

DISC SPECIALS:

Paul Simon's "One-Trick Pony"

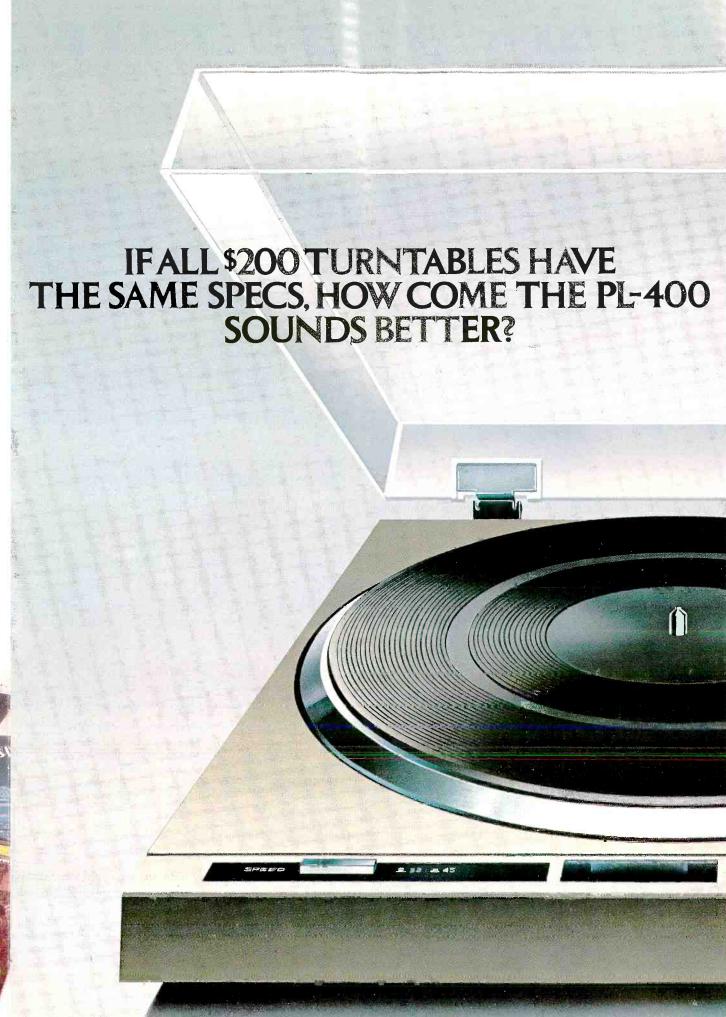
Charlie Daniels, Cecil McBee,

Claudio Arrau's Debussy

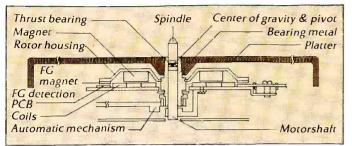
George Benson's "Give Me the Night"
Krystian Zimerman's Brahms Sonatas
Elly Ameling's Schumann *Liederkreis*And ... Chevy Chase, Al Stewart, Split Enz,

Mabel Mercer, Maria Callas' Traviata.

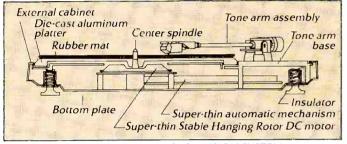
SERVIC SIT BOBILE 99 CALL NOVED



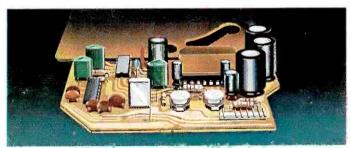
INTRODUCING THE NEW PIONEER PL-400.



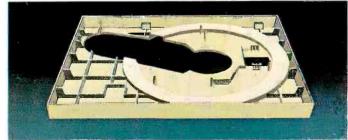
PIONEER'S NEW STABLE HANGING ROTOR. BY RAISING THE CENTER OF GRAVITY, WE LOWERED THE RATE OF DISTORTION.



PIONEER'S COAXIAL SUSPENSION SYSTEM. IT VIRTUALLY ELIMINATES VIBRATION AND RUMBLE



THE PIONEER QUARTZ PHASE LOCK LOOP SYSTEM. AUTOMATIC MONITORING, ROTATIONAL SPEED IS KEPT CONSTANT TO REDUCE WOW AND FLUTTER.





PIONEER'S BEST-SOUNDING REASON OF ALL: THE PRICE UNDER \$200.

Today, most turntables in the same price range look practically the same on paper. But they don't sound at all alike in vour home.

Because equal specs don't necessarily mean equal sound. In fact, specs are just a measure of the distortion caused by your turntable itself. They tell nothing about how your machine prevents distortion caused by your environment.

Pioneer's new PL-400 turntable was designed to also keep external interference from coming between you and great sound.

Much of the success of our new PL-400 turntable revolves around our all new "Stable Hanging Rotor." The world's thinnest direct drive motor.

Unlike more massive conventional motors, the motor in the PL-400 is so thin, it allows the center of gravity to be at the pivot point of the rotating mechanism. So instead of the platter wobbling like a top, the platter on the PL-400 acts like a gyroscope to stabilize itself.

Although this technology is very difficult to understand, the result of it is very easily appreciated. You no longer are bothered by distortion caused by stylus mistracking or speed deviations. So you get just what's on your record. Nothing added to it. And nothing taken away.

But this super thin motor does more than eliminate distortion. It also eliminates any space wasting elements used in conventional motors. And because it's THE PIONEER COMPUTER-DESIGNED HOWL-PROOF ENCASEMENT. SO much thinner than any other motor, BY SLIMMING DOWN THE SIZE, WE SLIMMED DOWN ACOUSTIC RESONANCE. So much thinner than any other motor, the cabinet around the PI-400 is also a lot thinner. This 20% reduction in cabinet size means the PL-400 is 20% less likely to suffer from acoustic distortion.

> Many turntables in this price range are direct drive. Some of them offer DC motors. Some of them have servo motors aimed at eliminating drift caused by

changes in temperature. But even the best of them just seem to reduce drift instead of eliminate it.

The Pioneer PL-400, on the other hand, has a Quartz PLL servo system that keeps rotational speed at a constant. And keeps the PL-400 unaffected by temperature changes, voltage fluctuations and other powerline anomalies.

These features work to keep the PL-400 sounding like a much more expensive turntable. But without our specially designed Coaxial Suspension system, they wouldn't be nearly as effective.

This free floating suspension system isolates the platter and tonearm from the rest of the turntable. So even if the base vibrates, the platter and tonearm don't.

This means you can shake, rattle and roll a lot more with a lot less worry that your turntable is doing the same thing.

new "Mass Concentrated" design im proves crossmodulation distortion and tracking accuracy. So you get more sound clarity and better channel separation.

All these features on a turntable the price of the PL-400 is unheard of. But Pioneer didn't stop there. The PL-400 also has full automatic controls. Includ ing automatic lead-in, viscous damped cueing, automatic return, and automatic repeat. An easy to read one-stripe strobe that confirms platter speed accuracy. A quick start mechanism that starts the platter revolving as soon as the tonearm begins to move. And more.

So if you want to buy a \$200 turn table and are just interested in great specs, there are any number you can buy. But if you're interested in a \$200 turntable that will give you great sound there's only one.

The Pioneer PL-400.

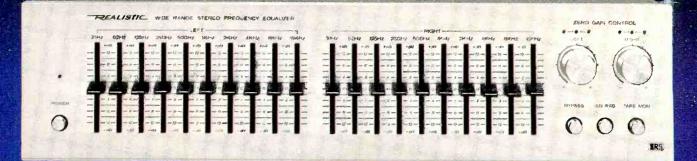






& PIONEER GUARTE PLL FULL-AUTOMATIC PL-41

19:35 STARTY GUT



Five Important Reasons Why You Should Own This New Realistic® 10-Band Equalizer.

1. Matches your system to any room.

Some rooms are acoustically "dead" due to thick carpeting and tons of overstuffed furniture. Some are acoustically "live" because of tile floors and hardwood paneling. Either environment will murder your music by altering the sound you hear by 6 decibels or more. Ordinary broadband bass and treble controls can't compensate for these imbalances because they alter far too much of the audio spectrum. But the Realistic wide-range equalizer, with 10 narrow bands and 10 controls for each channel, gives you total command from 31 to 16,000 Hz. You can add to or subtract from the music by up to 12 dB for a complete, creative control range of 24 dB.

2. Improves records, tapes, FM.

Remove annoying record scratches from old LPs and 78s

without removing the music. Just reduce the audio level at 8 and 16 kHz. Rumble is eliminated with the 31 and 62 Hz controls but the bass remains intact. Substandard audio from careless radio stations can be cleaned up by a little re-equalization on your part.

3. Improves your speakers.

Moving a speaker 6" out from a wall can degrade bass response by 8 to 10 dB. But sometimes you have to. This equalizer restores the lost performance. And you can en-

hance the sound of the best speakers ever when they're perfectly
placed. Electronic equalization is
the only way you can extend the
response of a speaker.
sations
fittle

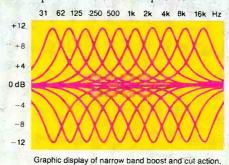
4. Makes you a

4. Makes you a recording pro.

Now you can record professionalsounding tapes without professionally priced equipment. Using a 3-head deck, you can monitor off the tape and adjust the equalizer for the results you want.

5. Low priced.

The efficiencies of engineering and manufacturing this equalizer in our own factory help us to price it lower than any 10-band design of comparable features and quality that we know of. Yet it adds value, versatility and enjoyment to your stereo system, no matter what you paid for it! Can you afford not to own this equalizer? Come in and let us demonstrate a little "audio magic."



Our Innovative \$179.95* Audio Upgrader Does It All!

Radio Shack

THE NATIONWIDE SUPERMARKET OF SOUND *Retail price may vary at individual stores and dealers

The	Eau	ripment ————	
NEW DRODUCTS	_	•	14
	accessories	F	,,,,,,
AUDIO QUESTIONS AND ANSWERS Equalizer vs. Expander, Model Changes, Sla	amming Pe	rilLarry Klein	22
TAPE TALK Equalizing Recordings, Distortion Specs, Sto	orage Prec	autionsCRAIG STARK	28
AUDIO BASICS The Force That's with You		ROBERT GREENE	30
TECHNICAL TALK Cartridge Response and Temperature		Julian D. Hirsch	35
EQUIPMENT TEST REPORTS Hirsch-Houck Laboratories test results on the Hitachi D-85S cassette deck, Micro-Acoustic Optonica SX-9305 power amplifier, and Sou image-restoration control	cs 3002 ph nd Concen	ono cartridge,	36
CLIDED DIGGG		David Ranada	
MUSIC FOR CHRISTMAS	-	Music RICHARD THOMPSON AND JAMES GOODFRIEND	69
IOHN WILLIAMS AND THE ROSTON	I POPS		
Paul Simon: "One-Trick Pony"	1 8∩	Cornelia Street: The Songwriters Exchange	85
Krystian Zimerman: Brahms Sonatas	82	Elly Ameling: Schumann Liederkreis	86
George Benson: "Give Me the Night"	85	American Brass Quintet	89
POPULAR DISCS AND TAPES			90
The B-52's: "Wild Planet"		Al Stewart: "24 Carrots"	102
The Charlie Daniels Band: "Full Moon"	92	Split Enz: "True Colours"	106
Mahel Mercer: "Echoes of My Life"	95	"Times Square" (The Movie)	110
Chevy Chase—Sings?	100	Cecil McBee: "Compassion"	112
CLASSICAL DISCS AND TAPES			116
Maria Callas' Traviata	117	Claudio Arrau's Debussy	120
Three Digital Conductors	118	Massenet: Suites for Orchestra	134
7	Se Re	gulars — WILLIAM LIVINGSTONE	
DULLETIN		WILLIAM LIVINGSTONE	5
SDEAKING OF MUSIC		WILLIAM ANDERSON	6
LETTERS TO THE EDITOR			10
COINC ON DECORD		JAMES GOODFRIEND	59
EDITORIAL INDEX FOR 1980			139
SIMELS LIVE		STEVE SIMELS	144
ADVERTISERS' INDEX			144

COVER: Design, Borys Patchowsky; costume, Ruth Davis; photo, Bruce Pendleton

COPYRIGHT © 1980 BY ZIFF-DAVIS PUBLISHING COMPANY. All rights reserved. Stereo Review, December 1980, Volume 45, Number 6. Published monthly by Ziff-Davis Publishing Company. Editorial and Executive Offices at One Park Avenue. New York, 10016; Telephone: 212 725-3500. Philip B. Korsant, President; Albert S. Traina, Vice President; Selwyn Taubman, Trassurer; Bertram A. Abrams, Secretary. Also publishers of Boating. Car and Driver, Cycle, Fly Fisherman, Flying, Popular Electronics, Popular Photography, Psychology Today, Sking, Sport Diver, Stereo Directory, and Tape Recording & Buying Guide. One-year subscription rate for the United States and its possessions, \$9.98; Canada, \$10.98. All other countries, one-year subscription rate \$14.98, cash orders only, payable

in U.S. currency. Controlled-circulation postage paid at Glasgow, Kentucky 42141. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. SUBSCRIPTION SERVICE: Forms 3579 and all subscription correspondence should be addressed to Stereo Review, Circulation Department, P.O. Box 2771, Boulder, Colorado 80323. Please allow at least eight weeks for change of address. Include old address as well as new—enclosing if possible an address label from a recent issue. PERMISSIONS: Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to Jerry Schneider, Rights and Permissions, Ziff-Davis Publishing Company, One Park Avenue, New York, New York 10016.

Record Care, Part 1:

Aqueous Cleaning vs. Organic Solvents

Electron microscopy (Figure 1) shows the principal cause of record wear: small particles of microdust, deposited from the air by gravity, are ground along the record groove by the stylus. Surface noise goes up. Sound quality goes down.



Figure 1

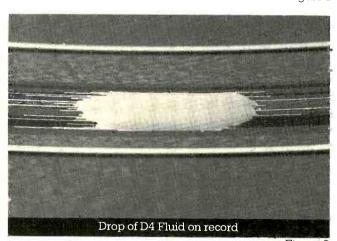


Figure 2

Figure 2 shows a drop of the aqueous Discwasher D4 Fluid, literally lifting dust and contamination out of record grooves. The extraordinarily complex D4 Fluid uses water pure enough for kidney dialysis, along with eleven chemically engineered additives that still results in lower dry-weight residue than most tap water. This formula is amazingly high in cleaning activity, uniquely safe for vinyl and vinyl additives, and preferentially "carries" contamination into the new Discwasher D4 pad.

In some record care products, organic solvents are used rather than water. Organic solvents such as ozone-gobbling chlorofluorocarbons, petroleum distillates (hexane, heptane) and alcohol concentrates are indeed speedy extractors and delivery solvents. They evaporate fast. Some organic solvents can dissolve vinyl stabilizers, Organic solvents may leave a "slick" looking record by treating the disc with other compounds carried in the solvent mix. In doing so, record contamination may also be dried back onto the disc in a nice even layer. Dust is often "held" to the record surface by "treatment."

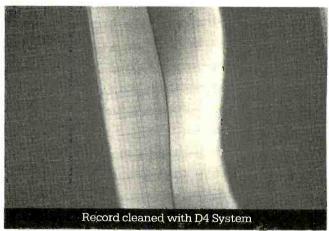


Figure 3

Electron micrograph (Figure 3) shows a record cleaned with the Discwasher D4 System. High technology record care leaves only a clean surface.



Discwasher, Inc., 1407 N. Providence Rd., Columbia, MO 65201

CIRCLE NO. 20 ON READER SERVICE CARD



Edited by William Livingstone

- TEXACO'S FORTY-FIRST YEAR OF OPERA matinee broadcasts on Saturdays will begin on December 6 even though the Metropolitan Opera's 1980-1981 season has been canceled following breakdown of contract negotiations between the Met orchestra's union and management. If performances at the Met have not resumed by December, Texaco intends to broadcast commercial recordings of the operas originally scheduled. The intermission features, including the Opera Quiz, will be produced as usual by Geraldine Souvaine.
- FOUR BRITISH CONDUCTORS WERE HONORED on commemorative stamps issued by the British Post Office on September 10. They were Sir Henry Wood, Sir Thomas Beecham, Sir Malcolm Sargent, and Sir John Barbirolli. The stamps will be available at most dealers for about a year. For more information write the BPO's North American distributor, StanGib Ltd., 601 Franklin Avenue, Garden City, N.Y. 11530.
- GOLD IN THEM THAR VIDEOCASSETTES! At the Vidcom Conference in Cannes, Andre Blay, president of Magnetic Video Corp., said that his company's videocassette of the movie musical All That Jazz became a \$1-million seller on the day it was released, marking the coming of age of the home video industry and its reaching mass-market status. All That Jazz is expected to bring Magnetic Video its eighth gold videocassette award from ITA, the International Tape Association, which gave its first awards this year.
- THE NEW SET OF MOZART'S MAGIC FLUTE reviewed in the Best of the Month section last month carries a bonus not mentioned in the review. It is a 12-inch, 45-rpm disc which contains conductor Herbert von Karajan's mono recording of the Magic Flute Overture from 1938 back-to-back with his new recording of the piece made for this digitally mastered set on Deutsche Grammophon. The bonus record is a limited edition included at no extra cost in the first American pressing order from Germany.

- musicians at the Ear. A libel suit against singer/songwriter Janis Ian was dismissed in N.Y. State Supreme Court. In a newspaper interview Ian had said PHOEBE SNOW's "manager and record company had screwed her all at once." Soul singer WILSON PICKETT is being sued for \$200,000 by an arranger who alleges Pickett assaulted him with a shotgun; jazz legend MILES DAVIS is being sued for \$500,000 by a musician who alleges Davis assaulted him with a chair; and RSO Records honcho ROBERT STIGWOOD is being sued by his main breadwinners, the BEE GEES, for a cool \$136,000,000.
- 10-DB IMPROVEMENT IN NOISE REDUCTION at high frequencies is claimed for the newly launched Dolby-C system, compared with the Dolby-B circuitry now in use. The new compatible system provides noise reduction up to 20 dB, and tapes made with the Dolby-C system, if played through a Dolby-B-type decoder, would sound much like Dolby-B tapes played without decoding.
- LEONTYNE PRICE AND LEONARD BERNSTEIN, soprano and composer/conductor, are among this year's recipients of the Kennedy Center Honors presented every December to five Americans who have made significant contributions to the nation's culture in the performing arts. The other 1980 honorees are the actor James Cagney, the choreographer Agnes de Mille, and the actress Lynn Fontanne. The gala performance in honor of this year's recipients will be telecast by CBS on December 7.
- ♦ dbx Noise Reduction Will Appear in two new Technics cassette decks as a result of an agreement reached between the two companies. As a bonus, the dbx circuits will also function as a decoder for dbx-encoded discs when the deck is included in a record-playing system. Recently introduced cassette recorders from Teac and Marantz also feature dbx circuits, but the decks to come from Technics will be the first to offer dbx noise reduction for less than \$500 retail and the first to include dbx disc-playback capability.

Speaking of Music...

By William Anderson



NECESSARY NOISE

SAAC NEWTON warned us: to every action there is an equal and opposite reaction. It was therefore only a matter of time before reactionaries got around to responding negatively to the arrival of the first digital recordings on the family turntable. Though very few people have yet heard true digital sound (digitally recorded tapes reproduced through a digital decoder without any adulterating analog processes), there are those who are prepared to damn the whole technology out of hand as being unpleasantly sterile, unmusical, and even "unnatural" after hearing only a few digital/analog discs. They can tell the difference blindfolded, they say, and to hell with it. And they can, too-which is precisely the point. Digital recordings (even when they are not digitally reproduced) do sound different-brighter. cleaner, airier—because of their greater dynamic range, higher signal-to-noise ratio, and flatter frequency response.

Some of this anti-digital sentiment is very likely traceable to that little bit of buggy-whip conservatism we all have within us—the old and familiar is more comfortable because it makes fewer demands on us. And so there are also those who insist that mono is better than stereo, who believe that if God had wanted us to hear quadraphonically he would have given us four ears.

In addition to natural conservatism, there is doubtless more than a little desire on the part of at least some of these digital critics either to demonstrate a superior degree of technical sophistication or to lay claim to a hearing acuity that would do credit to a bat. Some even claim to "hear" the over-40,000-

Hz sampling rate of digital recording processes, if not yet the even greater "sampling" rate of electromagnetic tape (an analog tape does not record a continuous signal at all, merely the tiny bits of it that are embodied in the minute "magnets" of the oxide particles).

But isn't there perhaps something solid to the objections nonetheless, something having to do with the charge that digital sound is "unnatural"? Even though the human hearing apparatus is in a sense the model for the technological processes involved (an analog affair right up to the labyrinth of the inner ear, audio signals turn "digital" at the auditory nerve, neural pulses being all the brain wants to know about sound), there is nothing "natural" about any of our means of sound reproduction. But what the navsayers may really be trying to tell us is that they miss the noise, that they are experiencing the kind of disorientation that comes from sense deprivation. Have some of us become so habituated to the noise and distortion content in ordinary recorded music that we now find it musically necessary? (For my part, I find most "electronic" music unlistenable because of its essentially unmusical, antiseptic sound quality, and I am struck by the fact that rock musicians find it necessary to "dirty-up" the sound of their electronic instruments with add-on gadgets that are no more than noise makers.)

Perhaps we're going to need a period of aesthetic readjustment, a gradual reprogramming that will teach us to appreciate the black-velvet background silence digital recording and reproduction are capable of. Surely we can then add what Acoustic Research's Bob Berkovitz calls "the ambient noise of civilization" for ourselves, the hum of the fridge, the whistle 'round the eaves, and the buzz of traffic substituting for the comforting susurrus of tape hiss and disc-surface noise.

Stereo Review

PUBLISHING DIRECTOR
SIDNEY HOLTZ
EDITOR IN CHIEF
WILLIAM ANDERSON
EXECUTIVE EDITOR
WILLIAM LIVINGSTONE
MANAGING EDITOR
LOUISE GOOCH BOUNDAS
ART DIRECTOR
BORYS PATCHOWSKY

TECHNICAL DIRECTOR LARRY KLEIN ASSOCIATE TECHNICAL EDITORS ROBERT GREENE, DAVID RANADA

MUSIC EDITOR
JAMES GOODFRIEND
POPULAR MUSIC EDITOR
PAULETTE WEISS
SPECIAL PROJECTS EDITOR
STEVE SIMELS
ASSISTANT MUSIC EDITOR
VIVIENNE WINTERRY GOODMAN

ASSOCIATE EDITOR
DAVID STEIN
PRODUCTION EDITOR
JOHN HARRISON
ASSISTANT EDITOR, RESEARCH
RICHARD SARBIN
EDITORIAL ASSISTANTS
BARBARA AIKEN, SHEILA DWYER

CONTRIBUTING EDITORS

CHRIS ALBERTSON IRV COHN NOEL COPPAGE RICHARD FREED PHYL GARLAND DAVID HALL JULIAN D. HIRSCH GEORGE JELLINEK IGOR KIPNIS IRVING KOLODIN

PAUL KRESH STODDARD LINCOLN RICK MITZ LINCOLN PERRY PETER REILLY EBET ROBERTS CHARLES RODRIGUES ERIC SALZMAN CRAIG STARK JOEL VANCE

LONDON EDITOR HENRY PLEASANTS

ASSISTANT TO THE PUBLISHING DIRECTOR PEARL HARRINGTON

ASSOCIATE PUBLISHER ROBERT JOHN UR, SR.

PROMOTION COORDINATOR OLIVIA WILSON

Editorial and Executive Offices: 212 725-3500 Ziff-Davis Publishing Company One Park Avenue, New York, New York 10016 National Advertising Manager: Richard J. Halpern Eastern Advertising Representative: Charles L. P. Watson

Midwestern Office, The Pattis Group: 312 679-1100 4761 West Touhy Ave., Lincolnwood, Illinois 60646 Arnold S. Hoffman

Western Office: 213 387-2100 3460 Wilshire Boulevard Los Angeles, California 90010 Western Advertising Representative: Shelley Lewis Japan: James Yagi Oji Palace Aoyama, 6-25, Minami Aoyama 6-Chome, Minato-ku, Tokyo, Japan Telephone. 407-1930/6821, 582-2851

Circulation Office P.O. Box 2771, Boulder, Colorado 80323

EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care; however, publisher assumes no responsibility for the return or safety of art work, photography, or manuscripts.

Member Audit Bureau of Circulations





ZIFF-DAVIS PUBLISHING COMPANY

President: Philip B. Korsant Senior Vice Presidents: Richard Friese,

Phillip T. Heffernan, Sidney Holtz, Edward D. Muhlfeld, Phillip Sine, Albert S. Traina

Vice Presidents: Robert Rayler, Paul Chook (Research

Vice Presidents: Robert Bavier, Paul Chook (Research), Baird Davis (Production), Edgar W. Hopper (Marketing), George Morrissey Treasurer: Selwyn Taubman

Secretary Bertram A. Abrams

Vice Chairman: W. Bradford Briggs

ZIFF CORPORATION

Chairman: William Ziff President: I. Martin Pompadur Executive Vice President: Hershel B. Sarbin Vice Presidents: Furman Hebb, Bruce Maggin, Lawrence Sporn

Eulide TOTOE

Professional·I. The one tape that stands up when you crank it up.



Premium ferric oxide tapes have more headroom which allows higher maximum recording

levels (MRL). Among all premium ferric oxides PRO I has the best MRL for loud recordings. Uniform maghemite particles provide in creased headroom for very accurate and loud recordings

with virtually no distortion. In the fundamental music range (20Hz-5kHz) PRO I can be

SD EX HP ED FX); 70

recorded louder and driven harder than even high bias tapes. PRO I is the internationally accepted reference tape, whose bias point is specifically matched to the Type I/normal/ ferric position on

today's high quality

cassette decks.

Professional·II. The world's quietest tape puts nothing between you and your music.



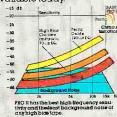
High bias tapes consistently provide wider frequency response and less tape noise (hiss



or background noise) than any other tape type. Among premium high biastapes PRO II is in a class by itself. It is the second generation chromium dioxide tape with superb frequency response

and outstanding sensitivity in the critical (10kHz-20kHz) high frequency range. It also has the lowest background noise of any other competitive tape available today.

PRO II will capture the many subtle harmonics of the most demanding recordings and play them back with the reality and presence of a live performance. PRO II is the tape for the Type II/chrome/



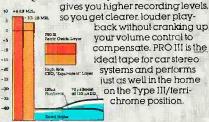
high bias position that comes closest to Metal tape performance for half the price

Professional·III. The only cartape that eliminates the car.



Ferrichrome tapes commine the benefits of chromium dioxide and ferric oxide tapes for superior performance in corstereos. The top layer is pure chromium dioxide for unsurpassed highs and low background noise. The

bottom layer is ferric oxide for superior lows and great middle frequencies. And it also



計算 模量

GUARANTEE

All BASF tape cassettes some with a lifetime guarantee of a lifetime."

All BASF tape cassettes some with a lifetime guarantee that covers everything. Should any BASF cassette ever fail—for any reason—simply return it to BASF for a free replacement.



Patented "Jam-Proof" Security Mechanism (SM)!" Patented "Jam-Proot" Security Mechanism (SM):

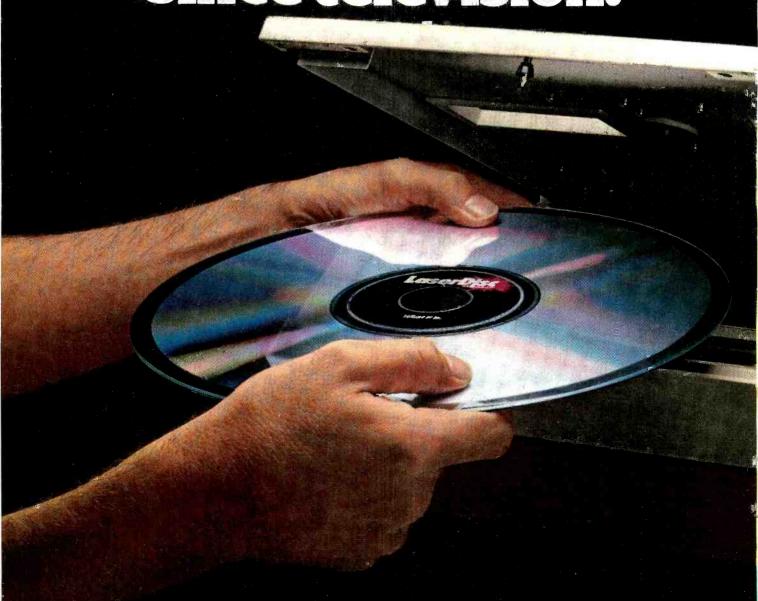
All BASF tape cassettes come with our exclusive SM—Security Mechanism. Two precision arms actually "guide" the tape in a smooth, exact and consistent track so that winding is always even, no matter how often the cassette is played. SM puts an end to tape jamming



Crosby Drive, Bedford, Massachusetts 01730

CIRCLE NO. 9 ON READER SERVICE CARD

Introducing
Pioneer LaserDisc.
The biggest innovation
in television
since television.



Imagine you could sit down in front of your TV set and see virtually any movie or concert you wanted to see when you wanted to see it.

Imagine you could actually see and hear concerts on your TV in stereo. The best stereo you've ever heard. Or cut to your favorite scene in a movie at will. Or study sports in slow motion, even one frame at a time. Imagine a machine

that could teach your children at their own rate.

You now have just an idea of Pioneer LaserDisc. A remarkable innovation that puts both picture and sound on a record. And plays them both by means of a laser beam onto your TV and through your hi-fi.

(The player hooks up to your TV with just one wire. And when it's not in use, your TV plays the way it normally plays.)

The laser picture quality is exceptional. As good as the best broadcast reception you've ever seen. And laser sound is better than the best conventional audio recordings you've ever heard. And since nothing touches the disc but a laser beam, the disc never wears out. The quality

is forever.

For all it does, surprisingly, the suggested retail price of the player is only \$749* (just \$50 more with remote control). And you can own a disc of a great

movie or concert forever for the cost of taking your family to the movies.

There are a few hundred different discs to choose from right now. And more and more are coming out every day. Someday, virtually anything that entertains anyone will be on the disc.

Nothing we say here will fully prepare you for the magic of Pioneer LaserDisc. You simply have to see it.

For a personal demonstration from the dealer nearest you call us at 800-621-5199 toll free. (In Hlineis 800-972-5855.)

LaserDist

CIRCLE NO. ES ON READER SERVICE CARD



*Suggested retail price, actual price set by dealer.
© 1980 U.S. Pioneer Electronics Corp.



Digitally mastered and audiophile recordings have added an exciting new dimension to the state of the audio art. Sonus cartridges are exceptionally well-suited to realize the full sonic potential of these new recording techniques.

This is especially true of the new Sonus Dimension 5. Its unique phase-coherent, integrated, stylus construction enhances still further the exceptional purity and integrity of reproduction found throughout the Sonus range of high compliance cartridges.

We believe upgrading your system by replacing your present cartridge with a Sonus will provide the greatest improvement in sound quality per dollar.

The finer your records the greater the difference a Sonus will make.



Sonic Research, Inc., 27 Sugar Hollow Rd. Danbury, CT 06810 (203) 792-8822 CIRCLE NO. 50 ON READER SERVICE CARD



ETTERS TO THE

Carly Simon

 Stereo Review's critics have always reviewed contemporary music with indisputable precision and an admirable honesty. In the October issue, Peter Reilly characterizes the talent and music of Carly Simon to perfection. I am a diehard Simon listener. not because of all the hype that surrounds her as a rock star but because she has affected my life with her philosophy. Whether she is singing of the end of the world or the birth of a baby, each lyric is crammed with verbalized emotion and incisive insight.

> Donna Harkowsky Jersey City, N.J.

Fairbanks Talked

 I was interested to read William Anderson's statement in October's "Speaking of Music" that, according to the TV documentary Hollywood, Douglas Fairbanks Sr. refused to "go audio" when the talkies arrived. Several months ago I forced myself to wake up for a 3:55 a.m. broadcast of the 1930 film Reaching for the Moon. My reason for this nocturnal vigil was that Bing Crosby was listed as a member of the cast, and I hoped to get a tape recording of him crooning Irving Berlin's haunting title song. The star of the film (a rather silly Loveboat-style shipboard romance) was Douglas Fairbanks Sr. He was his usual breezy, brash, macho self—and in good voice tooplaying a dynamic young executive. Bing, however, was disappointingly limited to a peppy performance of the film's only song, which described a new dance the name of which I've forgotten. If he sang Reaching for the Moon it was regrettably excised.

RALPH BANNIGAN Springfield, Mo.

Guess someone made old Doug an offer he couldn't refuse.

Clare Fischer

 It's true that the notes for the Discovery album "Duality" by the Clare Fischer Big Band are vague about when it was recorded

and why it took so long to be released, and Chris Albertson was right to be puzzled (in his October review). It was definitely recorded in 1966, not 1969; I attended both sessions and have had copies of the masters for my own enjoyment since then. As I recall, Albert Marx, the owner of Discovery, recorded them for John Hammond of Columbia. They were all ready to be released when there was a sudden policy change at Columbia. Everyone who knew about the sessions was bitter about the decision not to release. The tracks of piano with orchestra were superbly recorded and were some of Fischer's best piano work to that time; the organ-and-orchestra tracks were poorly recorded, with swimmy organ sound and weak bass, but they still contain some nice voicings and have Fischer on valve trombone. JOHN WILLIAM HARDY

Gainesville, Fla.

Albert Collins

 After reading Joel Vance's October review of Albert Collins' "Frostbite," I bought the album unheard. Collins is nothing short of incredible! It looks like we finally have a blues/pop artist who can take over where Jimi Hendrix left off.

DOUGLAS W. CALDWELL Seaside, Ore.

Hirsch for President

 Julian Hirsch says (in "Technical") Talk," September) that hi-fi is getting better. When are we grateful audio nuts going to let him know that he is surely one of the causes? Could we run him for President, do you think? Or something?

Julian dropped the remark in the article that he has been in the audio-measurement game for twenty-six years. I bought my first hi-fi rig in 1953 because of a funny little privately printed non-magazine that he and his buddy Gladden Houck published from some crazy place in New Jersey that I never heard of. The rig was a Radiocraftsmen tuner, preamp, and amp, with a Collaro turntable and a beautiful Brociner corner

(Continued on page 12)

FYOU'RE NOT USING THE SCOTCH RECORD CARE SYSTEM, YOU'RE USING THE SECOND BEST.

INTRODUCING SCOTCH® RECORD CARE SYSTEM. IT CLEANS, ANTI-STATS AND REDUCES FRICTION—ALL IN ONE STEP.

Finally there's a way to give your records the kind of care and protection that hasn't been possible until now...a way to insure a long life of true sound.

The System.

The Scotch Record Care System combines new Sound Life™ fluid with a unique dispensing applicator. To use, simply depress the supply container and Sound Life fluid is fed automatically to the pad. That's all there is to it. It's quick, easy and simple. No guesswork about how much fluid you need or how to apply it correctly. Just place the applicator on your turntable spindle, revolve it and the record is cleaned.

Super-wetting action deep-cleans grooves.



Discurasher D3® solution (left) beads up on the grooves. Sound Life (right) with super-wetting action deep-cleans grooves.

If your present cleaning solution beads up on the record surface, it may not be getting the job done.

Scotch Sound Life spreads onto the disc surface evenly safely penetrating grooves to remove micro-dust and fingerprints. Sound Life leaves the record with a brilliant look, as brilliant as the sound is clean and true.

As it cleans, it wipes out static.

Even though your record surface is clean, it's generally the electrostatic charge that gets it dirty again. An anti-static gun is just a temporary treatment.

One application of Sound Life reduces the residual charge to near zero. And it prevents static from returning no matter how often the record is played.



(Left) Styrofoam beads are attracted to static charge left on record after cleaning with Discwasher D3.8

Same record (right) after one treatment with new Sound Life fluid.

Friction reduction's a plus.

The same application of Sound Life that super-cleans and removes static can reduce stylus drag up to 15%.

Sound Life"

And with your sensitive stylus that can mean less wear and improved record life.

Better stereo performance.

To get all the true, pure sound you expect from your stereo, you need records that are truly clean, and protected from static and friction. Only the Scotch Record Care System gives you all three in one application. Ask to see a demonstration at your record or stereo store right now.

All of the tech data we've used to back up these statements is available free. Write to Magnetic A/V Products Division, 3M Company, 3M Center, St. Paul, MN 55101. Ask for report C-242.



RECORD CARE SYSTEM.
THE TRUTH COMES OUT.

311

CIRCLE NO. 36 ON READER SERVICE CARD

horn. What a revelation in sound! How grateful I was to this strange man with his figures, graphs, and opinions.

I have never stopped being grateful, and I am especially grateful right now because I have again renewed my rig. My ADS-10 Digital Time Delay system (he tested it in the April 1979 issue) did not really feed very well into the receiver I had (between preamp and amp). So I bought the receiver he reported on favorably in the September issue, the Onkyo TX5000. Not only does the ADS fit in better, but the receiver is clearly superior to the last one I bought on his advice in 1974. It was excellent in its day; no complaints from me.

The new turntable he steered me to last

December with a cartridge built in by the manufacturer is a honey, a real gain for bumble-fingered me (the Dual with the Ortofon 55E cartridge in place). My main speakers for the listening area are ones Julian tested in 1973 (Design Acoustics D-6). Those I won't give up.

So, I have a remarkable sound system, not only reproducing marvelously the new digital and direct-to-disc records, but also my "oldies." One can only marvel at the new ambient sound coming from a lovely old but "dry" recording such as the Steinberg/Millstein concert of works by Dvořák and Glazounov (Capitol P8382, 1950s mono). Yes, Julian, the equipment is getting better. And when you direct us toward

equipment that does not necessitate discarding one's "oldies," whether Millstein or the Mills Brothers, you truly are performing a public service.

Stay well, Julian Hirsch! I'd send you a loud plaid shirt, but your pictures in STEREO REVIEW indicate that you already have a goodly supply. You have been a continuing educator for me for twenty-six years.

ROBERT N. FORD Punta Gorda, Fla.

André Previn

● My students and I read William Livingstone's "portrait" of André Previn (September) with enthusiasm, but we were somewhat disappointed. So much was left unsaid about this other claim to fame of the "City of Champions." André Previn is the reason for the Pittsburgh area's packed concert halls and ever-growing demand for recordings of classical music. In appearances all over Southwestern Pennsylvania, he has made symphonic music interesting to the younger generation through his stylish approach and vital personality.

RUTH VANCE Frazier Junior High School Perryopolis, Pa.

Disappearing Disco

Why on earth (or elsewhere) has STEREO REVIEW eliminated disco reviews? It was bad enough that the reviews were usually a month late, but they were something. Granted, less disco is being recorded today, but a few 12-inch singles are still released. I know all the supposed reasons for disco's decline, starting with the higher cost of record vinyl, which raises the prices of discs, which reduces sales, which leads to radio stations' changing formats, which reduces sales further, which reduces production, which

A. J. AGUILERA Miami, Fla.

Pop Music Editor Paulette Weiss replies: We have not stopped reviewing disco; we have rather incorporated disco reviews into the main body of the pop section so as to reflect disco's absorption into mainstream popular music. Less "pure" disco is recorded today, and most of what is is slotted between rock or r-&-b cuts on the albums of former boogie queens. We also plead in-nocent to "late." The problem here is what is known in publishing as "lead time": this is the December issue, and you are probably reading it in mid November-but I am writing these lines in late September. It simply takes that long to print and distribute 540,000 copies of STEREO REVIEW each month. As for disco's decline, no music lasts forever, but traditional disco is still booming in Europe, so there are import discs to fill the American gap, if any.

Correction

• The price shown for the Omnisonix 801 Omnisonic Imager in the advertisement on page 85 of the November issue was in error. The correct price is \$199.

Sounderaftsmen Equalizers, tuner PREAMP-EQUALIZERS CLASS "H" AMPLIFIERS

New AM/FM Stereo Tuner features 14-station memory, 3-Way Auto-Scan, Digital Quartz, PLL, and Superb performance to match Soundcraftsmen's Super Preamps and Amplifiers.

ST6001 AM-FM TUNER

• 14 of your favorite FM and AM stations can be easily pre-set through the Microcomputer System • Exclusive Memory-Retention circuits provide years of program storage, without any external power required. Three-Way Automatic Scanning/Tuning selection • 5-digit Read-Out, for all present and future station spacing requirements . Variable Output Control matches level to other signal-source levels ● 19" Rack-Mount panel, EIA standard hole-spacing . Walnut veneer hardwood end panels included



SP4002 Preamp-Equalizer...

• VARIABLE CARTRIDGE LOADING 50 to 800 PF. • Variable 47k/100 ohm Phono Impedance • INPUTS for MOST MOVING COIL Cartridges • Four Mono Phono Preamplifiers • ±20 dB phono Level Adjustment • Two External Processing Loops • Three-way Tape Dubbing • Two Amplified Headphone Outputs • Front Panel Tape Inputs & Outputs • PHONO S/N: —97d8 • THD 0.01% • 3 Preamplifier models, from \$399.

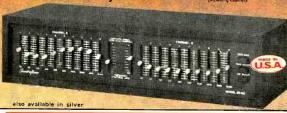
NEW CLASS "H" 250 w. Amps

The new CLASS "H" ANALOG logic Vari-Portional® circuit • AU10-CROWBAR protection circuit • Input level controls • Adjustable range meters • Main and remote speaker selection • Clipping indicators • 250 watts RMS minimum p/c 20-20KHz @ 8 ohms • Less than 0.1% THD • T.I.M. BETTER THAN 0.02% • NON-LIMITED output assures crisp clean peaks • S/N-105dB • 4 Amplifier models, from \$649.

The Best in EQ is now affordable—and GUARANTEED to enhance and improve ANY fine stereo system!

The Equalizer you buy should have all 10 of these features:

● Real-Time Frequency Analyzer
Test Record ● Computone-Chart
Memory System ● Two Zero-Gain
controls ● EQ Tape Record ● Tape
Monitor ● EQ defeat ● ±16/12dB
octave gain ● S/N-105dB ● THD
0.01% ● Cabinet included



WHYS & HOWS OF EQUALIZATION PROBLEM CONTROL OF THE PROBLEM OF THE

FREE! 16-page Full-Color Brochure

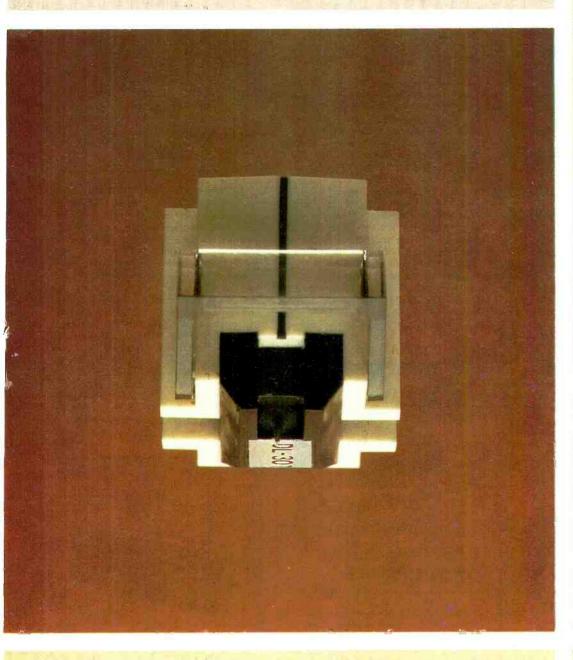
Includes TEST REPORTS, complete specifications. Class "H" amplifier REPORT, EO COMPARISON CHART, and the "WHYS & HOWS" of equalization—an easy-to-understand explanation of the relationship of acoustics to your environment. Also contains many unique IDEAS on "How the Sound-craftsmen Equalizer can measurably enhance your listening pleasures." "How typical room problems can be eliminated by Equalization." And a 10-POINT "IDO-IT-YOURSELE". ED evaluation checklist so you can FIND OUT FOR YOURSELF WHAT EQ CAN DO FOR YOU!

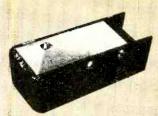
SEND \$6.00 FOR EQUALIZER-EVALUATION KIT: 1-12" LP TEST RECORD. 1 SET OF COMPUTONE CHARTS, 1 COMPARISON CONNECTION, INSTRUCTION FOLDER.

SOUNDCRAFTSMEN INC., 2200 So. Ritchey, Santa Ana, CA 92705 • (714) 556-6193 • CANADA: E. S. Gould, Montreol, Quebec H4T 1E5...

CIRCLE NO. 54 ON READER SERVICE CARD

1939...FIRST DIRECT-DRIVE TURNTABLE SYSTEM. 1951...FIRST MOVING-COIL CARTRIDGE. 1972...FIRST DIGITAL (PCM) RECORDING.





The year is 1951. Harry Iruman is President. An amazing new device called television entertains millions. And in Japan the leading manufacturer of professional sound equipment — Denon — develops the first high-performance moving-coil cartridge.

Denon's engineers discover that an extremely ightweight stylus assembly, made without a heavy magnet attached to its stem, gives this new kind of phono cartridge the ability to reproduce music with a subtlety of detail that escapes conventional cartridges.

Denon offers the cartridge first to professional broadcasting organizations, and then later to small numbers of sophisticated home listeners. Among this discerning few, the moving-coil legend is born: there is no finer way to play a record.

In recent years, the moving-coil legend has grown to the point that many manufacturers build their entire product lines around the moving-coil principle. But only one company has had 29 years to refine and improve the moving-coil concept. The same company that developed direct-drive turntables 41 years ago. The same company that invented the world's first commercial digital recorder eight years ago. Denon.

1980...DENON DL-300 SERIES PHONO CARTRIDGES.

The Denon DL-300 Series, the latest in the long line of superior Denon moving-coil designs. With the lowest stylus tip mass of any stereo cartridges in history, achieved through the use of Denon's patented dual-section cantilever and cross-shaped coil, they depict nuance and a sense of depth in music with unsurpassed sonic accuracy. The Denon DL-301 and DL-303 with long-area-contact stylus profiles and dual-section aluminum alloy cantilevers. Or the ultimate in record-playback performance, the Denon DL-305, with an ultra-low-mass Amorphous Boron cantilever.

Denon's DL-300 Series cartridges for 1980: three new musical instruments from the company where innovation is a tradition.

DENON Imagine what we'll do next.

Denon America, Inc. 27 Law Drive, Fairfield. N.J. 07006

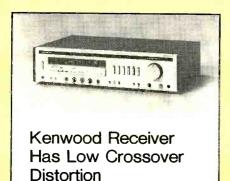
New Products latest audio equipment and accessories



Shure Brothers' Cartridge/Headshell Combination

☐ The Shure M97HE-AH integrated cartridge/headshell has a universal four-pin bayonet connector for installation in many turntables and tone arms. Claimed advantages for the combination include easier installation, elimination of spurious resonances from insecure cartridge mountings, and a reduction in weight of 4 to 6 grams compared to combinations of other cartridges and separate headshells. The unit is supplied with a special alignment system which includes an overhang gauge and an alignment-pin stylus substitute that is said to allow precise overhang adjustment for minimum lateral tracking error without risk of damage to the actual playback stylus. The cartridge has a nude-mounted hyperelliptical stylus, a Dynamic Stabilizer brush, and a Side-Guard feature to protect against stylus damage caused by cartridge mishandling. Tracking-force range is 3/4 to 11/2 grams. Price: \$120.

Circle 120 on reader service card



☐ Kenwood's Model KR-770 receiver uses a Zero-Switching output circuit which, by means of high-speed transistors, dynamic biasing, and wave-shaping circuitry, is said to provide thermal stability while eliminating crossover distortion. The amplifier section is rated to deliver 80 watts per channel with less than 0.02 per cent total harmonic distortion. Phono RIAA equalization is from 20 to 20,000 Hz ±0.3 dB. An infrasonic filter cuts off at 18 Hz with a 6-dBper-octave slope. There are separate bass,

midrange, and treble controls, with variable turnover frequencies for bass and treble. The receiver has connections and switching for two pairs of speakers and two tape decks. A microphone can be mixed into the main signal.

The digital quartz-synthesizing tuner section has auto-scan servo-locked tuning, a digital frequency display, plus six AM and six FM station presets. The digital memory is protected by a lithium battery. Switching is available for wide or narrow i.f. bandwidth and for 25-microsecond FM de-emphasis. Mono FM sensitivity is given as 1.7 microvolts (µV). Stereo 50-dB-quieting sensitivity is 35 µV. Stereo FM signal-to-noise ratio is 70 dB with a 65-dBf input signal. Total harmonic distortion for stereo FM is 0.1 per cent at 1,000 Hz. Capture ratio is given as 1 dB; image rejection, 80 dB; spurious response, 90 dB; AM suppression, 55 dB; and stereo separation at 1,000 Hz, 50 dB. The AM section has an 18-μV usable sensitivity and a 50-dB signal-to-noise ratio. Dimensions are 21 x 51/4 x 143/8 inches. Weight is 261/2 pounds. Price: \$679.

Circle 121 on reader service card



Belt Drive on New Philips Turntable

☐ Philips' F7213 two-speed, semi-automatic turntable has direct-control speed monitoring, a platter-mounted tachometer supplying a speed-correction signal. Wow and flutter is specified as less than 0.05 per cent (weighted rms). Measured rumble (DIN B) is given as better than -65 dB. The straight tone arm has an effective length of 8.46 inches and an effective moving mass of about 16 grams. The headshell is detachable, and the stylus-force range is from 0.75 to 3 grams. The silver-color base includes a stylus-force gauge. Other features include a shock-resistant, free-floating subchassis for platter and tone arm, a hydraulically damped cueing control, automatic tone-arm lift and return functions, a reject control, antiskating compensation, and a tinted dust cover with spring-loaded friction hinges. Dimensions are 173/4 x 51/2 x 141/4 inches. Price: \$170.

Circle 122 on reader service card



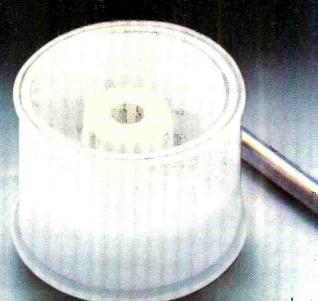
☐ MXR's System Preamp offers the home stereo enthusiast some control capabilities previously available only to recording engineers using sophisticated mixing consoles. The unit lets the user route two independent signal sources simultaneously to a monitor, tape output, or power amp and speakers. A mixing control blends the two signals and permits fading from one to the other. An instrument input permits the amplification and blending of electronic instruments and microphones. Features include two tapemonitor loops, two signal-processor loops, a switchable infrasonic filter, and switchable main-channel gain. A headphone output will drive low- and high-impedance phones. Specifications include total harmonic distortion of less than 0.005 per cent, phono frequency response of 20 to 20,000 Hz ±0.25 dB, and infrasonic filter response of -29 dB at 5 Hz. Dimensions are 3½ x 19 x 6 inches. Price: \$460.

Circle 123 on reader service card



☐ To optimize the distribution of sound over a dance floor, a speaker system from Electro-Voice comes in three separately mountable parts: the LF118 subwoofer, the HF12-3 high-frequency speaker module (shown), and the XEQ-1A electronic crossover/equalizer. The HF12-3 has an EVM 12L woofer, a VMR midrange speaker, and an ST350A tweeter. The unit's dispersion, given as a constant 120 degrees over the entire frequency range, is said to ensure that

The continuing story of TDK sound achievement. Parts Five and Six.



The guide roller and spindle pin are the turning point in a TDK cassette. It's there the tape takes on a sudden surge of tension. The winding angle changes sharply to 75°, causing great stress. The slightest imperfection, even a microscopic speck, will cause serious output fluctuations in sound.

TDK engineers began by



TDK guide roller and

analyzing existing molding techniques. They knew many manufacturers used a low cost, inferior

spindle pin in cassette. cost, inferior split-die process. This turned out rollers with seams, which disturb tape travel. Spindle pins were no better. Merely convenient mold extensions with pullout tapers which allowed rollers to slip up, wear out and wrench the tape off the track.

Part Five, the TDK guide roller, is flared and absolutely seamless. Made from a low-friction precision

molded plastic, it's created in one piece through an expensive forced-injection mold technique. Its flared edges provide perfect tape guidance while its six spokes maintain rigidity and perfect circularity. The tape flows through the mechanism and past the head gap in true vertical alignment. There's virtually no tracking variation or loss of high frequencies. Sixty checkpoints during the manufacturing pro-

cess guarantee it.
For Part Six, the TDK
spindle pin, our engineers
chose stainless steel.
Machined to size and
aligned to a perfect 90°, it's
designed without a taper.
Micro-polishing and a
silicone coating cut down
friction. The TDK spindle
pin is far more resistant to
heat and cold than plastic.
It won't bend out of shape

and wear down the spindle. Tape is assured safe passage with virtually no flutter or channel loss.

In a TDK cassette, the parts are much like the instruments of an orchestra. All equally important. Music is an outcome of the perfect interplay between them. In the end, that's what's so distinctive about TDK.

Music is the sum of its parts.







THE AUDIO PRO A4-14 BIAMPLIFIED LOUDSPEAKER

The only bookshelf-size*speaker with a built-in subwoofer.

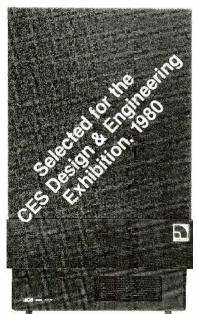
Audiophiles tell us the ultimate speaker Audiophiles tell us the ultimate speaker system uses biamplification and subwoofers. The biamplified A4-12's, with their built-in "ACE BASS" subwoofers are an entire audiophile system in bookshelf-size enclosures.

Acoustical engineers tell us that the ideal loudspeaker would be a single radiating point. Because of its built-in subwoofer, the Audio Pro A4-14 comes closer to this idea; than any other full range loudspeaker—without sacrificing bass.

full range loudspeaker—without sacrificing bass.

Designers tell us that speakers should be heard and not seen. Due to their compact size and full complement of room balancing controls, the A4-14's can deliver their op mum performance—wherever they are placed.

Sound, science, and style. The total design approach to audio



* Optional floor stands available.

For more information and your nearest dealer CALL TOLL FREE 500-638-0228. Maryland: 0-459-3292-COLLECT. Metro D.C. 459-3292

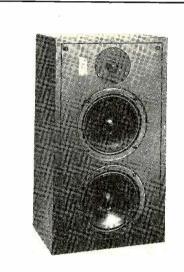


New Products

latest audio equipment and accessories

everyone on the dance floor is treated to the same sound quality. The trapezoidal shape and short vertical dimension of the HF12-3 simplify ceiling installation. The LF118 is intended for floor mounting, where it produces "visceral" undistorted bass down to 40 Hz. With the XEQ-1A, the LF118 can be adjusted to provide extended response down to 28 Hz. The single-channel XEQ-1A also has an infrasonic filter. Crossover frequencies are determined by plug-in modules; the recommended frequency for this system is 125 Hz. Price: LF118 and HF12-3, \$630 each; XEQ-1A, \$275.

Circle 124 on reader service card



Celestion's Three-way, Three-driver Loudspeaker

☐ In the Ditton 200 loudspeaker, Celestion has combined a 1-inch soft-dome tweeter with two 8-inch drivers. The upper driver functions as a woofer; the lower one doubles as midrange and passive radiator. This design is said to yield usable bass response down to 50 Hz with relatively high efficiency. The tweeter is designed for wide dispersion, increased power handling, and high efficiency. The rectangular cabinet has the drivers flush-mounted for even sound radiation without diffraction effects. Anechoic frequency response is 57 to 20,000 Hz ± 3 dB. Crossover frequencies are 1,700 and 2,300 Hz. Nominal impedance is 8 ohms. The unit will produce an 87-dB sound-pressure level at 1 meter with a 1-watt input. Dimensions are 23½ x 13 x 10½ inches; weight is 28 pounds. Price: \$300.

Circle 125 on reader service card



Power Amplifier From Nikko

□ Nikko's Alpha 440 power amplifier is rated at 220 watts per channel into 8-ohm loads with no more than 0.008 per cent total harmonic distortion (240 watts per channel into 4-ohm loads). Signal-to-noise ratio is given as 115 dB. The amplifier's input stages employ dual field-effect transistors (FETs), and the output stage consists of high-speed bipolar transistors with a d.c. servo loop to maintain performance at low frequencies. The output stage uses "nonswitching" circuitry that monitors and continuously adjusts the bias of each transistor to enable the amplifier to operate in a lowdistortion mode. Features include dual vertical bar-graph power displays, front-panel input-level controls, a headphone jack, and a relay-controlled speaker selector. Price:

Circle 126 on reader service card



High-output Phono Cartridge From Audio-Technica

☐ The AT155LC Vector Aligned phono cartridge from Audio-Technica has a 5-millivolt (mV) output, higher than the more common 2- to 3-mV level, for improved signal-to-noise ratio. The cartridge output terminals are gold plated for low-resistance electrical contact. The frequency-response range is given as 5 to 35,000 Hz (20 to 8,000 Hz ± 0.75 dB; 8,000 to 20,000 Hz ± 2 dB). Tracking-force range is 0.8 to 1.6 grams. The recommended load resistance is 47,000 ohms; load capacitance, 100 to 200 picofar-

Imagination has just become reality.

Finally. The elusive goal, attained.

Audiocassettes of such remarkable accuracy and clarity that differences between original and recording virtually vanish.

This is the sound of the future. Tapes with the widest possible dynamic range. The flattest frequency response obtainable. And freedom from noise and distortion.

III III

New Fuji tapes: Born of microscopic particles made smaller, more uniformly than ever before. Permanently mated to polymer film so precise, its surface is mirror smooth. The product of intensive research that unites physics, chemistry, computer technology and psychoacoustics.

The sound of the future. Hear it at your audio dealer today. In four superb tapes that share a single name.



Imagination has just become reality.



details ... A DIFFERENT KIND OF RECORD CLUB

You can now own every record or tape that you may ever want at tremendous savings and with no continuing purchase obligations. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

Look at these benefits:

TREMENDOUS SAVINGS

on every record and tape in print—no "agree-to-purchase" obligations of any kind.

DISCOUNTS OF 43% TO 73%

off mfg. suggested list . . . special catalog features hundreds of titles and artists.

ALL LABELS AVAILABLE

including most imports through special custom ordering service. If we don't stock it we'll get it for you.

SCHWANN CATALOG

lists thousands of titles; classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country, etc.

DISCOUNT DIVIDEND CERTIFICATES

Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

NEWSLETTERS

happenings in the world of music; concerts, critiques, new releases . . . special super-sale listings at discounts of up to 73%.

DISCOUNT ACCESSORY GUIDE

Diamond needles, cloths, tape cleaners, etc. Discount Music Club is your complete one stop music and accessory buying service.

QUICK SERVICE

same day shipping on many orders ... rarely later than the next several days. Partial shipments always made in the event of unforeseen delay . . . all at no extra cost to you.

100% IRON-CLAD GUARANTEES

on all products and services.
Everything is guaranteed factory fresh and free
of defects or damages of any sort.
Your total satisfaction is
unconditionally guaranteed.

Discount Music Club is a no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want . . . when you want . . . or not at all if you choose.

These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon below for immediate information.

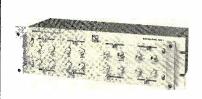
denc DISCOUNT MU 650 Main Str	SIC CLUB, INC eet, New Roche	9-1280 He N Y 10801
NAME		-
ADDRESS		
CITY		
		j

New Products

latest audio equipment and accessories

ads. Cartridge impedance at 1,000 Hz is 3,200 ohms; inductance is 490 millihenries. The stylus is a line-contact shape and is attached to a 0.3-millimeter-diameter beryllium cantilever. Vertical tracking angle is 20 degrees. Total cartridge weight is 8.2 grams. Price: \$225.

Circle 127 on reader service card



Superex's Eight-band Parametric Equalizer

☐ Superex Electronics' rack-mountable GEM-7 is an eight-band, full-parametric stereo equalizer with four response-shaping adjustable filters per channel. The four controls come in pairs: two filters have center frequencies adjustable between 30 and 820 Hz and the other two between 820 and 16,000 Hz. Each filter has a gain control providing up to 18 dB of boost or cut, as well as a variable-bandwidth control which adjusts the width of each filter from 0.16 to 2 octaves. Full tape-switching functions are included, with separate RECORD EQ, PLAY-BACK EQ, and TAPE MONITOR controls. Harmonic distortion is less than 0.01 per cent. Intermodulation distortion is less than 0.005 per cent. Signal-to-noise ratio is -89 dB (IHF A-weighted). Frequency response (with controls adjusted for flat response) is 20 to 20,000 Hz ± 0.5 dB. Dimensions are 19 x 5 x 7 inches. Price: \$449.95.

Circle 128 on reader service card



Low-profile Receiver From Radio Shack

☐ The Realistic STA-720 AM/FM stereo receiver is rated at 25 watts per channel into 8 ohms from 20 to 20,000 Hz with no more than 0.05 per cent total harmonic distortion. Phono signal-to-noise ratio is given

as 81 dB. Mono FM sensitivity is 1.9 microvolts (10.8 dBf), capture ratio is 1 dB, and stereo separation is 45 dB at 1,000 Hz. The FM signal-to-noise ratio is 70 dB. A new integrated circuit in the phono preamp is said to lower distortion while maintaining proper RIAA equalization. Special "Auto-Magic" circuitry is employed to fine-tune FM stations and to lock on to the transmitter frequency automatically. Other features include connections for one tape recorder. detented bass and treble controls, a fortydetent volume control, switching for two pairs of speakers, and a mono switch. The unit measures 31/8 x 161/2 x 121/4 inches. Price: \$299.95.

Circle 129 on reader service card



Magnepan's Undamped Unipivot Tone Arm

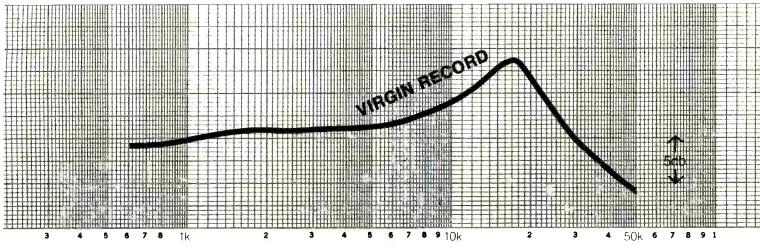
☐ The Unitrac I tone arm from Magnepan, Inc., uses an undamped unipivot bearing and is designed to be relatively immune to the problems generated by cartridge compliance and mass. It incorporates nonresonant materials and has its bulk distributed to reduce moving mass. The vertical tracking angle is adjustable during play by means of a movable arm post with a 1-inch height adjustment. All electrical contacts are gold plated for reliability and positive contact. Two low-mass, detachable carbonfiber headshells are supplied, as are an auxiliary counterweight and complete mounting instructions. Pivot-to-stylus distance is 9.5 inches; effective mass is 8 grams. The antiskating adjustment can compensate for elliptical or conical styli tracking up to a maximum of 3 grams. The arm's resonance frequency with typical cartridges falls between 5 and 12 Hz. Cable capacitance is 110 picofarads. Price: \$295. Magnepan, Inc., Dept. SR, 1645 Ninth Street, White Bear Lake, Minn. 55110.

Circle 130 on reader service card

NOTICE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturers.

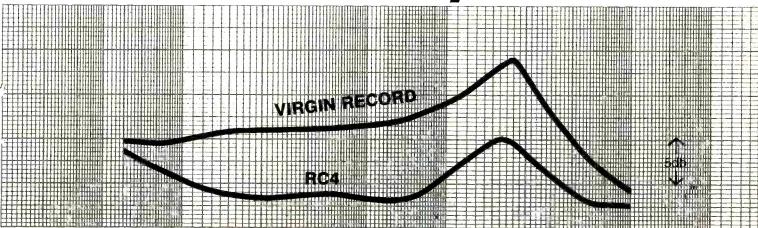
Domestic inflation and fluctuations in the value of the dollar overseas affect the price of merchandise imported into this country. Please be aware that prices quoted in this issue are subject to change. **Noisy virgin**

Noise spectrum analysis of a virgin record



FREQUENCY-Hz

Quieted by RC₄[™]



A quiet revolution in record cleaning

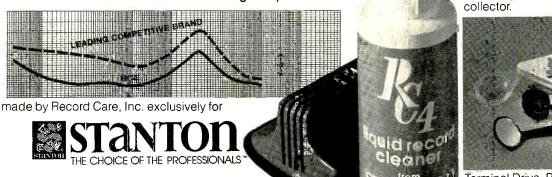
For years record collectors around the world have been searching for the ideal record maintenance program. A method that actually delivers a stated promise of continual protection of the faithful reproduction of the original recorded sound.

Now, supported by the most respected names in the audio field new RC4 and a companion stylus cleaning and inspection kit provide a new and dramatic improvement over every record care program available.

RC4 is 60% more effective than the leading competitive brand

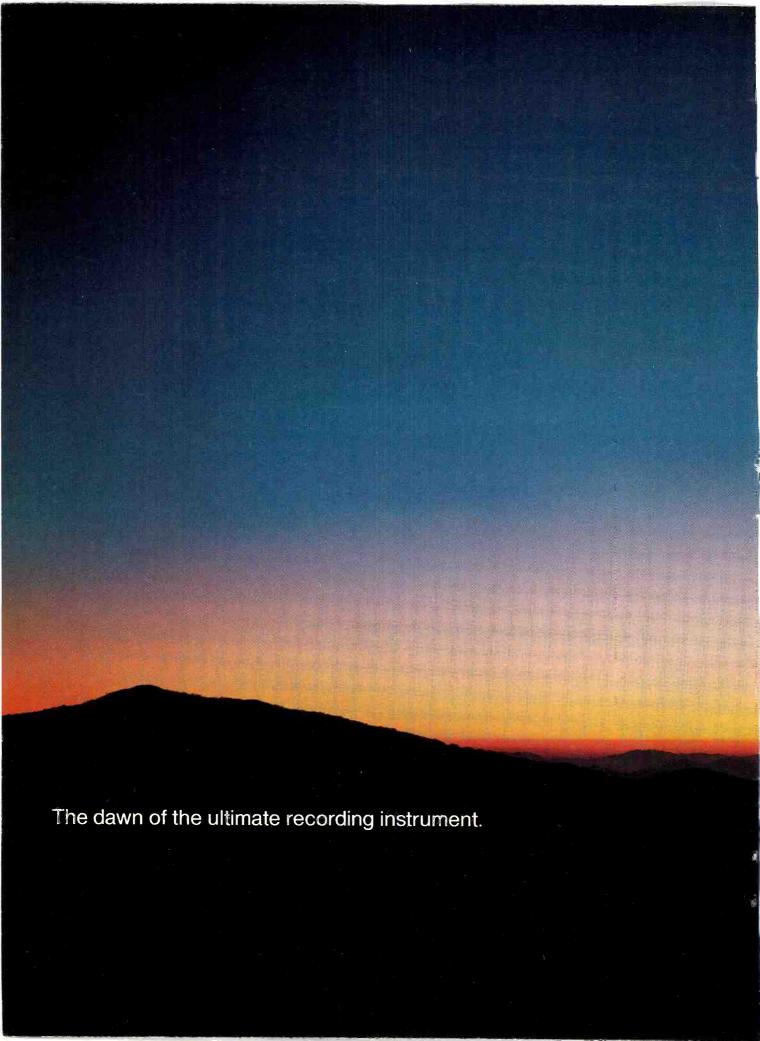
For example, the ultimate test of a clean record is a quiet record and RC4 quiets even a virgin record right from the sleeve. Result, a purity of sound, an absence of "pops and clicks" that brings new enjoyment to even well used and older records.

A companion stylus cleaning and inspection kit, complete with fluid, brush, magnifying glass and mirror, assures a record maintenance program in keeping with the ever increasing value of every record collector.





Terminal Drive, Plainview, N.Y. 11803 circle no. 44 on reader service card



...Nakamichi 1000ZXL

Once a decade, a unique recorder is created.

An instrument of the future designed without compromise to receive the state of the art. Harnessing the power of two computers, it becomes the Absolute Reference.

Automation that defies obsolescence. A recorder to cherish for years to come. 1000ZXL Computing Cassette Deck. The Ultimate Recording Investment.



Nakamichi

For more information, write to Nakamichi U.S.A. Corp., 1101 Colorado Avenue, Santa Monica, CA 90401.

| It sounds | like music. | Interface: C Series II | is the fulfillment of our six-year asso-

our six-year association with optimally vented speakers based on the theories of A.N. Thiele - speaker designs first introduced by Electro-Voice in 1973. The Interface: C offers you a unique combination of high efficiency and high power capacity - the only way to accurately reproduce the 120+dB peak sound pressure levels found in some types of live music.

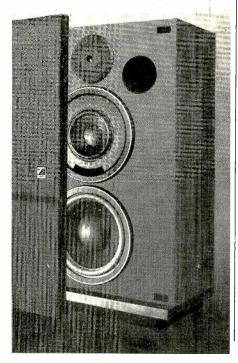
The SuperDome™ tweeter, an E-V exclusive, and the VMR™ vented midrange driver, the first to apply optimally vented design to mid frequencies, ensure your music is reproduced without the coloration normally found in other highefficiency drivers. An honest 30 Hz low end totally eliminates the need for expensive subwoofer assemblies.

When you spend \$1,000 for a speaker system, get your money's worth. Audition the Interface: C Series II at your nearest Interface dealer. If you want a speaker that sounds like music, the Interface: C Series II is the one you'll buy.



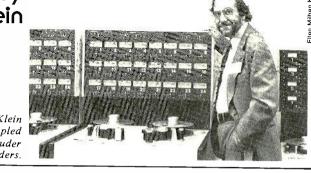
Electro-Voice®

600 Cecil Street, Buchanan, Michigan 49107:



Audio Q. and A.

By Larry Klein



Technical Director Klein admiring a pair of coupled twenty-four-track Studer tape recorders.

Equalizer vs. Expander

When I'm playing back or recording, will an equalizer or a dynamic expander do a better job of upgrading the sound? Can both of these components be used simultaneously in a stereo system?

JOHNNY WOO Monterey Park, Calif.

Equalizers and expanders provide dif-A. ferent corrective effects. In brief, the task of an expander is to restore the dynamic range lost-usually deliberatelyin the recording process. A recording engineer has problems with both very loud and very soft signals. In general, very loud signals are more difficult to record cleanly, limit the playing time on a disc side by taking up more groove space, and stress the playback ability of many otherwise adequate record players. Very soft signals are forced to compete with noise originating on the master tape, on the disc, in the phonocartridge preamplifier, or in the listening room.

The obvious solution to the recording engineers' loud and soft problems is to make the soft signals louder and the loud signals softer-which is technically known as compression. In playback, however, corrective expansion is needed to make the soft signals softer and the loud signals louder and thereby to restore some of the lost dynamic range. The two major problems of expansion devices is that they can only guess as to when and to what degree the engineer compressed the signal, and they must be designed and adjusted carefully to avoid causing "pumping" or "breathing" effects on the signal. (These describe disturbing volume surges or the appearance and disappearance of background hiss when expansion is applied inappropriately.)

Unlike some audiophiles, I'm a firm believer in the usefulness of the various accessory devices, and my system is seldom operated as "a straight wire with gain." The popular straight-wire approach implicitly expresses two naïve beliefs: (1) that the signal on the disc or tape is somehow "pure" and any sort of signal processing by the listener somehow sullies that purity, and (2) that this "pure" signal can be delivered intact to the ears of the listener only if tone

controls and other perverting influences are kept out of the signal path. The truth of the matter is that the music available on discs and tapes, whether classical or popular, has almost always already gone through a tremendous amount of intentional (and otherwise) manipulation that has changed its frequency balance, noise content, sonic perspectives, dynamic range, and so forth. Even assuming that your playback equipment acts as "a straight wire with gain" throughout the audible range (something not too difficult to achieve), it would nevertheless take a lot of sophisticated measurement and subsequent adjustment to maintain anywhere near the same degree of frequency flatness right through the speaker/room/ear interfaces. That's why we have equalizers—and also noise suppressors, sonic-image enhancers, time-delay systems, and dynamic-range expanders. Of course, any of these devices can be misadjusted to worsen the sound, but, if properly used, most can provide a worthwhile improvement.

Model Changes

Why do most of the hi-fi manufacturers bring out new receivers, amplifiers, and tuners every year? I can't believe that each year some revolutionary technical advance outmodes the previous year's model

> RONALD DAVIS Boston, Mass.

The reason for the annual and some-A times semi-annual new-model festivals derives far more from the "needs" and expectations of the marketplace (surprise?) than from breakthrough triumphs in the design laboratories. Any company that can afford the expense engages in "market research," meaning an ongoing analysis of competitive products with special focus on whatever new circuitry and new semiconductor devices they may have. Manufacturers are also alert for any new (or revised) features or styling that might turn out to have special appeal. The fierce competitive pressures are intensified by the ever-shifting yen/dollar relationship and by Japanese (Continued on page 24)

Sony's inseparable separates.

A stylish new match in a thin new tuner and an integrated amplifier.

Tune into style and grace with Sony's new slim separates. Together they give you the compactness of a single receiver, with the higher-fi engineering of individual components.

Sony's sleek ST-J55 tuner and powerful TA-F55 integrated amplifier are a perfect

pair. Both with the convenience of feather touch operation. In addition the

F55 features an electronic volume switch with a built-in motor to give you smooth and easy stereo command.

Frequency synthesized tuning.

The tuner's advanced technology is Sony sophisticated. Frequency synthesized tuning with a highly stable quartz-crystal oscillator locks onto the broadcasting signal and makes station selection precise and drift free. Sony sensational is the only description for our tuner's masterful performance.

The ST-J55's feather touch switches are set in a neat clean line for perfect visual operation. And you get impeccable operational ease with Memory Tuning, Auto Tuning and Manual Tuning.

Non-volatile memory with random memory preset.



The ST-J55's MNOS memory makes total operation incredibly simple. From tuning to randomly

presetting a total of 8 of your favorite FM/AM stations.

Pre-set frequencies and reception adjustments like Muting/ Mode Pre-set are all memorized for problem-

free tuning each time you turn the tuner on. And Sony's non-volatile memory holds all information up to ten years without power or backup systems.

Sony also supplies blank station labels so you can personalize your tuner. You can tag your preprogrammed frequencies or station names in a handy LED backlit slide out holder for at-a-glance identification.

MM and MC cartridge and appreciate the TA-F55's virtuosity.

The final touches.

Of course, you get all the higher-fi standards in the TA-F55, like Gold Plated Phono Jacks, oxygen free copper wiring, metallized film resistors and polypropylene capacitors.

It's the synthesis of Sony technology and design.

TA-F55

ST-J55

Sony's amplifier takes MIM and MC

cartridges for maximum virtuosity.

The ST-J55's matching mate is Sony's TA-F55 integrated amplifier. They're a natural fit at exactly the same slim size. Sony's technology gives you the combination of slim elegance and a powerful delivery. The TA-F55 pumps out 65 watts minimum RMS per channel at 8 ohms from 20 to 20,000Hz with no more than 0.008% total harmonic distortion.



Pulse Power Supply, Sony's revolutionary Heat Pipe, and Sony's innovations in simple and straight signal

processing circuitry construction all result in extremely clean and noise free sound quality.

Best of all, now you can choose practically any type of MC and MM cartridge for your choice of the most satisfying musical performance an audiophile can hope for. Just set the two position load selector for each

Precision and stability are Sony assured.

The ST-J55 tuner and TA-F55 integrated amplifier. Two Sony quality engineered components, whose separate stability and precision are unmatchable for operational convenience and performance.

Sony's perfect pair. They're inseparable.



CIRCLE NO 52 ON READER SERVICE CARD



There are perhaps a dozen reasons why the new AT155LC does so well tracking even the most explosive new digital records. An advanced new Line Contact stylus, our exclusive Vector-Aligned™ magnetic system, and new highefficiency coil and core designs to mention just a few.

But it's our sound, not the construction that is important. And our capability to track even the tough records which benefits you every time you listen. Because even slight mis-tracking can quickly destroy any record, shortening both disc and stylus life dramatically.

Of course it's easy to claim "good tracking"... everybody says it. Proving it is something else. Well, we guarantee that every new AT155LC will pass an objective test which easily exceeds the limits of most commercial pressings. Specifically, at 1.2 grams the AT155LC cleanly tracks the 80-micron band of a standard

DIN 45 549 or AT6607 equivalent test record. And at 1.6 grams it even tracks the severe 90-micron band without visible distortion.

Of course tracking is not the only virtue of the new AT155LC. Response is uniform from 5 to 35,000 Hz, separation is great, and efficiency is

uncommonly high*. All claims we back up with specific tests any lab can duplicate.

But the most important test is a visit to your Audio-Technica dealer. Ask to hear the new AT155LC with

your favorite records and with the new digital blockbusters. We promise a remarkable sonic experience. And audible proof that the new AT155LC can unlock the full potential of every other hifi component you own.

*Performance specifications available on request.

AUDIO-TECHNICA U.S., INC., 1221 Commerce Dr., Stow, OH 44224 Dept. 110F. inflation. It should be apparent to any shopper that the Japanese have achieved wonders in holding down equipment prices in the face of all the inflationary pressures. This is a tribute both to their command of audio technology and to their marketing ability.

It seems to be a matter of principle with the major Japanese hi-fi manufacturers that any new-model price increase (brought about usually by the above-mentioned inflation or dollar/yen shifts) be somehow softened or justified by building in a new user "benefit" in styling, features, or some measurable (if inaudible) specification improvement. In the past half-dozen years the search for the "gimmick" (to put it crassly) that will differentiate this year's new models from those of last year has become ever more desperate. The gimmicks are hard to come by simply because the equipment is already so good.

So why the constant model changes? A few are the result of improved technology, which is accompanied by "styling" changes to signal to all concerned that here is a truly new model. However, I'm told that the basic reason is that individual dealers and manufacturers' "reps" both feel that frequent new-model introductions are required from each manufacturer in order for them to remain competitive.

From the hi-fi consumer's point of view, the competitive maneuvers of the major manufacturers are certainly not without their advantages. Competition has held down prices and speeded the application of new technology to design. And, unlike the "planned obsolescence" that afflicts so many other consumer product areas, hi-fi product obsolescence is usually more in the perception of the audiophile than in the planning of the manufacturer. Those audiophiles who must own the very latest technological marvels will find many manufacturers here and overseas who are more than pleased to cater to their addiction-and who provide good value besides.

Slamming Peril

Q. Will slamming my car's trunk lid damage the woofers mounted in the rear deck?

JEFF DARCY Lewistown, Mont.

A. The variables in the equation are: the compliance and ruggedness of the woofer-cone suspensions, the volume and "leakage" of the air in the trunk, and the friction in the trunk-lid hinge (which influences the speed of the slam). To determine whether there is a problem, watch a woofer cone (with its protective grille removed if necessary) during a normal trunk slam. If the forced outward excursion of the cone exceeds a quarter-inch or so, it probably would be best to moderate your lid slamming, although I suspect that the better car-stereo speaker manufacturers have designed their product specifically to withstand this sort of mistreatment. Jensen tells me that cones fabricated with rubberoid or fabric outer suspensions (rather than the cheaper corrugated paper) are far better able to handle such momentary large excursions.



Introducing another Sony only. The MDR series open-air headphones. The smallest, lightest stereo headphones available today. Or tomorrow.

With our lightest at 40 grams, you will barely know you're

wearing them. Yet the sound is

dynamite.

Through a remarkable new audio breakthrough, our engineers have succeeded in reducing big-headphone technology down to the size of your listening channels.

The MDR series headphones' airy spaciousness delivers absolute clarity through an ultra-small driver unit that produces more than three times the energy of conventional circuits. And a new high-compliance diaphragm accurately reproduces the 20 to 20,000Hz bandwidth and improves low-range response.

That means you can listen to the heaviest of music for hours. Lightly. And know that you're hearing every nuance of the original recording from deep bass to the highest treble.

Listen to our new MDR series headphones.

They're light. And heavy.



CIRCLE NO. 51 ON READER SERVICE CARD

State of the M t. AR Verticals, the finest speakers in AR history. Audition them and be assonished. Left to riight AR9, AR91, AR92, AR90. Your AR Dealer has literature or write AR, 10 American Drive, Norwood, MA. 02062 TELEDYNE ACQUISTIC RESEARCH

Tape Talk

By Craig Stark



Equalizing Recordings

I recently purchased an octave-band equalizer that plugs into the tape-out/tape-in jacks on my preamp. Naturally, it has a pair of tape jacks of its own, so I can still use my recorder. The equalizer I bought, however, offers me a choice between equalizing the signal fed to the recorder or equalizing the signal coming back from the recorder. Which is better?

FRANK SANTELIA New York, N.Y.

Most people use graphic equalizerswhich are, in essence, more flexible tone controls than their receiver or amplifier provides-for the purpose of improving the overall sound balance within their listening room. This involves boosting some frequencies and cutting down other frequencies so that a satisfactory tonal balance is achieved for the *combination* of speaker and room characteristics. If your equalizer is used for this purpose, its normal setting should never be used to feed a signal going onto a tape-unless, for some strange reason, you want to listen to FM and LPs with the equalizer turned on but to tapes with the equalizer turned off! If you record your tapes with a frequency-correction curve based on your specific room/speaker needs and then leave the equalizer in when you play the tapes so made, you will be doubling the required correction factors and will produce a very unnatural sound indeed. Further, such a tape will not play properly on anybody else's hi-fi system, since its frequency balance has been set to correct for deficiencies in your specific room/ speaker combination.

On the other hand, while pros may "lay down" (record) an original track "flat" (without equalization), they do, at least by the mixdown stage, apply "equalization" to what becomes the master tape itself. If you're going to boost the highs, for example, it's generally a better practice to do so before they go onto the tape, because if you insert a treble boost during playback you'll automatically raise the background-hiss level on the tape by the same amount. Working with a cassette deck instead of a 15- or 30-ips mastering recorder, the very opposite procedure might well represent

"best practice," however, since cassettes are notoriously short on high-frequency headroom at high recording levels.

What it boils down to is that the equalizer manufacturer gave you a choice for a reason. If the source material you're taping is tonally deficient in some respect, or if you have reason to believe that your tape deck (or components feeding into it) require correction in frequency balance, then frequency equalization should be applied to the signal fed to the tape. These modifications will almost certainly be different from the tonal changes required to make a "flat" source sound proper with your speakers and room, but they are important. Your goal should always be to make your tapes in such a way that they sound like "state-of-theart" LPs or broadcasts when played back through the same equalizer settings you normally use in your room, with your speakers, to make records and FM broadcasts sound "natural."

Distortion Specs

The government requires amplifiers to meet rated distortion claims at full power from 20 to 20,000 Hz. How can tape-recorder manufacturers get away with advertising their distortion at only 315 or 1.000 Hz?

MERLE POSNER Yankton, S.D.

A. Tape recorders and amplifiers are playing in different ballgames with different ground rules. For example, would it help you in picking a cassette deck for high-fidelity recording to know that its "full-power bandwidth at rated distortion" ranged from, say, 100 Hz to 6,170, 6,330, or 6,670 Hz? Those are the sort of numbers you might get with a rating for total harmonic distortion at full power. This is because the third harmonic (three times the input frequency) is the dominant distortion in regular analog tape systems. Since 18 to 20 kHz is the normal upper frequency limit (even at low levels) for response in cassette decks, you simply can't measure the harmonic-distortion products with input signals much over 6 kHz.

A promising new technique, using two

simultaneous tones 1,000 Hz apart in frequency (for instance, 15,000 and 14,000 Hz), is in the process of being developed to measure distortion products at high frequencies, but the exact correlation between these tests and those using traditional single-tone, third-harmonic measurements has not been fully established. When it is, you may be sure that our test-report results will reflect the "true" distortion products of tape recorders across their rated frequency bandwidth, and we'll have more to say about what should be considered "full rated power" (nanowebers per meter of recorded flux on the tape).

Storage Precautions

Q. I don't get around to playing some of my open-reel tapes for a year or more at a time, and I'm concerned that they might deteriorate during storage. Are there any precautions I should take?

Frank Pedroja Wichita, Kan.

A. While today's polyester-base tapes are not as susceptible to damage during long-term storage as were the acetate-based tapes of years ago, the same general good-practice precautions apply.

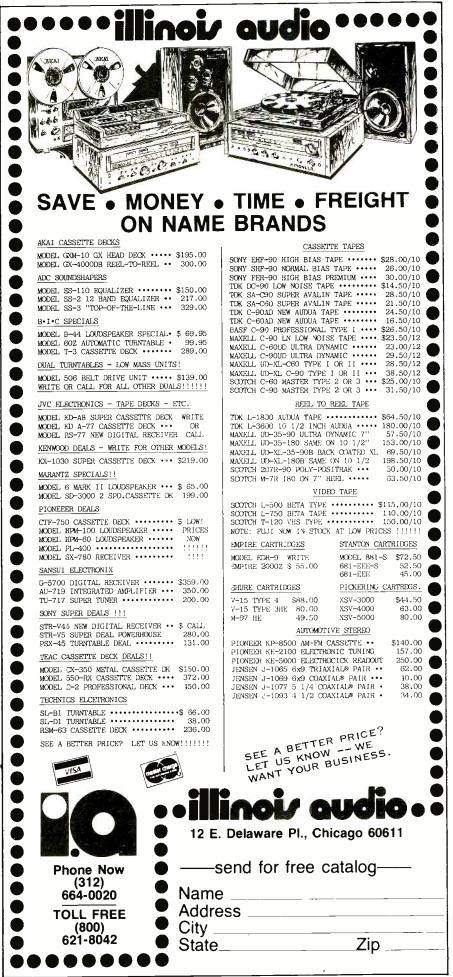
1. Tapes should always be stored in a played rather than a fast-wound condition. This ensures that tension within the wound tape pack will be moderate and minimizes the danger that internal stresses (increased by temperature/humidity variations) will build up—possibly deforming the tape—within the reel.

2. A flat-wound tape pack, in which no strands stick out and in which there is space between the pack and both reel flanges, is necessary to prevent damage to the tape edges. If you hear a "tick" on each revolution of the take-up reel (you'll also be able to see the tape's edge being deflected), either the height of the reel "turntable" is misadjusted or the plastic reel itself is too warped for use in long-term storage.

3. If a tape is recorded in only one direction (half-track stereo or quarter-track stereo on only one side), it should be stored "head in," that is, with the beginning of the program closest to the reel center, thus requiring you to rewind the tape before playing it after storage. This will minimize print-through effects—the unintended transfer of magnetization from one layer of tape to the adjacent ones that sometimes produces pre- and post-echo. Rewinding in advance of playing not only clears any sticky splices in the tape, but also (for reasons not entirely clear to me) discharges some of the accumulated spurious printthrough signal.

4. Tapes should always be stored on edge (not lying down flat), away from extreme variations in temperature, and at a reasonable (3 feet or so) distance from strong magnetic (loudspeakers) or electromagnetic (transformers on your amplifier, air-conditioner or furnace motors) fields.

Have I ever broken these utopian-sounding rules and gotten away with it? Yes. Have I ever ruined tapes I could never replace by breaking these rules? Also, tearfully, yes.



SJUST

AKG K-340 **ELECTROSTAT DYNAMIC HEADPHONES**



AKG ACOUSTICS, INC.

77 SELLECK STREET STAMFORD, CT 06902

Audio Basics

By Robert Greene



THE FORCE THAT'S WITH YOU

HANCES are you know many of the electrical specifications of your audio equipment, but do you know what electricity is or how it makes your system, or anything else, work? If not, I could refer you to a library to read up on the theory of electricity. That's a rather complex subject, though, and perhaps more than you want to know. So I'll boil it down instead to a simplified, once-over-lightly description to give you some idea of what goes on inside the wires between your components that eventually makes sound come out of your speakers. Should you become interested enough to want greater detail, there's still the library or bookstore. One title you might look for is Basic Electricity, a reprint of a U.S. Navy publication. If it isn't available locally you can order it from Dover Publications, Inc., 180 Varick Street, New York, N.Y. 10014, for \$5.50 plus 70¢ postage.

Although the analogy doesn't work perfectly, many people find it helpful to think of electricity as being like water running through pipes. With water, if you put some in at one end of a pipe that same water will eventually come out the other end. Something of this sort does happen with direct current (d.c.), but in alternating current (a.c.), which is what we'll mainly be concerned with here, the only motion is a backand-forth oscillation rather than a here-tothere flow. The local power plant does not "put" electricity into one end of a wire so it can come out the other. What it in fact does is create a condition in the wire—the "conductor"---whereby so-called "free" electrons (small parts of atoms) in it will shift from one atom to the next and back again.

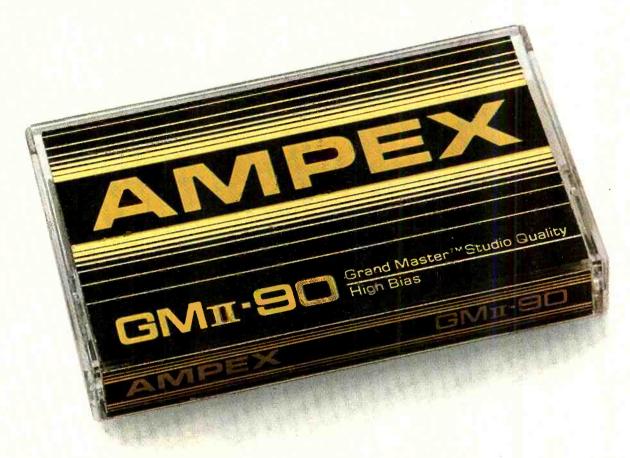
The atoms of some materials are more amenable to this sort of electron shifting than are others, which is why not all materials are good conductors. This free-electron movement could be visualized by imagining electrons jostling each other out of position like the hungry cats in the TV commercial, each pushing the next down one "dish." only with alternating current the cats push back again, and so on over and over. This electron activity in the wire is only potential activity, however, until an electrical device is attached at some point and turned on. thus "drawing" current from the generator.

Now, how does the generator start this electron activity in the first place? Magnetism. You know what a magnet is and have probably seen its properties demonstrated by moving a magnet beneath a board covered with iron filings; the filings are moved around into different patterns as the magnetic field shifts. To get some idea of the action of a generator, think of a coil of wire wound around a hollow core. If a bar magnet is moved through the center of this core (or the core is moved along the magnet), the magnetic field surrounding it will agitate the free electrons in the wire in the manner described, thereby "making" electricity. This will continue for as long as the magnet and coil are in appropriate motion relative to one another; when the motion stops, so does the electron activity. Of course, the amount of electricity generated by such an arrangement is minuscule (perhaps enough to light a flashlight bulb), but the principle is the same as that employed on a much larger scale by power generators-and on a much smaller scale by magnetic phono cartridges and some microphones.

HE electricity so created has two basic properties: voltage and amperage. Voltage, or electromotive force (EMF), is roughly comparable to water pressure. The electricity usually used in home wiring in the U.S. and Canada is 120 volts. Amperage, or current, is comparable to the rate of flow of water in a pipe; one ampere represents the passage of about six billion billion (!) electrons past a given point in one second. You may notice amperage figures on some of your home appliances; for example, a 120volt air conditioner might use 7.5 or 12 amps, depending on its design. This can be converted to the more familiar watts measure by multiplying the voltage by the amperage; if the air conditioner is a 7.5-amp unit, it will normally draw about 900 watts. Voltage is often shown as a range rather than a single number because the figures are merely nominal. The actual voltage at a given moment depends on two factors: what is being generated and the amount of drain on the line. A "brownout" illustrates the former; this is a deliberate lowering of volt-

(Continued on page 32)

HGAPERFORMANCE HIGH BLAS



AMPEX GM II HIGH BIASTAPE.

When you're recording music that's rich in high frequencies, you need a high performance tape. Ampex GM II high bias cassettes. They retain and release every note and nuance. Especially those found in highly amplified electronic music.

GM II's high performance begins with the magnetic particle. The ones we use are smaller, permit higher volumetric loading and greater uniformity of dispersion on the tape surface. This produces a more consistent energy, increased output sensitivity, and a substantial reduction in the third harmonic distortion level. Our unique oxide formulation and new processing techniques extend the high end while they lower the noise floor (-62.8dB @ 333Hz).

And to make certain that tape-to-

head contact is precise, we use our exclusive Ferrosheen™ calendering process to give the tape an ultrasmooth, glossy surface.

GM II's True-Track™ cassette mechanism is an audio achievement in and of itself. Every aspect, from the fore and aft guide system to the computer-torqued cassette housing screws, says high performance. Then every Ampex cassette must pass our stringent quality control standards.

GM II high bias, high performance tape. Use it next time you're recording a passage that's rich in high frequencies. You'll hear what a difference it can make when your high bias tape delivers high performance.

For complete information and specifications on all Ampex premium tapes, write us for a copy of our Full Line Brochure.

The Tape of the Stars

Ampex Corporation, Magnetic Tape Division, 401 Broadway, Redwood City, CA 94063 415/367-3888

CIRCLE NO. 5 ON READER SERVICE CARD



age by the power company (for whatever reason). The latter factor is illustrated by the lights' dimming when you turn on some heavy appliance in your home.

Using the wattage formula can help you avoid overloading your own lines and having to replace blown fuses. Just check the amperage rating of each line-it's printed on the circuit breaker or fuse (if you have the old-style glass fuses that will fit in sockets with various different ratings, be sure you have the right fuse in each line). If your fuse box is inaccessible or if you have unmarked circuit breakers, you might check with an electrician or else assume 15 amps for each line, a conservative figure. To determine the wattage each line can handle. multiply the amperage by the voltage.

It might also be worth examining your electric bill, which is based on kilowatt hours (kwh) of electricity used. One kwh represents the use of 1,000 watts for 1 hour or the equivalent (100 watts for 10 hours, for example). Using the local rate per kwh, you can calculate what it costs to use most electric appliances. Unfortunately, this formula can be misleading when applied to stereo systems because the current drawn by most amplifiers varies greatly with the signal and the volume setting.

ALTERNATING current also involves the matter of frequency. As the magnets and coils in a generator change their relative positions, the voltage will peak, drop to zero, and then peak again in the reverse direction. In the U.S., this cycle of alternation is timed to take place 60 times per second—a frequency of 60 Hz (the European standard is 50 Hz). This periodicity becomes visible when objects are moved in the light of a neon lamp (or a single fluorescent tube), a phenomenon used for checking turntable speed: the markings on a stroboscopic disc (or turntable edge) are keyed to the line frequency so as to create the optical illusion of a still or moving pattern in the rapidly flickering light.

The a.c. pulsations in conductors can present problems in audio because of the magnetic fields created around them; these can induce a hum at the line frequency (60 or 50 Hz) in some equipment. Tape heads, magnetic cartridges, and the high-gain circuits driven by these devices are particularly susceptible to this hum, so they are generally isolated or protected from the magnetic fields surrounding a.c. wiring, electric motors, and transformers, all of which are hum generators.

COIL and magnet in motion will create electrical current. Not surprisingly, reversing that situation—putting electrical current through the coil-will cause motion. This is the operative basis both of most electric motors (which are essentially generators in reverse) and of loudspeakers, which are in fact a kind of electric motor. The cone of a typical speaker driver is attached to a coil of wire (the voice coil) suspended within the magnetic field of a permanent magnet. A varying current (an analog of that received from the signal source) is fed into this coil from the audio amplifier, causing the coil to vibrate within the magnetic field. The vibrating coil moves the speaker cone, which moves the air, thus producing the sound you hear.

The GE Computer Radio. At 6:00 A.M. it's smarter than you are.



The Great Awakening from General Electric. For starters, it's smart enough to let you set the time directly...no flipping around the clock.



You can program it to change stations for you. So it will rock you to sleep with Strauss, switch to your news station, and wake you at 6:15.



Then it comes back on to wake up your better half to Beethoven at 7:53. All with push-button ease.



When you forget to set the alarm...The Great Awakening remembers to remind you.



You can scan all the AM or FM stations by pressing a button or, to tune in one station, just punch in the frequency of your choice on the keyboard.



You can also program up to six stations into the memory. And recall any one with the touch of a finger.



For a little extra sleep, press the Snooz-Alarm. It lets you sleep an extra minute or an extra hour. You tell the memory how long.



The Great Awakening is so smart it even tells you when you've made an error. But it's easy to correct...just press a button.



Model 7-4880

We bring good things to life.

GENERAL ELECTRIC

NEW HIGHS. The 500ID defines hard-to-get high frequencies because it comes with a cantilever that doesn't easily distort them.

It's boron-vapor hardened to track under "G"-forces that would buckle ordinary cantilevers.

NEW FIDELITY. In addition to hearing more highs you're going to hear less noise from a 500ID.

There's nothing complex about the benefits of Samarium-Cobalt magnets. They are simply less massive and higher in output than conventional ones.

So, if we had to give a reason for our signal-to-noise ratio being better than most, it's because the materials we use are better than most.

NEW TECHNOLOGY. Because the 500ID features Empire's inertially damped tuned stylus system, its performance is consistent—even when the capacitance varies from one system to the next.

Which means, the performance we monitor in our lab is the performance you're likely to hear at home.

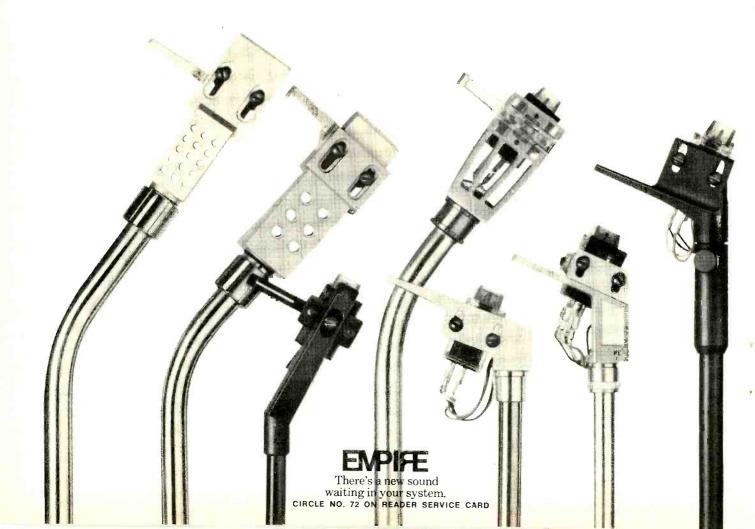


NEW SECURITY. Empire's two-year limited warranty is 365 days longer than the one-year limited warranty offered by many other manufacturers.

An extra year in no uncertain terms.

NEW SOUND. The Empire 500ID. You're an arm's length away from a new listening experience.

EVERYONE WHO WANTS THEIR OLD SYSTEM TO SOUND LIKE NEW, RAISE YOUR ARM.



Technical Talk

By Julian D. Hirsch



Cartridge Response and Temperature

compare our frequency-response measurements on a phono cartridge with those run by the manufacturer on the same sample. Whenever they use the same test records that we do (generally the CBS series) there is usually very close agreement between their response curves and ours. On the rare occasions when there have been measurable response differences (such as I dB or more) we have assumed that they reflected the slight but inevitable differences between different pressings of the same test record.

In a couple of cases, correspondence with the cartridge-design engineers has brought up the matter of temperature effects on cartridge response. Most carefully made frequency-response curves for cartridges not the ambient temperature during the test, and we have been advised that any significant departure from this temperature can affect the measured frequency response.

When one is dealing with the \pm 3-dB response variations that are typical of many cartridges, this can be a minor matter (as it always is from a listening standpoint), but some premium-grade cartridges carry very "tight" tolerances for their deviation from a flat response (sometimes as close as \pm 1 dB over the audio range). In such a case, a measurement shift of only 1 dB due to temperature effects can make it seem that a cartridge is "out of spec" when in fact it is not.

An accurate test of the effect of temperature is not easy to make; not only does it require a well controlled and calibrated cooling and heating chamber, but it should ideally be done while the entire record player is in the chamber since the cartridge temperature will begin to change as soon as it is removed from the chamber. However, we felt that even a relatively crude measurement might reveal the general magnitude of the effect and at least suggest whether it was something we would have to recognize in future measurements.

We therefore measured the frequency response of two different cartridges at room temperature (about 68 degrees F, or 20 degrees C, the usual temperature in our laboratory, give or take a few degrees). They were then placed in a refrigerator overnight (in their plug-in headshells) and retested in the morning. An ordinary household thermometer in the refrigerator showed that the ambient temperature was about 58 degrees F, or 14.5 degrees C (obviously not a very cold refrigerator, but most homes do not get any colder than this even in the winter). The measurement took only a few minutes, so the cartridges did not have a chance to warm up significantly during the response measurement.

THE cartridges were next allowed to stand at room temperature for several hours and were retested to see if the previous day's response was duplicated (it was). They were then put into an oven set for its lowest possible temperature (it fluctuated considerably, from over 150 degrees F to around 100 degrees F, but eventually we were able to

stabilize it at around 115 degrees F, or 46 degrees C, for an hour or so). Then the cartridges were removed from the oven and their response measured again. The test was concluded by leaving them at room temperature for several hours and measuring them once again to verify that no permanent change had occurred in their response (again, we were able to duplicate the previous room-temperature measurements).

The effect of these temperature changes on the frequency responses of the two cartridges was quite different but easily measurable. The response curves of an Astatic MF200, a high-quality magnetic cartridge, showed no change whatever with temperature up to 4,000 Hz. From that frequency up to the 20,000-Hz upper limit of the test there was no difference between the cold and room-temperature responses. However, at the high temperature the output increased slightly above 7,000 Hz, with the maximum change of about 1.5 dB occurring between 13,000 and 14,000 Hz.

A Micro-Acoustics electret cartridge behaved somewhat differently. The entire output level below 4,000 Hz shifted uniformly with temperature, with the cold and hot levels spaced, respectively, just 1 dB above and below the room-temperature output level. There were also slight changes in the high-frequency response above 10,000 Hz, amounting to a \pm 1-dB change over the full temperature range. Of course, the listener does not hear these effects directly as response changes, since the overall response curve would normally be adjusted for one's

35

Tested This Month

Avid Model 110 Speaker System
Hitachi D-85S Cassette Deck

Micro-Acoustics 3002 Phono Cartridge
Optonica SX-9305 Power Amplifier

Sound Concepts IR2100 Image Restoration Control

preferred listening level. In this case, the specified cartridge response was ± 1.25 dB; this was met at the low temperature, and it improved to ± 1 dB at room temperature and to a very impressive ± 0.5 dB at the high temperature (although most people would not appreciate even this remarkable flatness in such a tropical ambient temperature!). We also noted that the output between 5,000 and 8,000 Hz did not change with temperature, so the rest of the spectrum could be said to hinge about this upper-midrange band.

Our conclusion from these tests is that cartridge response *does* change somewhat with temperature, and in a manner that is

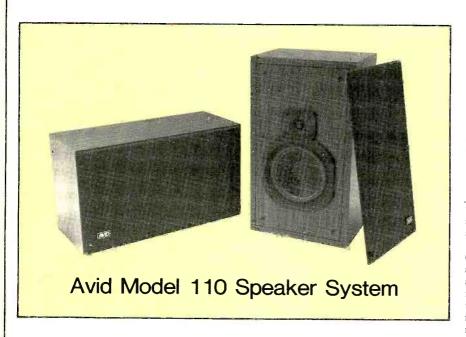
not always predictable (it is probably due in most cases to changes in the properties of the elastomeric damping materials in the cartridge, which modify the effect of the internal cartridge resonances on its response). These effects are not likely to be obviously audible, since A-B tests are not very feasible because of the surprisingly long thermal time constant of a phono cartridge (as much as a couple of hours for complete stabilization). Still, even these small changes can matter to a cartridge manufacturer who is claiming an unusually close response tolerance. However, a manufacturer will usually specify the temperature at which the measurement was made, such as 20 degrees C,

and most home environments do not differ much from that value.

Probably the most interesting thing we learned from this test was that at least some cartridges, seemingly such delicate devices, can withstand the abuse of being baked at upwards of 150 degrees F without apparent damage or change in any characteristics, since our three sets of room-temperature measurements (before, during, and after the temperature cycling) were absolutely identical. So, if you can listen to your system in reasonable comfort, don't worry about the effect of temperature on the phono response; your cartridge is probably more rugged and stable than you are!

Equipment Test Reports

By Hirsch-Houck Laboratories



AVID CORPORATION describes its loud-speaker systems as being designed for "minimum diffraction." This means that in addition to meeting the usual criteria of wide range, smooth frequency response, and good dispersion, the speakers are so constructed that the cabinet edges and other acoustic discontinuities close to the drivers have a minimal effect on the polar response, thereby preserving the imaging accuracy of the systems over their full frequency range.

The Model 110 is Avid's smallest and least expensive "minimum-diffraction" speaker system. It is a two-way, bookshelf-size unit whose 8-inch acoustic-suspension woofer crosses over at 2,500 Hz to a 1-inch coft-dome tweeter with 6-dB-per-octave crossover slopes. The Avid 110 is moderately efficient and is recommended for use with amplifiers rated at between 15 and 100 watts output. The rated frequency response

is 48 to 20,000 Hz ± 3 dB, with no specification of the test conditions.

The particle-board enclosure of the Avid 110 is finished in walnut-grain vinyl on all visible surfaces, including the front board on which the speakers are mounted. They are normally covered by a dark-brown cloth grille that is retained by plastic fasteners, but even with the grille removed the speaker presents an attractive and finished appearance. The grille assembly plays an important part in the operation of the system, however, and should normally be left in place. The drivers are mounted as close to each other as possible, and each is surrounded by a plastic ring that extends about 3/8 inch in front of the mounting surface. The tweeter ring is flared to provide a hornlike matching section between the dome and the surrounding air. Avid states that this "optimum-dispersion coupler" reduces diffraction and improves dispersion.

The cloth grille is mounted on a %-inchthick wooden board, cut out to fit closely around the front extensions of the tweeter and woofer. This eliminates the usual discontinuity between the edge of a speaker driver and either the mounting board or the grille structure; the radiating surfaces thus terminate, in effect, at the actual front surface of the grille. The edges of the grille are also rounded to reduce diffraction at the enclosure edges.

The Avid 110 is 21% inches high, 12¼ inches wide, and 9% inches deep. It weighs 28 pounds. Avid covers it with a five-year full warranty, paying shipping costs both ways if service is needed and supplying shipping cartons if the original ones are not available. Price: \$145 each.

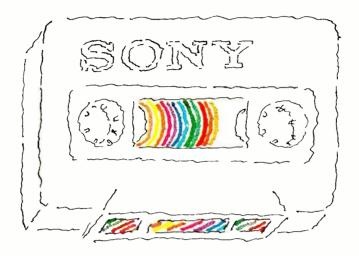
♦ Laboratory Measurements. The averaged frequency response of the two speakers as measured in the far field of the listening room was very smooth and free of the midrange irregularities that are typical of "live room" measurements. Similarly, the close-miked woofer frequency response was notably flat and smooth up to the 1,000-Hz upper limit of our measurement.

Splicing the two curves resulted in an unusually flat and smooth frequency-response plot, varying only $\pm\,0.5\,dB$ from 150 to 2,500 Hz and with its $\pm\,3\text{-}dB$ limits at 43 and 20,000 Hz. There was no ambiguity in splicing the curves, which overlapped for more than one octave with negligible error.

The high-frequency dispersion was good, though not significantly different from that we have observed in other speakers using 1-inch dome tweeters. The low-frequency distortion with a 1-watt input (based on an 8-ohm impedance) was a negligible 0.5 per cent from 100 Hz to below 50 Hz, rising to 2.5 per cent at 40 Hz and 11 per cent at 30 Hz. Increasing the drive level to 10 watts resulted in typical distortion readings of 2.5 per cent down to 50 Hz and 7.5 per cent at 40 Hz.

The impedance of the Avid 110 averaged (Continued on page 38)

Inside Full Color Sound.



There's more to Full Color Sound than meets the ear.

There is a story of experience and technical achievement that no other tape manufacturer can tell. Fact: Sony produces both high fidelity audio and video tape and the high quality equipment that plays it. In fact, Sony pioneered magnetic tape recording, and has been producing tape and tape equipment for over 30 years.

Because of this vast and unique experience, we believe Sony knows more about producing high quality recording tape than anyone else. Sony know-how goes beyond exclusive magnetic particles and binders, or our exceptionally smooth SP transport system, or superb MOL and frequency response.

What Sony does in its own unique way has to do with balance. The fine-tuning of all the elements that go into making a tape, so that each complements the other, and together—in balance—deliver the finest recording that is humanly and technically possible to achieve.

It is this balance that is the secret of Full Color Sound. It isn't really difficult to make one particular element extraordinarily superb. So when some tapes boast about a particular feature, we are not impressed. And neither should you be.

The true test of a tape is to balance these superb elements, some of which actually work against each other. For example, high sensitivity (so vital for MOL and S/N ratio) can produce print-through. Another example: increasing the volume of magnetic particles on the tape improves sensitivity. However, this would decrease tape durability.

Some of the factors that we consider important to tape performance are: MOL, frequency response, S/N ratio, sensitivity, uniformity of output level, print-through, erasability, and such physical attributes as runability, shedding, head wear, resistance to temperature and humidity.

This is where the genius of Sony comes in. To take all these elements and balance them so they work with, instead of against each other.

Balance. It's why Sony audiotapes are so superb. The fact is, the more expensive your audio equipment, the more you'll appreciate Full Color Sound. Listen to Sony SHF (normal bias), EHF (high bias), FeCr or Metallic tape yourself. Listen to the balance. It's the secret of Full Color Sound.

SONY.

CIRCLE NO. 53 ON READER SERVICE CARD

about 8 ohms over most of the audio range with a maximum of almost 30 ohms at the bass-resonance frequency of 53 Hz. The speaker sensitivity was 88 dB at 1 meter with an input of 2.83 volts of random noise in an octave band centered at 1,000 Hz. The tone-burst response was excellent at all frequencies, and it was virtually unaffected by changes in the microphone position relative to the speaker.

• Comment. We would have been surprised if a speaker that measured as good as the Avid 110 were to sound less than good in any respect. There were no such surprises. The Avid 110 delivered some of the flattest, least colored sound we have heard from a small bookshelf speaker. In fact, very few of the more sophisticated and expensive speakers we have tested could match, let alone surpass, the Avid 110 in

smooth response and lack of coloration.

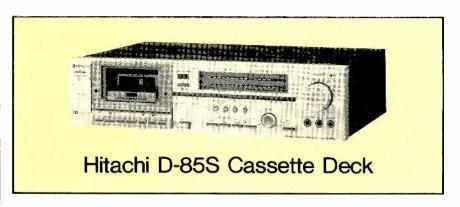
This was most evident in its mid-bass sound. The low-frequency response of the 110 has only a slight peak of about 3 dB in the 60- to 70-Hz range, and above that it is essentially flat. Thus, male voices do not acquire a boomy or tubby quality, which is one of the most common low-frequency aberrations of speakers.

Avid strongly implies that the lack of "boxiness" (another way of describing what we heard from the 110) is a direct result of its minimum-diffraction design. Although we cannot be certain which aspect of the speaker's design deserves the credit (probably there is more than one), it seems obvious to us that a speaker with uniform energy output over most of the audio range, almost constant impedance, good dispersion, clean tone-burst response at almost any distance and angle relative to the drivers, plus a lack

of "boxiness" must be doing its job properly. To paraphrase the late C. J. LeBel (one of the founders of the Audio Engineering Society), "If something measures good and sounds good, it is good."

The Avid 110 does not sound either small or inexpensive. Its bass performance is all that can be expected of an 8-inch driver in a small box, and we found it to be quite adequate and in balance with the excellent high-end output of the speaker. The 110 can be driven hard with a 200-watt amplifier without damage either to its components or to a listener's sensibilities. Even without having compared the Avid 110 directly with any competitively priced speakers, we would not hesitate to rank it among the top of that group. It is a superior speaker that does just what is claimed for it.

Circle 140 on reader service card



THE Hitachi D-85S is a two-motor, two-head cassette deck with a solenoid-controlled transport and a rewind feature based on a microprocessor-assisted memory. An electronically regulated d.c. motor drives the single capstan, and a second d.c. motor is used to turn the reel hubs. Cassettes are inserted, tape openings downward, into slides on the rear of a front-opening cassette-well door. Rear illumination shows how much tape there is remaining on a side, and the clear plastic door affords full label visibility. The door panel itself can easily be removed for either routine head cleaning or demagnetizing.

The solenoid-controlling RECORD, PAUSE, and PLAY pushbuttons have LED status indicators; the last of these flashes on and off during record and play modes at a rate determined by the amount of tape on the take-up hub. To insert a 4-second space between recorded selections (more if the button is held down continuously), a RECORD MUTE pushbutton is provided that causes the PAUSE LED to flash and automatically halts the machine in the pause mode after inserting the blank space.

Two rows of sixteen peak-reading LEDs, (green at 0 dB and below, red above) form the record-level indicators, which are calibrated from -30 to +10 dB. No specific marking for Dolby level is provided; in our tests it registered at +1 dB. For signal levels of 0 dB and above the appropriate LED

remains on for about 1 second after the musical peak has passed, making it easier to set record levels during passages of rapidly changing signal levels.

Although the customary three-digit mechanical tape counter is provided, the D-85S does not use it for memory-rewind (and rewind-play) functions. Instead, a microprocessor in the unit memorizes the tape location when the PLAY button is pressed (during either the play or record mode), and it is to this point that the deck will return (and either stop or replay from) when the appropriate memory function is engaged. If the tape is permitted to run to the very end, where the auto-stop mechanism is triggered, the memory functions ignore the point where PLAY had been last pushed and completely rewind the tape.

Three pushbuttons set the bias and equalization of the D-85S for either metal, CrO_2 -equivalent, or ferric-oxide tape formulations, and similar pushbuttons turn the Dolby system on or off and select either a microphone or a line-level source; LED indicators show when metal tape and Dolby have been selected. When the Dolby system is used, an FM multiplex filter is automatically inserted into the circuit to prevent improper operation of the Dolby circuitry during off-the-air recording. Additional frontpanel switches and controls are provided for timer activation (in record or playback mode) and level setting.

The customary line-level input and output jacks are located on the rear panel, together with a DIN-type connector for attaching a remote-control accessory. The Hitachi D-85S measures approximately 171/8 x 43/8 x 105/8 inches (width, height, depth). Retail price: \$300.

● Laboratory Measurements. Test data supplied with our sample of the D-85S indicated that its factory adjustments had been made with Maxell tapes—UD XL-I (ferric), UD XL-II (CrO₂-type), and MX (metal)—so we used these in our evaluation. Other premium-grade formulations would yield very similar results, as a spot check with different brands indicated.

Playback frequency response was tested using Teac 216 (120-microsecond) and 316 (70-microsecond) test tapes. As shown in the accompanying graph, differences in equalization accuracy were negligible, and response was extremely flat (± 1 dB) from the highest tone on the test tapes (14,000 Hz) down to the lowest (31.5 Hz), where the response was down by 2 dB.

Overall record-playback frequency-response curves were no less impressive, particularly for a deck in the rather modest price class of the D-85S. Low-end response held up down to 40 Hz and showed a nearcomplete absence of the usual bass irregularities ("head bumps"). With the ferric UD XL-I, treble response was down by 3 dB at a little over 17 kHz; UD XL-II (CrO, equivalent) pushed this point slightly above 18 kHz. The metal formulation (Maxell MX) showed a slightly rising high-end response (+2.5 dB at 16 kHz), but even discounting this the -3-dB point would have fallen at approximately 19 kHz, which is extraordinarily good for any two-head deck. As we have come to expect, metal tape showed its greatest advantage in considerably extending high-frequency response at a high input level (0 dB).

Switching in the Dolby noise-reduction system with its attendant 19-kHz FM-multiplex filter restricted the upper frequency-response limit for all tapes to about 15 kHz.

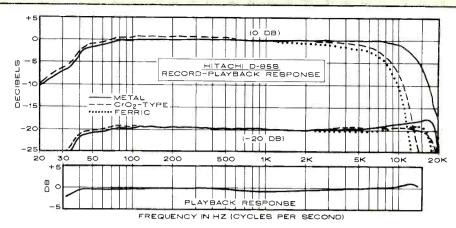
(Continued on page 40)



The fact that the filter could not be separately switched out did not affect FM dubbing or the playback of normal prerecorded cassettes, but it did slightly attenuate the highest frequencies when we copied some of our best "demo" cassettes containing extremely demanding music signals. At levels of $-20\ \text{and}\ -30\ \text{dB}$, the Dolby system itself tracked very accurately $(\pm\,0.5\ \text{dB})$ up to between 14 and 15 kHz.

Third-harmonic distortion, using a 1,000 Hz tone at an input level of 0 dB, registered 0.55, 1.05, and 1 per cent with ferric, CrO₂equivalent, and metal tapes, respectively; 3 per cent distortion required inputs of +5.3, +3.2, and +4.2 dB. Referred to the output at this point, unweighted signal-to-noise ratios (S/N) for the three tapes measured 54.4, 54.8, and 53.4 dB. Adding Dolby and CCIR/ARM weighting, the S/Ns for ferric, CrO2-equivalent, and metal tapes increased to 64.2, 65.8, and 65.8 dB, respectively. Weighted-rms wow and flutter was slightly below 0.04 per cent, with a 0.045 per cent rating on the DIN-peak-weighted measurement, using a Teac MTT-111 test tape.

Fast-forward and rewind times for a C-60 cassette were a rather rapid 75 and 73 seconds. A line-level input of 77 millivolts produced a 0-dB indication, with a maxi-



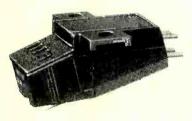
mum output at that level of 0.65 volt. Microphone sensitivity was 0.45 mV, and the maximum input level before clipping registered 22 mV. This is not an outstanding overload margin (34 dB), but it should prove adequate for most live-recording applications likely to be undertaken with the D-85S.

• Comment. The Hitachi D-85S proved to be a very capable performer within any rea-

sonable expectation for a deck in its price category. For FM and normal disc dubbing its frequency-response and signal-to-noise ratios were certainly adequate, and its wow-and-flutter was surprisingly low. Mechanically, operation was smooth and free of any idiosyncratic hitches. In short, the Hitachi D-85S is a fine machine for a medium-price sound system.

Circle 141 on reader service card

Micro-Acoustics 3002 Phono Cartridge



HE new System II phono cartridges from Micro-Acoustics are improved versions of the basic "electret" design used in all previous Micro-Acoustics cartridges. The electret is a sintered dielectric material that carries a permanent (for all practical purposes) electrostatic polarization. Any strain on the electret, such as the vibrations applied by the stylus/cantilever assembly, generates a voltage between opposing conductive surfaces of the element, a voltage that is proportional to the amplitude of the deflection of the electret.

To make the response of the Micro-Acoustics electret cartridge compatible with conventional magnetic-cartridge preamplifiers, an integral passive microcircuit simultaneously converts the amplitude response of the cartridge to a velocity response, reduces its output level so that it is compatible with the input requirements of magnetic preamplifiers, and provides an essentially resistive cartridge impedance that makes its electrical performance nearly independent of wide variations in preamplifier input load resistance and capacitance.

The middle cartridge in the System II series, the Model 3002, has a beryllium stylus cantilever with a "Micro-Point II" diamond stylus at its tip. This was designed to be a playback analog of the Micro-Point cutting stylus that Micro-Acoustics supplies to a large part of the recording industry. It is the company's proprietary version of the extended- or line-contact stylus shape used in some models by almost every cartridge manufacturer.

The cantilever is coupled to the electret element by a small yoke that applies its motion along the 45-degree-incline axes of the modulation of a stereo groove directly to the two generating elements. The stylus assembly is easily replaceable by the user. The electrets are damped by a system of dampers that are independent of the pivot system and are designed to give the cartridge a flat and extended high-frequency response.

An electret cartridge inherently can have a very low mass, since it does not require shielding, magnets, or coils. Previous Micro-Acoustics cartridges were deliberately weighted so that they could be balanced in available tone arms. To adapt the System II cartridges to the recent trend toward reducing arm mass, they have been lightened somewhat, and in addition they are equipped with removable internal weights that permit the cartridge weight to be varied in 0.5-gram steps from 2.5 up to 4 grams. The body of the cartridge is molded of black carbon fiber for low mass.

Unlike most cartridge manufacturers, Micro-Acoustics specifies the test records used to derive their performance ratings. The frequency response with the CBS STR 170 record is rated at ±1.25 dB from 5 to 20,000 Hz and the tracking-force range is 0.7 to 1.4 grams, 1.2 grams being the preferred force. The rise time of the cartridge response, using the CBS STR 112 record, is rated at 5 microseconds. The output voltage at 3.54 cm/sec velocity is 3.5 millivolts. Channel separation is rated 30 dB at 1,000 Hz and 20 dB at 10,000 Hz. The cartridge loading is completely non-critical, and it can be used with load resistances from 5,000 to 100,000 ohms and capacitances from 25 to 1,500 picofarads. Suggested retail price: \$150.

◆ Laboratory Measurements. We installed the Micro-Acoustics 3002 in a tone arm of typical mass, so that effective mass was 25 grams including the cartridge. The load was the standard 47,000 ohms in parallel with about 160 picofarads. The output voltage from the 3.54-cm/sec, 1,000-Hz standard-level bands on the CBS STR 100 record was about 3.6 millivolts with the channel levels balanced within 0.4 dB. The tracking force used throughout our tests was the manufacturer's recommended 1.2 grams.

(Continued on page 44)



Performance and reliability. That's why 73 of the top 110 radio stations that use turntables use Technics direct-crive turntables. In fact, of those stations surveyed by Opinion Research Corporation, Technics was chosen 6 to lover our nearest competitor.

Why did station engineers choose Technics direct drive: "Low rumble"—as low as —78 dB. "Fast star."—as fast as 0.7 sec. "Wow and flutter"—as low as 0.025%. "Direct drive and constant speed"—as constant as 99.998%. Perhaps one engineer said it best when he described Technics direct drive as the "latest state of the art."

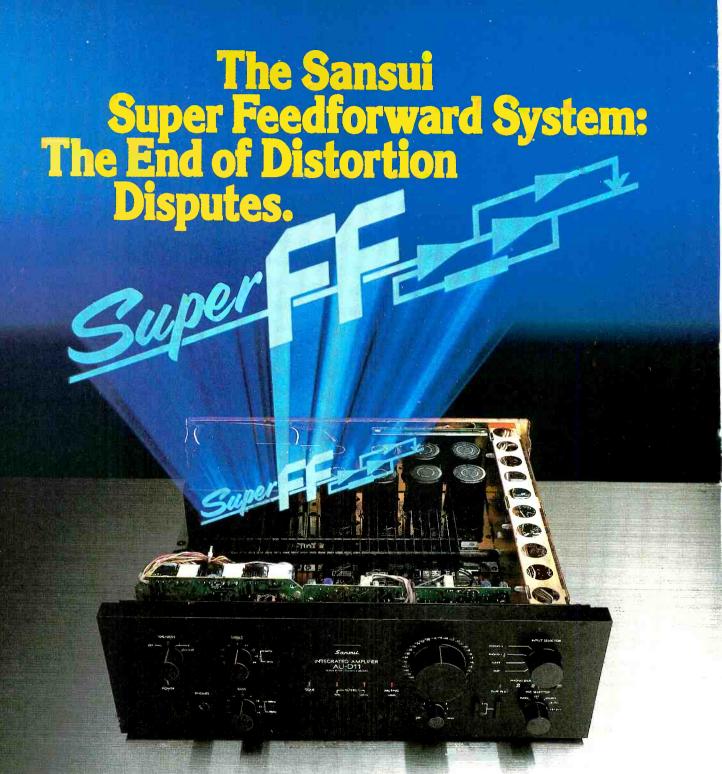
But Technics state of the art goes beyond performance.

Stationieng neers also depend on Technics direct-drive turntables because of "reliability and past experience" as well as "quality and durability." In fact, the most listened to cass cal music station, WOXR in New York, has depended on Technics direct-drive turntables since 1972.

You'll choose Technics direct-drive turntables for the same performance and reliability that's made Technics the turntable top radio stations use. And there are eleven Technics direct-drive turntables from manuals, to semi-automatics, to fully automatics, to changers. Starting at \$125 to \$600 (Technics suggested retail prices). So listen to Technics and hear the Science of Sound.

Technics
The science of sound

CIRCLE NO. 61 ON READER SERVICE CARD



For years, arguments over the causes, and even the significance, of distortion have been raging among engineers and audiophiles the world over: Is the low distortion class-A amp the only practical alternative to the class-B amp even though it is costly and woefully inefficient? Are the new crop of "non-switching" quasiclass-A amps the answer to the class struggle between A and B? Is TIM a legitimate, audible threat to musical accuracy and is this distortion as harmful as har-

monic distortion? Do high-speed devices really take care of switching distortion? And on and on.

At Sansui, with one bold engineering move, we've simply made all of these arguments academic. We've virtually eliminated all distortions. Not just TIM or switching distortion (the goals of many so-called "breakthrough" designs from other companies.) The method we have used is the Sansui Super Feedforward System. And the results are truly uncanny.

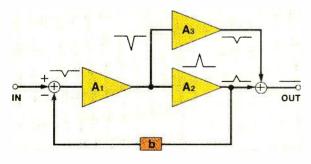
Sansui's revolutionary Super Feedforward System virtually eliminates all types of distortion.

The Sansui Super Feedforward System has eradicated all types of distortion. Gone are harmonic, intermodulation, crossover, switching, TIM (Transient Intermodulation) and envelope distortions. With them are gone other, unknown and not yet quantifiable types of distortion (TIM at one time was considered to be of this type). Switching and crossover distortion generated by the in-out switching operation of the power transistors is suppressed the moment it is generated. TIM distortion is not produced since the Super Feedforward System responds faithfully to the never-repeating, rapidly changing waveforms of real music. And the Super Feedforward System totally eliminates distortion at all frequencies, not just selected frequencies as a negative feedback circuit does. It suffers no instability or oscillation. But most importantly, it eliminates all distortion of both a static and transient nature.

Super Feedforward System: How does it work?

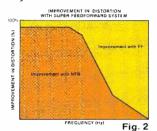
The feedforward circuit theory is not new. In fact it predates the negative feedback circuit that is found in nearly all audio amplifiers on the market today including direct-coupled and "non-switching" types. But feedforward had never been practically applied to an audio amplifier until now.

Fig. 1 Sansui Super Feedforward System



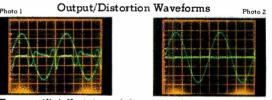
Sansui's Super Feedforward System is actually a hybrid of both negative feedback and feedforward, as conceptualized in Fig. 1. Distortion, generated by power amp stage A_2 , is returned to the input through the NFB loop (b) and added, out of phase, to amp stage A_1 . The out-of-phase distortion is

amplified by A_1 and added to A_2 . This effectively cancels most distortion. This is where the feed-forward circuit comes into play. Like the NFB circuit, the feedforward circuit also uses out-of-phase distortion as an error-correction signal, but it bypasses power amp stage A_2 and sends the distortion component to error correction amp A_3 from which it is routed to the *output* of A_2 to cancel any distortion that may have been generated in A_2 and any distortion overlooked by the NFB loop.



The concept is simple but effectiveness is 100%, as Fig. 2 shows. In fact, the Super Feedforward System is so effective that it even eliminates artificially-injected distortion completely

Fig. 2 (Photo 2).



Even artificially-injected distortion (center trace in Photo 1) is eliminated; no distortion appears at output (Photo 2).

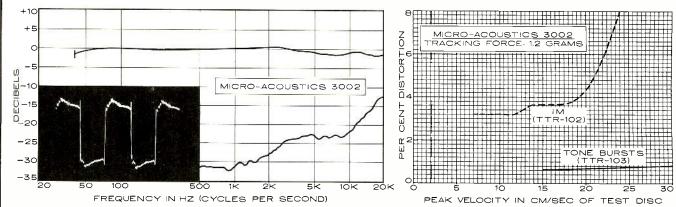
The AU-D11 and AU-D9—the most perfect amps around

When presented at the Audio Engineering Society Conventions in Los Angeles and London, the logic of Sansui's Super Feedforward System was quickly perceived by the engineers in attendance.

And now the theory has become reality. In the AU-D11 and AU-D9, Sansui has added the Super Feedforward System to Sansui's highly acclaimed DD/DC design to create amplifiers that are virtually free of any kinds of distortion. Stated simply, whether you're a firm believer in the advantages of "non-switching" over "high-speed" amp technology, or vice-versa, you get all the advantages of both, with Sansui's new Super Feedforward System. You just can't go wrong.

Sansul continues to be the industry pacesetter in advanced technology. The name to remember is Sansul and the amps to hear are the AU-D11 and the AU-D9.





In the graph at left, the upper curve represents the frequency response of the cartridge. The distance (measured in decibels) between it and the lower curve represents the separation between the two channels (anything above 15 dB is adequate). The inset oscilloscope photo shows the cartridge's response to a recorded 1,000-Hz square wave, which indicates resonances and overall frequency response (see text). At right is the cartridge's response to the intermodulation-distortion (IM) and 10.8-kHz tone-burst test bands of the TTR-102 and TTR-103 test records. These high veloc-

ities provide a severe test of a phono cartridge's performance. The intermodulation-distortion (IM) readings for any given cartridge can vary widely, depending on the particular IM test record used. The actual distortion figure measured is not as important as the maximum recorded signal groove velocity that the phono cartridge is able to track before a sudden and radical increase in distortion takes place. There are very few commercial phonograph discs that embody musical audio signals whose average recorded groove velocities are much higher than about 15 centimeters per second.

The rise time measured using the square wave of the CBS STR 112 record was about 8 microseconds, not quite as fast as rated but surely fast for any phono cartridge. The top of the square wave had low-level ringing at about 40,000 Hz (which is on the record) and a "bump" that was evidently associated with the midrange response of the cartridge. The vertical-tracking angle was measured at 18 degrees. The frequency response was ± 1.25 dB over the 40- to 20,000-Hz range of the STR 100 test record, with a broad shallow dip in the upper midrange and a return to the lower frequency levels in the 10,000- to 15,000-Hz range. Noting the excellent response up to 20,000 Hz, we also measured it with the JVC TRS-1005 record from 1,000 to 50,000 Hz. This showed a very gradual downward-sloping response over most of that range.

The channel separation with the STR 100 record was 27 to 30 dB at 1,000 Hz and 20 dB at 10,000 Hz as rated. More notable was the exact crosstalk symmetry between the channels. The Micro-Acoustics 3002's separation curves could be overlaid, and they coincided with no more than a couple of decibels difference between them all the

way up to at least 12,000 Hz. The JVC test record showed slightly less separation (this measurement is a function of the match between the physical contours and orientations of the cutting and playback styli), and the separation fell to zero at frequencies above 40,000 Hz.

To judge the effect, if any, of loading on the cartridge response, we measured it using the basic load of 47,000 ohms and 160 picofarads and again with the capacitance increased to 400 picofarads. There was no detectable difference over the 20,000-Hz range of the record. When we reduced the resistance to 23,500 ohms, the only effect was a slight level reduction at all frequencies but no change in the shape of the frequency-response curve. In the tone arm used, the cartridge resonated at 8 Hz with an amplitude of 6.5 dB (here, too, both channels were exactly alike, unlike many cartridges that show very different low-frequency resonance characteristics in the two channels). Note that, with many tone arms, the cartridge cannot be lightened by removal of its internal weights since these arms cannot be counterbalanced with cartridges weighing less than 4 grams or so.

The tracking-distortion measurement using the Shure TTR-102 and TTR-103 test records showed that the intermodulation distortion of the 3002 was nearly constant at 3 to 4 per cent (a fairly typical reading for this measurement on a cartridge) up to about 20 cm/sec velocity, increasing to 11.5 per cent at the record's maximum level of 27 cm/sec. The high-frequency tone-burst distortion (at 10.8 khz) of the tests with the TTR-103 record was very low and nearly constant with level, measuring from 0.63 to 0.76 per cent over the 15- to 30-cm/sec range of the record.

Subjective tracking tests yielded very similar and satisfying results. The 32-Hz high-level tones of the Cook 60 and the 30-cm/sec, 1,000-Hz tones of the Fairchild 101 record were tracked easily at 1.2 grams, as was the 80-micrometer level of the German Hi Fi Institute record. The Shure "Audio Obstacle Course" ERA III could be played in its entirety without mistracking, but the ERA IV showed the slight "hardness" that warns of incipient mistracking on the highest levels of several bands; however, there was no clearly audible mistracking.

• Comment. The test data confirm that the Micro-Acoustics 3002 is a very fine cartridge indeed, certainly one of the better ones to pass through our laboratory. We have seen a few (very few) with a response as flat as this one, a few with almost the same uniformity of channel separation, and a few with slightly more impressive tracking performance in measurements or in subjective tests. But it is hard to think of any other cartridge that has combined all these points of excellence to the same degree as we found in the 3002.

One of the important advantages of the Micro-Acoustics cartridge design is its lack of susceptibility to magnetically induced hum. We measured the d.c. resistance of the cartridge as just over 3,000 ohms, which should also tend to load down the input of a magnetic preamplifier stage and reduce the (Continued on page 46)



"All I can say, Emma, is thank God for food stamps!"

Blaupunkt once again revolutionizes the look and sound of car stereo

Tn the 1970s, Blaupunkt introduced L the world's first fully electronic car stereo. For the 1980s, Blaupunkt designed the new Berlin—a superbly engineered AM/FM Stereo Cassette that, among other remarkable things, automatically raises and lowers its own volume.

The Berlin's unique dual-unit construction, winner of four industrial design awards, is a masterpiece of human engineering.

Controls at your fingertips

Unit One is the Operating Head. Mounted on a flexible stalk, it is a

marvel of electronic miniaturization. Into a space the size of a 100 mm. cigarette pack, Blaupunkt engineers organized the most frequently used radio controls.

By manipulating the flexible stalk, the Head can be adjusted in any direction to put these controls comfortably at your fingertips. No groping, no taking your eyes off the road.

LW	AMI		SW	FM	FM	FM
LW AMI	l1.	61. 6	82.0.	2.22 8	.49	LW AM1
ame SW				14		AM2 SW
FM	889	296.	100.	104	108	FM
● BL,	AUP UN K	T			K	M
-		+		<		1

The Berlin sells for \$1,395.** It is one of a full line of Blaupunkt ÅM/FM Stereo Cassettes priced from \$250.**

**Suggested retail price exclusive of installation and

Automatically adjusts its own volume

Unit Two contains the Stereo Cassette Player and the remaining sound

Blaupunkt Berlin Features

*Dolby is a registered trademark of Dolby Laboratorie

4 x 20 W (4 Separate Channels) 7 Electronic Station Presets Electronic Signal Scan SALS (Sound Ambient Level Sensor) Stereo/Mono Switch Automatic Muting AM/FM/SW/LW ASU (Automatic FM Noise Suppression) *Dolby Noise Reduction Circuit

Autoreverse Cassette Pushbutton Locking Fast Forward & Rewind Permalloy Head Separate Bass & Treble Separate Fader and Balance Cassette Gain Control Tape Pause Control Loudness Contour Control Tape Bias Compensation Switch

modulation controls. One of these controls is a remarkable Blaupunkt innovation called SALS an electronic sensor that automatically raises or lowers the volume to compensate for changes in interior or exterior noise levels. No other car stereo in the world is equipped with SALS.

See and hear the Berlin

Consult the Yellow Pages under Automobile Radios for your nearest Blaupunkt Distributor. He'll arrange a demonstration of the Berlin or any of the superbly engineered in-dash models in the full Blaupunkt line of AM/FM Stereo Cassettes.

BLAUPUNKT

©1980 Robert Bosch Sales Corporation



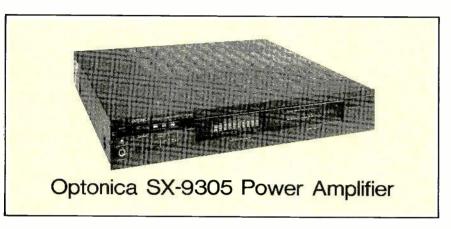
noise generated there. There is still the possibility of hum arising from ground loops or electrostatic fields, but on the whole this cartridge should be at least as quiet in a good music system as any magnetic cartridge we know of (moving-coil cartridges, of course, are also relatively independent of loading effects and do not suffer from induced hum, but their low output voltage can place them at a disadvantage in respect to

overall phono-system signal-to-noise ratio.)

We found the Micro-Acoustics 3002 to be an exceptionally listenable cartridge, one with a light, airy transparency that converted some previously sonically unsatisfying records into carriers of enjoyable listening experiences. We found absolutely no flaws in its performance; it is a thoroughly excellent product. In some low-mass arms (such as the Dual ULM, Thorens, SME Se-

ries III, and others) it should be possible to remove some of the cartridge's internal weights and enjoy the effortless warp tracking that is attainable only with a really low-mass pickup system. This cartridge is not only a first-rate performer, but it is compatible with—even a bit ahead of—the current trend toward reduced pickup mass.

Circle 142 on reader service card



HE Optonica SX-9305 power amplifier offers a unique combination of advanced circuitry, operating features, and packaging. Viewed from the front, it is one of the most compact high-fidelity components outside of the "micro" category, yet it is rated very conservatively to deliver 100 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.015 per cent total harmonic distortion. The initial impression of compactness is soon dispelled when one looks at the top of the amplifier or picks it up. The overall dimensions of the SX-9305 are 17 inches wide, 175/8 inches deep, and 3 inches high, and it weighs a solid 31 pounds.

The amplifying circuits of the Optonica SX-9305 use field-effect transistors (FETs) throughout. It is a direct-coupled amplifier with an overall response extending to d.c. ("zero frequency"), but for connection to program sources that might have small d.c. components in their outputs it has a second set of a.c.-coupled inputs that allows a flat response down to 10 Hz. The four input connectors at the rear of the amplifier are gold plated. The first and second stages of the amplifier are in a cascode configuration for low distortion and wide frequency response, while each output stage uses four power MOSFETs in a push-pull/parallel configuration. The amplifier channels are powered by separate supplies, each having its own shielded toroidal power transformer. A third, smaller power transformer and supply energizes the various auxiliary and protective circuits.

The auxiliary circuits of the SX-9305 are as unconventional as its packaging. In addition to a peak-power indicator for each channel, consisting of two parallel rows of LEDs that respond to power levels from 0.002 to 100 watts, it has a built-in ten-

channel, octave-band, real-time spectrum analyzer. The analyzer display consists of some eighty LEDs, variously colored green, amber, and red, forming ten vertical columns whose heights are proportional to the program levels in frequency bands centered at 30, 60, 125, 250, 500, 1,000, 2,000, 4,000, 8,000, and 16,000 Hz. The amplitude scales are divided into 5-dB intervals. Small pushbuttons next to the display switch it to read either the left- or rightchannel output. Although the manual does not mention it, pressing both buttons apparently gives a display of the sum of the two channels. Another button increases the analyzer display sensitivity by 20 dB for monitoring low-level signals.

Green LEDs above the spectrum-analyzer's control buttons show which of them are engaged, and next to them are two more buttons and lights that separately connect the two sets of speaker outputs in the rear of the amplifier. The remaining panel features are a pushbutton power switch, a PROTECTION indicator light, and a stereo-head-phone jack.

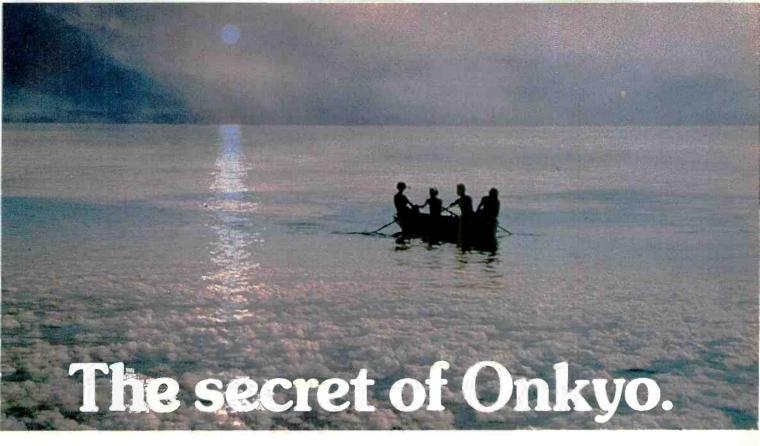
The SX-9305 has a comprehensive array of protective circuits and devices designed to safeguard both its components and the speakers from damage due to any possible overload or internal failure. These protective features include primary power-overload protection, a high-temperature thermal sensor that shuts off the amplifier if the output transistors become too warm, a sensor that shuts the amplifier off if an excessive d.c. level appears at the outputs, internal circuits that protect the output transistors against excessive load currents, a special power-transformer thermal-overload switch, and a transformer-primary currentsurge-reducing circuit (to protect the power-supply components).

If any of the protective systems is activated, the speaker outputs are disconnected by relays and the amplifier is shut off. When this happens, the front-panel PROTEC-TION light changes from green to red (when the amplifier is first turned on, the speakers are disconnected by the protection circuits for a few seconds, and the light changes to green when the amplifier is ready for use). Should the PROTECTION light glow red during operation of the amplifier, primary power must be switched off for at least 10 seconds before the unit can be restored to normal operation. If the fault (such as an external short circuit or excessive temperature) remains, the light will stay red and the amplifier cannot be used until the condition is corrected.

One of the most interesting features of the Optonica SX-9305 is nowhere mentioned or even hinted at in the instruction manual. Even though it is not quite a "super amplifier" by today's standards, it is still very powerful for its size. It has no external heat sinks and no fan, yet it operates cooler than one would expect for an amplifier of its power rating. The credit for this must be given to its closed-circuit convection/radiation cooling system. The output transistors are mounted on a heavy aluminum block through which passes a metal tube that is shaped to fit around the rear and right side of the amplifier (within the case) and form a continuous loop. Over the entire length of the loop of tubing (except for the small part occupied by the transistor mounting block) are ranged a multitude of radiator plates.

Within the tubing is Freon gas under sufficient pressure to keep it in the liquid state at normal room temperatures. After being heated by the output transistors, the liquid Freon vaporizes and flows by convection through the loop of tubing, giving up its heat to the surrounding air through the many radiating plates. Eventually the Freon condenses to its liquid state and reenters the transistor-mount/heat-transfer block. The process takes place continuously and silently, removing heat from the transistors and transferring it to the outside of the amplifier (through convection air-cooling via the usual slots in the top and bottom of the amplifier's metal case) with an effectiveness that one would normally expect only from a large heat-sink system. Price:

● Laboratory Measurements. The cooling system of the SX-9305 proved its effectiveness in the 1-hour preconditioning period, during which the top of the amplifier never (Continued on page 48)



Let Onkvo transport you to a world beyond electronics . . . to a world of more perfect sound. Where you'll hear music of such stunning purity and sensual richness, that you'll forget you're listening to an audio system.

That's the secret of Onkyo . . . and Onkyo's dramatic success. The unique ability to take you several steps beyond pure technology . . . to experience more exciting sound. And you'll find it in all our components . . . including all four of our new stereo tape decks.

The Onkyo TA-2050 is an outstanding example. It goes further than other tape decks . . . to harness the full performance potential of new metal tapes. One reason is Onkyo's exclusive "Accu-Bias" control system, which guides you to far more precise tape bias adjustments. Brighter, cleaner high notes are the reward.

The Onkyo TA-2050 also utilizes a full logic direct drive motor transport for extremely high reliabil-

ity with minimum wow and flutter. A second motor handles fast forward and rewind functions. A special Hard-Permalloy record/playback head . . . and a ferrite erase head . . . provide optimum performance

with all types of tape . . . both metal and conventional.

The Onkyo TA-2050 also provides a rich and important array of other high performance features ... soft touch controls with IC logic ... a Dolby* noise reduction system with switchable MPX filter . . . large, illuminated "peak-hold" meters for greater precision and convenience . . . a memory-stop/memory-play system . . . a timer mode selector . . . and full remote control capability when used with the optional RC-5 remote control unit.

Two valuable features of the TA-2050 are its instant muting and automatic fade in/fade out control systems . . . which permit far more professional recording effects. Musical passages can be "cut-in" or "cut-out" instantly . . . or "faded-in" or "faded-out" smoothly. And cassettes can be recorded right to the end . . . then rewound a short bit to overlay a professional "fade-out" effect.

Styling is superb. Brushed silver metal with elegant appointments . . . in a dramatically handsome

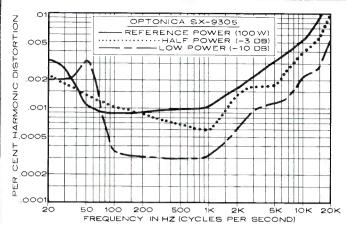
new slim-line design. And the TA-2050 is just one of four important new metal tape-compatible stereo cassette tape decks from Onkyo. Onkvo USA Corporation 42-07 20th Avenue Long Island City, N.Y. 11105, (212) 728-4639

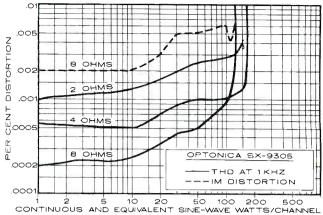


*TM of Dolby Laboratories

The Onkyo TA-2050

A remarkably advanced stereo cassette deck that harnesses the full potential of new metal tapes.





became too hot to touch. At no time in our tests did the thermal protective system of the SX-9305 shut it down. The 1,000-Hz power output into 8-ohm loads at clipping was 128 watts per channel (IHF clipping headroom = 1.07 dB). The 4-ohm and 2ohm clipping power outputs were, respectively, 173 and 166 watts (the latter being set by the over-current protection system's shutting the amplifier down). The dynamicpower output, using the IHF standard toneburst test signal, was 171 watts into 8 ohms (IHF dynamic headroom = 2.34 dB), and into 4- and 2-ohm loads it was 269 and 179 watts (again, the latter figure being the output at which the amplifier was shut down by its protective circuits).

The slew rate of the SX-9305 was 60 volts per microsecond, and its square-wave rise time was 1.5 microseconds. In the IHF slew-factor measurement, the amplifier shut down at 120 kHz for a slew factor of 6. Its low-level frequency response was per-

fectly flat through the audio range, and it was down 1.4 dB at 100 kHz and 3 dB at 200 kHz. At the low-frequency end, through the "10-Hz" inputs, the response was down 0.4 dB at 20 Hz, 1.7 dB at 10 Hz, and 4.5 dB at 5 Hz. Through the "d.c." inputs the response was flat down to our lower measurement limit of 5 Hz. The amplifier sensitivity for a reference output of 1 watt was 100 microvolts, and its A-weighted noise level was unmeasurable, being less than -90 dB referred to 1 watt, or 110 dB below rated power.

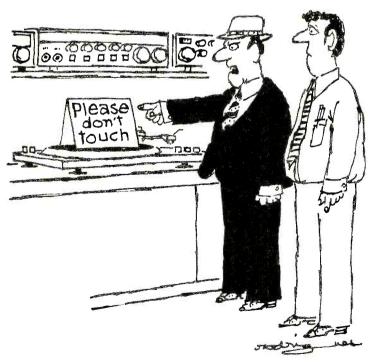
At many power levels during our tests we encountered bursts of ultrasonic or r.f. oscillation riding on the 1,000-Hz sine wave. Connecting a capacitance of 0.01 microfarad or greater across the output (in parallel with the 8-ohm resistive load) cleaned up the waveform and reduced the distortion to nearly unmeasurable levels. (It is not clear whether the oscillation, which in no case was audible, was a product of our test setup

or is inherent in the amplifier; Optonica tells us that they were unable to duplicate the effect.)

It is becoming almost commonplace to find power-amplifier distortions so low that they cannot be measured with accuracy over most of the audio-frequency range and at most power levels. It is generally agreed that the fact that distortion has been reduced to these ultra-low levels does not improve the sound quality (since it is hundreds of times less than distortions in the program material or elsewhere in the system), but the achievement is nonetheless impressive. For example, the 8-ohm, 1,000-Hz distortion of the Optonica SX-9305 ranged from 0.0002 per cent at a 1-watt output to about 0.001 per cent at 100 watts. Into 4 ohms, the distortion was 0.0005 per cent up to 10 watts or more, and it was still only 0.001 per cent at 100 watts. Only when we drove 2ohm loads (for which the amplifier is not rated) was the performance measurably degraded, with distortions ranging from 0.001 per cent at 1 watt to 0.0028 per cent at 100 watts. The IM distortion (8 ohms) was 0.002 per cent (the residual reading of our analyzer) up to 10 watts, rising to between 0.005 and 0.006 per cent from 30 to more than 100 watts output. At the rated 100-watt level, the harmonic distortion was about 0.003 per cent at 20 Hz and 0.001 per cent from 50 to 1,000 Hz; it climbed to its maximum of 0.014 per cent at 20,000 Hz. At lower power outputs the distortion characteristic was similar but with lower levels, typically under 0.001 per cent.

◆ Comment. The sound of the SX-9305 was completely free of flaws. With only one exception, the SX-9305 was an ideal "connect and forget" component with exemplary performance. That exception was the protective system of the amplifier, which was so effective that it interfered with our measurements and even shut the amplifier off during some of our switched listening comparisons. We are very much in favor of foolproof protection for amplifiers, but we would prefer the type that restores the unit to operation as soon as the fault has been corrected.

The front-panel displays gave the otherwise austere amplifier a colorful appearance, rather startling for such a compact (Continued on page 52)



". . . I'd like to buy six of those signs!"



Where a man belongs.

Camel Lights.

Low tar. Camel taste.

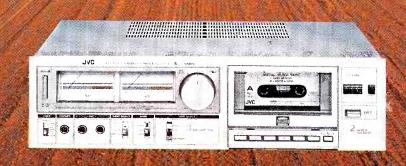
9 mg

Warning: The Surgeon General Has Determined That Cigarette Smeking Is Dangerous to Your Health.

9 mg. "tar", 0.8 mg. sicotine av. per cigarette by FTC method.

JVC has brought you a lot of cassette deck technology...





Now, it's priced so you can bring it home.

While a lot of companies were calling their flashing lights and elaborate memory systems "breakthroughs," JVC was exploring ways to make cassette recordings sound better.

As a result, we've not only come up with important ways to improve cassette fidelity; we're also able to offer them in affordable decks.

The KD-A33, for \$299.95,* is a perfect example. Naturally, it's metal-compatible, as are all eight decks in JVC's line. But more important, it delivers everything that metal promises: stunning clarity, especially with high-energy musical transients. Very low distortion. Superb deep-bass extension. Accurate frequency balance.

How do we achieve this kind of fidelity? It's mainly in our heads.

SA heads. Comprised of a sendust alloy in a laminated structure, these JVC heads were the first to take advantage of sendust's electromagnetic and physical superiority, while avoiding the high-frequency limitations of conventional sendust. So they're perfect for recording and erasing metal tape, as well as any other kind of tape.

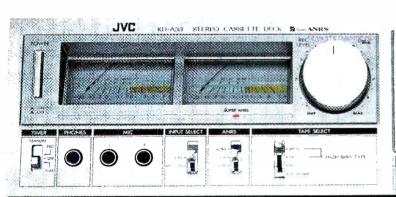
Our Super ANRS contributes a lot of fidelity, too. Years ahead of its time, Super ANRS combines noise reduction and headroom extension. That means improved dynamic range with both metal and non-metal tapes.

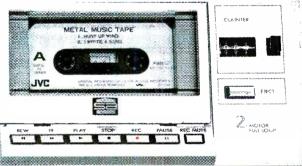
KD-A33

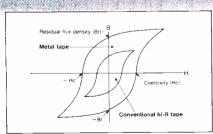
We also offer the professional convenience of full-logic, solenoid controls. Unlike stiff, mechanical switches, solenoid controls are activated by a light touch. And you can switch directly from mode to mode (like "record" to "rewind") without damaging the tape or the deck itself. The KD-A33 also provides accurate VU meters with readings to +7 dB and provisions for optional remote control.

The specs are no less impressive. Frequency response is an honest 30-16,0000 Hz ±3 dB. When you use Super ANRS, it will sound even wider because of added high-frequency headroom. Wow and flutter are 0.04% WRMS. Signal-to-noise ratio is 70 dB with ANRS in.

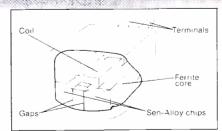
*Manufacturer's suggested retail price.







Hysteresis curves: metal vs. conventional tape



2-Gap SA erase head

KD-A77

800-221-7502

Just dial this toll-free number for the location of your nearest JVC dealer. (In New York State, 212-476-8300.) While you're there, you can also check out our KD-A7, metal-compatible deck with built-in spectro peak indicators, for \$499.95.* Our KD-A8, with a built-in B.E.S.T. computer. Or any of five other JVC decks that were built with only one goal in mind—to give you quality cassette performance for your dollar.



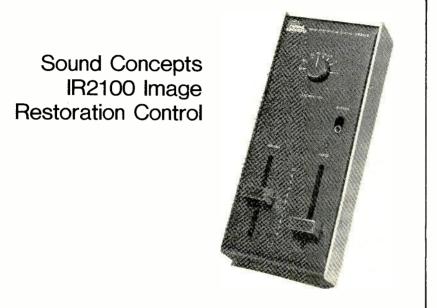
KD-A7



unit. However, the spectrum-analyzer display can be interpreted quantitatively only from a rather close viewing distance. Without question, the inclusion of the RTA display is at least partially responsible for the cost of the SX-9305, which is somewhat higher than that of other similarly rated amplifiers. Except for the matters previously noted, one could hardly take exception to the electrical performance of the Optonica

SX-9305 amplifier, which easily qualifies it for that much overworked classification "state-of-the-art."

Circle 143 on reader service card



THE Sound Concepts IR2100 is a stereosystem accessory designed to extend the apparent width and depth of a stereo image (as heard from a conventionally placed pair of loudspeakers) beyond the angle defined by the speaker and listener locations. It effectively opens up the restricted sound stage to fill most of the front hemisphere of the listening room.

Conventional stereo sound reproduction through loudspeakers can and has worked well for the last several decades. Its main deficiencies (which have been largely ignored since stereo's development) are its inability to produce a sonic image not included in the angle between the speakers and what can be described as a lack of depth and stability in the images that are created. Both of these problems come from what can be termed acoustic cross-coupling or crosstalk between the ears. This effect is a result of the fact that each ear hears the sounds emitted by both speakers.

A sound emitted from the left loudspeaker strikes the left ear and, after a short delay while the sound diffracts around the head, also strikes the right ear. While the sound bends around the head, its spectrum is changed, with the high frequencies getting attenuated somewhat, depending on the angle from which the sound originates. The same process occurs with sounds emitted by the right speaker. After hitting the right ear, they also reach the left ear after a delay and a high-frequency loss.

The IR2100 seeks to correct for this acoustic cross-coupling by electronically generating the crosstalk signal (using delay

circuitry and filters), inverting its phase, and feeding it to the speaker closest to the cross-coupled ear. The simulated crosstalk signal meets the actual crosstalk signal at the listener's ear, and, since the signals are 180 degrees out of phase, cancels it, thus eliminating the imaging loss of normal stereo reproduction.

Since this acoustic-crosstalk cancellation is applied to both channels simultaneously, the audible effect is a wider stereo stage whose effective width can approach that of a semicircle extending across the front of the room. Together with the widening of the stage, there is enhancement of the apparent depth of the image both behind and in front of the speakers. The effects of the IR2100 are most vivid when the listener is located on the acoustic center line between the two loudspeakers.

In the Sound Concepts IR2100, the signal processing is applied only to the difference signals; the center signal (sum, or mono) is not affected, remaining firmly in place midway between the speakers with unaffected frequency response. To compensate for the different angles formed by different distances between speakers and different listening locations, the time delay in the cross-blending has been made variable, adapting the system for use with speaker angles from 20 to 100 degrees. The delay is supplied by a "bucket-brigade" analog delay line similar to those used in the Sound Concepts SD550 time-delay system, and the delay time can be varied easily by a single control that adjusts the frequency of the "clock" that shifts the signals.

Like most signal-processing accessories, the Sound Concepts IR2100 is designed to be connected into the tape-monitoring loop of an amplifier or between the amplifier and preamplifier sections. It does not require any additional speakers or amplifiers, although the maximum effect will be obtained with speakers whose drivers are in a vertical line and which have a minimum of cabinet diffraction and phase distortion. The speakers should be placed at least 1 to 2 feet from any adjacent wall for best imaging results.

The packaging of the unit is distinctly different from that of most other signal-processing accessories. It is not much larger than a hand-held calculator, and it is powered by a separate plug-in power supply similar to those used for many calculators. The remote-control unit is actually the entire instrument, and it is connected to the amplifier by a 12-foot cable. Having the controls literally in hand while listening to the results is the ideal way to adjust a device like this.

There are two slider controls marked VOLUME and IMAGE and a knob marked CALIBRATION. A small toggle switch enables one to bypass the entire unit (except the VOLUME control, which is always functional as a convenient remote volume adjustment). A green LED above the volume control is on whenever power is applied to the IR2100, and another one over the IMAGE control glows whenever the unit is not bypassed. The CALIBRATION control varies the clock frequency for the time delay and is calibrated in terms of a function of the angle between the speakers as viewed from the listening location. The instruction booklet shows clearly how to set this control and indicates that the final adjustment may be done by ear.

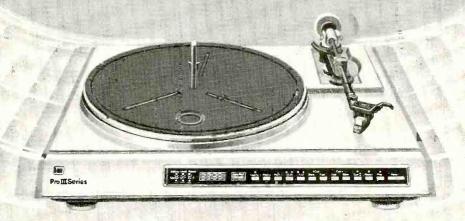
The IMAGE control adjusts the level of delayed signal fed to the opposite channel's speaker and thus affects the level of the perimeter sound relative to the center-stage sound. It also has an effect on the perceived level and frequency balance of the sound. The Sound Concepts IR2100 is about 71/4 inches long, 31/4 inches wide, and 11/8 inches high. Its power supply can be plugged into a switched outlet on the amplifier, or it can be left on permanently since the unit consumes less than 10 watts. Price: \$229.

● Laboratory Measurements. Because of the totally subjective nature of the effects provided by the IR2100, conventional performance measurements are of little significance in judging its performance. We did verify that the noise level at its output was lower than our 100-microvolt minimum measurement limit and that a more than adequate 4- to 8.5-volt output (depending on the control settings) could be achieved (Continued on page 54)





Single-play vs. multiplay: the argument is over.



BSR is proud to put an end to the seemingly endless debate over what style of turntable is the "correct" turntable — single-play or multiplay.

Introducing the BSR Pro III Series the third generation of turntables.

The BSR Pro III Series combines the precision and accuracy of the finest single-play and the ease and versatility of a multiplay. At a price well within the range of both.

The tonearm—a story in itself.

This may be the finest tonearm ever offered on a multiplay turntable. It has an extremely low mass carbon fiber head shell, designed to be used with today's finest low-mass cartridges and measures an impressive 237mm from pivot to stylus. And, its sleek, rapier-straight line will give you unerring tracking performance.

Two motors are better than one.

The BSR Pro III Series 300 and 200 models feature a direct response FG Belt Drive turntable with a quartz-locked control system that references the speed of the motor to that of the turntable. Additionally, there is an independent servomotor that drives the tonearm only during cycle changes. This unique two-motor design eliminates complicated cams, trip switches, etc. — all of which can interfere with optimum turntable performance.

Independent tonearm and turntable suspension.

BSR Pro III Series turntables utilize a floating suspension system to isolate both the turntable <u>and</u> the tonearm. Mounted together on a separate subplate, independent of base, cover and controls, this eliminates most causes of vibration and acoustic feedback.

Three-record umbrella spindle—short and sweet.

Unlike traditional six-record multiplays, the BSR

Pro III Series turntables are designed to play up to three records. The decreased height and weight of the record stack allows for a much more precise vertical tracking angle and overall turntable performance.

Digital readouts.

BSR Pro III Series turntables have a multifunction digital display, allowing you to determine both quartz-locked and variable turntable speed, elapsed time, stylus time and exact turntable leveling.

Lateral cueing.

The BSR Pro III Series has the only lateral cue control on a multiplay turntable. It provides fast and slow cueing in both directions, allowing for precise location of any portion of a record.

Remote control.

For total convenience, the BSR Pro III Series 300 has infrared remote control, which handles all major turntable functions, including volume control, from as far away as 40 feet.

Look at the look.

The BSR Pro III Series has a handsome low-profile design, with all electronic pushbutton controls conveniently placed outside the closed dustcover.

Add it up-both sides win.

Whether you're a believer in single-play or multiplay turntables, we believe that the BSR Pro III Series offers exactly what you demand. We invite you to examine it at your audic dealer.

BSR Pro III Series.
The Third Generation of Turntables.

BSR (USA) Ltd., Blauvelt, New York 10913. BSR (Canada) Ltd., Rexdale, Ontario.

Crown makes American hightechnology audio components, whose innovative designs and remarkable specifications established new performance standards for an entire industry. Crown amps, pre-amps, crossovers, equalizers and tuners are highly respected by audio enthusiasts. Performers, recording engineers and sound contractors choose Crown for their personal, and professional systems.

The Crown Information Package tells all about Crown and its products, possibly the finest collection of audio information easily available to you. Over 50 pages, including Crown technical papers on audio concepts, discussions

Buy Crown. Three dollars.

of product design and operation, specifications, prices, dealer locations – and much more. Many illustrations in full color.

Send three dollars with the coupon. If it's not worth it, send it right back. We'll refund your money.

If all you need is the name of a nearby Crown dealer (he has this information for free), use our reader service card number.

Here's my \$3. Send the package.	SR-12
Name	
Address	
City	
StateZrp)



1718 W. Mishawaka Rd, Elkhart, IN 46514 Innovation. High technology. American. That's Crown.

CIRCLE NO. 15 ON READER SERVICE CARD

before clipping. The frequency response was flat within 0.1 dB from 10 to 20,000 Hz. In the BYPASS mode, the 1,000-Hz distortion at 3 volts output was -92 dB (0.0025 per cent). Like some of the other properties of the unit, the distortion numbers varied widely with control settings; the worst case we found was with the CALIBRATION set at 1 and IMAGE gain set at maximum, when the distortion exceeded 0.5 per cent.

The manufacturer's specifications indicate that the gain of the IR2100 is unity at its mid setting and approximately +6 dB at maximum volume setting (confirmed by our measurements) and that its noise output is more than 80 dB below 1 volt (confirmed). Harmonic distortion is stated to be less than 0.01 per cent at 1,000 Hz and 1-volt output (confirmed). The input impedance is at least 30,000 ohms, and the output impedance is less than 300 ohms. Aside from confirming some of the basic performance specifications of the IR2100, our evaluation was done entirely by listening.

• Comment. The Sound Concepts IR2100 operated very much as we were led to expect it would from its instructional booklet. The effect of the CALIBRATION control varied widely with the program material, and eventually we set it according to instructions and left it alone. The IMAGE gain was another matter. In addition to adding strong lower- and mid-bass enhancement as it was advanced, it increased the overall volume substantially. We usually preferred to use a large amount of IMAGE gain (the optimal amount depends on the stereo spread of the program material). However, we found that excessively high settings of the control will produce colorations and that some types of multipath effects and record noise will be exaggerated.

No great effort was needed to hear the

contribution of the IR2100 to the sonic image. It expanded the sound stage—often dramatically—beyond the confines of the speakers, and the added depth both in front of and behind the speakers was unmistakable. The manufacturer's recommendations concerning speaker types and their placement must be adhered to if best results are to be obtained. However, we did find the spatial expansion provided by the IR2100 to be effective over a wide range of listening positions.

Those who are looking for comparative judgments should be aware that it is as difficult to make meaningful comparisons between image-enhancement devices as it is between time-delay units. We have found that each has positives and negatives that are determined by the environment, the associated equipment, and the ears and taste of the listener.

The packaging of the IR2100 proved to be one of its strongest features, since there is no better way to set up an enhancement system of this type than being able to switch it in and out *and* to make all adjustments from any listening position.

The Sound Concepts IR2100 provides a rather exceptional amount of program enhancement per dollar of investment. Considering that it requires no additional speakers or amplifiers, it is hard to imagine a greater benefit from a \$229 investment, assuming a reasonably good system to start with. Also, it is completely compatible with a time-delay system; the two should be set up and adjusted separately, and when both are used the results can be highly gratifying. We operated the IR2100 in conjunction with a Sound Concepts SD550 time-delay unit for some time and found them to be a habit-forming combination in a very positive sense.

Circle 144 on reader service card



. . . Harry, I've tried, but I just can't get the speakers in phase."

the best value in hi-fi

Three V15 Type IV Technological Breakthroughs

Dynamic Stabilizer Suspended from two viscous-damped bearings, acts like a shock absorber to maintain constant cartridge-to-record distance and uniform tracking force; eliminates record groove skipping caused by warp; cushions the stylus from accidental damage.

Electrostatic Neutralizer 10,000 conductive graphite fibers discharge static electricity from the record during play. Eliminates attraction of dust and tracking force variations caused by static charges.

Telescoped Shank Greatly improves trackability at the critical middle and high frequencies. Lowest effective mass, with no sacrifice of necessary stiffness or strength.

Plus a Studio Cartridge Innovation

SIDE-GUARD Stylus Deflector

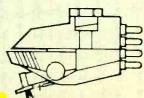
A unique lateral deflection assembly developed by Shure for its professional studio cartridge—prevents the most common cause of stylus damage by withdrawing the *entire* stylus shank and tip safely into the stylus housing before it can be bent by sideways thrusts.

In 6 Models to Match Any Turntable, Any Budget All these features are incorporated into six moderately-priced cartridges—with tracking forces ranging from ¾ to 3 grams, and three different stylus configurations—including the revolutionary distortion-reducing Hyperelliptical stylus. Headlining the M97 Series is the M97HE-AH, featuring a precision aligned cartridge-headshell and adjustable overhang.

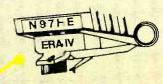


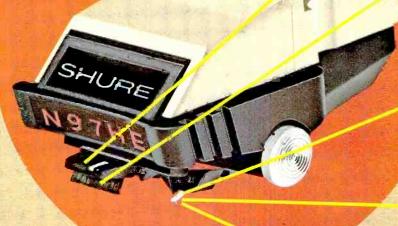


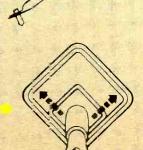
SENUINE INNOVATIVE DESIGN SHURE & SUPERIOR SOUND IN A COMPLETE RANGE OF PICKUPS

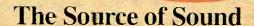






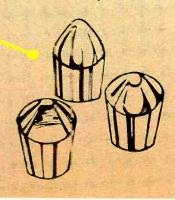


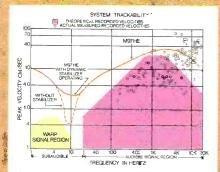




Every component in your system depends on the electrical signal generaled by the phono cartidge as it tracks the record groove. No matter how much you spend on a territable, amplifier, or speakers, your system can't provide true high fidelity sound with an interior cartridge. What's more, a cartridge that mistracks can ruin your records!

> The M9° Cartridge Series was developed by Shure in answer to the reec for a troad spectrum of high-trackability cartridges for audiophiles sixing a high-performance cartridge with top-of-the-line features at a mode ate price. Whe her you are buying your first system or upgrading a current one, and whatever the requirements of your turntable or budge, there's an M97 model that will give you optimum performance for the money





*Cartridge-tone arm system trackability when mounted in SME3009 tone arm at 1 gram tracking force.

Superb Trackability

Trackability is the most important characteristic of a cartridge. Simply put, trackability is the ability of a cartridge to maintain contact with the record groove a: a given tracking force.

Ir the rackability chart, the shaded area a bottom left represents the actual warp signals found on records: the s raded area at right represents the theore ical limits of record atting velocities; the scattered dos are the "hottest" recorded velocities actually measured on many of tcday's difficult-to-track records. The solid line shows the trackability of the M97HE at 1 gram.

As you can see, the M97HE has trackability much higher than the theoretical I mits, higher ever than most of the measured "hct" points at only 1 gram. In addition, the M97HE trackability in the warp signal region is well above the danger area due to the effect of the Dynamic Stabilizer. Thus the cartridge is able to achieve its full potent at trackability at all requercies, on every record. warpec ar not.

Trackability of the M97HE-AH M97ED, and M97GD is equal to the M97HE. The M97EJ and M97B achieve this high leve of trackability at slightly higher tracking forces.

The Dynamic Stabilizer

The revolutionary Shure-designed and -engineered Dynamic Stabilizer is viscous-damped to resist sudden changes in motion, such as those caused by subaudible warp (between 5 and 15 Hz). This damping ensures that the tone arm will follow the irregularities of the record surface, even at the critical frequency of arm-cartridge resonance. The original cartridge-to-record distance is thus maintained, and vertical tracking angle and stylus tracking force remain constant -even on severely warped records! Stabilizing the distance, angle, and force ensures that the full tracking capability of the cartridge is realized at all times.

Electrostatic Neutralizer

Electrostatic charges on the record are omnipresent and unevenly distributed. As these charges attract the cartridge toward the record, they change the arm-torecord distance, the vertical tracking angle, and the stylus tracking force. The result is undesirable wow and flutter.

During play, 10,000 electrically conductive fibers in the Dynamic Stabilizer continuously sweep just ahead of the stylus preparing the groove about to be played. They pick up the static electricity and discharge it to ground, much like a miniature lightning rod. The record surface is electrically neutralized. The static charge is prevented from effecting arm-to-record distance or from altering the vertical tracking angle—and the tracking force is stabilized to minimize wow and flutter.

The Telescoped Stylus Shank

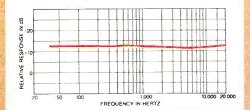
Shure's unique telescoped stylus shank, originally designed for the V15 Type IV, is standard on every M97 Cartridge. This design was made possible by the most advanced computer simulation techniques—which have been widely acclaimed by technical audio critics. The telescoped stylus shank greatly improves trackability at the critical middle and high frequencies by combining significantly lower effective mass with the stiffness necessary for clear, undistorted reproduction.

Unique SIDE-GUARD Stylus Deflector

The most common cause of stylus damage occurs when the stylus is pushed sideways and bent, for example, when the cartridge is accidentally bumped against the edge of a record. To help prevent this, Shure's new M97 Series Cartridges feature a unique lateral deflection assembly, called the SIDE-GUARD, which responds to side thrusts on the stylus by withdrawing the entire stylus shank and tip safely into the stylus housing before it can be bent. The arrows in the illustration at left show the direction the stylus takes when it is subjected to lateral movement.

Choice of Stylus Configurations The M97 Series of cartridges are available with a choice of Hyperelliptical,

Biradial (Elliptical), or Spherical stylus tips: There are two tracking force ranges 34 to 11/2 grams, and 11/2 to 3 grams. Plus the Headliner, Model M97HE-AH, which offers the simplicity of plug-in connection. All styli are interchangeable, so as your system grows, you can upgrade performance for the cost of the replacement stylus alone. The selector chart at right will help you choose the model that delivers optimum performance with your turntable and within your budget



Ultra-Flat Response

The frequency response of the M97 Series is extremely flat throughout the entire audio spectrum. The effect is pure and uncolored re-creation of every instrument, every voice. It is a clear, neutral sound that is a delight to the musical ear. The response curve of the M97HE and M97HE-AH is shown in the chart above.

M97 SERIES **CARTRIDGE SELECTOR**

the HEADLINER

3/4 to 11/2 grams with adjustable integrated headshell

Combination cartridge-headshell Hyperelliptical stylus for minimum distortion. Four-pin universal bayonet mount and precision overhang alignment. Instant attachment to the tone arm of most turntables





Nulle Hyperelliptical

3/4 to 11/2 grams

Hyperelliptical nude diamond tip configuration is better suited to reproduction of the stereo-cut groove than any other tip configuration. Reduces intermodulation and harmonic distortion by as much as 25% over conventional Elliptical or long contact tips.



Model HE



Nude Hyperelliptical

3/4 to 11/2 grams

Nude Biradial (Elliptical) tip configuration reduces distortion (when compared to a Spherical stylus). Nude mounting reduces stylus tip mass for high trackability at an ultra-light tracking force



Model ED



Nude Biradial (Elliptical), OCG2 in x .0007 in.

3/4 to 11/2 grams

Nude mounted Spherical tip configuration, for the audiophile whe requires ultra-light tracking forces at a lower cost.



Model GD



1½ to 3 grams

A superb cartridge with Biradial (Elliptical) tip, offering high trackability and high fidelity at a slightly heavier tracking force. An excellent choice for an older turntable, or one that requires heavier tracking forces for proper operation.



Model E.J



B radial (Elliptical): 0004 in x .0007 in

$1\frac{1}{2}$ to 3 grams

Spherical tip, an excellent value, offering high trackability at a very affordable price. A good "first' M97 cartridge to buy now and which you can upgrade later.



Model



Spherical 0006 in

78 rpm Stylus also Available

N978E Biradial (Elliptical) Stylus. (.0005 in. x .0025 in.) For playing 78 rpm records at 11/2 to 3 grams with any M97 Series Cartridge.



No matter which Shure cartridge you own, from today's V15 Type IV all the way back to the M3D, the first true high fidelity stereo cartridge, you can get a Genuine Shure replacement stylus that can bring it right back up to its original performance specifications. Upgrade styli are available to fit some Shure cartridges for performance beyond original specifications.

Even as the performance of the rest of your high fidelity system can be no better than the performance of the cartridge, the performance of a fine Shure cartridge can be no better than its

stylus. Cartridges don't wear out—styli do. A worn or damaged stylus can cause irreparable damage to your valuable, possibly irreplaceable record collection. Don't take the chance! Have your stylus professionally inspected at least once a year, and replace it if necessary with a Genuine Shure replacement stylus.

Don't be fooled by cheap imitations. Sophisticated equipment designed by Shure assures uniformity and unwavering adherence to specifications. Insist on the name SHURE on the stylus grip.



Going on Record

By James Goodfriend



HOME PIRACY

In the record business, as elsewhere, there is someone to agree with any point of view. Should CBS, for instance, decide that its next release will comprise Rimsky's Scheherazade, Gershwin's Rhapsody in Blue, the Beethoven Fifth, Tchaikovsky's 1812 Overture, Dvořák's New World Symphony, and the Mendelssohn Violin Concerto, there would be people to consider that just dandy-though each of those pieces is already represented by at least twenty-four available recordings. Similarly and contrarily, should RCA decide that it will expend its entire classical recording budget for the next two years on the collected works of Morton Feldman, that decision too would find its supporters—a few, at least. Should Philips decide to press its records in New Jersey rather than in Baarn, Holland, a certain (small) amount of dancing in the streets (in New Jersey, presumably) might be expected. And should the new owners of Arista vow to change that label's image to one of classical music and inform president Clive Davis to "get with it or get out," there would surely be banners amidst the crepe.

But there is one topic on which, apparently, record companies and consumers have no overlap of agreement, and that is the ever more important matter of the private taping of records. The companies are against it, the artists are against it, the consumers are for it, and never shall they meet. Or shall they?

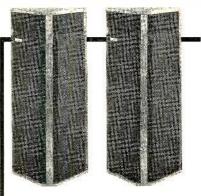
The ethical position of the companies and artists is that this is thievery. The ethical position of the consumers who tape (to be called the tapers from here on) is that great music is everybody's heritage and why should people who can't afford the record be forced to do without the music? Tapers are always, in their own minds, poor. They are not so poor that they cannot afford a tape machine and blank tape, but we have a way of seeing such things in this country that places in the balance a single individual and a "large" corporation, and the individual will always be seen to be poor in comparison. Therefore, at the worst, the taper will be thought to be guilty of stealing from the rich to give to the poor, and at anything better than "worst," he will be seen not to be guilty of anything reprehensible at all.

There is no ethical difference between the private taping of popular music and the same thing applied to classical music, but though the former tends to eat into the profits, the latter has even more serious ramifications. Tapers will prefer not to know this, but whatever one's course of action, one should be aware of the consequences. Private taping tends to make a marginal record operation into a losing proposition. It will ultimately make larger companies even more conservative than they already are in repertoire and put smaller, more adventurous companies out of business entirely. I spoke to the owner of such a small company last week, and he advised me that he had, so far, one profitable record in his catalog, and that the rate of return, on all his records, of so called "defectives" was far beyond what a quality-conscious company such as his could legitimately expect. Such "defectives" are frequently records bought, taped, and returned for credit. He is staying in business, but for how long?

T is perhaps at this point that the matter of ethics turns into the matter of self-interest. Few people will refrain from something that to them seems harmless just because someone tells them, or even proves to them, that it is ethically wrong. But the taper tapes because he wants more: more variety, more music. The result of his taping will be that he has less-in the long run, of course, but few of us are planning to die soon. The thing is that the classical music most likely to be taped is the more obscure music, and that is the music that is most marginal economically to put on records. The more you tape, the less such music will be released. The more you actually buy such records, the more encouragement is given to make more. The enlightened man takes the course more to his own interest, once he determines what that is. Despite loud noises, there is little the record companies can do directly in the matter. The equipment and tape manufacturers are content simply to take their profits from both sides. At the moment, this particular future is totally in the lap of the consumer, and he might just think about that the next time he starts to add up the timings on a record jacket.

Original.

original n: that from which a copy, reproduction or translation is made. (Webster's Collegiate Dictionary)



The ALLISON: ONE® Room Matched® loudspeaker system was introduced in 1974. It was the first direct-radiator system ever designed to use roomboundary reflections constructively, so that flat acoustic power could be radiated into a listening room throughout the full frequency range.

Now, more than five years after, we are pleased to see systems based on this concept being marketed by AR, Design Acoustics, and Snell (if we've omitted anyone, our apologies). To all such we say, "Welcome aboard." The more of us there are, the better.

But imitation does not mean replication. Only Allison® loudspeaker systems are manufactured under U.S. Patent No. 3,983,333, which teaches the most effective and least costly ways to make Room Matched loudspeakers. Only Allison systems have convex-diaphragm tweeters and midrange drivers, which combine high output capability and unmatched dispersion. And only Allison systems are available in models designed for use with one, two, or three intersecting room boundaries.

Information on the complete line, including specifications, a list of authorized dealers, and details of our Full Warranty for Five Years, is available on request.

For literature and information call (800) 225-4791 [in MA (617) 237-2670] or send coupon.

ALLISON: ONE \$460/\$483 (each) (Price varies with shipping distance)

ALLISON ACOUSTICS Seven Tech Circle/Natick, MA 01760, U.S.A.

Name		
Address		
City	State Zip	



SUPERDISCS

Can your present audio system handle the new "audiophile" recordings? Will it reproduce the coming digital-playback discs without strain or distortion? Ten industry spokesmen address themselves to these and other questions.

FTER reading last month's article on upgrading your stereo system you're probably all ready to go out and buy a new component, right? But even if you're not lusting after a new amplifier or loudspeaker right now, take a few moments to reflect on coming developments in audio and decide whether or not any new (or old) component you now have or are considering buying might become obsolete within the next few years owing to the arrival of new audio technology. The future development of most importance is, of course, a home digital-audio playback system which might appear on the market even as soon as a year from now, at a time when your newly purchased components are still in their infancy.

What will the upcoming digital play-

back system require of the rest of the playback chain? Indeed, what do the presently available super-disc technologies (direct-to-disc, digitally mastered, remastered, dbx-encoded) require of playback components, chiefly amplifiers, speakers, and cartridges? We asked these questions of several leading component manufacturers, and what you will find below is an edited summary of their responses.

They all agreed on at least one thing: that the most significant aspect of the new technology is its increased dynamic range, the range between the maximum possible undistorted signal and the background noise level. But there was considerable disagreement as to what this wider dynamic range will mean to the home playback system and to power

amplifiers and speakers in particular. The whole matter seems to boil down to just how loud you want to play your music: softer than life (easily done with present-day components), loud as life (less easily done today, but still possible), or louder than life (a level that strains contemporary technology, not to mention your vulnerable ears).

This loudness problem is addressed in statements from Allison Acoustics, Acoustic Research, and Electro-Voice. The true requirements for a well-engineered power amplifier in the Eighties are discussed in statements from David Hafler, Carver Corp., and Apt Corp. The remaining three statements (from dbx, Sony, and Shure) deal with other important aspects of digital playback and stereo design. —David Ranada

Dynamic Range and Home Listening





DIGITAL recording and playback typically add 25 dB of dynamic range to present-day professional recordings and provide somewhat flatter responses at very high and low frequencies as well. Since peak sound levels comparable to those of live music can readily be obtained in the liv-

ing room at present (and loudspeaker designers are steadily pushing speaker capability higher—indeed, up to and beyond the physiological danger point), we should look to benefit from digital recording at low signal levels instead. In other words, midrange driver and tweeter capabilities are challenged now by high-level playback in ways that digital technology will not change. It is the ability to lift low signal levels out of the noise that makes the digital difference.

Given the noise levels that exist in quiet apartments or suburban homes, a dynamic range of 100 dB (as is claimed for digital systems) will allow signals with SPLs between 115 and 15 dB to be separated from the noise of the playback system. Such quiet listening environments exist, but most of us live in sound fields that almost never drop below a 30- to 35-dB SPL (A-weighted) during waking hours. Unless one plays mu-

sic louder than reason and medical prudence suggest, this leaves a useful dynamic range of 80 dB. Allowing for the noise from a listener's breathing, several more decibels are chipped away from the total, and the useful dynamic range of a record/play system drops to about 75 dB—just about what good professional Dolby-A master tapes have been providing for the past dozen years.

There are two lessons to be learned from this. One is that most of the analog recordings made during the past decade will be perfectly suited to reproduction on home digital-playback equipment (once they are converted to a digital format); that is great news, considering how many beautiful recordings fall into this category. The other lesson is that digital media will offer the home music listener much more than the opportunity to play music at unnaturally

SUPERDISCS...

high volume levels; there will also be exceptional speed stability, extended frequency response, imperceptibly low distortion, and, with care, playing life that is for all practical purposes eternal.

Should listeners wish to exploit the full dynamic range digital media will provide, technical evolution in loudspeakers during the coming years will probably make room for high levels with minimal risk to voice coils and adhesives. At the low-sound-level end, the ambient noise of civilization will have to be altered for most of us to hear the difference



A Power Amp for the Eighties



ROBERT CARVER

President
Carver Corp.
Woodinville, Wash.

ost popular power amplifiers today fall in the \$400 to \$800 price range and put out from 100 to 200 watts per channel. Consequently, a belief exists that since this power range is all that's commonly available, no higher power is required for the reproduction of music at "live" volume levels. In reality, the power/price range results only from electronic and economic considerations.

Today's power amplifiers of conventional design (the ones that don't cost an arm and a leg) are not up to the task of providing the full dynamic range of the best of presentday discs without considerable overload and clipping. They can certainly generate high amounts of power, but will clip when doing so. These amplifiers won't even come close to reproducing, undistorted, the forthcoming digital discs. Experiments by KEF, B&W, and others, including myself, demonstrate that about 1,000 watts per channel are required to accurately reproduce some very high-level transients at full volume with the typical low-efficiency loudspeakers widely used at present.

But here is where the situation changes: even though 1,000 watts per channel are required to reproduce transients, the average power that is required is far, far less. The imminent arrival of true digital systems gives us a unique opportunity to rethink amplifier design. If engineers are sufficiently clever, an amplifier can be designed to pro-

duce a total of 2,000 watts at peaks and yet behave (and cost) otherwise like a much smaller amplifier.

Therefore, my view is that a true stateof-the-art power amplifier for the digital decade will

- 1. be able to put out 200 watts per channel (continuous)
- 2. put out 1,000 watts per channel during peaks
- 3. fall in a popular, affordable price range4. be designed to provide extremely high

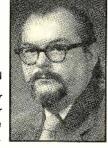
power into real loudspeaker loads

5. have a microprocessor-controlled power supply that will closely fit the power-vs.-frequency abilities of the amplifier to the music being fed into it. (The same microprocessor will monitor signals in the amplifier and loudspeaker to prevent any damage to either.)

I'm assuming, of course, that all the other normal specifications (distortion, noise, etc.) will be acceptable.

Louder and/or Lower





BECAUSE OF the generally spectacular nature of the new audiophile recordings, you might get a little worried when a highlevel bass passage audibly strains your loud-speaker's capabilities. And your worries might be even greater when the realization sinks in that current high-quality program material (be it direct-to-disc, digitally mas-

tered, dbx-encoded, or just well recorded and pressed) is only a harbinger of further sonic refinements that will some day culminate in the true digital disc.

The improvements in dynamic range available from these sources may in many cases be employed to reduce surface-noise levels instead of to create higher average or peak sound levels in the listening room. However, additional freedom from noise, coupled with any reduction in cutting or playback distortion, can in itself be an encouragement to increase listening levels to some extent. Increased acoustic output levels do concern loudspeaker designers, for they imply increased speaker power-handling abilities (assuming that higher amplifier power is feasible) and/or higher-efficiency loudspeakers.

An increase in loudspeaker efficiency by a factor of four, for instance, will give a 6-dB greater sound output at the same am-

plifier output level. At low frequencies, greater output requirements produce additional complications that might lead designers to choose suitably sized (generally larger) woofers and/or to use systems (optimally vented ones) that minimize cone excursion for a given output.

Any attempt to extend low-frequency response in this situation also complicates woofer design. For example, every additional half-octave of bass response requires a doubling of cone excursion unless woofer size is increased or lower-excursion designs are chosen. A 12-inch woofer in a sealed-box system must move a total of 2 inches to produce 1 watt of acoustic output at 28 Hz; a vented system's 12-inch woofer cone would move only 0.67 inch.

With a true digital disc, cutting and playback distortion may virtually disappear, and this will offer even greater opportunities for loudspeaker designers to provide a uniform and flat high-frequency system output within a carefully defined and unchanging radiation angle. Digital discs, freed from the traditional LP's groove problems, can have low-frequency performance

that extends to frequencies current disc techniques cannot handle. The bottom of the normal acoustic spectrum (20 Hz) will become easily attainable and will almost certainly be exploited for musical effect. High-intensity outputs in this frequency range will require loudspeaker designers to use all their knowledge, skills, and talent in the creation of high-output, extended-response, low-frequency reproducers.

Components for the Digital Age



TOSHI T. DOI Manager, Digital Audio Project Sony Corp., Tokyo

DIGITAL sound is remarkable not only for its dynamic range but also for its low harmonic and intermodulation distortion and its complete freedom from wow and flutter. Before digital audio was introduced,

the quality bottleneck of the whole audio chain was in analog tape recorders and analog records. Now, the weakest points are in the transducers: microphones and loud-speakers. Distortion and intermodulation problems are far worse in these components than in digital audio recordings.

The use of sixteen-bit linear quantization is now considered appropriate for both professional and consumer digital-audio applications. Full realization of a digital system's potential requires at least 90 dB of dynamic-range capability in consumer audio equipment. This figure can be achieved with today's equipment when it is carefully designed and used.

It should be noted, however, that digital recorders will capture and reproduce the extremely sharp peaks of percussion transients even though the average level is low. (Analog recorders, because of phase shifts, can "smear" such peaks and reduce their level.) In many cases, these peaks are clipped by amplifiers and speakers without being noticed, but this is hardly "accurate" reproduction of a digital recording. In fact, if the protection circuitry of an amplifier is of poor design, short high-level peaks from digital program sources might activate it unnecessarily.

Nowadays, many manufacturers are using digital recorders for making test recordings used in the evaluation of other playback components. These people are hard at work improving the quality at all stages of the audio chain, so it will probably not be very long before the bottleneck will again be the recording system.

Dynamic Range—The Real Questions



ROY ALLISON

President

Allison Acoustics, Inc.

Natick, Mass.

It isn't necessary to discuss the differences in dynamic range, average levels, and peak levels between old-style records, current superdiscs, and digital recordings of the future in order to estimate what the demands on associated playback equipment will be. A discussion of that kind would be a digression from the main point. The impor-

tant questions are, rather, the following:

- 1. With due consideration given to the dynamic characteristics of music (of any kind), individual loudness preferences, and the tolerance limits of our hearing mechanisms, what are the average and peak sound-pressure levels we should be able to reach in our home listening rooms?
- 2. Is our present playback equipment adequate for those levels?

The answer to the first question determines how much acoustic power must be generated in the listening room by the amplifier and loudspeakers (for a quantitative discussion of this point see "Loudspeaker Power Requirements" in the August 1980 issue of STEREO REVIEW). Whatever the maximum requirement may be now (using modern analog recordings as program material), it is not likely to change much—if at all—for the same music recorded on digital discs. Certainly the average sound-pres-

sure-level (SPL) requirement (which is related to perceived "loudness") will not increase, which means that there will be no change in thermal stresses in loudspeakers. And live-performance music will not change in peak SPL values merely because it is being reproduced through a different recording medium.

Equipment is readily available today that is quite adequate for the reproduction of music at any listening-room SPL desired by anyone except perhaps a few ultra-loud extremists pushing toward (or beyond) 120-dB peaks. The same equipment will be adequate for domestic reproduction of digital discs at conventional levels. This is not to say that associated playback-equipment components (most notably loudspeakers) are now perfect or will not be improved in the future. They surely will be—but mostly in ways unrelated to any special requirements of digital recordings.

Wide Dynamic Range



JEROME E. RUZICKA

Vice President
dbx, Inc.
Newton, Mass.

FULL dynamic range has now taken its rightful place as an extremely important element in providing home music reproduction that has the sense of excitement and the emotional impact experienced at live performances. Until recently, software (records, prerecorded tapes, radio broadcasts) has been the weakest link in music reproduction. However, realization that true "high fidelity" requires that the full dynamic range be reproduced along with full frequency response and low distortion has led to recent significant advances in music recording and reproduction.

The dbx-encoded disc represents a solution to the two major problems with vinyl records: restricted dynamic range and record-surface noise. The dbx signal companding concept accepts the fact that the dynamic range of vinyl discs is fundamen-

tally limited to about 50 to 60 dB. The dbx-disc system operates within this limitation, but it provides a dynamic-range capability of 90 dB through signal compression and expansion. The difference between music reproduced with 60 dB of dynamic range and that played with 90 dB is anything but subtle. A full dynamic range provides a feeling of depth and naturalness like that which makes live music so enjoyable.

Some questions have been raised as to the need for a full 90-dB dynamic range. The argument goes like this: if the loudest level at which you can play music in a home listening environment is (to pick a reasonable figure) 100 dB SPL and the typical level of ambient noise in the listening room is 40

SUPERDISCS

dB, all that is actually required is 60 dB of dynamic range. While the accuracy of this calculation is unquestionable, its relevance becomes questionable when we include consideration of peak-vs.-average signal levels and the psychoacoustic characteristics of the hearing process.

Even in home listening situations that have a 100-dB upper limit imposed on the SPL (by neighbors, family members, or oneself), an occasional peak exceeding this level by 10 dB or so can be tolerated-and it is at precisely such moments, when a transient musical peak is needed, that dynamicrange compression is particularly audible and objectionable.

With regard to the lower limit imposed by ambient noise levels, the human auditory process fortunately does not abide by oversimplified arithmetical rules. We all have incredibly capable "psychoacoustic filters" in our hearing systems that allow us to focus on music content at sound levels lower by some 20 dB than the ambient noise level, particularly if the music is in different frequency regions from the noise. The socalled "cocktail-party" effect is an example of our ability to pick and choose what we hear despite high overall noise levels. For example, while supposedly engaged in a conversation with a number of people, we can tune them out and choose to hear another conversation a considerable distance away. This "selective-listening" ability allows us also to pick the music signal out of the ambient noise with amazing clarity and definition. There is therefore some justification for music systems capable of handling a full 90 dB of dynamic range.

We have, in my opinion, been presented with a series of insignificant technological "advances" during the past decade-minor improvements in bandwidth, slightly flatter frequency responses, reductions of distortion from 0.1 per cent to 0.05 per cent (both of which are usually inaudible), and so forth. But the rise in dynamic range from 60 to 90 dB in home music systems is an extraordinary accomplishment the benefits of which can be immediately appreciated and enjoyed by everyone. The "weakest link" is now somewhere else, for it is no longer the software.

An Experiment in Loudness



DAVID HAFLER President David Hafler Co. Pennsauken, N.J.

HE increase in dynamic range made possible by digital media will require both lower noise levels in the associated playback equipment and greater power capability in amplifiers and loudspeakers. Many people will question the need for increased power capability on the basis that live music is not really as loud as many people try to reproduce it. Yes, if one wishes to sit toward the rear of a concert hall the music is not very loud. However, the actual sound pressures near the instruments are surprisingly high, and accurate reproduction of closely miked instruments requires quite high power levels if one wishes to hear them "close up."

Many years ago (around 1956) I participated in an experiment that tried to reproduce a piano so that the recording would sound as loud as the instrument itself would in a home listening room. We had a speaker system that was quite low in efficiency, and we were able to have the pianist alternate with recordings of himself while we set the levels to sound alike. The input to the amplifier and its output were shown on a special oscilloscope hookup. This display showed a straight line as long as the output stayed proportional to the input. If the output overloaded, the line bent-the arrangement was, in other words, a very sensitive overload indicator.

The sound levels from the piano and from the loudspeaker were equalized, as far as the ear could tell, in the moderate-level passages. When the fortissimos came, the output of a 50-watt amplifier showed significant overload. Thus we learned that 50 watts was not sufficient to reproduce, at original loudness, high-level piano music picked up by close-proximity microphones.

By simple calculation, using the scope trace and the amplifier gain, we discovered that the amplifier would have had to deliver 250 watts with that loudspeaker system in order to remain undistorted.

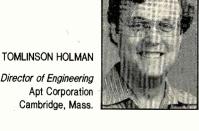
Obviously, a loudspeaker system of higher efficiency would have required less power, but the desire to design extended lowfrequency response into small boxes has led to a proliferation of low-efficiency loudspeakers. Most home hi-fi speakers of today are not too much different in efficiency from the one with which the 1956 experiment was conducted.

Though our experiment was done with a monophonic system, it is likely that with a stereo system the total power requirement of the combined channels would be the same as was determined for a single channel (that is, at least 125 watts per channel). Digital recording techniques have the potential to supply program material with the full dynamic range of the original instruments. To utilize this potential, the amplifiers must be able to supply the high peak powers needed, and the speakers must be able to handle it.

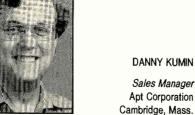
The Amplification Chain



Director of Engineering Apt Corporation Cambridge, Mass.



s we move into the penultimate decade A of the twentieth century, it seems fair to call the dynamic-range "explosion" of the late Seventies the most significant development in audio since high-powered amplifiers. What's more, the inevitable—if sometimes erratic-march of true digital



Sales Manager Apt Corporation Cambridge, Mass.



program sources to market promises to raise the available dynamic range even further, perhaps to over 100 dB. But before welcoming this audio millenium with open arms, we would do well to raise several critical questions about portions of the soundreproduction chain that are downstream

from the new wide-range signal sources.

Let's start with the most limiting factor: the listening room. What sort of dynamic range can we expect to re-create in a "typical" living room? The fact is that the range between the acoustic-noise "floor" of a typical room and the 105-dB peak sound-pressure level of a Wagnerian ensemble is at best a depressing 65 or 70 dB. (Even Symphony Hall in Boston can't do much better-maybe 75 to 80 dB with a full house.) Although much of this "room noise" lies in the lower frequencies and below the noise levels of even present-day sources, it still seems pretty clear that audiophiles who wish to exploit a digital playback system fully will have to undertake some serious sound-insulation projects at home, both to keep environmental noises out and high-level music in.

The next significant issue is the dynamic-



Only Custom-Tailored Sound meets your taping needs.

If tape is the only sound that's right for you, to maximize your taping requirements, an ADC Sound Shaper® Two MK II frequency equalizer is a must.

When they designed the Sound Shaper Two, they had you in mind. Because, aside from being a superb all-around equalizer, it lets you work with tape the way you want. For example, now you have two-way tape-dubbing capability, a feature many receivers don't offer. You can "custom-tailor" a record and then record it the way you would have engineered it. And that includes your golden oldies because, with the Sound Shaper Two, you can virtually eliminate the surface noise which has accumulated

over the years.

The entire ADC Sound Shaper line is impressive. The basic Sound Shaper One is a great introduction to frequency equalizers. And the top-of-the-line Sound Shaper Three, the Paragraphic™ equalizer, combines the ease and control of a graphic equalizer with the precision and versatility of a parametric. And, all Sound Shaper equalizers, except the Sound Shaper One, feature LED-lit slide controls, allowing for visual plotting of the equalization curve.

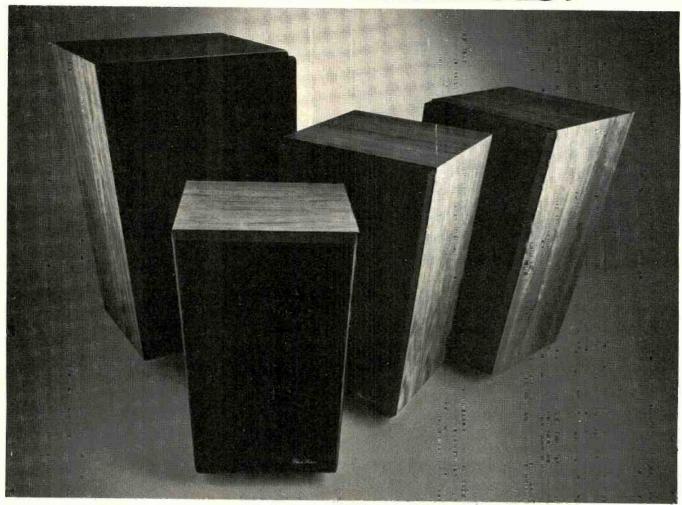
With the Sound Shaper Two MK II, you can appreciate the difference custom-tailored sound makes—over and over again

Custom-Tailored Sound





LOUDSPEAKERS ARE NOT PURESPEAKERS.



INTRODUCING THE PHASE LINEAR P-500 SERIES PURESPEAKERS.

Why Loudspeakers? It's a fact: Most speakers that sound good at loud listening levels don't sound the same during a soft musical passage. And vice-versa. The drivers are simply not capable of reproducing such a wide dynamic range with clarity and accuracy. Until now.

Purespeakers. Not loudspeakers. If you love music as we do, you know that a hi-fi system is only as good as the "weakest" component. And for the most, it's the speakers. Clearly, it was time we addressed the task of advancing the "state-of-the-art" in speaker and driver technology. We began by identifying design objectives through a careful analysis of how we experience music. Then we got very serious, indeed, about meeting those objectives by:

 Applying every computer-aided technique available, including extensive laser-holographic analysis.

Utilizing the lightest, strongest materials in the world.
Pursuing "no-compromise" quality at every stage of

design, prototype development, test and manufacturing. The result was an exact discipline of speaker design that far exceeds anything ever produced. Or heard. In fact, anything less and the listener invariably experiences the speakers. Instead of the music. We urge you to contact your Phase Linear audio dealer and audition the Phase Linear P-500 Purespeakers.



P-580 System Specifications:

Frequency Response: 28Hz-120,000Hz ± 2.5dB.
Total Harmonic Distortion Content: 20Hz-20kHz, less than 0.3% Intermodulation Distortion: (SMPTE) less than 0.03% Sensitivity: 91dB, 1 watt at 1 meter.

Driver Complement: 9mg. Ribbon Tweeter, 2½" Beryllium Dome Midrange with Cantilever Suspension, 15" Concentric Rib Woofer.

Phase Linear 20121 48th Ave. West, Lynnwood, WA 98036

CIRCLE NO. 70 ON READER SERVICE CARD

range potential of the speaker/power-amplifier combination. The dynamic power capability of such a combination is being granted more importance as better program sources with higher peak outputs developas opposed to the steady-state, "FTC-type" of power ratings most of us grew up with. The general acceptance of a dynamic-headroom specification by the Institute of High Fidelity (IHF) has been a big step forward in this area. Less widely known, unfortunately, is the design difficulty of maintaining a large dynamic headroom into the full range of load impedances presented by modern loudspeakers. What's needed today is an amplifier with the ability to deliver the large amounts of current demanded by 20millisecond peaks from a digital disc into a 3-ohm inductive speaker. This can be done with new power-supply designs that are unimpeded by the limitations of conventional protective circuitry. We anticipate great progress in these areas in coming years, possibly including electronically "smart" power supplies.

Our last point is more subtle and involves the preamplifier itself. Normally the highlevel section of a preamplifier is not considered to impose any serious dynamic-range limitations, but a little-appreciated condition-almost universal in preamplifier design-bears closer investigation. A conventional preamplifier has its output amplifier following the volume control. With the system turned all the way up, the impedance of the volume control does not contribute to the preamplifier's output noise. However, at a typical listening level, the resistive impedance of the volume control itself introduces noise into the system. As long as the noise from the source material is higher than this volume-control-generated noise, as is the case with today's phonograph records, this is unimportant. However, with a digital, super-wide-dynamic-range source this noise becomes a limiting factor, possibly even

limiting the whole stereo system's output to an 89-dB signal-to-noise ratio, compared to the 96-dB figure attainable with a sixteenbit digital-disc playback system. (There is a solution, of course, and it is to place the volume control in the feedback loop of the preamp's output amplifier.)

There are other problems to be aware of: the pitiful dynamic range of FM radio, agreement on and perfection of a digital-audio format before the next world war, the limitations of conventional recording techniques, will the speakers be able to take the signals?, will the neighbors be able to take them?

Here at Apt, we're convinced that all these issues are more or less soluble—except, perhaps, the last. If they are, and if the questions of component and circuit interaction mentioned above are addressed, then the potential for the new audio technology is truly wonderful, and we join the industry and the audio public in awaiting it.

Recordings and Dynamic Range





DURING the past ten years, the audio consumer has benefited from substantial improvements in the prerecorded-tape and disc media. Advances in disc technology in both the production of records and in their playback have been significant and can be put in three broad categories: (1) those that increase the usable dynamic range either by reducing the background noise level or by increasing the maximum recorded signal level, (2) those that reduce distortion, and (3) those that reduce the rate of disc deterioration with repeated playings.

The resulting dynamic-range capability of today's records and cartridges is dependent on frequency and varies from about 65 dB at 1000 Hz to 80 dB at 1,000 Hz and 75 dB at 10,000 Hz. Unfortunately, these fig-

ures are not always attainable because state-of-the-art materials and techniques are not always employed, generally because of economic rather than technical or musical considerations.

Phono cartridges, benefiting from new stylus-tip geometries, improved stylus/cantilever/transducer systems, and cleaner records, can not only successfully play today's "hotter" records under laboratory conditions, but they can also deal effectively with the non-ideal world of warps, debris, and static charges.

Tape recording has likewise seen substantial improvements, both in increased signal capabilities and in reduced noise levels. With the various noise-reduction and tape-saturation-reduction systems now available, the cassette medium has a dynamic-range capability varying from 78 dB at 100 and 1,000 Hz to 79 dB at 10,000 Hz. Future digital playback systems offer the potential of even further improvements, not only in the form of increased dynamic range but reduced distortion and greater immunity to wear as well.

During this evolutionary process, many audiophiles have been experiencing a new problem: system overload due to a combination of low loudspeaker efficiency, low power-handling capability, and small amplifier size. This problem is complicated by the increasing use of room equalization, which

can place further demands on the output capability of a playback system.

However, these problems are not new to the audio industry, for they have long been encountered in professional recording and sound-reinforcement situations. Proper solutions include more efficient and (generally) larger loudspeaker systems with high power-handling capabilities made possible by bi- or tri-amplification. In addition, equalization can be adjusted, with the aid of acoustical instrumentation, so as to take full advantage of room construction and loudspeaker placement.

But it should be remembered that not all listeners will desire realistic dynamic-range reproduction all the time. Many listening environments, in fact, cannot support such program material, for the low-level portions of the program can simply be lost in the ambient noise of the listening room. In addition, one is not always in the mood for an "audiophile" listening experience, particularly if the music is just serving as background. User-adjustable compressors may consequently become necessary or at least desirable.

Perhaps as the quality of the programstorage and playback system reaches the point of practical perfection to which it has been tending, audiophile interest will turn in other directions—specifically, toward the generation of more realistic sound fields.

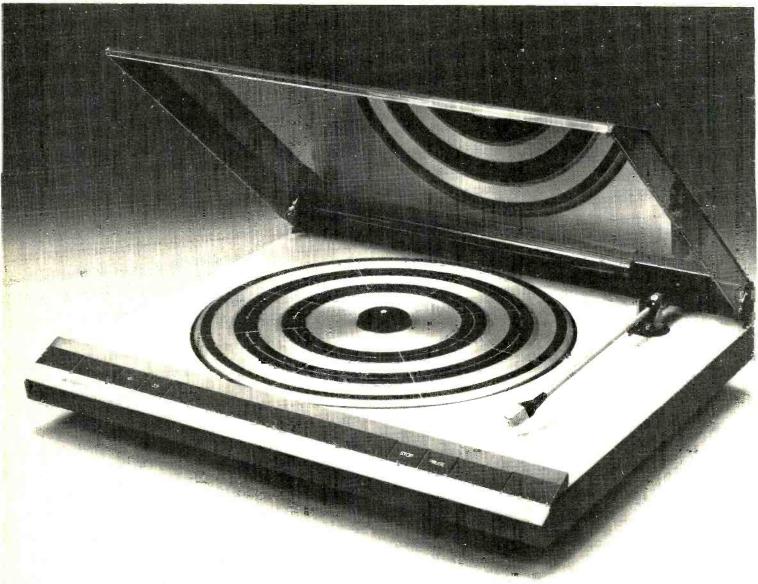
Postlude

R. Schulein's last point is worth additional emphasis. Despite the quibbling objections of some to the adoption of digital recording, the digital process will remove all the traditional barriers to "high fidelity." And yet I am willing to admit that even after digital recording has been adopted, stereo will not sound any more "real" than it does now. You can set up any number

of high-quality microphones in front of an orchestra and listen to their output in a smaller room nearby over veryhigh-quality amplifiers and speakers with no intervening recording process at all, and the result will not be a perfect re-creation of the sonic experience in the concert hall, either theoretically or measurably.

Progress toward ideal "high fideli-

ty," if it is possible at all, will come only from a comprehensive examination of the whole hearing process, including the home listening environment, and from the making of recordings and components that can trick your ears into thinking they are somewhere else. And it is well to realize that such "realism" might be attained at the expense of sonic accuracy.



ITS BEAUTY IS MORE THAN SKIN DEEP

Meet the Beogram® 3404...an intelligent, thoughtful and very well spoken turntable.

Like all Bang & Olufsen turntables, the 3404 effectively combines superior sound reproduction with simplified—not complicated—operation. That's the real beauty of the 3404.

That's why the controls are outside of the dust cover where they're easily accessible. And that's why just a light touch of the START button does everything. It determines if a record is on the platter, and if so, quickly sets the correct speed and lowers the stylus to the record.

Slam! Pound the shelf next to the 3404. Not a skip, not a jump...thanks to the rocksteady patented suspension system. Audible acoustic feedback disappears as a result.

A low inertia tonearm with a knife-edge bearing system eliminates audible distortion. The Bang & Olufsen MMC cartridge works in flawless harmony with the tonearm. The unique self-correcting electronic servo-drive is so precise that the need for a conventional strobe device is eliminated.

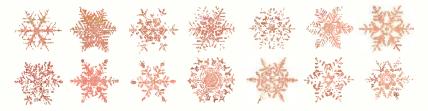
The Beogram 3404 even responds to remote control commands when used with the Beomaster 2400 receiver.

At Bang & Olufsen, good looks and brains run in the family. So discover the inner beauty of our full line of fine turntables at your local Bang & Olufsen dealer or write us for complete informative literature.

ng & Olufsen of America, Inc 6 Busse Road Elk Grove Village, Illinois 60007 Attention: Sandy Reinquist



A Basic Library Selected and Annotated by Richard Thompson and James Goodfriend



spontaneous generation, vanish almost as quickly, and, so far as the Schwann catalog is concerned, can be found only in a special seasonal supplement. Christmas records. Every year, every label worth its oil-based vinyl releases a collection of holiday music ranging from Messiah excerpts to—last year, at least—no less than three different disco sets for those who want hip-wriggling versions of Silver Bells and Joy to the World.

Even more important than these new releases, however, are the Christmasmusic reissues. In this one area, at least, the record companies recover momentarily from their chronic cut-out fever and return to the market, year after year, a sizable catalog of old favorites that have proved as imperishable (though fragile) as any collection of cotton-wrapped Christmas-tree ornaments. But ornaments break, phonograph discs wear out, and replacement becomes necessary, so a timely inspection of your Basic Library of Christmas Music is perhaps in order just about

now. If you should find some holes that need filling, you will be gratified to discover that the record companies seem to have been inspired somewhat by the spirit of the season: many of the Christmas issues (especially the Columbia "LE" series) carry a list price of \$4.98 or less in this day of the \$9.98 (and up) disc. And if you're lucky enough to hit a good sale, the price of many a Christmas album might even drop below \$2.

You will note in the entries that follow that some items are conspicuously absent. Recent rock-group releases don't show up, primarily because they have no track record (pun intended) of being reissued year after year-not that there are all that many of them anyway. Ditto for disco, special commercial offers ("Buy a microwave, get a free Santa record!"), and such albums as "Santa's Gone Hawaiian!" (49th State LP-3421). That last includes Christmas Luau and (take a deep breath, now) Santa Claus Finds It Is Actually Springtime at Christmastime in Hawaii. (Though that sounds about as imperishable as you can get, we haven't been able to determine whether the disc is still available or not.)

You will find no mention of Handel's complete Messiah either, for it is not, strictly speaking, a Christmas work at all. Which may be why Handel premiered it on the thirteenth of April. Herewith, then, an alphabetical guide—admittedly incomplete—to what is especially worthwhile in Christmas perennials, the ones that keep poking up through the snow year after year for the best of musical reasons.

☐ A BAROQUE CHRISTMAS. Praetorius: In Dulci Jubilo. Charpentier: In Nativitatem Domini Canticum. Hammerschmidt: O Ihr Lieben Hirten. C. T. Pachelbel: Magnificat. Schein: Vom Himmel Hoch. Buxtehude: In Dulci Jubilo. M. Haydn: Lauft, Ihr Hirten. Soloists; Amor Artis Chorale; instrumental ensemble, Johannes Somary cond. MCA/WESTMINSTER MCA-1418.

Originally recorded by American Decca, this perfectly splendid disc has just been reissued. It is a serious program that includes works—several of them of striking beauty and majesty—that are not often

CHRISTMAS...

heard (including one by the American Carl Theodorus Pachelbel, second son of the famous Johann Pachelbel; he immigrated to Boston in the 1730s and died in Charleston. S.C., in 1750). The singing, both solo and choral, is musicianly and tonally lovely, but it takes nothing away from the singers to mention that some of the instrumental work, totally uncredited and even unmentioned on the jacket and label, is even more startlingly beautiful. The two anonymous oboists (Henry Schumann and Ronald Roseman, perhaps?) in particular offer some of the sweetest duetting on records in the Charpentier and Buxtehude works. The recording, though dated, is still quite fine.

□ BAROQUE CHRISTMAS CANTATAS. Erlebach: Siehe, Ich Verkündige Euch Grosse Freude. Ahle: Merk auf Mein Herz. Buxtehude: Das Neugeborne Kindelein. Tunder: Hosianna, dem Sohne Davids. Telemann: Lobt Gott, Ihr Christen Allzugleich. Soloists; Freiburg Student Choir; instrumental ensemble, Klaus Knall cond. VANGUARD CARDINAL VCS-10045.

These Christmas cantatas from the German Lutheran tradition are wonderful music at any time of the year but particularly moving in their proper seasonal context. The Tunder and Buxtehude works show the special sweetness of the style, while the Erlebach and Telemann works emphasize the festive aspect with clarino trumpets (mistranslated by the annotator as clarinets). The virtually unknown performers are both accomplished and affecting.

J.G.

☐ THE BEST OF CHRISTMAS. Various artists. Capitol STBB-2979.

This is one of those corporate efforts where they gather a bunch of different songs by a bunch of different artists and wrap them up in one album. Happily, it's also one of the better of such packages. It contains, among other things, the definitive performance of Do You Hear What I Hear?, by Bing Crosby, and The Christmas Song, by Nat King Cole. In addition, Al Martino does well by What Child Is This?, David Rose shines on Carol of the Bells, and there is a fine version of O Holy Night by-of all peoplethe Lettermen. There's some average material here too, such as (for other tastes than mine) Glen Campbell's Christmas Is for Children and Marlene Dietrich's The Little Drummer Boy. [This "other taste" finds the latter simply fabulous.—Ed.]

□ BOSTON POPS ORCHESTRA: Pops Goes Christmas. Boston Pops Orchestra, Arthur Fiedler cond. RCA LSC-3324.

Here's a disc worth having if only for its original version of Leroy Anderson's Christmas Festival, but it also features sprightly arrangements of Sleigh Ride, Parade of the Wooden Soldiers, Winter Wonderland, and The Toy Trumpet. There are some selections by the "Arthur Fiedler

Chorus" that are not quite the caliber of the instrumental ones. R.T.

☐ THE CARPENTERS: Christmas Portrait. A&M SP-4726.

You don't hear much from the Carpenters any more, and this record will probably make you wish that weren't the case. There are very few weak spots in this pleasantly performed program, though it is a little annoying that the songs come one right after another with almost no break in between; you can't listen to one without getting a snippet of those before and after. That aside, "Christmas Portrait" is an asset to



any Christmas collection. Christmas Waltz and Merry Christmas, Darling (a Carpenters original) are highlights, as is a quodlibet fusing of First Snowfall and Let It Snow! Let It Snow! R.T.

☐ **JOHNNY CASH:** *The Christmas Spirit.* COLUMBIA CS 8917.

This could have been a wonderful album instead of a merely good one were it not for Johnny Cash's decision to write several of the songs himself. There is an appealing nononsense approach to most of the material, especially I Heard the Bells on Christmas Day and The Gifts They Gave, while an interesting interpretation of The Little Drummer Boy turns the drum into a tom-tom with good effect. Blue Christmas, though, falls flat, and the Cash originals are by and large forgettable, sermons with back-up music.

R.T.

☐ CHRISTMAS FESTIVAL IN PRO-VENCE. Tomasi: Divertissement Pastoral. Saboly (arr. Tomasi): Twelve Noëls. Boys' Choir of the R.T.F.; instrumental ensemble. DG PRIVILEGE 2535 375.

Unless you are French, and perhaps not even then, you will not recognize many of the scngs on this album. Which only goes to show that appropriate and effective Christmas music does not have to be based on a comparatively few widely known tunes. The Divertissement was written to accompany a Christmas Mass at the Abbey of St. Michel de Frigolet in the Holy Land. The raw material Tomasi uses is Provencal in origin,

and the music somehow evokes both the Middle Ages and biblical lands and times through use of the striking sounds of a boy choir, shepherd's pipes, tambourines, drums, gongs, brass, and bells. Brilliant, festive, earthy music, full of ardor and empty of slickness, it is available now, with the new number given above, at less cost than when originally issued a few years ago.

J.G.

☐ PERRY COMO: Christmas Album. RCA ANL1-1929.

Perry Como's voice improves with age, and this record is proof. It was recorded many years after his successful "Merry Christmas Music" album, but there is simply much more depth to his work here. The selections range from O Holy Night and Ave Maria to light pop numbers, all of them handled with skill. I especially like Christmas Eve and There's No Christmas Like a Home Christmas, a sweet song which seems to have been programmed by no one else. R.T.

☐ BING CROSBY: Merry Christmas. MCA MCA-15024.

This is, of course, one of the all-time great Christmas albums on the pop side, despite the dated arrangements and rather primitive (particularly in these digital days) sound quality. Here is the original White Christmas plus Silent Night, Adeste Fideles, It's Beginning to Look a Lot Like Christmas, Silver Bells, and a batch of others superbly performed. If you have ever wondered why Bing Crosby was so closely identified with Christmas, this album is your answer.

☐ JOHN DENVER & THE MUPPETS: A Christmas Together. RCA AFL1-3451.

This was the big-selling Christmas record of 1979, and it's easy to see why: for the most part it's as comfortable as an old shoe. The



alternately gruff and piercing voices of Jim Henson's Muppets counterbalance the saccharine content of such songs as It's in Every One of Us, Peace Carol, and The Christmas Wish, and they lend something of a new flavor to such standards as Have Yourself a Merry Little..., The Twelve

Days of ..., and Silent Night. And when you can't stand another growl, there's Denver's smooth rural baritone to fall back on. Not a traditionalist's Christmas record surely, for it conjures up visions of a holiday spent in a TV studio in snowy Colorado, but somehow it works.

☐ THE ELIZABETHAN SINGERS: Sir Christemas. ARGO ZRG 5446.

Many of the songs are familiar-I Saw Three Ships, We Wish You a Merry Christmas, The First Nowell, even Silent Nightand the complement of small chorus and piano or organ accompaniment prepares one for no surprises. But the surprises are there, for all the tunes have been passed through the unique musical prisms of various contemporary composers and arrangers (Peter Maxwell Davies, John Gardner, Richard Rodney Bennett, Nicholas Maw, to name a few) and refracted into something quite new; they are sometimes strange, often pungent, and almost always interesting. It's not for arch traditionalists, perhaps, but the record has been around since 1965 so something about it must definitely be right.

☐ PERCY FAITH: Music of Christmas. COLUMBIA LE 10082.

The late Percy Faith was one of the foremost arrangers for popular orchestras, as a long string of best-selling albums, including this present collection, attests. Here he applies his talents to fourteen Christmas songs, all of religious origin, finding his own interpretations while retaining a respectful attitude toward the originals. The selections range from the standards, highlighted by a rousing Hark the Herald Angels Sing, to such rarely recorded (by a pop performer) pieces as The Holly and the Ivy and Lo. How a Rose E'er Blooming. A bonus is a comprehensive set of liner notes that tell the origin and legend of each song. RT

☐ PERCY FAITH: Music of Christmas, Volume 2. COLUMBIA LE 10088.

This one sometimes turns up under its old title, "Hallelujah!," but by any name this companion set to "Music of Christmas" is superb. Again the Faith orchestra essays fourteen religious carols, songs, and choruses, including such lesser-known pieces as Bring a Torch, Jeanette, Isabella and Gesu Bambino. But the main event has to be Faith's instrumental setting of Handel's Hallelujah Chorus. On audacity alone it has to rate high, but the execution actually makes it a memorable listening experience. As in the first album, there are detailed liner notes that give the background of the music. R.T.

☐ **PERCY FAITH:** *Christmas Is....* Co-LUMBIA CS 9377.

Here is Faith's album of popular Christmas music, and it doesn't come off as well as his records of religious songs. Still, it's an enjoyable collection, including as it does Faith's own *Christmas Is...* and a brightly burnished version of Irving Berlin's *Happy Holiday*. These two are with chorus, but there are strictly instrumental settings of



Do You Hear What I Hear? and of (yes) The Little Drummer Boy. It is still one of the best pop-only albums.

R.T.

☐ A FESTIVAL OF CAROLS IN BRASS. Philadelphia Brass Ensemble. COLUMBIA MS 7033.

There are no surprises here, simply twenty-five standard carols and Christmas songs played like a dream by the first-chair brass men of the Philadelphia Orchestra. In the best of all possible worlds, the little Salvation Army street-corner bands would sound like this at Christmas.

J.G.

□ GLAD TIDINGS. Schütz: Hodie Christus Natus Est. Purcell: Christmas Anthem. Hammerschmidt: Allelujah, Freuet Euch. Monteverdi: Christe Redemptor. Bouzignac: Noé, Noé! Pastores. Gabrieli: O Magnum Mysterium. Anon.: Soberana Maria; and four others. Heinrich Schütz Choir; Philip Jones Brass Ensemble; Camden Wind Ensemble; London String Players, Roger Norrington cond. Argo ZRG 590.

This is a wide rather than a deep sampling of Baroque Christmas music, limiting itself to about a hundred years but roaming all over Europe for its music. Every piece has something unique to offer, and the singing and playing are superb. There is wonderful exuberance in the Hammerschmidt piece, an incredible sense of awe in the Gabrieli, and the most amazing alternation of both in the Schütz. The Purcell is a rarely heard marvel that draws upon Italian and French styles to produce something quintessentially Anglican. A fine record.

J.G.

☐ HOLLYRIDGE STRINGS: Christmas Favorites. CAPITOL SM-11830.

You could subtitle this one "Christmas Goes Muzak," but, having said that, I have to add that it is a particularly good example of what is basically background music. There are a couple of surprises—a rock-flavored Jingle Bells and a Winter Wonderland that is sort of a cross between that old favorite and Peter Gunn—but the album is primarily suitable for putting on during the Christmas party when everyone is already occupied. Don't expect more, and you won't be disappointed.

□ JOHNNY MATHIS: Give Me Your Love for Christmas. COLUMBIA CS 9923.

Johnny Mathis seems to be one of those performers who particularly love getting into the Christmas singing spirit. Here, aided by excellent arrangements from Ernie Freeman, he is all over the musical map. You'll find an up-and-at-'em version of Jingle Bell Rock and, at the other end of the spectrum, a reverent reading of The Lord's Prayer. In between are fine renditions of Calypso Noel, Have Yourself a Merry Little Christmas, and My Favorite Things. Just about the only weak spot is the title song, unfortunately as dreary a holiday offering as you'll hear in a while. Still, for Mathis fans it's a better album than his other "Merry Christmas" disc (Columbia CS 8021).

□ LUCIANO PAVAROTTI: *O Holy Night*. National Philharmonic, Kurt Herbert Adler cond. LONDON OS 26473.

Despite Adolphe Adam's Minuit! Chrétien (O Holy Night) at the beginning, Adeste Fideles at the end, and Pietro Yon's Gesu



Bambino and a couple of Ave Marias in the middle, this is hardly a real Christmas record. It is, rather, a program of mostly classical religious songs and arias, including also Stradella's Pietà, Signore, Franck's Panis Angelicus, Bizet's Agnus Dei' (which is a vocal version of the Intermezzo from L'Arlésienne), and the Sanctus from Berlioz's Requiem, none of which have much to do with Christmas. It is, however, one heck of a Christmas present. The music is mostly wonderful, the singing mostly splendiferous, and under what other circumstances will you get to hear a voice like this proclaiming Adeste Fideles?

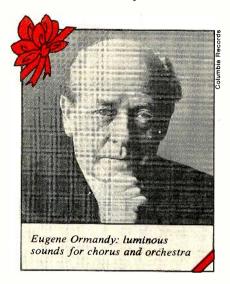
J.G.

□ PHILADELPHIA ORCHESTRA: A Christmas Festival. Philadelphia Orchestra, Eugene Ormandy cond. COLUMBIA LE 10092.

There are actually four albums of Christmas music by the Philadelphians: this one, "The Glorious Sound of Christmas" (Columbia MS 6369), and rerecordings of generally the same selections done when the orchestra switched record companies and went over to RCA. It's hard to go wrong

CHRISTMAS...

with any of them, but "A Christmas Festival" stands out from the group. The album has luminous interpretations of Good King Wenceslas, Here We Go A-Caroling, O Tannenbaum, I Wonder As I Wander, and others. Then there are equally good renditions of Handel's Hallelujah and For unto



Us a Child Is Born from Messiah, sung by the Temple University Concert Choir with back-up by the Philadelphia Orchestra.

R.T

☐ A RENAISSANCE CHRISTMAS CEL-EBRATION. Josquin Des Prez: Ave Maria. Praetorius: In Dulci Jubilo; Dances from "Terpsichore"; Five Hymns. G. Gabrieli: O Magnum Mysterium. Anon.: Three Spanish Villancicos. Waverly Consort, Michael Jaffee cond. COLUMBIA M 34554.

It is a mark of the inadequacy of labels that two of the composers represented in this Renaissance collection (Gabrieli and Praetorius) are also staples of Baroque collections. Nevertheless, don't miss this record. Christmas is hardly complete without Praetorius' Est Ist ein Ros Entsprungen, performed here with love and imagination; Josquin's Ave Maria is beautiful and deeply affecting music; and the three Spanish pieces are a riot of rhythm and color. The Waverly Consort is a splendid performing organization which manages to sidestep pretension, preciosity, and all the other potholes in the performance of early music and give us the message sweetly, directly, and with no end

□ ELISABETH SCHWARZKOPF: The Christmas Album. Angel S-36750.

As I listened to this album, I had the uncanny sensation of being in church on Christmas Eve—a distinctly pleasurable feeling to have. You'll find no full-throated choirs here and no overblown orchestrations, but even when the lyrics (printed on the record liner, by the way) are in German or Latin,

the spirit of Christmas pours from these wonderful vocal performances. In fact, the use of the original German words to Silent Night makes it more effective, I think, than it would have been sung in English. Other highlights are The First Nowell, In Dulci Jubilo (which weaves together the Latin and English lyrics), and Von Himmel Hoch. The only misfire is I Saw Three Ships, which Schwarzkopf hurries through as if she were trying to catch one. But that occupies less than two minutes of the album. Otherwise, it is something you can put on the turntable, sit back, and enjoy. R.T.

□ SING WE NOEL: Christmas Music from England and Early America. Boston Camerata, Joel Cohen cond. Nonesuch H-71354.

Here is a totally unhackneyed collection of Christmas songs drawn from nine centuries of the English-speaking tradition and performed with spirit and musicianship in a variety of vocal and instrumental combinations. There are also purely instrumental pieces as well as readings in an earlyish English that might strike some souls as a mite precious. But the music is the thing: such rousers as Exultemus et Letemus, from twelfth-century England, the American "shape-note" tune Fulfillment, and a wonderfully bawled out Gloucestershire Wassail, among others. Recorders, bells, shawms, vielles, viols, dulcian, oboe, lute, and tambourine make appealing period noises, the whole is beautifully recorded and produced, and the record should be an ear opener for those whose Christmas tastes have previously been cloistered.

□ JOAN SUTHERLAND: Joy of Christmas. Ambrosian Singers; New Philharmonia Orchestra, Richard Bonynge cond. LONDON OS 25943.

If you know the expression about killing a gnat with an elephant gun you will understand the approach of this record. Not for



the quiet times after the kiddies have gone to bed, the album gives the impression that it would sound simply glorious broadcast from the town church steeple (what a good idea!). Sutherland gives her all, which is

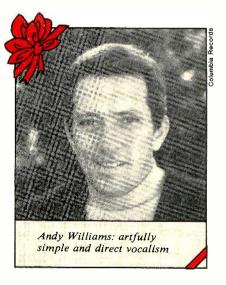
considerable (especially in volume), and in the sterner material-Hark the Herald Angels Sing, O Holy Night, Adeste Fideles. and so on—the effect is mighty impressive. More lyrical material (Reger's Virgin's Slumber Song, for example) also receives beautiful singing, though there is little hint of intimacy. The lighter material shows only that she lacks the lighter touch, but even Sutherland fans will be delightfully surprised to find that they can understand some of the words. Douglas Gamely's arrangements are of armada proportions (methinks I heard a kitchen sink), and the recording has enough reverberation in it to make for pleasant listening even in anechoic surroundings.

☐ TO DRIVE THE COLD WINTER AWAY. St. George's Canzona, John Sothcott cond. VANGUARD VSD-71261.

This English production is less a Christmas record per se than a medieval evocation of the winter season, but it is, God knows, festive enough for any holiday. Twittering and snarling, the pungent-sounding medieval instruments give us marches, pavannes, branles, fandangos, and the like, peasant music and courtly music, indoor music and outdoor music—the full panoply. The voices add carols, Latin hymns, and wassailing songs, and the whole is beautifully recorded. It is the other end of the world, the other end of time from White Christmas and the department-store Santa Claus, but it is the sound of a great heritage. J.G.

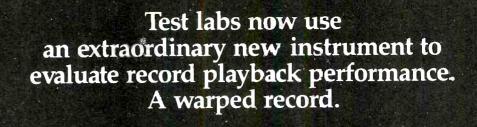
☐ ANDY WILLIAMS: Christmas Alhum. COLUMBIA CS 8887.

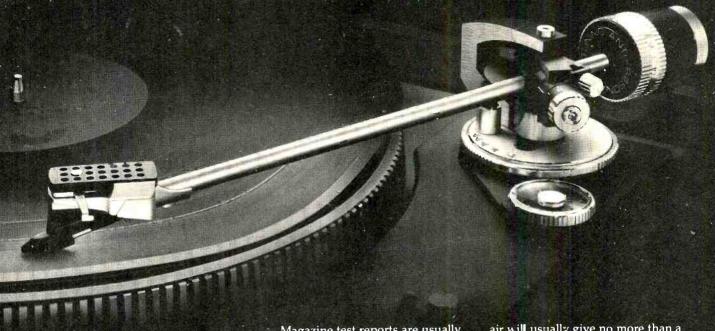
I promise: this record will grow on you. The first time through only *The First Noel* will



seem notable, but later on White Christmas, It's the Most Wonderful Time of the Year, and Happy Holiday will impress you through Williams' artfully simple, direct vocalism. The rest of the program is on the plane of pleasant competence—save for Kay Thompson's Jingle Bells. I can't decide if it's really great or really lousy. R.T.

Merry Christmas!





Magazine test reports are usually based on measurements made with professional equipment and under ideal laboratory conditions. None of which matches the real-life situation you face at home.

Virtually all records manufactured today are warped. And even records that are slightly warped can make conventional tonearm and cartridge combinations (typically 18 grams effective mass) distort badly and even leave the record groove.

The test labs know this, of course, which is why they tried something different with Dual's 8-gram Ultra Low Mass tonearm and cartridge system. They added an innovative test instrument to their scopes and meters.

A badly warped record.

The results of this new test are not reported as percentages, decibels or other technical jargon, but in clear and unmistakable language:

"Navigating the worst warps we could find, the Dual/Ortofon combination proved very agile indeed, with nary a mistrack."

High Fidelity

"... tracked the most severely warped records in our collection, usually so well that we heard nothing wrong." Stereo Review

"Even a severe warp that would normally throw the pickup into the

air will usually give no more than a slight 'thump' ... and most warps are undetectable by ear."

Popu'ar Electronics

"The Dual takes dead aim at the fienc of disc reproduction—the warped record—and response to record warps practically is eliminated at the source." Stereo

One test lab, after making the usual measurements, chose to just listen to mus c as reproduced by ULM.

"There is no way measurements, or mere words, can describe the acoustic presence of this record player...highs are crystalline, with a purity we haven't heard before. The bass is so clean that one can hear new sounds from records, such as the harmonic vibration of unplayed strings on the double bass...overall definition and transient response were outstanding." HiFF Steree Bujers' Guide

You too car hear the difference ULM makes. Visit your local Dual dealer and be sure to bring your own "test instrument." Especially one that seems unplayably warped.

ULM.

A major breakthrough in record playback technology.

Write for our brochure describing all rune Dual ULM turntables. Prices start at less than \$190. United Audio, 120 Sq. Columbus Ave., Mt. Vernon, NY (0553.

his year Boston has been celebrating its 350th birthday, and from May through September the streets seemed always to be filled with smiling people out using and enjoying their city. Jubilee 350, as the celebration was called, included parades, exhibitions, new statues, tall ships, concerts, Boston Week, New England Month, and the Conference of Great Cities of the World. But no celebration or birthday present seemed to please Bostonians more than the appointment of the new conductor of the Boston Pops Orchestra, John Williams.

Under Williams' predecessor, the late Arthur Fiedler, the Boston Pops became the best-known orchestra in the

world. Its radio broadcasts were carried around the globe, and on the RCA, London, and Deutsche Grammophon labels it sold fifty million records. The orchestra's television program, Evening at Pops, produced by WGBH in Boston, consistently ranks among the

shows receiving highest ratings on the Public Broadcasting Service.

A flamboyant personality, Fiedler made his name a household word in the United States and Canada during the half-century that he conducted the Pops. When he died last year, the administrators of the Boston Symphony Orchestra, of which the Pops is a part, faced the monumental task of finding a replacement for him. Seiji Ozawa and Thomas Morris (the BSO's music director and general manager, respectively) passed up candidates with conventional backgrounds as bandleaders or classical conductors, and in a brilliant move that announced the end of the Fiedler era and the beginning of a new one they persuaded Williams, Hollywood's most successful and glamorous composer, to take the job.

The composer of scores for about sixty movies, including Jaws, Star Wars, The Empire Strikes Back, Dracula, and Close Encounters of the Third Kind, Williams is not abandoning the film centers of Hollywood and London. In press conferences in January he explained that he will simply do less film work so that he can spend three or four months a year in Boston. He reminded reporters that the Pops is actually the Boston Symphony minus only the twelve first-chair players, and said he could not pass up the opportunity to

work with a musical instrument of such high quality.

At recording sessions at Symphony Hall in Boston this summer Williams said to me, "Anybody coming here from the film industry, as I do, would have been a surprise. Frankly, it surprised me when Tom Morris proposed the idea. I had conducted my film music, but had never thought of making a career of conducting publicly. This situation is pregnant with possibilities, and I reacted first as a composer, thinking what a fantastic opportunity to present not only one's own music, but that of colleagues. Playing things that have just been written—while the ink is still wet—that's a great way to make music. awards for records, and Academy Awards for his scores for Fiddler on the Roof, Jaws, and Star Wars.

Born in New York in 1932, Williams grew up in a musical environment. His father, a drummer, took the family to Los Angeles in the middle Forties and worked there as a free-lance percussionist in movie studios. John learned to read music and play the piano at home when he was six or seven and was always involved with music after that. After graduating from high school in North Hollywood, he went to UCLA and studied with a number of teachers in the Los Angeles area.

During the Korean War he served in the Air Force and worked in various

> bands, making arrangements and conducting. His military service completed, he enrolled at the Juilliard School in New York, where he studied with the famous teacher Rosina Llhevinne. "I think the best I ever played the piano," he says, "was the day I auditioned for

her. I was very serious about the piano and worked hard at it for several years, but I don't think I ever believed I was extrovert enough or good enough to have a career as a pianist. And I was always lured by the orchestra. Even as a kid of fourteen or fifteen I made attempts at orchestration, arranging pop songs for a school band or musical shows in high school."

After Juilliard, Williams had a succession of musical jobs and toured for a while with Vic Damone as pianist and conductor before returning to Hollywood in the middle 1950s. There he married a singer, Barbara Ruick, and they had three children who are now in their twenties. She died in 1974.

"My first work in Hollywood was as a pianist in staff orchestras in the studios of Columbia Pictures and 20th Century-Fox," Williams says. "I was so lucky as a kid in those studios. I was not exactly adopted by older colleagues, but I was treated in such a friendly helpful way by many of them."

They included such famous men as Bernard Herrmann, Alfred and Lionel Newman, Dimitri Tiomkin, and André Previn. "André was actually about my own age, but he was more developed as a musician than I was. A close friend who has had a great effect on my life, he has always encouraged me and helped me in ways that sometimes

JOHN WILLIAMS and the BOSTON POPS

An American institution enters a new era

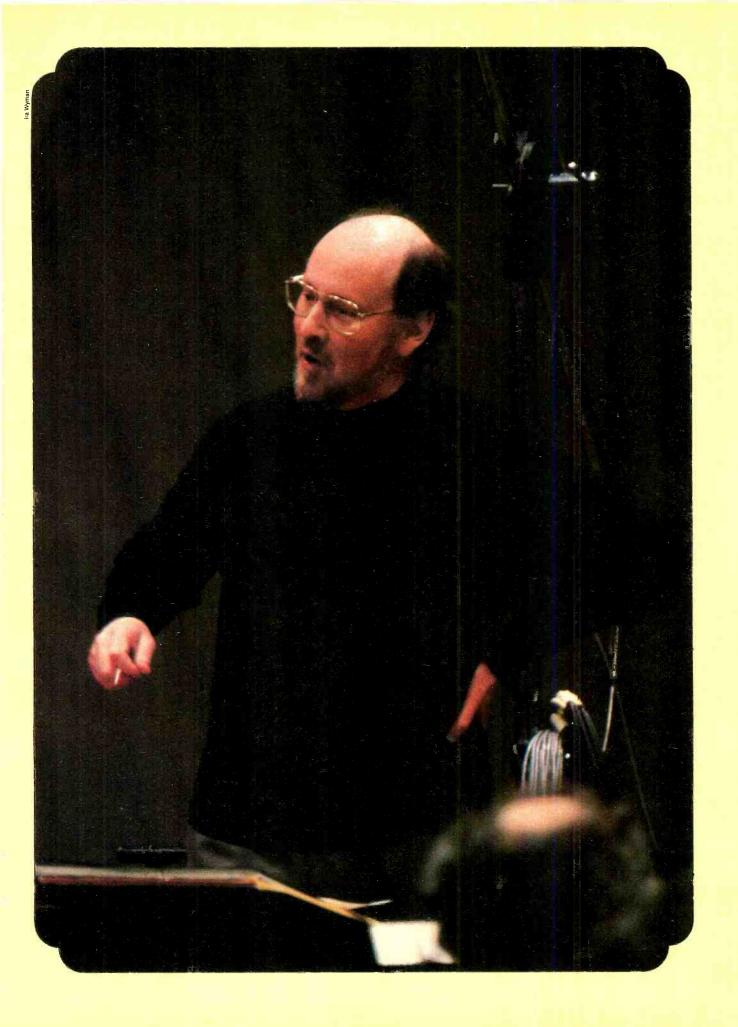
The proposition was irresistible, and I went headlong into it."

These were Williams' first recording sessions with this orchestra, the Pops' first sessions for the Philips label, and Philips' first digital recordings. George Korngold (son of the composer Erich Wolfgang Korngold) was the producer. Decca engineers had come from London, and Jules Bloomenthal, of Soundstream, Inc., had brought the digital equipment he was operating from Salt Lake City.

All were happy with the results they got for the first record, "Pops in Space," an album of selections from Williams' recent film scores which should be in stores by the time you read this. Euphoria reigned at Symphony Hall as work began on the second album, a collection of marches.

HARD-WORKING, intelligent man with considerable low-key charm, Williams is well liked by the musicians. When I chatted with them at the breaks they spoke openly of their warm feelings for him and their respect for his musicality and his accomplishments. These include two Emmy awards for work in television, eight Grammy

By William Livingstone



WILLIAMS...

seemed small but led to big things."

Richard Dyer, music critic of the Boston Globe and a longtime Williams watcher, has pointed out that the films Williams has scored can be roughly classified in cycles. There was an early period of comedies such as Gidget Goes to Rome and How to Steal a Million. Next was a period of movie musicals, such as Fiddler on the Roof, followed by the disaster films of the late Sixties and Seventies: Earthquake, The Poseidon Adventure, Towering Inferno, and Jaws. Now in his space-epic period, Williams has agreed to do another sequel to Star Wars, due in 1983.

After mentioning Virgil Thomson, Aaron Copland, Sergei Prokofiev, William Walton, and the few other great composers who have written film music, Williams says the history of the genre is disappointing. But he points out that it is, after all, just over fifty years old, and he is confident that film music will eventually occupy a higher place in the artistic hierarchy. "College cinema departments didn't exist in my student years, but every campus seems to have one now, and interest in film has become a passion. Whatever opera was to the nineteenth century, film is to the close of the twentieth. If we had a Wagner in this century, he would be a DeMille making his own pictures."

Among the difficulties in film composing, Williams mentions economics, which constantly shorten the post-production periods during which the composer works on the score. He also speaks of the frustration of having so much of the music covered by sound effects of wagon wheels or the breaking up of icebergs, and he complains of poor sound reproduction in movie theaters. "It all sounds wonderful on the dubbing stages where you hear a magnetic 70-millimeter print and six-track sound. But you wander into a neighborhood theater where one speaker is tilted and the one across the stage is unplugged, and there's dirt on the sound head, and you realize that the people are hearing about 5 per cent of what went into it." He's pleased that audiences are becoming more sophisticated about sound and says that seeing "Dolby Stereo" as a come-on on movie theater marquees is "very encouraging for a composer."

WILLIAMS says that to be a successful film composer "one has to develop a chameleon-like approach and be able to find a musical texture that will marry

with the whole general 'noise' that a picture will make. It's no good writing a post-serial, pointillistic piece for a popcorn romance where you need a tonal tune. If someone like Debussy with a very idiosyncratic, highly personal style were a film composer, only one film out of five hundred would suit his particular thumb print. For me, shifting styles wildly from one assignment to the next has been part of the challenge, and I've enjoyed that, not taking it too seriously. I don't claim that any of the stuff I write for movies is the *Eroica*, and I've had a lot of fun with it."

The lack of form and the inability to develop musical ideas are constricting elements in composing for films, he says. "Just as your tune is about to blossom, you have to cut to the heroine on a cliff and the musical idea is aborted. Because of the fragmentary nature of film music, many excellent germinal

"Whatever opera was to the nineteenth century, film is to the close of the twentieth. If we had a Wagner in this century, he would be a DeMille making his own pictures."

bits of musical energy—melodic phrases that beautiful movements could be built from—lie dormant and undeveloped in the scores. I've always urged such very talented colleagues as Alex North to take their music, put it in suite form, and develop it."

Williams was surprised by the success of his own suite of music from Star Wars, which had four hundred concert performances in the season of 1978-1979. He credits its vogue to Ernest Fleischman (manager of the L. A. Philharmonic) and Zubin Mehta, who first conducted it. "I told Zubin I couldn't understand it. I have no pretensions about that score, which I wrote for what I thought was a children's movie. All of us who worked on Star Wars thought it would be a great Saturdaymorning show. We had no idea it was going to become a great worldsuccess."

Like film composers Richard Rodney Bennett, Jerry Goldsmith, Alex North, and Leonard Rosenman, Williams has composed a great deal of concert music in such standard forms as the symphony and concerto. His first symphony was premiered in Houston in 1966 by André Previn, who also programmed it with the London Symphony Orchestra in 1972.

"My non-film music is atonal and has a more contemporary feeling, though by today's standards it's fairly conservative. It has tunes and uses the orchestra in a fairly conventional way, but it's more daring than what I can get away with in a film score, and I hope it's more idiosyncratic. For me it's a way of stretching myself and getting rid of certain impulses I couldn't get rid of in any other way. Some of it may have less value than music I've written commercially, but I think my violin concerto, which will be premiered by the St. Louis Symphony under Leonard Slatkin in January, is the best thing I've written. But I remember the old saying that a lot of things done in the name of art contain less art than those done in the name of commerce. I continue to try to do both, and I'm not any the less serious about one or the other.'

Williams plans to compose some works especially for the Boston Pops. He will program music by many of his colleagues in the movie world, but will try to avoid overdoing the film connection. He will leave some of the classical repertoire that Fiedler played to Ozawa and others he thinks conduct it better. He expects to program more American works both because he thinks he should and because he knows them better and can perform them better.

He thinks the American tradition of light concert music is very healthy, and he is not in the least concerned by any danger of popularization leading to lowering of standards. "The Pops is a symphony orchestra, and it will not become a rock band, but popular music played by a symphony orchestra doesn't have to be trashy. It can always be done in a stellar way.

"When I was in Europe last winter I heard a concert by the Vienna Philharmonic conducted by Lorin Maazel, a concert of Strauss waltzes and other light things. The musicians were smiling and having a good time, but there was also seriousness in their faces as they played with felicity, subtlety, and perfection of ensemble. There isn't an English word to express that attitude of combining seriousness and fun, though there may be one in German, but that's what I think the Pops should be. And that's what I'll strive for-everyone having a wonderful time and making an exemplary musical presentation.'

He will maintain the three-part format that Fiedler used—a rousing overture and classical section, a concerto section, and a popular section. "There is something very satisfying about that tripartite form." He finds it stimulating to be going back and learning clinically some of the light classical pieces he grew up with, and he enjoys playing for the very responsive Pops audience.

At forty-eight, Williams seems to be starting a new life. His children are grown, and this summer he remarried. (His second wife, the former Samantha Winslow, is a photographer he met in Hollywood.) At the peak of his profession as a composer, he has added a new artistic dimension to his career by taking on a conspicuous conducting post. He has a two-year contract and says his relationship with the Pops will continue as long as he is happy in Boston and Boston is happy with him.

Boston is proud of being the Athens of America and of the role it has played in the nation's history. A slogan on tourist pamphlets this summer read, "America, Your Mother Wants You to Come Home for Her Birthday." But while celebrating the past, the city looks cleaned up and ready for another great three and a half centuries.

Bostonians have many affectionate memories of Arthur Fiedler, but Williams fits perfectly the image of Boston as an up-to-date, forward-looking city, and the city has taken him to its heart. In his first week there he was asked to speak to the Harvard Club, and the Berklee College of Music has given him an honorary doctorate.

In one short season Williams has won over the orchestra, the audience, and the critics. In writing of Williams on Evening at Pops, the Globe's TV critic William A. Henry III said "His contributions to the eight new shows . . . are as styled as the norm of the Fiedler era." Richard Dyer has repeatedly

stated his satisfaction with Williams in the three major facets of his job—as a program builder, as a conductor on the podium, and as a public personality.

FERHAPS the most telling comments, ones that augur well for a long relationship between Williams and the Pops, were made by Harry Ellis Dickson, who was Fiedler's assistant for many years and was one of the candidates to replace him. In an interview with Dyer, Dickson said in part: "Williams has a good classical background as well as in jazz, and he's a fine conductor with a capacity for growth. I would even say he's a better conductor now than he was a month ago. On top of that he is warm and sensitive, a person of great decency and very modest. I don't know that I've ever met a more humble conductor. Getting him here was absolutely marvelous, almost a stroke of genius."

High-brow (Digital) Popcorn

An international undertaking: American orchestra and conductor, Dutch record company, and English recording team. With John Williams (standing, center) are the Men from Decca—Stan Goodall, Peter Cook, and Jack Law.



CHOOSING John Williams as Arthur Fiedler's successor at the helm of the Boston Pops was a real public-relations master stroke. The popularity of his movie music notwithstanding, the man simply looks like a classical musician in an old Hollywood film, the kind of guy who might have taught Cornel Wilde how to play the piano or coached Jeanette MacDonald through some tricky tessitura. He's a "longhair" in the old-fashioned sense of the word, even though he's not above sharing his podium with an intelligent fire hydrant.

Williams' just-released "Pops in Space" album represents several firsts: the Pops' debut on Philips, Philips' (and the Pops') first digital recording, and, of course, the Star Wars Maestro's first recorded effort with his new orchestra. It's an auspicious occasion, and I am happy to be able to report that it is a lot of fun as well.

One might quibble about the repertoire, but really, what else could we have expected? A medley of Sex Pistols tunes arranged by Morton Gould? No, despite the seeming overfamiliarity of this music, it's rather nice to have what might logically have been billed as "John Williams' Greatest Hits" collected on a sin-

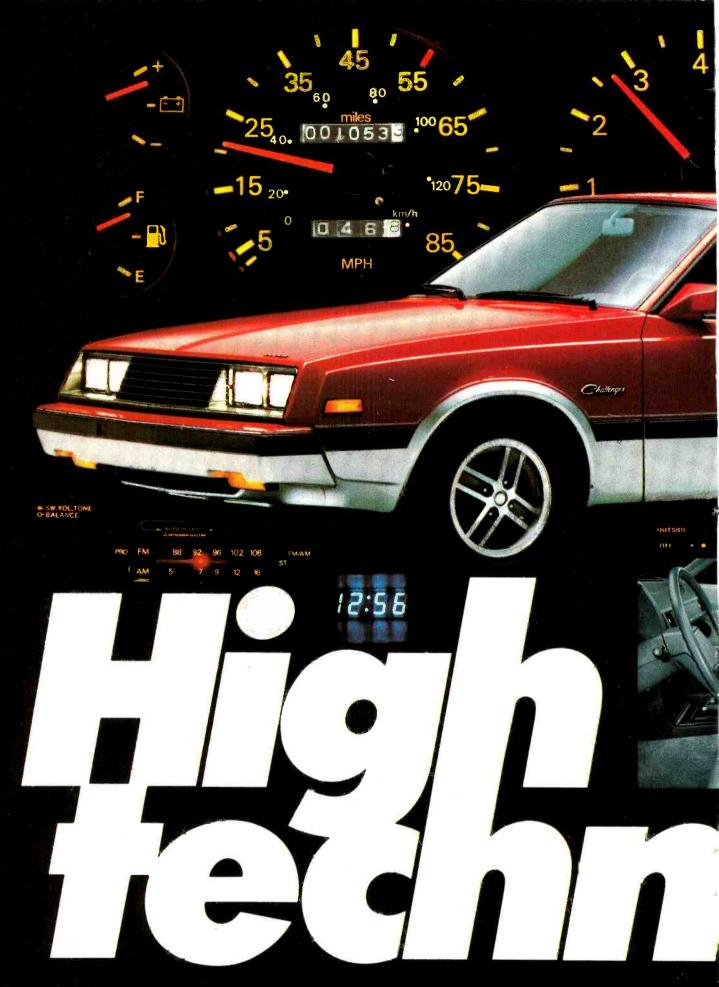
gle LP, especially as these are definitive performances. And as properly derivative as Williams' movie work is, drawing as it does from sources as varied as Tchaikovsky, Liszt, the early serialists, and just about every composer ever employed at MGM or Warner Bros. (does that make it Neo-Classical? Post-Modernist?), there's no denying that it's also smart, effective, tuneful stuff—exactly the kind of high-brow popcorn that has long been the Pops' stock in trade.

Everything (and I mean everything) you'd want is here: all the big tunes from the two Star Wars movies and Superman (mercifully bereft of Leslie Bricusse's dopey lyrics for the love theme), even the new stuff Williams added to the revised version of Close Encounters. For my money, there's just enough music here to keep you interested without the special visual effects. The orchestra, rising to the occasion, plays all of it as seriously as if it were the Eroica, and conductor Williams leads this umpteenth go-around of composer Williams' scores with the freshness and enthusiasm of his first. The digital sound is spectacular, and, not surprisingly, it is most impressive at the quieter end of the dynamic range. Check out, particularly, the very

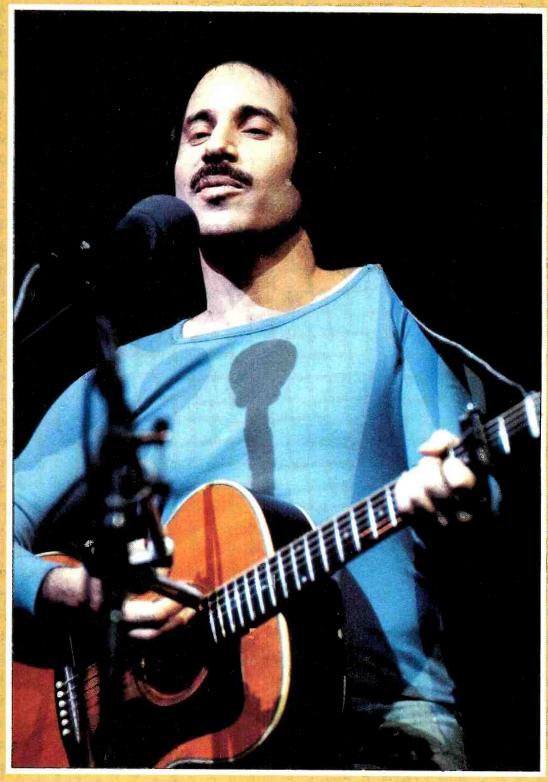
low-level chatter of the string entrance on the Princess Leia theme: you simply haven't ever heard anything so quiet on an analog recording, perhaps not even in the concert hall.

ALL in all, "Pops in Space" gets the Boston institution's new era off to a rousingly good-humored intergalactic start. And, fittingly enough, the whole thing was produced by George Korngold, son of Erich Wolfgang ditto, without whose example, inspiration, et cetera Mr. Williams might never have concocted the music that will probably make him the richest orchestral composer in the world. Perhaps Mr. Williams might return the favor some time in the future: a Williams/Itzhak Perlman version of the Korngold Violin Concerto, anyone? -Steve Simels

JOHN WILLIAMS: Pops in Space. Superman: March; Love Theme. The Empire Strikes Back: The Asteroid Field; Yoda's Theme; The Imperial March. Star Wars: Main Theme; Princess Leia. Close Encounters of the Third Kind: Suite. Boston Pops, John Williams cond. Phillips • 9500 921 \$9.98, © 7300 921 \$9.98.







Paul Simon (Photo by Michael Putland/Retna)

STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT

BEST OF THE MONTH



Paul Simon: A Vernacular Poet Tackles a Big Theme

APPROACHING (would you believe it?) forty, Paul Simon has elected to tackle in his music one of the most difficult and ambiguous of present-day (any-day) themes, the so-called "midlife crisis" that results when we try to decide whether we are growing up or merely growing old, whether we are going to come out ahead in the game of life or whether we have already blown it, whether we have greatly disappointed our friends or, worse, ourselves. Simon's newest album for Warner Bros., "One-Trick Pony," features ten songs from his new film of the same name (he wrote the script and the songs, and he stars). It's about an aging rock star whose career was based on one fluke hit. Now on the comeback trail, he desperately needs to know that he's no "one-trick pony in anybody's glamour horse race."

I have no idea what the eventual verdict on the film will be, but I can tell you that the album drawn from it is as good as anything he's ever done. One song after another demonstrates Simon's gift for seizing and holding up to the light those almost reflexive emotional conclusions about a person, a time, a place, or a relationship that any poetry, even on the pop level, must offer if it is going to communicate anything at all. Simon's work, from the long-ago days of Dangling Conversation and Mrs. Robinson to the present, has always been able to catch us unawares with startling insights, and here again he illumines those fugitive, fragmentary bursts of authentic feeling that contribute so much, plus and minus, to our perception of ourselves.

As usual with Paul Simon's work, the somber tends to overshadow the sunny. Although he has never been strong on imagery, he is a master of mood and atmosphere, and he uses those means here to show us the calm, introspective maturity of a man for whom middleage is but another natural part of the life process. There's no J. Alfred Prufrock regret, no rage, no fear, and, best of all, no self-pity. There is the dark thread of a constitutional pessimism running through many of the songs, but that has been a characteristic of Simon's work ever since he and Art Garfunkel abandoned the teen pseudonym of Tom & Jerry (under which they had a couple of hits in the late Fifties) to

PAUL SIMON: One-Trick Pony. Paul Simon (vocals, guitar); instrumental accompaniment. Late in the Evening: That's Why God Made the Movies; One-Trick Pony; How the Heart Approaches What It Yearns; Oh, Marion; Ace in the Hole; Nobody; Jonah; God Bless the Absentee; Long, Long Day, WARNER BROS. HS 3472 \$8.98, © W5 3472 \$8.98, ® W8 3472 \$8.98.

turn the pop-music world on its ear with a series of commercial and artistic successes which are now standards. What makes this such an interesting, challenging, chance-taking album is that it is evidently an attempt to communicate with an audience that the experts say no longer listens much to pop music, to tell them that though the long pop summer is over, it's okay. Just how correct or incorrect that view of the market-place is ought to be demonstrated by the success or failure of this album.

Though all of the songs here come from the film, they display the old Simon trait (think, say, of Mrs. Robinson) of standing nicely on their own. There is the sardonic title song, there is Ace in the Hole (how to cop out by using God or Music or just plain Craziness as a substitute for being responsible for your own foul-ups), there is Jonah (the bringer of bad luck-and Simon's name in the film), and there is the slightly surreal That's Why God Made the Movies. But there is also the reluctant romanticism of Nobody, the exasperated and funny Oh, Marion, the gentle reminiscence of Late in the Evening, and (perhaps my favorite of all here) How the Heart Approaches What It Yearns, a lovely song that first seized my attention through the head-turning syntactical trick in its title and then went on to grab me in one of my private emotional places.

It is instructive to see that the songs for "One-Trick Pony" are strikingly consistent with something Simon said (quoted in George T. Simon's book The Best of the Music Makers) years ago when he reached thirty: "The Beatles wrote about their age. That's what I'm doing. I can't stay writing the same lyrics I wrote when I was twenty-three. So much of what I hear on the radio is boring. I think that part of the reason is it's not real. It may be real—maybe—if you're eighteen, but not if you're thirty.

"Who else . . . has had the courage to ask his audience to grow up along with him? . . ."



BEST OF MONTH: RECENT SELECTIONS YOU MAY HAVE MISSED

CLASSICAL

- Grieg: Complete Music for String Orchestra. BIS LP-147. "Clear, fresh, inspired, and piquant." (August)
- ☐ Martinů: Symphony No. 2; Symphony No. 6 (Fantaisies Symphoniques). SUPRAPHON 4 10 2096. "One of the most welcome orchestral releases of the year." (October)
- ☐ Mozart: The Magic Flute. DEUTSCHE GRAMMOPHON 2741 001. "A wonderful achievement . . . a beauty." (November)
- ☐ Mozart: Plano Concertos Nos. 8 and 22. CBS M 35869. "Nothing less than a model of how this music should sound." (November)
- ☐ Pettersson: Symphony No. 8. DEUTSCHE GRAMMO-PHON 2531 176. "Extraordinary communicative weight and convincing musical logic," (August)
- Ruggles: The Complete Music. CBS M2 34591. "Material of the highest interest vividly presented." (October)
- □ Rutter: The Beatles Concerto. Rutter/Goodwin: Six Beatles Impressions. MOSS MUSIC GROUP MMG 1121. "Lush, sweeping, virtuosic." (September)
- ☐ Saint-Saëns: Symphony No. 3, in C Minor, Op. 78
 ("Organ"). TELARC 10051. "Close to the ultimate in beauty of orchestral sound." (August)
- □ Verdi: Luisa Miller. DEUTSCHE GRAMMOPHON 2709 096. "Excellent, with completely captivating singing by the two leads." (September)

POPULAR

- ☐ The Canadian Brass and Friends: Unexplored Territory. MOSS MUSIC GROUP MMG 1119. "Happy musical surprises, stunningly recorded." (September)
- ☐ Eric Clapton: Just One Night. RSO RS-2-4202. "Good musicians getting the hang of live recording." (August),
- ☐ Al Di Meola: *Splendido Hotel*. COLUMBIA C2X 36270. "Awesomely exciting tapestry of sound." (October)
- ☐ Larry Gatlin: *The Pilgrim*. COLUMBIA PC 36541. "Full of warm, goodhearted, tuneful surprises." (November)
- ☐ Issac Hayes: And Once Again. POLYDOR PD-1-6269. "Cooler, more mellow, but as soulful as ever." (August)
- Carole King: Pearls. CAPITOL SOO-12073. "Not only a
- classy album, but a timely one," (September)

 Bernadette Peters. MCA MCA-3230. "Sensationally good." (August)
- The Records: Crashes. VIRGIN VA 13140. "Sixties-inspired humor, refreshingly benign and therapeutic."
 (November)
- ☐ Carly Simon: Come Upstairs. WARNER BROS. BSK 3443. "Enormous musical vitality combined with a fierce intelligence." (October)

People thirty years old wonder why they're not getting off on popular music the way they once did, and it's because nobody is singing for them." Oh yes, there is, and doing it very well besides. Who else do you know of, other than Sinatra, who has had the courage to ask his audience to grow up along with him? There are, of course, one-trick audiences too, those who will reject the offer out of hand. Pity. —Peter Reilly

Piano Sonatas by The Young Brahms, Performances by The Young Zimerman

RECORDINGS of the first two Brahms piano sonatas have been relatively few and far between, and none that I know convey anything like the elemental romantic impulse that informs them in the performances by young Krystian Zimerman on a new Deutsche Grammophon release. This is, after all, music written by a young man just emerging from his teens, and it is fitting that it be

performed not only by a young artist, but in an uninhibited manner that might cause one to imagine that day in September 1853 when Brahms entered the Robert Schumann home for the first time: he was at the piano, just beginning the C Major Sonata, when he was interrupted by his host so that Clara might be on hand to hear, as he told her, "such music as you never heard before."

The C Major was actually the second in order of composition, and it is certainly the better disciplined of the two in terms of control of its materials. Its high points are the haunting folk-songbased slow movement and a fierce scherzo. The finale, too, is a wild and woolly affair, and in it Mr. Zimerman is at his brilliant best.

The F-sharp Minor Sonata seems almost Lisztian in its declamatory opening pages, and for the slow movement there are variations on an old *Minnelied*. For me, the musical interest falls off somewhat in the two later movements, though there are some lovely bucolic bits midway in the scherzo and a nice touch of Hungarian flavor toward the end of the finale—which otherwise seems to be trying, throughout much of its length, to remember the rhythm of the first movement of Beethoven's Fifth Symphony.

These sonatas are both, in their own ways, fascinating and in their best

KRYSTIAN ZIMERMAN: an elemental romantic impulse







Fisher Direct Drive...the most technically advanced tape drive system.

In the new Fisher DD280 cassette deck, Fisher has replaced the conventional belt-drive system with a high-torque 18-pole brushless, coreless, direct drive DC flywheel motor. The motor shaft is the tape transport capstan itself. The result is a silent, one-piece direct drive system that glides at a stable 360 rpm. Wow and flutter are reduced to an incredibly low 0.04%. Gone forever are belt wear problems resulting in speed change, belt breakage and reclacement. For long term reliability direct drive is the answer.

Feather touch electronic solenoid controls. Don't look for "clunky" levers on the DD280. Transport functions are actuated by sensitive solenoid electronic switching IC logic circuitry assures instant, positive action. You can go directly from rewind to fast forward to play... without having to manually stop betweer functions. LED indicators signal mode of operation.

18-pole permane Drive coils provide ring magnet is pulsating magnetic bonded to back of field to propei flywheel. Dynamicallybalanced flywhee weighs over 1/2 lb., helps maintain speed accuracy, low wow and flutter Sensing coil between driving coils and flywheel magnet Capstan shaft is directly connected to. continuously and is part of the flywheel. There are ponitors speed in DC servo circuit no belts, no pulleys

Metal tape compatibility.

The DD280 is also metal tape compatible. The new metal particle tapes offer a marked improvement in signal-to-noise ratio and dynamic range over previous tape formulations. With its metal EQ and bias settings, plus high performance MX/Ferrite heads, the

DD280 produces tapes of stunning accuracy. With metal tape, the DD280 delivers an impressive frequency response of 30Hz-20kHz.

Low in profile. And high on features. The low-profile DD280 has everything you'd expect in a professional-quality cassette deck. Calibrated input level controls. Dolby* Noise Feduction. Large-scale dual-range VU meters. Peak level LED indicators and more.

It's what you'c expect from the new Fisher. We invented high fidelity over 40 years ago. We've never stopped moving ahead. The new DD28C is a perfect example. Part of the new Fisher. Where the only thing about usthat's old is our dedication to quality and craftsmanship. See the DD280 soon at your Fisher Dealer.

*Dolby is a registered trademark of Dolby Laboratories.

© Fisher Corporation, 1989





moments truly inspired. One hopes that Mr. Zimerman will give us the Op. 5 Sonata and the Op. 4 Scherzo in the not too distant future. Producer Hanno Rinke and recording engineer Wolfgang Mitlehner deliver a piano sound that is just right in solidity and brilliance for the music at hand.

—David Hall

BRAHMS: Piano Sonatas in C Major, Op. 1, and F-sharp Minor, Op. 2. Krystian Zimerman (piano). DEUTSCHE GRAMMOPHON 2531 252 \$9.98.

George Benson: Eloquent, Expressive Pop Music from a Master of Jazz

GEORGE BENSON'S journey from jazz to the domain of popular song has been accompanied by relatively few accusations of defection, in contrast to the disdainful flack that has had to be dodged by other artists who have made similar shifts. This is remarkable in view of the stature Benson had so quickly attained in jazz, where he was considered by many if not yet the crown prince of the guitar at least the heir apparent to the mantle of the late Charlie Christian.

Most of Benson's old jazz fans have nonetheless found a fresh excitement in his recent vocal work-and with good reason, for at no time has he abandoned his fundamental musical integrity. Instead of succumbing to the strident and repetitious excesses of pop funk (in the manner of, say, Herbie Hancock), he has applied his own standard of excellence to popular material, bringing it up to his artistic level. The flawless technique that marked his work as a jazz guitarist can still be found in every note he sings and plays. He has retained his graceful facility with the melodic line, his ability to bend and reshape it into ample new proportions. And, too, he has a true singing voice and an exceptional sense of phrasing that are at their best when he fuses them with his other talent, singing wordlessly in unison with the elegant utterances of his expressive guitar.

Benson's new album, "Give Me the Night," was produced by Quincy Jones, another transitional jazz giant impatient with categories, and it is an invit-



GEORGE BENSON: a fundamental musical integrity

ing showcase of the singer's musical skills. In a brilliant virtuosic display, he ranges from the punchy rhythms of such high-flying danceables as Love X Love and Off Broadway to the web-like delicacy of Love Dance, which should rank with This Masquerade as one of his finest vocal performances to date. He rises to a special nostalgic peak in his rendition of Moody's Mood, a song that deserves a bit of explication. It is derived from the chord changes of the standard I'm in the Mood for Love and is based on an instrumental solo by saxophonist James Moody; the original arrangement was the creation of the late Eddie Jefferson, the peerless jazz vocalist who was gunned down in front of a Detroit club about a year ago. It should be noted that Jefferson, whose unique vocal improvisations will never be duplicated, was a native of Pittsburgh, also the home town of George Benson. As a child Benson sang, danced, and played a ukulele for coins on that city's street corners. Pittsburgh is a bristling, bustling, big-shouldered industrial city that has nurtured some of the greatest talents jazz has produced, among them Earl Hines, Billy Eckstine, Mary Lou Williams, Art Blakey, Roy Eldridge, Kenny Clarke, Ahmad Jamal, and Erroll Garner. In his performances here,

George Benson demonstrates that though he is now thoroughly "popularized," he is still eminently qualified to travel in such classy jazz company.

---Phyl Garland

GEORGE BENSON: Give Me the Night. George Benson (vocals, guitar); other musicians. Love X Love; Off Broadway; Moody's Mood; Give Me the Night; What's on Your Mind; Dinorah, Dinorah; Love Dance; Star of a Story (X); Midnight Love Affair; Turn Out the Lamplight. WARNER BROS. HS 3453 \$8.98, ® W8 3453 \$8.98, © W5 3453 \$8.98.

Cornelia Street Songwriters Exchange: Does the Folkie Revival Start Here?

Is there some kind of folkie revival likely soon? Well, you may reply, there hasn't exactly been a stampede of acoustic-instrument bearers building



CORNELIA STREET: the best and brightest of the troubadours

up behind Steve Forbert and the Roches. Maybe not, but that doesn't mean they're not out there. Economic forecasts suggest that dwindling energy resources will eventually lead to less travel and a need for more small local clubs in which to play or hear music, and a heavy-metal outfit is a bit much in such a place. Of course, live music may no longer be that big a factor in determining Next Big Things or even Comebacks. But they are still out there. those troubadours with their simple acoustic backing, and Stash Records has made a beautiful little album with some of them called "Cornelia Street: The Songwriters Exchange."

The Cornelia Street Café is a little place in Greenwich Village where, sure enough, Steve Forbert (and Carolyn Mas) used to play. The Songwriters Exchange is, first and foremost, its Monday-night activity-singer/songwriters singing only what they've written in the previous week. The best and brightest of the regulars, one must suppose, were picked for the album, and there are simply gobs of talent here. Forget about the musical category; these people can write. Several are quite impressive singers as well. Rod MacDonald-mark that name down-impressed me the most. His voice is a nice combination of gravel and smoothness, and his songs are not only perceptive and linguistically rich but touched with grace. Song of My Brothers is the best new song I've heard in many moons.

Cliff Eberhardt, who seems to identify not with jazz so much as "the jazz life" à la Ricky Lee Jones, doesn't have much vocal range, but he has smoothness and Loudon Wainwright's kind of joke tension, and he shows me a thing or two on the guitar. He also knows how to grab your attention: "Summers in New Jersey/I always hated New Jersey" David Massengill does toograb your attention, that is-at least in his Theory of De-Evolution (his other entry is a little too cheaply lascivious for me). "What's wrong with the man upstairs?" he starts out. "He can't stop crying/He just lost his boyfriend." Well, it turns out he means the man in the apartment upstairs, but by then he has you hooked if not frantically computing the theological ramifications of what you at first thought he meant.

I was also more than commonly impressed with (love this name) Simon and Kaplanski's second effort, Say Goodbye Love (terrific melody) and Martha P. Hogan's Connections. And I found at least a little something to like in all the others. That's a lot. Never once did I have any electric-instrument withdrawal symptoms. Of course, I have a rather small apartment; economics, you know. —Noel Coppage

CORNELIA STREET: THE SONGWRITERS EXCHANGE. Rod MacDonald: Song of My Brothers; The Comin' of the Snow. Cliff Eberhardt: Summers in New Jersey; Drive. David Massengill: Contrary Mary; Massengill's Theory of De-Evolution. Simon and Kaplanski: Moonsong; Say Goodbye Love. Martha P. Hogan: Connections. Michael Fracasso: Girl in New Mexico. Brian Rose: Paddy on the Handcar. Tom Intondi: Then God Will Dance. STASH ST-301 \$7.98.

Rare (and Not So Rare) Schumann Songs in Rare Interpretations by Elly Ameling

LTHOUGH Schumann's much-re-A corded Op. 39 Liederkreis is better suited to a feminine interpreter, it has heretofore been more successfully rendered on records by men, notably Dietrich Fischer-Dieskau (Angel S-36266) and Peter Schreier (MHS 4062, reviewed in July "Best of the Month"). Now, however, Philips has given us a new version by Elly Ameling, and it holds its own against any rival. In the melancholy and deliberate opening song, In der Fremde, Miss Ameling sets the tone for her approach to Eichendorff's poetry, a subtle and inward treatment in which there is no place for over-dramatization. The inherent drama in such songs as Waldesgespräch and Schöne Fremde is perfectly realized with delicate inflections and accentuations, the ethereal mood of Mondnacht is sustained with superb skill, and the controlled passion poured into the closing Frühlingsnacht rounds out the sequence to make a unified artistic whole. The entire cycle is exquisite and eminently cherishable, the presence of a few not quite effortless top notes notwithstanding.

The Op. 79 Liederalbum für die Jugend is something of a rarity on discs: several artists have recorded individual songs from the cycle (Fischer-Dieskau and Ameling among them), but I have never encountered the entire collection of twenty-eight songs before. They are all short pieces about nature, the arrival of spring, and other joys of old and young alike. The poetic texts, including a few from the ubiquitous Des Knaben Wunderhorn, are by Goethe, Schiller, Mörike, and other poets nowhere near their caliber. It is surprising to find Mignon's Kennst du das Land among

Beauty...Without the Beast



 Γ he finest reproduction of sound. . . matched with the advanced technical design, reliability and aesthetics that make NIKKO AUDIO the stereo components you cannot afford to overlook.

Even more so when you consider their extraordinary value for your money.

Shown here: The Gamma 20 frequencysynthesized digital tuner with 6-station programmable memory, Beta 20 preamplifier with performance, construction and many features of far more costly units, EQ-1 graphic

metal cassette deck

equalizer, ND-790

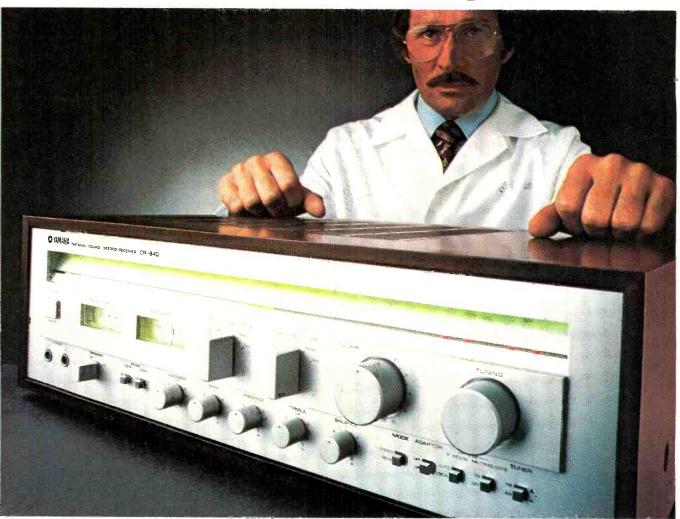
(with optional rack-mounts), Alpha 220 DC servo nonswitching power amplifier.

Experience these and other quality NIKKO AUDIO components at your authorized dealer—all except cassette decks backed by a transferable 3-year parts & labor limited warranty.

© 1980 Nikko Electric Corp. of America, 320 Oser Ave., Hauppauge, N.Y. 11787

CIRCLE NO. 35 ON ŘEADER SERVICE CARD

"...an outstanding product on any absolute scale of measurement without regard to price." -STEREO REVIEW



Read more of what Stereo Review magazine had to say about the Yamaha CR-840 receiver:

"The harmonic distortion of the CR-840 was so low that without the most advanced test instruments it would have been impossible to measure it."

When speaking of the OTS (Optimum Tuning System), an easy-to-use Yamaha feature that automatically locks in the exact center of the tuned channel—for the lowest possible distortion, Stereo Review said, "The muting and OTS systems operated flawlessly."

Among Yamaha's most significant features is the continuously variable loudness control. By using this control, the frequency balance and volume are adjusted simultaneously to compensate for the ear's insensitivity to high and low frequency sound at low volume settings. Thus, you can retain a natural-sounding balance regardless of listening level. As Stereo Review states, "...another uncommon Yamaha feature."

And there's more. Like the REC OUT/INPUT SELECT feature. These separate controls allow you to record from one program source while listening to another program source. All without disturbing the recording process. Stereo Review's comment was, "... the tape-recording functions of the CR-840 are virtually independent of its receiving functions." One could not ask for greater flexibility.

In summing up their reaction to the CR-840, Stereo Review said, "Suffice it to say that they (Yamaha) make it possible for a

moderate-price receiver to provide performance that would have been unimaginable only a short time ago."

And the CR-840 is only one example in Yamaha's fine line of receivers. For instance, High Fidelity magazine's comment about the Yamaha CR-640 receiver: "From what we've seen, the Yamaha CR-640 is unique in its price range."

And Audio magazine has remarks on the Yamaha CR-2040 receiver: "Without a doubt, the Yamaha CR-2040 is the most intelligently engineered receiver that the company has yet produced, and that's no small feat, since Yamaha products have, over the last few years, shown a degree of sophistication, human engineering, and audio engineering expertise which has set them apart from run-of-the-mill receivers."

Now that you've listened to what the three leading audio



magazines had to say about Yamaha receivers, why not listen for yourself? Your Yamaha Audio Specialty Dealer is listed in the Yellow Pages.

To obtain the complete test report on each of these

receivers, write: Yamaha International Corp., Audio Division, P.O. Box 6600, Buena Park, CA 90622.

Quotes excerpted from June 1979 issues of Stereo Review, High Fidelity and Audio magazines. All rights reserved

them, for this is not at all "für die Jugend," but in Schumann's unadventurous setting it does not seem musically misplaced. The cycle is by no means uniformly first-rate Schumann-it was written in 1848, a revolutionary and (for the composer) an emotionally unsettling year-but there are several lovely songs in the group, including a few duets in which the artist partners herself. That bit of audio magic is carried off with an expertise that is characteristic of the entire enterprise. Miss Ameling does the Album to perfection, with an outstandingly apt and evocative assist by her collaborator Jörg Demus. —George Jellinek

SCHUMANN: Liederkreis, Op. 39; Liederalbum für die Jugend (Lieder Album for the Young), Op. 79. Elly Ameling (soprano); Jörg Demus (piano). Phillips 6769 037 two discs \$19.96.

Invigorating American Brass Music Strikingly Performed by the American Brass Quintet

THE American Brass Quintet has been touring the United States and Europe since 1960, playing American works that range in style from the native idiom of Virgil Thomson to the experiments of Henry Brant and Charles Wuorinen and the brilliant achievements of Elliott Carter. The group, every member of which is a virtuoso soloist in his own right, has also explored the repertoire for brass in the music of this country's earlier years.

On a new Titanic disc that includes guest John Stevens on bass horn, they turn their attention, with striking results, to brass-band music of the mid-1800s. Employing authentic instruments of the period, they offer quick steps, schottisches, and waltzes from the brass-band journals (based on popular music of the time) compiled by Allen Dodsworth and G. W. E. Friederich; lend style to old-time songs such as Massa's in the Cold Ground; and bring to life period arrangements such as Dixie and The Mocking Bird Quick Step that once rang through the streets of Winston-Salem when the band of the 26th North Carolina Regiment, C.S.A., came out to play. Most gratifying of all are selections from Stephen Foster's The Social Orchestra, a collection in



ELLY AMELING: subtle

which the composer himself supplied an invigorating lift to arrangements of his quadrilles and original melodies, elevating them into some stratosphere above the typical music of the Sunday bandstand. Especially engaging are the variations on Old Folks at Home, subtle and elegant. Harking back to our British musical roots are a brassy treatment of Auld Lang Syne and the British drinking song that later, with a new set of words provided by a Mr. Key in 1812, became The Star-Spangled Banner. The handsomely designed album includes a fine set of informative notes by several experts, and the recording quality is first-rate.

—Paul Kresh

AMERICAN BRASS QUINTET: Music of the Mid-1800's. Ellen Bayne Quick Step; Rainbow Schottisch, The Jewel Waltz; Massa's in the Cold Ground; Farewell, My Lilly Dear; The Star-Spangled Banner; Gift Polka; Auld Lang Syne; Wedding Schottisch; Prima Donna Waltz; Lilly Bell Quick Step; Empire Quick Step; To Thee, Oh Country!; Dixie's Land; Washington's March; Hosanna; Mocking Bird Quick Step. Foster: Quadrilles Nos. 3 and 4; Would I Were with Thee; Happy Land; Oh, Summer Night; Old Folks at Home. American Brass Quintet-Raymond Mase and John Aley (cornets), David Wakefield (alto horn), Ronald Borror (tenor horn), and Robert Biddlecome (baritone horn); John Stevens (bass horn). TITANIC Ti-81 \$9.

THE AMERICAN BRASS QUINTET: every man a virtuoso



Popular Discs and Tapes



Reviewed by CHRIS ALBERTSON • IRV COHN • NOEL COPPAGE • PHYL GARLAND PAUL KRESH • PETER REILLY • STEVE SIMELS • JOEL VANCE

RECORDING OF SPECIAL MERIT

HERB ALPERT: Beyond. Herb Alpert (trumpet, piano, vocals); instrumental accompaniment. Kamali; The Continental; Keep It Goin'; Red Hot; The Factory; Reach for the Stars; and three others. A&M SP-3717 \$7.98, ® 8T-3717 \$7.98, © CS-3717 \$7.98.

Performance Excellent Recording: Excellent

"Beyond" is another splendiferously produced, gorgeously recorded album by Herb Alpert. If you like this sort of thing—and I have to confess that I do—putting a new Alpert album on the turntable is like opening a box of chocolates and deciding, or trying to decide, which one to glom first. Be assured that all the selections here are the soft-centered kind, with perhaps the tastiest being *The Factory*, to which Peter Frampton contributes a raspberry-creme solo on guitar. This is not an album for purists or musical weight watchers, but it's a lot of fun for us self-indulgent types.

P.R.

LYNN ANDERSON: Even Cowgirls Get the Blues. Lynn Anderson (vocals); instrumental accompaniment. Even Cowgirls Get the Blues; Poor Side of Town; Shoulder to Shoulder; The Lonely Hearts Café; Blue Baby Blue; and five others. COLUMBIA JC

Explanation of symbols:

- @ = eight-track stereo cartridge
- © = stereo cassette
- \Box = quadraphonic disc
- digital-master recording
- $\mathbb{O} = direct-to-disc$

The first listing is the one reviewed; other formats, if available, follow it.

36568 \$7.98, **③** JCA 36568 \$7.98, **⑤** JCT 36568 \$7.98.

Performance: Plastic coated Recording: Good

The cliché Nashville Sound, thanks mostly to the rise of Austin and to the work of such lonely pioneers as Merle Haggard, is slowly being phased out. But not in this recording. Strings and choruses cascade through it. and the Golden Girl is still being pitched to some sort of easy-listening crowd. Awakened in the middle of the night to hear it, most people couldn't tell this one from any of Lynn Anderson's other albums. It highlights some of the things she can do, but mostly the smoothness just produces slickness. Anderson is actually a bit more of a singer than this kind of production would lead you to suspect—unless you listen closely to how she doesn't mess up Randy Newman's Louisiana 1927 (an unlikely song for the Nashville Sound anyway). Anderson's voice has an attractive, maybe even svelte, kind of thinness, but that doesn't mean she needs fat arrangements. It's too bad that, so far, that's all she's gotten. N.C.

ASHFORD AND SIMPSON: A Musical Affair. Nick Ashford (vocals); Valerie Simpson (vocals, piano); vocal and instrumental accompaniment. Love Don't Make It Right; Rushing To; I Ani't Asking for Your Love; Make It to the Sky; and four others. WARNER BROS. HS 3458 \$8.98, ® W8 3458 \$8.98, © W5 3458 \$8.98.

Performance. Not among their best Recording: Satisfactory

While it might be carping to suggest that success has spoiled Ashford and Simpson, something must account for the musical mediocrity of their latest offering. Most of these songs just seem to go around in circles, beginning with a phrase that is not altogether clever or inviting and repeating it until the sliver of melody has worn out its already tentative welcome. Of course they still sing with gusto, but there is little here to shout about. The passion that once in-

fused their duets has been supplanted by a slick predictability. Some of this might be fun to dance to, but that's about it. *P.G.*

PAT BENATAR: Crimes of Passion. Pat Benatar (vocals); instrumental accompaniment. Treat Me Right; You Better Run; Never Wanna Leave You; Hit Me with Your Best Shot; Hell Is for Children; and five others. CHRYSALIS CHE 1275 \$7.98, ® 8CH 1275 \$7.98, © CCH 1275 \$7.98.

Performance: **Solid** Recording: **Very good**

The boys in the band may wear skinny ties and silly shades, but most of this record is good, plain rock of the sort Paul McCartney calls Permanent Wave. Pat Benatar is more than just one kind of singer, however, even if this album repeatedly suggests she has more as a vocalist than she shows. She has a light and airy voice that is somehow able to cut through or ride over the instrumentals. The engineering doesn't hurt, achieving good clarity and transparency. For some reason You Better Run, written by Felix Cavaliere and Eddie Brigati of the erstwhile Rascals, got the most early notice, though no one selection stands out much. Indeed, the most "modern" and troublesome characteristic of the album is that all the songs seem directed at someone with a very short attention span. Neither the lyrics nor the melodies presume you can remember farther back than two lines. Benatar is clearly capable of handling something of more substance, and my guess is she'll be around for a while, eventually doing just that.

OSCAR BRAND: American Dreamer. Oscar Brand (vocals, guitar); vocal and instrumental accompaniment. Touch the Earth; Where Do You Go; Kill for Peace; Remember the Horse; A Very Nice Country; and six others. BIOGRAPH BLP 12067 \$7.98.

Performance. **Stylish** Recording **Good**

Here's a collection of intelligent, stylishly satiric songs written and performed by Oscar Brand. The liner notes describe the album as a "confrontation with the potholes of life in America's fast lane," but although Brand does confront some hard issues (war, the draft, pollution, sexism), the overall impression he gives is oddly good-humored and pleasant. Perhaps that's because Brand is so very good at what he does—after all, he's been at it long enough. No matter how grim the subjects, it's hard not to enjoy listening to these jaunty, folkish tunes. P.R.

CHICAGO: Chicago XIV. Chicago (vocals and instrumentals). Manipulation; Upon Arrival; Song for You; Overnight Café; The American Dream; Hold On, and four others. COLUMBIA FC 36517 \$8.98, ® FCA 36517 \$8.98, © FCT 36517 \$8.98.

Performance: **Well...**Recording: **Very good**

I've managed to avoid hearing Chicago for quite a while, but all vacations must end. The group no longer sounds as pompous as it used to; in fact, it has progressed to being merely ponderous. This is, after all, an aging band. As the members grow older their tastes change, and they must look for new ways to keep themselves au courant.

Manipulation is the closest here to their familiar style, but Song for You has a more acoustic feel and an emphatic vocal that reminds me of the group Orleans. Overnight Café is an interesting slow reggae number. The rest of the album makes it clear that Chicago is, to put it politely, floundering.

PERRY COMO. Perry Como (vocals); orchestra. Regrets; When; You Are My World; Save Me the Dance; Love; and five others. RCA AFL1-3629 \$7.98, ® AFS1-

Performance: **Mellow** Recording **Good**

3629 \$7.98, © AFK1-3629 \$7.98.

While Cole Porter's worldly Babes in the Woods may have "Found that the fountain of youth/Was a mixture of gin and vermouth," Perry Como's secret must be that he takes his vocal cords out between recording sessions and immerses them in apricot brandy. That's how mellow and endlessly smooth he sounds here. Who else but Como could give a Sondheim song (granted, it's the relatively benign Not While I'm Around) the warm glow of a snifter enjoyed in front of a seasoned-oak fire? And when it

comes to such straightforward MOR selections as You Are My World and When She Smiles, he tosses them off with the famous high-style nonchalance and unerring attention to musical detail that's made him such a joy all these years. Good listening. P.R.

CORNELIA STREET: THE SONGWRIT-ERS EXCHANGE (see Best of the Month, page 85)

DYNASTY: Adventures in the Land of Music. Dynasty (vocals); vocal and instrumental accompaniment. Groove Control; Take Another Look at Love; Do Me Right; Something to Remember; and four others. Solar BXL1-3576 \$7.98, ® BXS1-3576 \$7.98.

Performance. **Monotone** Recording: **Fine**

You could swing and sway straight through this album and never skip a beat, but don't listen too closely. There are more words crammed into the eight songs here than you'll find in the entire Supremes songbook. Unfortunately, the lyrics have no music to accompany them. There's just (Continued on page 96)



B-52's: Cosmic Surf Music

The late Doug Kenney of National Lampoon used to do a bit about a rock-androll beach-party horror film of the Fifties that, sadly, American International never got around to making, a little epic called Tacos—an acronym for Teen-Age Commies from Outer Space. Kenney died before I got a chance to ask him what he thought of the B-52's, but my guess is that he would have loved them: they're the only band around today that could have starred in and scored such a flick. All of which is a roundabout way of saying, anent their latest LP, "Wild Planet," that the B-52's make surf

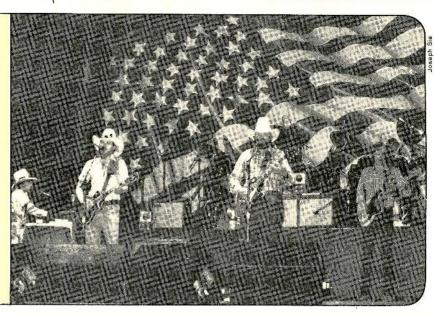
music for the Eighties and are therefore nearly immune to serious criticism. After all, breathes there a man or woman with soul so dead that he/she does not love at least one surf classic from the Golden Age, who does not swoon to the strains of some immortally stupid car song by Jan and Dean, a cosmically moronic instrumental by Dick Dale, or an unutterably weird and absolutely untiring assault on the canons of good taste by the Trashmen?

Now, there are those who think all of that somehow lacks the high seriousness, the profound significance of, say, a Jackson Browne or a Bruce Springsteen. On the other hand, there are those who—like that Village Voice critic who compared the B-52's to Flannery O'Connor (no kidding!)—profess to find some hidden profundity in the band's Aliens Robbed the A&P aesthetic. Well, to both those groups I can only say Hoo Hah! Just because, being Southerners, the 52's occasionally chance upon some Appalachian modalities or because their lyrics at times eschew outer space for fundamentalist guilt (check out Devil in My Carhere) doesn't make them any less frivolous than their great progenitors. And I mean that as a compliment.

All things considered, the stuff we dismissed as trash in the Sixties (commercial teenage surf ditties) has aged far better than what passed for Art (Dylan's protest songs, for instance). Need I remind anyone that even as we speak there is a group in San Francisco that performs Led Zeppelin's Stairway to Heaven with the lyrics from the Gilligan's Island theme? No, the punk theoreticians are right: America's glory, her true Culture, is what we throw away, and so, to look for Significance in "Wild Planet," to try to make it either more or less than what it is, is completely to miss the point-which is, of course, simply "Which way to the drive-in?" That being the case, this is probably the first album I have ever reviewed that is clearly to be preferred in its eight-track format. -Steve Simels

THE B-52'S: Wild Planet. The B-52'S (vocals and instrumentals). Party Out of Bounds; Dirty Back Road; Runnin' Around; Give Me Back My Man; Private Idaho; Devil in My Car; Quiche Lorraine; Strobe Light; 53 Miles West of Venus. WARNER BROS. BSK 3471 \$7.98, ® M8 3471 \$7.98, © M5 3471 \$7.98.

The Charlie Daniels Band: It Plays in Peoria



THERE is an endless supply of *Them* to threaten, frustrate, bamboozle, outmuscle, out-missile, pester, and otherwise torment *Us*, so it is natural that one of the things we make sure we teach our children—and some of our dogs—is chauvinism. As soon as the younguns are ready for euphemisms we call it by such names as school spirit, but it's already ingrained by then, and the teaching is reinforced continually by Secretaries of Defense and newspaper columnists and whatnot until these citizens die and go to Heaven—where only Our Side is allowed in.

Not even the mindless hedonists of sunny California escape indoctrination, not even the (Be True to Your School) Beach Boys. But the regions where times are hardest, where threats seem to come from all sides, where threats seem to come from all sides, tend to teach chauvinism the most avidly. The Southeast has a tradition of hard scrabbling and, until only recently, a pattern of losing out to the damn Yankees, so it is not surprising that a Southerner can sense a Commie in the woodpile before anyone else can. And it is not surprising that this region also produced Charlie Daniels, an old boy who's actually trying to whip chauvinism into an art form.

Daniels and his band have played a wide variety of music-their new album, "Full Moon," may be the most varied yet-but Daniels' greatest impact has clearly been in the realm of chauvinism. The first song of his that really clicked with the public, Uneasy Rider, cast the longhairs as Us and the rednecks as Them, being about a run-in with Them in a small Southern café. Then there was Leave This Long-Haired Country Boy Alone; "Them" was broadened to include "decent" folk who were a bit too nosy, and "Us" was used in a way to suggest that a redneck kid with enough grit to think for himself could switch sides and become a midnight toker. The South's Gonna Do It Again took the time-tested regional approach and pitted the South's musicians against all others. "Lynyrd Skynyrd" was a near-buzzword there, since that band had put down Neil Young for putting down (it seemed to those Southern boys) Alabama. Then came the biggest click of all, *The Devil Came Down to Georgia*, wherein Them was boiled down to the ultimate opponent, Old Nick hisself, and (just to touch the regional base) Us was a Good Old Boy.

"Full Moon" has some strong regional evocations in Carolina and Lonesome Boy from Dixie, but they are chauvinistic only in the petty way that brand loyalty is; they aren't really about the struggle of Us against Them. Then there's Money, in which Them are the greedy, but its impact is softened by the understanding that not many of Us would turn down a windfall. The real contender is In America, in which regionalism has been broadened to nationalism and the CDB finally—like many other Americans, if the polls can be believedtakes the step from chauvinism to jingoism. "This lady," it says, meaning the USA, "may have stumbled, but she ain't never fell/And if the Russians don't believe it, they can all go straight to hell.'

As usual, Daniels is disarmingly friendly singing this sort of thing. He knows, somewhere in his bones, that the audience wants the person on the stage, screen, or turntable to be on its side and that the more likable he seems the harder people will try to convince themselves that he is. So Daniels has an affable confidentiality in his voice that suggests it is already understood that he and the listener are buddies. And he does other things that help. He usually doesn't try to make a whole album a chauvinistic tract but instead mixes up a batch of stuff ranging from hard country (missing from "Full Moon") to some suggestion of jazz beyond hard rock (in the new album, check out the bossa-nova-variant South Sea Song), with plenty of his own kind of country-rock in between. His band has a massive sound but is surprisingly quick. He has a certain humility and is also a nice guy, generous in giving band members solos, vocal leads, and songwriting credits; that aspect of his personality comes through in the music too.

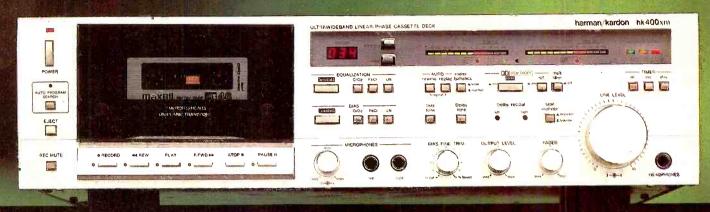
"Full Moon" is an uneven album. Many times the song seems to be based on a good idea and the lyrics and a couple of chord changes are okay, but the melody doesn't zing. But there surely is, as they say in the South, a Duke's mixture of stuff. The Legend of Wooley Swamp uses the recitative story-telling form-but not the chauvinism—of The Devil Came Down from Georgia, and Daniels is a good storyteller. It sounds as if he got down every nuance and mannerism of some grandaddy master taleteller as important to his era as fiddlers. The songs go on from there to nostalgia, topical (Civil War) history, the blues, and such exotica as toreadors, South Sea islands, and gypsies. Even if they don't all quite satisfy, there are good lines scattered about ("Carolina, Carolina/You're hard but you're hard to forget"), and few bands could jump so far from one style to another and still retain some kind of identity.

As for making chauvinism an art form, in my judgment In America finds Daniels spinning his wheels if not slipping backwards a tad. But I have a feeling, watching the news, that, art aside, Charlie's more in tune with the times than I am. My feeling that having enough "defense" to blow up the world two or three times over is enough . . . well, that doesn't play in Peoria these days. Charlie Daniels, on the other hand, does. Since chauvinism seems to be at least as inevitable as death and politics, I guess we're lucky to have as nice a fellow as Charlie working it into songs. At least he won't pester me about my hair.

—Noel Coppage

THE CHARLIE DANIELS BAND: Full Moon. The Charlie Daniels Band (vocals and instrumentals). The Legend of Wooley Swamp; Carolina (I Remember You); Lonesome Boy from Dixie; No Potion for the Pain; El Toreador; South Sea Song; Dance, Gypsy, Dance; Money; In America. EPIC FE 36571 \$8.98, @ FEA 36571 \$8.98, @ FET 36571 \$8.98.

Here's how to make a standard \$5 tape outperform a \$10 metal tape.



The hk400XM with frequency response from 15-20kHz \pm 3dB

Record a standard \$5 tape on one of the new Harman Kardon High Technology cassette decks with Dolby HX*. And a \$10 metal tape on a conventional deck. Any conventional deck.

Now compare.

The Harman Kardon deck with Dolby HX will give you substantially better performance from the standard tape. More dynamic headroom. And better signal-to-noise ratio.

Yet the recording made on our Harman Kardon High Technology deck costs about half as much. Which can save you a small fortune if you plan a tape library of any size.

Of course our new High Technology decks are metal capable, too. So you can use Dolby HX *and* metal tape for performance that can't be topped by anything less than a professional quality open reel deck.

But Dolby HX is only part of the performance story.

Our heads cost more. And they deliver more.

The heads used in a cassette deck probably dictate the performance you'll get more than any other single component. That's why at Harman Kardon, we spent a lot more time and money on our head designs and materials. We started with Super Sendust Alloy, the costliest and most advanced

material available. In manufacturing, we machine our head gaps to incredibly precise tolerances, and align them with equal care. Obviously, this process takes more time and costs more money. But it results in frequency response unheard of in a single speed cassette deck at any price.

Even our most economical deck, for instance, gives you ruler-flat frequency response from 15 Hz to an incredible 19,000 Hz from a conventional tape. You also get features like Dolby NR, a front panel bias fine trim, MPX filter and memory.

As you move on up the line, the specs just get better. And so do the features. Like the world's first headroom safety indicator to prevent tape saturation far more accurately than any peak level indicators. You'll also find built-in Dolby and bias test tones. Normal and slow meter ballistics. A fader control. Plus our exclusive Auto Program Search System that scans a tape automatically, sampling the beginning of each cut until you've located the one you want.

Yet the new Harman Kardon High

Technology cassette decks do share one thing in common with the conventional decks.

A conventional price tag.

So before you settle for a deck that will set you back \$10 or more every time you want a quality recording, audition the new Harman Kardon Decks with Dolby HX.

For the location of the Harman Kardon dealer nearest you, call toll-free: 1-800-528-6050, ext. 870.

Dolby and the dochle-D symbol are trademarks of Dolby Laboratoric. Dolby HX is a standard feature on all Harman Kardon High Technology decks except the 100M.



The hk100M with frequency response from $15-19kHz \pm 3dB$.



The hk200XM with frequency response from $15-19kHz \pm 3dB$.



The hk300XM with frequency response from 15-20kHz ± 3dB.

harman/kardon

240 Crossways Park West, Woodbury, NY 11797 CIRCLE NO. 25 ON READER SERVICE CARD

THE KLIPSCHORN:

The finest loudspeaker system in the world is a lifetime experience.

The hom is the most effective system for reproducing sound, and the KLIPSCHORN is hom loaded throughout.

Until 1940, it took an enormous bass horn to reproduce the full range of bass sounds. Paul Klipsch succeeded in folding the hom into a trihedral corner so that the construction inside the cabinet acted as a four foot long exponential horn.

When the speaker was placed into a corner, the room walls themselves became extensions of the horn which he had cleverly folded around the speaker mechanism.

And the result was deep, full, rich bass tones.

Today's KUPSCHORN has beer perfacted by 40 years of researcand refinements that have resulted in a loudspeaker that delivers truly awesome performance The KLIPSC one watt or decibels of lirto your li warp you in And, if you KLIPSCHOR will rattle t

The KLIPSCHORN is so efficient that only one watt of power will deliver 104 décibels of sound pressure four feet into your living room. Ten watts will warp you in the pleasure of huge sound. And, if you think you can take it, the KLIPSCHORN can take 100 watts that will rattle the silver.

Each KLIPSCHORN is made of nearly 50 hand-cut, hand-sanded birch plywood parts. Whether unfinished in birch, or finished in grain-matched walnut, teak, rosewood, zebra wood, oak, ebony or other exotic wood veneers, the KLIPSCHORN is a beautifully crafted loudspeaker that will hold its value for a lifetime. And never become obsolete.

The KLIPSCHORN has the highest dynamic range over the widest bandwidth among home entertainment loudspeakers.
Response ranges from 35 to over 17,000 Hz, plus or minus 5 dB.

So, if you love music, the KLIPSCHORN will give you unsurpassed clarity, definition and detail that you never thought possible in anything but a live performance. To own a pair is to take a journey into the purest and most rewarding musical experience that any loudspeaker can possibly deliver.

A Legend in Sound.

Please send me tree information on the KLIPSCHORN and the entire line of Elipson bookspeakers. Send me the name of the nearest sealer, too.

Name:

Address

KLIPSCHORN, BELLE KLIPSCH, KLIPSCH La SCALA, KLIPSCH CORNINALL and KLIPSCH HERESY are registered trademarks of Klipsch & Associates, Inc. "A Legend in Sound" is a trademark of Klipsch & Associates, Inc. Copyright 1980 Klipsch & Associates, Inc. All rights reserved

CIRCLE NO. 33 ON READER SERVICE CARD

Mail to: Klipsch and Associates, Inc. Box 688 Hope Arkænsas USA 71801 Or Call: 501-777-6751

S

Zip



OCCASIONALLY a record album comes along conceived with so much love and executed with so much care and attention to detail that it reminds me of a slender, beautifully printed volume of sonnets by a distinguished poet. Such an album is Audiophile's new two-disc set by Mabel Mercer, "Echoes of My Life."

Miss Mercer has always been known for her taste and skill in choosing among the best works of contemporary lyricists and composers of popular songs. The twenty-five songs included here are so well matched to her very special interpretive gifts that they sound as though she had written them herself, recollecting in tranquility some of the events from a rich and varied past. Although her memories evoke feelings of pain as well as pleasure, they are all tempered by the kind of wisdom that comes in the autumn of a long, well-lived life.

The public celebrations of Mabel Mercer's seventy-fifth birthday in 1975 brought her a kind of fame she had never known before. For the first time she saw her picture on the cover of a national magazine—Stereo Review. Strangers greeted her by name in the street. The Berklee College of Music in Boston gave her an honorary doctor's degree. She became a frequent interview guest on television talk shows, and owners of cabarets and clubs vied for her services.

That outpouring of attention and affection brought about a wonderful late flowering in her career. Supported by those who had been her devoted fans for years and drawing new strength from the hordes of young people who were discovering her for the first time, she made a royal progress from club to club over the next two or three years. As she went from the St. Regis and Cleo's in New York to the Café Lafitte in

Philadelphia and the Copley Plaza in Boston and on to the Mocambo in San Francisco, a kind of Mabel Mercer Madness swept the country.

At that time she made her only appearance ever in Los Angeles, giving a one-woman show at the Dorothy Chandler Pavilion. When she returned in triumph to England (where she was born) for her first London engagement since before World War II, journalists had a good time writing about the restoration of the Queen of Song to her proper throne.

URING that busy time, there was talk of making new records with her, but somehow no one managed to get her into a studio. This new album is derived from tapes made in July 1976 for Miss Mercer's guest appearances on Alec Wilder's series, The American Popular Song, broadcast on National Public Radio. Short of a live recording of one of her club dates, I would not have thought it possible to come up with such an accurate representation of the way Mabel was performing during the lovely afterglow of her diamond jubilee. Being surrounded by so many people who loved her and responded to her work gave her the courage to go for a few notes she hadn't hit in years. She got most of them, and if an occasional one had too much tremolo or wobble, did it really matter?

Unlike Ella Fitzgerald, for example, who uses her voice like an instrument and emphasizes the music at the expense of a song's lyrics, Miss Mercer has always been primarily an interpreter of the words. As she grew older and her voice became fragile, she developed a kind of pitched speech that is not far from reading poetry. This album demonstrates again that whatever lim-

itations age may have placed on her vocal resources, it never restricted her ability to express feeling, to convey meaning, or to deliver a phrase musically.

The sound on the advance acetates submitted for review is excellent, and Miss Mercer is well accompanied by a trio led by pianist Loonis McGlohon. He also provided the arrangements, which are interesting without being distracting, and he wrote a couple of the songs on the album. The repertoire is typical of her shows in that it includes some old favorites, such as Rodgers and Hart's Falling in Love with Love, as well as some new things, such as the title song composed in 1976.

I regret that there is nothing here by George Gershwin, Cole Porter, or Noël Coward, who have always been among her stand-bys, but the selections give her opportunities to express a wide variety of moods. There's plenty of bittersweet sentiment (How Do You Say Auf Wiedersehen?), but the album is not all nostalgia for lost love and youth. She is playful in Sweet Talk, funny in When in Rome, and her very dramatic rendition of Send In the Clowns is my favorite version of that standard.

The producers have resisted the temptation to include some of the conversation between Miss Mercer and Alec Wilder on the radio show. It is printed instead on the liner, and it gives a survey of Miss Mercer's career. That's appropriate, because she has always avoided chit-chat with the audience during her shows. Whenever an interviewer has tried to pry into her private life, she has always said. "It's all revealed in my music."

ABEL MERCER will be eighty-one in a few months. She could surprise us and have another late flowering, but this album may well contain her final recordings. Poets and other artists have the job not just of telling us about their lives, but of explaining our own lives to us. Poet W. H. Auden said that we must love each other or die. The message I get from "Echoes of My Life" is that love exists in many forms, and although it is often painful, life is meaningless without it. This is an album that could add meaning to a lot of lives. —William Livingstone

MABEL MERCER: Echoes of My Life. Mabel Mercer (vocals); Loonis McGlohon (piano); Terry Lassiter (bass); Jim Lackey (drums). When the World Was Young; Days Gone By; When in Rome; Someone to Light Up My Life; Sweet Talk; The Door Opened; Dancing on the Ceiling; Is It Always Like This?; Just in Time; Be a Child; I'm All Smiles; Christopher Robin; Wait Till You See Her; I'll Be Around; If There's Love Enough; You Came a Long Way from St. Louis; Why Did I Choose You?; Falling in Love with Love; Send In the Clowns; How Do You Say Auf Wiedersehen?: Grow Tall My Son; Try to Remember; Time Heals Everything; By Myself; Echoes of My Life. AUDIOPHILE AP 161/ 162 two discs \$15.96 (or \$9.96 plus \$1 postage directly from Audiophile Records, 3008 Wadsworth Mill Place, Decatur, Ga. 30032).

Directly comparable in both sonic quality and test specifications with the most expensive and prestigious equipment, the Hafler amplifier and preamplifier are moderately priced, and further savings can be made by the option of assembling them from kits

These units are advanced designs using top quality components for consistent performance and long-term reliability. For the kit builder, critical circuits are factory assembled and pre-tested, making a simple, enjoyable assembly project, even for the novice constructor.

Distortion has been virtually eliminated



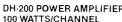
from these designs, and particular attention has been paid to reduction of all forms of transient and interfacing distortions, so that input sources and loudspeakers do not impair the specified performance.

Detailed literature is available free on request. And, if you send \$1 to cover handling costs, we will send an extensive compilation of test reports by independent reviewers including both laboratory and listening tests. We will also include a kit construction manual (normally \$3) so you can judge the feasibility of assembling our kits.

Available through selected dealers.

DH-101 PREAMPLIFIER







5910 Crescent Boulevard ☐ Pennsauken ☐ New Jersey 08109

LET'S COMPARE **APPLES with ORANGES:**

Mura SSC vs. everyone else

No other headsets have SSC. Sennheiser doesn't. Koss doesn't. Only Mura does.

All other headsets create the impression that the music originates inside your head. With SSC (Stereo Separation Control), sound is moved out in front, producing a much more realistic apparent music source location-more like listening to stereo speakers or a live performance. This realism is achieved by circuitry that electronically alters the phase relationship of the stereo signals being converted to acoustic energy in the headset.

The SSC effect is most apparent and significant when listening to a soloist or a small group performance. The result is amazing freedom from the closed-in feeling of other headsets.

If you choose not to use SSC, simply switch to "Normal"

and you have a fine quality stereo headphone without the SSC effect. Only Mura SSC headsets give you this



Mura SSC headsets are available in either isolation or open styles.

Ask your audio dealer for a SSC demonstration today, then flick the switch and compare the difference.

You'll be hearing from us.™

© 1980 Mura Corporation, Westbury, N.Y.

that basic L.A.-grind rhythm with little else to relieve the monotony. Occasionally Dynasty creates a special moment, such as the catchy, closely harmonized refrain to I've Just Begun to Love You, the falsetto vocals in Do Me Right, and the rock-anddisco beat of Ice Breaker, the album's high point. Nevertheless, these "Adventures" are mostly a bore.

RECORDING OF SPECIAL MERIT

DAVID GRISMAN: Quintet '80. David Grisman (mandolin); Darol Anger (violin, cello, violectra); Mike Marshall (guitar, mandolin); Mark O'Connor (guitar, violin); Rob Wasserman (bass). Dawgma; Bow Wow; Barkley's Bug; Sea of Cortez; and four others. WARNER BROS. BSK 3469 \$7.98, © M5 3469 \$7.98.

Performance: Classy Recording: Excellent

Since "Bluegrass Jazz" would be confusing if not silly, David Grisman calls this stuff Dawg Music. A small, extremely agile combo using bluegrass instruments (or classical instruments, such as the mandolin) plays little tunes that take the dangdest turns and jumps you ever heard. Some of them you have to hear four or five times before you can divine any structure; you wonder if they ever get played the same way twice. Some of it is Hot Dawg Music, little more than an excuse for showing off virtuoso pickingexcept that the players, Grisman especially, aren't cold; each piece has a certain feel to it. All in all, this one might perk up your

RICK JAMES: Garden of Love. Rick James (vocals, guitars, keyboards, synthesizer, percussion); Colored Girls (vocals); Stone City Band (instrumentals). Big Time; Island Lady; Summer Love; and three others. GORDY G8-995M1 \$8.98, ® G8-995-H \$8.98, © G75-995-H \$8.98.

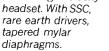
Performance: In the mainstream Recording: Fine

This new album is certain to add to Rick James' already considerable audience. There's a lot in these high-stepping cuts to please his established fans and plenty of very accessible music to appeal to new ones. James is a multitalented performer who writes and arranges his own material, plays numerous instruments, and sings lead. In Don't Give Up on Love his singing is as serious as I've ever heard it; this is a hearty soul ballad that his good baritone handles with power to spare. The positively intimate Island Lady shows a different aspect of the singer. Best of all here is Mary-Go-Round, which deserves major success as a single; like the Punk Funk music of the "old" Rick James, it is fun and raunchy, a long, joyful cut that gives you time to get into the discofunk mood-a terrific finale to an interesting album. I.C.

RECORDING OF SPECIAL MERIT

BEN E. KING: Music Trance. Ben E. King (vocals); instrumental accompaniment.

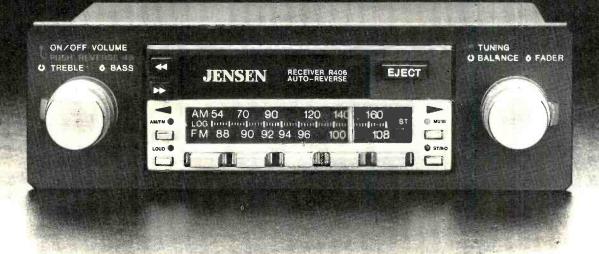
Music Trance; Touched by Your Love; You've Only Got One Chance to Be Young; Everyday; and three others. ATLANTIC SD (Continued on page 98)



vented high velocity

Mura HV-300

Driving aid.



It's new.

Introducing the Jensen R406 AM/FM Stereo/Cassette Receiver. A superb 10 watt in-dash receiver for your car's stereo system. And yes, this new Jensen receiver gives you the added convenience of . . . 5 station preset pushbutton tuning.

Beyond convenience.

Clearly the ability to select a favorite station with the touch of your finger is handy. But that's hardly the only reason to choose this R406 car stereo receiver.

You select a Jensen first, because you implicitly trust our quality. You have an instinctive feeling that this is one company building car stereo products with care and purpose. And because you've heard about the

great reviews of our receivers, you know the performance of any Jensen in your car will be outstanding.

Features that function.

On the cassette side, this new R406 features auto reverse, for automatic play back of both sides of the tape. There are ultrahard Sendust tape heads too, that give you play back of metal tape—the latest and highest fidelity tape.

On the radio side, the R406 gives you a special Auto Hi Blend circuit that automatically adjusts high frequency stereo separation when FM reception is poor. And there's an

JENSEN SOUND LABORATORIES

AN ESMARK COMPANY

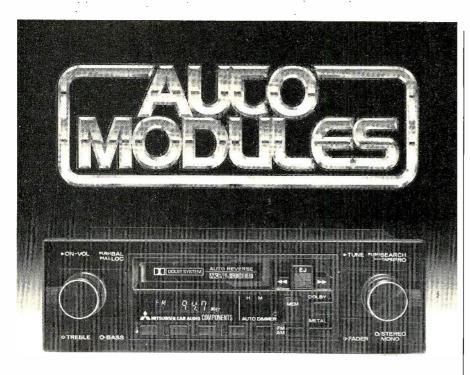
© 1980, Jensen Sound Laboratories, An Esmark Company automatic local/distance circuit that brings your station in loud and clear in the city or the countryside.

The R406 offers controls with LED indicators for loudness, FM muting, AM/FM, mono/stereo. And there are separate bass/treble and balance and fader controls, too.

No gimmicks sold here.

The R406 AM/FM Stereo/Cassette Receiver is the kind of purposefully innovative car audio product you can expect from Jensen. It's a no-gimmick component with a solid performance difference ...and the added convenience of preset tuning. If you're looking to improve the sound system in your car, this Jensen R406 will do it. See your Jensen car audio electronics dealer for a demonstration.

CIRCLE NO. 29 ON READER SERVICE CARD



A component system in disguise.

If you've always wanted component sound, Mitsubishi has the answer. Our new Auto Modules have all the advantages of component separates, yet feature all the conveniences of an in-dash system.

The CZ-747 with its super-compact chassis, contains the in-dash module tape transport and tuning sections. It features a Sendust head, metal tape bias switch and an electronic tuning system with memory, scan and auto-search. Time-of-day and

tuning frequency are digitally displayed and both tape and FM feature Dolby® Noise Reduction.

There's also the CZ-692 It features five AM or five FM pushbutton tuning, Sendust head and metal tape bias. It

too has Dolby® Noise Reduction on tape and FM sections Add one of the Mitsubishi Power Modules to suit your power requirements. Our Power Modules are available in 8, 20 or 40 watts

per channel

We also offer an optional 5-band Graphic Equalizer Module

for complete sound contour control.

The Mitsubishi Auto Modules. A total concept in component stereo for the road. You owe yourself a visit to your nearest Mitsubishi Car Audio dealer.

® "Dolby" and "Dolby System" are trademarks of Dolby Laboratories, Inc.



© 1980 Melco Sales, Inc., 7045 N. Ridgeway Ave., Lincolnwood, III, 60645 800-323-4216 (Outside III.) 312-982-9282 (Within III.) In Canada: Melco Sales Canada Inc., Ontario

CIRCLE NO. 76 ON READER SERVICE CARD

19269 \$7.98, ® TP 19269 \$7.98, © CS 19269 \$7.98.

Performance Mellow Recording: Good

Ben E. King is like a shot of aged bourbon; mellow in bouquet but still packing a mighty punch. His sound on this new set is so firmly contemporary, with several tracks featuring a heavy but tastefully applied disco beat, that it is hard to believe his career began way back in the Golden Age of rhythm-and-blues.

King got his start in the late Fifties as lead singer with the Five Crowns, who later became the Drifters, one of the flagship groups of this genre. As a solo artist, he went on to record some of the all-time r-&-b greats, among them Spanish Harlem, Stand By Me, and Don't Play That Song. Though he has not regained that same level of popularity in recent years, he has continued to release albums that, like "Music Trance," highlight his fine sense of gutsy strut. My favorites here are Touched by Your Love, Everyday, and You've Only Got One Chance to Be Young. I'll dispute him on that last point, for Ben E. King has found a way to stay young in spirit while exuding the cool assurance of maturity.

BOB MARLEY AND THE WAILERS: Uprising. Bob Marley and the Wailers (vocals and instrumentals). Bad Card; We and Dem; Work; Zion Train; Pimper's Paradise; and five others. ISLAND ILPS 9596 \$7.98, ® M8 9596 \$7.98, © M5 9596 \$7.98.

Performance: Authoritative Recording: Very good

Among the factors that might account for the failure of reggae to capture a broader U.S. audience are its built-in musical and thematic limitations. With restrictions in instrumentation and style, the main source of variety must be in the lyrics of the songs, and here too the social and political commentary follows prescribed lines.

Bob Marley and the Wailers have worked miracles within these limits through the years, and though everything on this new album sounds rather familiar, it is no less a pleasure to hear. This set will appeal primarily to Marley fans and reggaephiles, but its high quality should also please those who want only an occasional taste of this music from the islands.

MARTHA AND THE MUFFINS: Metro Music. Martha and the Muffins (vocals and instrumentals). Hide and Seek; Monotone; Echo Beach; Revenge (Against the World); Cheesies and Gum; and five others. VIRGIN VA 13145 \$7.98, ® TP 13145 \$7.98, © CS 13145 \$7.98.

Performance: Arty kid stuff Recording: Excellent

"Metro Music" is what results when you take a bunch of bright, likable kids and lock them in a room with Roxy Music records for the duration of their adolescence. Martha and the Muffins make a kind of airy, playful New Wave dance rock that begins with the instrumental and rhythmic approach of the early-Seventies "experimental" bands like Roxy, jettisons the pretentious Angst of the lyrics, and replaces it with teenage (but fairly cerebral teenage) frivolity and fun. It's not completely to my taste, but it's worlds better than the music that inspired it, and for that I give thanks. Still, it's completely cold, and my guess is that it is going to sound amazingly dated amazingly fast. Love that name, though.

S.S.

MORMON TABERNACLE CHOIR: Beyond the Blue Horizon. Mormon Tabernacle Choir; Columbia Orchestra, Jerold Ottley cond. You Must Have Been a Beautiful Baby/It's Only a Paper Moon/Pick Yourself Up; As Time Goes By; Love Thy Neighbor/Love Is Just Around the Corner/Love Walked In; I Only Have Eyes for You; and six others. CBS M 35868 \$8.98, © MT 35868 \$8.98.

Performance: **Melted ice-cream** Recording: **Excellent**

The Mormon Tabernacle Choir, apparently determined to record all the mindless music ever written and reduce it to one large, gelatinous, flavorless mass, turns its attention this time around to Hollywood musicals of the 1930s. The original material is already so bland as to require only a modicum of retouching at the hands of arranger Arthur Harris; it is hard to determine where innocuousness ends and insipidity begins. The Shadow Waltz loses not a single drop of the sweetness it contained when a thousand violins played by pretty girls in white introduced it on the screen in The Gold Diggers of 1933; but It's Only a Paper Moon is thinned down from cardboard to tissue, and Singin' in the Rain is attenuated to a light drizzle. I guess what saves "Beyond the Blue Horizon" from being the silliest record of the year is that so many of the songs on it have such winning tunes as to be imperishable no matter who sings them or how drowsy the arrangements.

RECORDING OF SPECIAL MERIT

JUNIE MORRISON: Bread Alone. Junie Morrison (vocals and instrumentals); vocal accompaniment. Love Has Taken Me Over (Be My Baby); Why; Bread Alone; Funky Parts; and three others. COLUMBIA NJC 36585 \$5.98.

Performance: **Promising debut** Recording: **Very good**

"Bread Alone" starts Walter "Junie" Morrison off on a promising new solo career. He served a long apprenticeship, first with the Ohio Players back during the early Seventies and more recently with Parliament-Funkadelic. Though primarily a pianist and keyboard artist, Morrison was responsible for writing some of P-Funk's better-known numbers, including One Nation Under a Groove. Now he has abandoned the frequently annoying tomfoolery and superfunky pretensions of his earlier affiliation to concentrate on making his own music, which, though not exactly brilliant or immediately distinctive, is brightly appealing, tuneful, and refreshingly restrained.

Through multitracking, Morrison plays all the instruments heard on the album. The only back-up is from a quartet of female vocalists who assume an exclusively supporting role and don't try to sneak into the spot-

light. Morrison's musical style is tastefully eclectic, with a cupful of funk, a jigger of pop, and just a dash of rhythmic and harmonic experimentation. At his best, he vaguely reminds me of the early Sly Stone, injecting a touch of humor into his rustily competent and ingratiating voice. Bread Alone and Apple Song have a light, airy flavor, while Love Has Taken Me Over and Funky Parts harken back to the P-Funk days but without the overkill. I had trouble making out some of the lyrics, but the overall effect is pleasantly amusing "Bread Alone" is worth the bread it costs. P.G.

THE O'JAYS: The Year 2000. The O'Jays (vocals); instrumental accompaniment. The

Year 2000; To Prove I Love You; You're the Girl of My Dreams (Sho Nuff Real); and five others. TSOP FZ 36416 \$8.98, ® FZA 36416 \$8.98.

Performance. Rousing Recording: Very good

Though there is little that is outstanding in the songs on this new album, the O'Jays sing them as though there were. The result is a relaxing forty minutes of medium-tempo music with a couple of tracks that are particularly pleasing. Girl, Don't Let It Get You Down has a Fifties flavor, sounding as if it were an old Sam Cooke hit rather than something written the day before yesterday.

(Continued overleaf)



As advanced as our turntables!

In 1963, we originated the compact cassette system. In 1980, the Philips N 5788 represents the latest in cassette deck technology. Our 3 head, two motor, dual capstan deck offers metal capability; test oscillator, with bias fine adjustment; and, two electronic memories for auto-play programming. Designed as part of our advanced Sound Series Eighty system, the N 5788 is also available in a non-rack model with silver satin finish (N 5781).

Frequency response, 20-20 kHz, \pm 3dB; wow and flutter, 0.045% WRMS. Audition the N 5788, and the rest of our full line, at finer audio dealers.

For further information, write Philips, Dept. 803, P.O. Box 6960. Knoxville, TN 37914.

PHILIPS HIGH FIDELITY LABORATORIES, LTD.

© 1980. Philips High Fidelity Laboratories, Ltd.

CIRCLE NO. 57 ON READER SERVICE CARD



Audio & Video

AUDIO	VIDEO
IECHNICS RS-M45 Cass Luck \$225 B.I.C. T.Q. assette Deek. \$159 DUAL 60/655 T. Wilcart \$219 DUAL 60/655 T. Wilcart \$269 SANSUI 30/02 Receiver \$269 TECHNICS SA. 202 Receiver \$165 SANSUI 40/179 Int Amp. \$319 PIONEER SX. 3700 Receiver \$259 PIONEER SX. 3700 Receiver \$250 AKAI UGU-2 Micro Intra \$150 AKAI UGU-2 Micro Intra \$150 SANSUI AUT-52 TECHNICS SIZT 1 Under \$150 SANSUI AUT-52 TECHNICS SIZT 1 Under \$150 SANSUI AUT-52 TECHNICS SIZT 1 Under \$150 SANSUI AUT-52 SANSU	SONY SL-540B Betamax J7990 SONY SL-540B Betamax J790 Video Rec S7990 PANA PV-130D Video Rec S790 PANA PV-130D Video Rec S690 RCA VET-250 Video Rec S729 RCA VET-250 Video Rec S729 RCA VET-250 Port Video Rec S729 SONY KV-1914 19" Calor TV S439 PANASONIC CT 1910 19" Calor TV S279 PANASONIC CT 1910 1910 1910 1910 1910 1910 1910 191

CAR STEREO

MPIONEER		
CASSETTE IN-DASH W/RADIO		
KP,41500 KP,2500 KP,4500 KP,8500 KE-3000 KE-3000 KE-5000 KE-5000 KEX-20 KP,4502-(Jorean cars) KP,4502-(Jorean cars)	84 90 104 90 119 90 129 90 141 90 174 90 209 90 214 90 129 90 144 90	
KP-8000 KPX9000-(req amp) KPX9500-(req amp)	154 90 178 50	
CASSETTE UNDER DA		
KP-373 KP-575 KP-506 KP-66G-(req amp) KP-77G-(req amp) KP-88G-(req amp) KP-8600 KP707G	94.90 129.90 78.50 104.90 99.90	
POWER AMPS/EQUA		
GM-40 GM-120 CD-5	89.90 141.90 49.90 106.90	
TS-M2 TS-T3 TS-107 TS-167 TS-167 TS-168 TS-695 TS-X6 TX-X9	32 90/PAIR 37 90/PAIR 49 90/PAIR 84 90/PAIR 89 90/PAIR 69 90/PAIR 129 90/PAIR	
WE ALSO CARRY THE FULL CAR STEREOS BY PANASON		

JENSEN	
CASSETTE IN-DASH W	/RADIO
R-402 receiver.	174.90
R-406 receiver	. 209.90
R-410 receiver	229.90
R-420 receiver	267 90
SPEAKERS	
J-1001 6x9 separates	94.90
J-1065 6x9 Iriax	62.50
J-1033 6x9 tnax II	79.50
J-1201 6x9 coax II thin	59.90
J-1101 4x10 tnax J-1130 4x10 tnax II	62 50
J-1130 4x10 tnax II	79.90
J-1174 51/4 triax	62.50
J-1124 514 triax II	79.95
J-1188 61/2 coax thin	. 42 95
	40 50
J-1037 6x9 coax II	59.90
J-1041 514 coax H	49 50
SANYO	
IN-DASH CASSETTE	
FT-1496	179.95
FT-1498	219.90
FT-1495	119.95
FT 2400	224 90
F1-C2	54.90
FT-C4 FT-C6	64.90
FT-C6	. 71 90
FT-C8	99.90
FT-C10	
FT-C16	. 147 90
BLAUPUNKT	
CR-2000D	209.90
On 20000	207.70

BEA-100		174.90
CLAR	ON	
PE-959 progra	immable .	569.90
PE-9568		319.90
PE 7588		172.90
PE-554A		94.90
100EQ83		77.90

BLANK CASSETTES

AUDIO	
AMPEX GRAND MASTER LOR II C90 .	. 2 99
BASE PRO LILOR III C90	2 99
FUJI FX I OR II, C90	. 2.99
SCOTCH HIGHLANDER C-90-3-PI	499
MEMOREX HI BIAS C90	2 99
SCOTCH MASTER II OR III C90.	. 3.25
SONY FECR C90	3 25
SONY LNX C90	1 64
TDK HD-01 DEMAGNETIZER	16 95
TDK DC60	1 19
TDK DC90	1.68
TDK ADC60	1.68
TDK ADC90	2.45
TDK SAC60	2 15
TDK SAC90	2.99
TDK MA C90 (METAL)	6 29
TDK MA C90(METAL)	7 99
MAXELL UD, UDXLI, UBXLIL	
TOO LOW TO ADVERTISE	
CALL OR WRITE FOR PRICES	

WE STOCK BAW AND COLOR TY'S, VHS AND BETA VIDEO RECORDERS, AND HOME MOVIES FROM ALL MAJOR HOLLYWOOD STUDIOS SEND FOR CATALOGUE.

MINIMUM DROER 12 TAPES—100% GUARANTEED

ACCESSORIES

CAR ACCESSORIES	HEADPHONES
FUZZBUSTER III 99 95	KOSS PRO 4/AAA
FUZZBUSTER ELIT 134.95	KOSS TECH VFR
FOX XX RADAR DETECTOR 99.50	KOSS HVX 42 90
FOX XKRW (remote) 109.50	KOSS HVX/LC 48.50
SUPERFOX	SENNHEISER HD-420 52.50
PAGE ALERT 4000	SENNHEISER HD-430 72.50
PAGE ALERT 4444	AUDIO TECHNICA ATH-7 94.90
THEFT ALERT 500A 89 90	PIONEER SE 205
AIRBUSTERION GENERATOR . 64 90	SONY MDR-3 34 50
PANASONIC TR1000P (11/2 TV) 249 00	
	MISCELLANEOUS
CARTRIDGES	BIC FM-6 BEAM BOX 24.90
SHURE M91ED	BIC FM-8 BEAM BOX 34 90
SHURE M95ED	BIC FM-10 BEAM BOX 64 90
PICKERING XV 15/4OOE 24 95	CASIO C 80 Cal/Watch 44 90
FICKERING AV 15/400E 24 95	CASIO ML-81 CALCULATOR 31.95
	CHESS CHALLENGER X7 87.90
WE ALSO STOCK AUDIO TECHNICA, EMPIRE.	BACKGAMMON CHALLENGER 85 90
STANTON, ADC. AT LOWEST PRICES	SONY IPSL2 PORTABLE STEREO 179 96

HOW TO ORDER: For shipment within 48 hours, send money order, certified check, cashier's check. Master Charge or Visa, finctude card number, expiration date and signature.) Shippingfinsurance charge is 5% of total purchase or \$3.95 minimum (\$5.00 additional for orders outside Continental U.S.) N.Y.S. residents, add tax. No C.D.D. All merchandise 100% guaranteed, brand new and factory free?

ORDER TOLL FREE (800) 221-8180

customer Service Hot Line (212) 233-0857



23 PARK ROW, NEW YORK, N.Y. 10038 DEPT. SR SEND FOR OUR 200 PAGE FREE CATALOG



Chevy Chase Sings?

HEVY CHASE, as an actor and a comedian, has a shot at becoming the Cary Grant of the Baby Boom generation, so it's not surprising that people tend to forget he has solid musical credentials as well. His work in Lemmings, the National Lampoon stage show, and in his TV special showed him to be quite a good drummer and an excellent organist in the Jimmy Smith style. On his new Arista album, however, Chase restricts himself to singing, letting a group of expensive New York session cats cavort behind him while he satirically butchers a number of pop-music sacred cows. The result is one of the most thorough trashings of contemporary radio fodder since the Lampoon's "Goodbye Pop" album back in 1976. The laughs are intermittent, as they generally are in hard-core satire, so this disc is unlikely to catch on with the Cheech and Chong crowd. But if there's any justice, it will at least wind up a cult favorite.

Among the high points: a Let It Be apparently performed by Minnie Mouse on belladonna, my pick as the ultimate cover

version of a Beatles song (there's no need ever to do another); a Donna Summer takeoff that seems to have been recorded in an obstetrics ward; a rewrite of Randy Newman's Short People that extolls, at length, the virtues of such tiny titans as Mason Reese; and a Bob Marley parody that skewers the white audience's patronizing romanticization of Rastafarian dogma (about time, too). There are also several well-deserved and deadly accurate shots at both New Wave and disco. Satire may be, as George S. Kaufman observed, what closes on Saturday night, but at my house this record sounds good any day of the week.

-Steve Simels

CHEVY CHASE. Chevy Chase (vocals); instrumental accompaniment. Nat'l Anthem; Short People; Never Never Gonna Sing for You, I Shot the Sheriff; Let It Be; Love to Have My Baby; Sixteen Tons; Wild Thing; Rappers' Plight. ARISTA AL 9519 \$7.98, @ A8T 9519 \$7.98, @ ACT 9519

Bunny Sigler's Once Is Not Enough just sounds like a hit with its well-shaped melody, sweet ensemble singing, and first-rate production. The O'Jays have broken no new ground here; they just sound great.

RECORDING OF SPECIAL MERIT

JOHN OTWAY: Deep Thought. John Otway (vocals); instrumental accompaniment. Body Talk; D.K. 50/80; Crv Crv, and nine others. STIFF USE 5 \$7.98.

Performance: Er . . . unique Recording Okay

John Otway is a certifiable English eccentric in the great tradition. His voice suggests someone having his eyes gouged out. his songs are totally off-the-wall concoctions-there's one here called Beware of the Flowers (Cos I'm Sure They're Gonna Get You, Yeh . . .)—and on stage he carries on like a contortionist with a terminal rash I find him utterly charming. This album, which collects a number of his European hits and near hits, is not only an unfettered delight but the greatest record for clearing unwanted late-night guests out of your home since Marty Robbins' immortal "Gunfighter Ballads and Trail Songs." It's not for all tastes, to be sure, but if you're the kind of weirdo who thought the Bonzo Dog Band was just too commercial, Otway may be your man.

RECORDING OF SPECIAL MERIT

TEDDY PENDERGRASS: TP. Teddy Pendergrass (vocals); vocal and instrumental accompaniment. Is It Still Good to Ya; Take Me in Your Arms Tonight; I Just Called to Say; Can't We Try; Feel the Fire; and three others. PHILADELPHIA INTERNATIONAL FZ 36745 \$8.98, © FZA 36745 \$8.98, © FZT 36745 \$8.98.

Performance: His best Recording: Very good

Teddy Pendergrass' image as a super-macho masher has tended to obscure consideration of the talent behind that image (which drives some women to frenzy while leaving others, me among them, unaffected if not hostile). But the power and downright searing soulfulness he exhibits on this new album are bound to sweep away all reservations. Not since the days of the late Otis Redding has a male singer been capable of dredging up such delightfully uncontrollable gut responses. Pendergrass also displays an attractively sweet side on such ballads as Can't We Try and Peabo Bryson's wonderful Feel the Fire. The opener, Ashford and Simpson's Is It Still Good to Ya, is an emotional kaleidoscope that surpasses even the excellent original. In future it won't be so easy to put this guy down. He's just that

POLYROCK. Polyrock (vocals and instrumentals). No Love Lost; Green for Go; Bucket Rider; Go West; Your Dragging Feet; Romantic Me; and five others. RCA AFL1-3714 \$7.98, © AFK1-3714 \$7.98.

Performance Apt Recording Good

To be honest, I don't particularly trust music like this. Theoretically, Polyrock's brand of minimalist musing should make a degree of sense to me, since I've been quite taken with some of the "serious" Philip Glass stuff that inspired it (Glass, by the way, coproduced the record and plays keyboards on several tracks). Moreover, lots of great rock-and-roll, from the Fifties on down, has been harmonically limited, repetitive, even hypnotic. So what's my problem with Polyrock? I'm not completely sure, but I suspect it's that the band's motivating concept (like that of most of the SoHo art bands) is not in the rock tradition but rather an aspect of Oriental music-in fact, the same old songand-trance shtick pioneered by the Sixties San Francisco outfits, most notably the Grateful Dead. I'm sure Polyrock didn't set out to become the Dead of the Eighties (these guys are post-modernists, after all), but despite what at first appears to be a totally different musical idiom, it seems to me that that's what they've achieved. So I say it's wallpaper and to hell with it.

QUINCY. Quincy (vocals and instrumentals). Turn the Other Way Around; Just a Tragedy; Critics' Choice; Don't Knock on My Door; and five others. COLUMBIA NJC 36471 \$5.98, © NCT 36471 \$5.98.

Performance: **Good** Recording: **Good**

Quincy is a New Jersey band that sings in British accents and draws its inspiration

from British Sixties pop and current New Wave. Jersey bands have been nothing to sneer at since Bruce Springsteen, and Quincy has polish and fervor. But their material, while not really bad, too often barely escapes being pedestrian. They need to see a little more of the world outside New Jersey, and they need to work harder at their writing. Perhaps a road tour before their second album will make the difference.

RECORDING OF SPECIAL MERIT

MINNIE RIPERTON: Love Lives Forever. Minnie Riperton (vocals); vocal and instrumental accompaniment. Here We Go; Strange Affair; Give Me Time; and four others. Capitol SOO-12097 \$8.98, @ 8XOO-12097 \$8.98, © 4XOO-12097 \$8.98.

Performance: **Poignant** Recording: **Good**

How poignant it is to hear Minnie Riperton sing again on this posthumous album. "Love Lives Forever" was produced as a tribute to the singer after she died of cancer last year. Riperton's vocals from an unreleased recording were lifted and mixed with new tracks by performers who were significant in her life, among them Stevie Wonder, Roberta Flack, George Benson, and Peabo Bryson. (The album jacket contains numerous brief eulogies from these and other artists.) (Continued overleaf)



Our tradition of turritable excellence continues with the fully-automatic AF 829. The exclusive Direct Control drive system combines the advantages of direct drive with the rumble-free performance of belt drive. A free-foating subchassis provides acoustic isolation. Front-mounted sensor controls offer finger "touch" operation.

Wow and flutter, less than 0.03% WRMS; rumble better than - 70 dB (DIN B). Audition the AF 829, and the rest of our full line, at finer audio dealers.

For further information, write Philips, Dept. 803, P.O. Box 6960, Knoxville, TN 37914.

PHILIPS HIGH FIDELITY LABORATORIES, LTD.

© 1980. Philips High Fidelity Laboratories, Ltd.

CIRCLE NO. 45 ON READER SERVICE CARD



THERE'S A BETTER WAY O BUY RECORDS & TAPES!

J&R Music World Mail Order Service

Incredible! That's the only way to describe J&R Music World's 5-FLOOR RECORD & TAPE WAREHOUSE, brimming with thousands of recordings from every musical category. We're **NOT A CLUB**— you buy what you want, when you want with absolutely no obligation. **Playboy Guide** said "...J&R is chock-full of nutty bargains on major-brand records and tapes, components and audio sound. Exhaustive

TREMENDOUS SAVINGS

We buy in such huge quantities that we're able to knock down prices dramatically. One look at our everyday price list will convince you of the dramatic savings we offer, EVERYDAY.

EVERY ARTIST, EVERY LABEL

Vladimir Horowitz, Zubin Mehta, Billy Joel, Paul Simon, George Benson, Fleetwood Mac, Frank Sinatra, Barbra Streisand, Tony Bennett, Bob James, Eric Gale...we've got it all, from Rock to Bach and everyghing in-between.

SUPER-FAST SERVICE

We provide same-day shipping on most or-ders by U.P.S.-you never have to sweat out long delays. And everything's guaranteed factory-fresh and free of defects.

• J&R's 200-PAGE CATALOG

It's yours free, and it contains our entire record and tape inventory, plus exciting buys on famous-name audio and video equipment

LOWEST EVERYDAY PRICES#

List Price 4.98	299 _{LP}
List Price 5.98	399 _{LP}
List	A99

List Price 11 98 699 LP List 799 Price 12.98 Price 899 LP

999

OTHER SUPER-SPECIALS OF THE MONTH!

TDK SA C-90 Cassette Tapes	2.99
All BETA L-500 Video Tapes	. 10.95
All VHS 1120 Video Tapes (Except HG)	14.95
DISCWASHER D4 System	10.95
DISCWASHER DISCKIT	34.95
DISCWASHER Stylus Cleaner, SC-2	4.99
WATTS DUST BUG	5.99
SOUNDGUARD Record Preservation Kit	5.99

If you want a Schwann Catalog to help you with your selections, send \$1.25 and we will gladly send it to you.

WE ALSO CARRY A COMPLETE STOCK OF AUDIOPHILE DIGITAL AND DIRECT-TO-DISC RECORDINGS, ALL AT SEN-SATIONAL DIS COUNTS!

HOW TO ORDER: For shipment within 48 hours, send money order, certified check, cashier's check, Master Charge, or Visa, (Include card number, expiration date and signature) Shipping/insurance charge is 5% of total purchase or 53.95 minimum (\$5.00 additional for orders outside Continental U.S.) N.Y.S. a residents, add tax. No C.O.D. All merchandise 100% guaranteed, brand new and factory tresh.

Please use a separate piece of paper to order and indi-cate whether you want LP or tape.

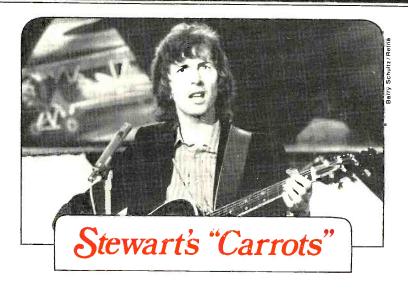
If any items are not available or temporarily out of stock, we'll send you an immediate refund.
When ordering multiple sets, please multiply price per LP by number of LP's in set.

ORDER TOLL FREE (800) 221-8180



23 PARK ROW, DEPT. R., NEW YORK, N.Y. 10038

CIRCLE NO. 74 ON READER SERVICE CARD



HE great thing about Al Stewart is that, in the High School of Life, he ignores the Sophomores. On "24 Carrots," his new Arista album, he does not do much lovin' his baby in 4/4 time and spends no time at all posing as spokesman for the next big fad. He dabbles quietly in history and a mildmannered kind of pop sociology. He keeps his language simple but manages to write about things that aren't so simple. He has evolved an instrumental back-up sound that fits his style like a French T-shirt; it's the quietest, softest-spoken rock ever, but it is rock. And here it's particularly distinctive, with some beautiful beyond-rock guitar runs allowed.

Rocks in the Ocean would be a hit. I'd say, if it weren't five minutes long (by the time this is printed there could be a shorter, single version that is a hit, if they're on the ball). But all the songs here bear repeated listening, and, like Brueghel paintings, keep showing you little things you didn't notice before. Of course, the album doesn't seem to have much variety. Paint by Numbers, in which Stewart "rocks out" and even synthesizes, is so toe-in-the-sand polite that you think of it as quieter and slower than it really is. But I think some of you Juniors and Seniors out there could get into this.

-Noel Coppage

AL STEWART: 24 Carrots. Al Stewart (vocals, guitar); instrumental accompaniment. Running Man; Midnight Rocks; Constantinople; Merlin's Time; Mondo Sinistro; Murmansk Run/Ellis Island; Rocks in the Ocean; Paint by Numbers; Optical Illusion. ARISTA AL 9520 \$8.98, ® A8T 9520 \$8.98, @ ACT 9520 \$8.98.

It is actually painful to listen to this disc and hear Riperton pluck those impossible high notes from the vocal stratosphere without interrupting the flow of her flawlessly executed solos. What is especially disturbing is the album's great sense of vitality; it is even more sassily upbeat, for the most part, than "Minnie" (Capitol SO-11936), the superb record issued shortly before her death. Yet on one track the sad reality meshes perfectly with the temper of the music: Give Me Time, a yearning ballad notable for its finely understated string backgrounds and a harmonica solo from Stevie Wonder that echoes the element of entreaty in Riperton's splendid singing. Under the circumstances, the title is wrenchingly ironic. "Love Lives Forever" is a bittersweet reminder of the treasure we lost with Minnie Riperton's death. It is good to have this one last addition to her musical legacy.

DEVADIP CARLOS SANTANA: The Swing of Delight. Devadip Carlos Santana (guitars, percussion, vocals); Wayne Shorter (soprano saxophone); Herbie Hancock (keyboards); Ron Carter (bass); other musicians. Swapan Tari; La Llave; Gardenia; Golden Hours; Jharna Kala; and four oth-

ers. Columbia O C2 36590 two discs \$9.98.

Performance: Swing? Delight? Recording: Excellent

Remember Santana, the San Francisco group that hit the charts with Evil Ways and Jingo some ten or eleven years ago? Well, I'll take those early Columbia albums by the group over most of Carlos Santana's efforts of recent years, and I'll take about anything over three-quarters of "The Swing of Delight." Producer David Rubinson explains in the notes that this is a double album because the clarity of digital recording would have been impaired if the four short sides had been squeezed onto one LP, but the sad fact is that there is not enough decent material here for even one record. The quarter that is listenable is all on the last two sides: Gardenia, the cut of greatest jazz interest, is saved by the performances of Wayne Shorter, Tony Williams, and Ron Carter; Golden Hours is a lively south-ofthe-border romp featuring good input from flutist Russell Tubbs; Shere Khan, the Tiger, is a low-key Wayne Shorter tune that ends the album in a far more palatable manner than it began. If you don't mind all

the dead weight, by all means enjoy what there is to enjoy here, but it sounds to me as if the inspiration of Sri Chinmoy—the guru Santana shares with John McLaughlin and Alice Coltrane—has worn out.

C.A.

SEA LEVEL: Ballroom. Sea Level (vocals and instrumentals). Wild Side; School Teacher; Comfort Range; Anxiously Awaiting; and five others. ARISTA AL 9531 \$7.98.

Performance: Low tide Recording: Very good

The seven bearded young men who make up Sea Level (put together by Chuck Leavell, hence the name-get it?) actually seem to be in search of a new level of inarticulateness. Even with the full text of the lyrics provided, it's hard to follow what they're trying to say about cruising, aging, strutting, or any of the other subjects they could be said to trip up on rather than tackle. There's one song about a schoolteacher ("Dynamite in the lunchroom, straight through the study hall") that reminded me of the big kids in my math class in junior high who used to throw spitballs from the back of the room, as if algebra weren't already giving us enough trouble. As for the music, it's all the same series of descending chromatic notes—a surly, delinquent dying fall. These fellows should see their guidance P.K.

PAUL SIMON: One-Trick Pony (see Best of the Month, page 81)

THE STATLER BROTHERS: 10th Anniversary. The Statler Brothers (vocals); instrumental accompaniment. Don't Forget Yourself: The Kid's Last Fight; We Got Paid by Cash; Charlotte's Web; and six others. MERCLRY SRM-1-5027 \$7.98, ® MC8-1-5027 \$7.98.

Performance **Quintessential Statlers** Recording. **Good**

This album marks a milestone in the Statlers' association with Mercury; the group has been around longer than ten years. It has a sort of retrospective quality despite its all-new material, for it puts together various examples of what the Statlers do. There are a couple of straight songs, a country classic (Jimmy Davis' Nobody's Darlin' but Mine), a gospel number, a comment on the industry (Nobody Wants to Be Country: "They'll all be in clover/When they finally cross over"), and some of the Statlers' own kind of gimmick songs, including the autobiographical We Got Paid by Cash (they were Johnny Cash's protégés in the early days) and, of course, Charlotte's Web (I'd love to see the look on E. B. White when he hears this dude). The Statlers have the same robust, gospel-derived sound as always, and the backing is Jerry Kennedy's familiar jangle. The only quirk here is the inclusion of Bob Merrill's The Kid's Last Fight, a crazed weeper recorded eons ago by Frankie Laine. "10th Anniversary" may be a sampler, but it's a pretty good one. Even has a touch of class here and there, and the boys never sang better. N.C.

BARBRA STREISAND: Guilty. Barbra Streisand, Barry Gibb (vocals); vocal and

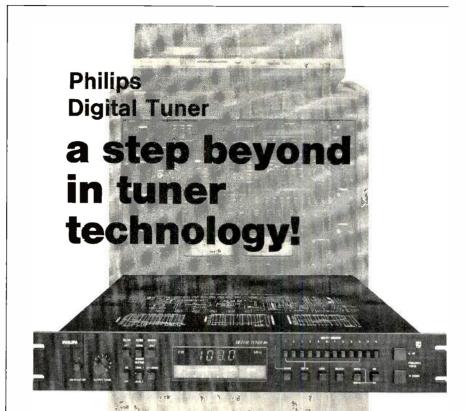
instrumental accompaniment. Guilty; What Kind of Fool; Life Story; Promises; Run Wild; Never Give Up; and three others. Co-LLMBIA FC 36750 \$8.98, © FCA 36750 \$8.98, © FCT 36750 \$8.98.

Performance. A piece of cake Recording Excellent

Here's a bulletin from the sovereign state of Streisandia with the latest word from its ruler, Empress Barbra I (and only). Her Majesty is feeling playful this month and has decided that it would be nice for her subjects to hear her in a lighter mood than is her usual wont. To that end she has recorded nine songs by, and consented to form a vocal duct in two of them with, a Mr. Bar-

ry Gibb of the House of Bee Gee. She has graciously allowed him to be photographed holding her closely on the front, back, and two inside covers—and even on the record sleeve itself. His name, however, appears only on the back of the recording jacket, in modest-size type as producer and in footnote-small type as her partner in the title song and What Kind of Fool.

In Guilty, a sexy little time killer, they sound like Mae West and Don Knotts out on a spree, with Her Majesty interlacing Mr. Gibb's quavery solos with a series of fine Brooklynese chortles. In What Kind of Fool she has deputized Mr. Gibb to provide the imagined singing equivalent of someone named Redford, a film actor she once



As advanced as our turntables!

Stereo Review states, "Short of being interfaced with an external computer, it is hard to imagine any FM or AM tuning mode that this tuner cannot handle." We couldn't have said it better! Because the Philips AH 180 utilizes the ultimate in precision tuning — a microprocessor controlled PLL frequency synthesizer — to offer unlimited operating flexibility.

Instantaneous frequency selection! Key-in tuning, automatic search, manual search... even memory tuning with twelve presets. The AH 180 is so flexible that even possible future FCC changes to channel spacing can be easily accommodated with the push of a button. That's sound performance. And you'll find it in every Philips component. Audition our full line today at finer audio dealers.

For additional information write Philips, Dept. 803, P.O. Box 6960, Knoxville, TN 37914.

PHILIPS HIGH FIDELITY LABORATORIES, LTD.

© 1980, Philips High Fidelity Laboratories, Ltd.

CIRCLE NO. 46 ON READER SERVICE CARD

^{*}Stereo Review, April, 1980

worked with. In content, What Kind of Fool resembles The Way We Were, which blew the charts wide open several years ago.

Her Majesty sings the other seven songs, including the one chosen for early airplay, Woman in Love, on only one or two of her usual sixteen cylinders, and the results often have much charm. Compared to the Empress' traditional donations of hot-fudge-and-walnut sundaes to her subjects, this album is a piece of angel cake. Needless to say, we're all very grateful, and this recording can be purchased at almost any record shop. Even without an appointment. P.R.

SWEET: Sweet VI. Sweet (vocals and instrumentals). Sixties Man; Too Much

Talking; Tell the Truth; At Midnight; Hot Shot Gambler; Give the Lady Some Respect; and four others. CAPITOL ST-12106 \$7.98, © 4XT-12106 \$7.98.

Performance: **Disappointing**Recording: **Good**

This is not the kind of album I've come to expect from Sweet. The band seems to be operating here on half power, or maybe they've just mellowed out too much. Either way, they've lost their sense of humor, which was always one of their best assets. Sixties Man starts to make a statement and doesn't complete it. Is the main character reactionary, foolish, naïve, sentimental, or

just incapable of living in the present? All we're told is that he and his girl come from the same era. The rest of the material is standard Tin Pan Alley, and everything is done halfheartedly—not, it would appear, from a lack of inspiration but from an excess of comfort that borders on laziness. What's happened? Has Sweet gone California? Or is it that they just don't care any more?

STEVE TIBBETTS: Yr. Steve Tibbetts (guitar, keyboards, mandolin, dobro, sitar, kalimbas, percussion); other musicians. Ur; Here Come the Sphexes; Ten Years; One Day; Three Primates; and three others. FRAMMIS 1522-25 \$7.98 (from Frammis Enterprises, P.O. Box 6164, Minneapolis, Minn. 55406).

Performance: Mildly far out Recording. Clear

This isn't quite the kind of thing David Grisman or John Fahey does, but I suspect they have cornered what little market there is for this whole realm of, uh, whatever one calls it. Almost entirely acoustic, Steve Tibbetts' music flirts with jazz and with whimsey and is vaguely programmatic. He toys with percussive effects more than the others in this realm do. But "Yr" really needs a movie or something to go with it—maybe one of those TV-screen light shows they can do with computers. Otherwise, it just doesn't seem relevant to much of the known world.

THE TREMBLERS: Twice Nightly. The Tremblers (vocals and instrumentals); other musicians. You Can't Do That; Steady Eddy; She Was Something Else; I'll Be Taking Her Out Tonight; Little Lover; and six others. Johnston JZ 36532 \$7.98, © JZT 36532 \$7.98.

Performance: Mild fun Recording Excellent

The Tremblers, in case you haven't heard. are fronted by Peter Noone, who used to be the Herman of Herman's Hermits at the height of the British Invasion. He looks even younger than he did in 1965, believe it or not, but his singing voice has grown up a bit and he remains as ingratiating as ever. The band is not half bad: vaguely New Wave-ish in a commercial way, somewhere between Power Pop and Tom Petty (a couple of Petty's Heartbreakers helped out with the project, in fact). There's nothing earthshaking going on here-Noone still has music-hall tendencies—but it should be interesting to see how the Tremblers develop if they stick together.

"AT THEIR PRICE, THEY ARE SIMPLY A STEAL." AUDIOGRAM

"If you're shopping for stereo our advice is not to buy speakers until you've heard the Polks." <u>Musician</u>

"Polk Audio Monitor Speakers (are) so vastly superior to the competition in their price range we had to pass the information along...the design produces a remarkably well integrated and coherent sound that adapts itself ideally to all kinds of music...and produce the kind of open uncolored perfectly imaged sound we thought began at twice the price and required huge amounts of amplification...(The Polks) will benefit from state-of-the-art electronics but sound quite magnificent with a good mid-powered popular brand receiver...They make the popu-

lar speakers in their price range seem dim, colored, boxy, unmusical and just plain insufficient...If you're shopping for stereo our advice is not to buy speakers until you've heard the Polks" MUSICIAN MAGAZINE

Polk Audio loudspeakers priced from less than \$125 each to less than \$400 each, are available at the finest hi-fi stores. Use the Reader Service Card for complete information and the location of the Polk Audio dealer nearest you.

Polk Audio, Inc. 1205 S. Carey St., Balto., Md. 21230



INCREDIBLE SOUND -- AFFORDABLE PRICE

CIRCLE NO. 48 ON READER SERVICE CARD

ELVIS

ACCORDING to an RCA spokesman, and contrary to what you read in our October review, it has been decided that the original limited-edition pressing order of 250,000 copies for the eight-disc Elvis Presley "twenty-fifth anniversary" package will hold firm—that's all there's going to be. Let's see now, \$69.95 × 250,000....

-Ed.



GEORGE BENSON: Give Me the Night (see Best of the Month, page 85)

RAY BROWN/JIMMY ROWLES. Tasty! Jimmy Rowles (piano); Ray Brown (bass). A Sleepin' Bee; My Ideal; Come Sunday; Close Your Eyes; and four others. CONCORD JAZZ CJ-122 \$7.98.

Performance. **Delicious** Recording: **Excellent**

The cover photograph of this one shows a jar of honey beside a small basket of brown rolls (get it?—Brown/Rowles). It's a simple, nourishing snack and therefore an appropriate image for the piano-and-bass duets within. A program of eight familiar tunes, ranging from Richard Whiting's 1930 hit My Ideal to Duke Ellington's Come Sunday (from Black, Brown and Beige) to Charles Chaplin's Smile, is covered in dialogues these composers would surely have approved of. So will any listener with an ear for the lyrical.

C.A.

RECORDING OF SPECIAL MERIT

DEXTER GORDON: Landslide. Dexter Gordon (tenor saxophone); Dave Burns, Tommy Turrentine (trumpet); Kenny Drew, Sonny Clark, Sir Charles Thompson (piano); Paul Chambers, Al Lucas, Ron Carter (bass); Willie Bobo, Philly Joe Jones (drums); other musicians. Second Balcony Jump; Blue Gardenia; Love Locked Out; and four others. Blue Note LT-1051 \$7.98, ® 8LT-1051 \$7.98, © 4LT-1051 \$7.98.

Performance. Left over, but right on Recording: Good early stereo

Obviously cashing in on the recent Columbia-ignited resurgence of Dexter Gordon, the folks at Blue Note have searched through their tape vault and come up with an album's worth of unreleased performances from 1961 and 1962. Happily, this is not another case of scraping inferior leavings off the reels, for every one of these seven tracks-representing three different sessions and sets of personnel—deserves to be heard. The title tune is from a 1961 session. the rest of which appeared on an album entitled "Dexter Calling" (BLP-4083); the remaining six are from two 1962 dates. The later of these-represented by Blue Gardenia, Six Bits Jones, and Second Balcony Jump-presents Gordon in the most satisfying context. The quintet includes trumpeter Dave Burns, a Savoy Sultans alumnus who was among the earliest Dizzy Gillespie disciples; pianist Sonny Clark, a fine Bud Powell apostle whose work enhanced the Buddy DeFranco Quartet in the mid-Fifties; and bassist Ron Carter and drummer Philly Joe Jones, two rhythm men who surely need no introduction. But all three settings yield worthy Gordon performances, which are most intriguing because they are demonstrations of the influence the immediate musical environment can have on a seasoned player.

C.A.

RECORDING OF SPECIAL MERIT

DONALD LAMBERT: Harlem Stride Classics. Donald Lambert (piano). Ain't Misbehavin'; Old Fashioned Love Keep Off the Grass: If Dreams Come True; Carolina Shout; Daintiness Rag; Jingle Bells; I'm Just Wild About Harry; and seven others. Pumpkin 104 \$7.98 (from Pumpkin

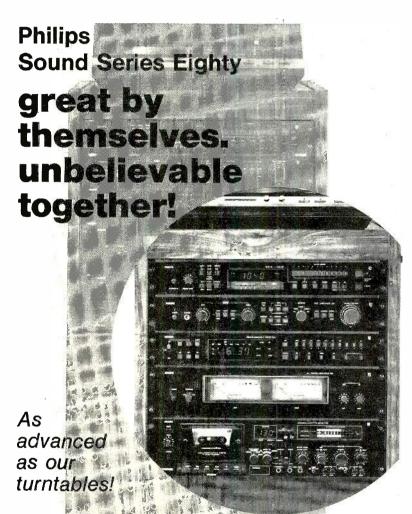
Productions, Inc., P.O. Box 7963, Ludlum Branch, Miami, Fla. 33155).

Performance: **Great**Recording: **Webcorian**

DONALD LAMBERT: Classics in Stride. Donald Lambert (piano). Moonlight Sonata; Anitra's Dance; As Time Goes By; Sextet from "Lucia"; Liza; and nine others. PUMPKIN 110 \$7.98 (from Pumpkin Productions, Inc., P.O. Box 7963, Ludlum Branch, Miami, Fla. 44155).

Performance Uneven
Recording: Wollensakish

Donald Lambert, who died in 1962, chose to stay out of the limelight that often beck-



Individually – and collectively – Phillips' Sound Series Eighty establishes new parameters in audio excellence. Each component offers the advanced features you'd expect. And more! For openers, there's the virtually incest ucible power amp (AH 380); the "spec"-tacular preamp (AH 280); the digital tuner with microprocessor controlled synthesis tuning (AH 180); and, the 3 head, metal-capable cassette deck (N 5788). Audition these Sound Series Eighty components, and the rest of our full line, at finer audio dealers.

For further information, write Philips, Dept. 803, P.O. Box 6960, Knoxville, TN 37914.

PHILIPS HIGH FIDELITY LABORATORIES, LTD.

© 1980. Philips High Fidelity Laboratories, Ltd.

...THEY HEARD WHAT THEY'VE BEEN MISSING!

". . . there isn't anything I've heard that improves the sound quality as much as the 801 does. Especially for such an economical cost."

J. Hagen, Milwaukee, WI

"... In all of my more than 30 years as an Audio engineer, I have never heard anything that compares with the results I obtained, using the unit. I am the retired Chief Audio-Video Engineer for the Oberlin College Conservatory of Music, at Oberlin, Ohio and I can attest to the fact that the more than a half million dollars worth of professional and 'super' audio equipment that I designed and installed for the Conservatory of Music there, did not match the results obtained in using your '801' unit in connection with a new cassette recorder!"

with a new cassette recorder!"

H. White Bradenton, Fla.

Audio Recording Engineer/

Consultant

"... I have a small system in my office, and someone here suggested I try it—!!! What in the world have you got there? IT WORKS!! Fantastic! If it works better the better the system, I'm looking at heart-arrest on my \$16K home system!"

J. Loyd, Colorado Springs, Co.

"I must say before anything else that it's the greatest piece of equipment I own! Every advertising claim made was true, which is quite unbelievable, until you hear the Imager in operation. I will never turn it off."

C. Zilavy, Vineland, NJ

"On the basis of subjective experience, I can attest that the Omnisonic product works quite well. It seems to remove virtual sound sources from the plane of the loudspeakers and distribute them at arious positions in the listening pace, adding a sense of front-to-back dimension at the same time. At times, some sounds appear to come from in back of the listener, which is a startling effect, given that sound is being radiated only from the front. Another effect the device produces is a greatly increased sense of ambience or 'spaciousness.'"

Harold A. Rodgers
Executive Editor
Popular Electronics
July 1980

What better Holiday gift for yourself or your friend(s) than the 801 OMNI-SONIX IMAGER! Call or write today! (See opposite page.)

₽ 1980 OMNISONIX, LTD.



Split Enz: "True Colours"

On the cover of "True Colours," the new Split Enz album from A&M, there is a prominent sticker informing prospective buyers that they can "See True Colours on this Laser-Etched Graphic Record!" Well, it's true that the disc goes a way beyond basic black, since laser-etched patterns in the vinyl catch the light and scatter it back in iridescent designs. And there is actually a utilitarian reason for it: these patterns can't be duplicated easily and will thus discourage counterfeit pressings. It still looks like a gimmick, but it shouldn't prejudice you one way or the other regarding the musical content of the disc, which I'm happy to say is always interesting and sometimes close to excellent.

I don't know what it is about the British educational system, but it still manages to produce literate people, and from all classes. Tim Finn does most of the writing for Split Enz; his description of a shy, rather bland fellow in *Nobody Takes Me Seriously* is concise but thorough, and his explo-

ration of the role of fear in a love affair in I Got You is straightforward and immediate. He came awfully close to writing one of the most dramatic ballads of the last ten years in I Hope I Never (Have to See You Again); the melodic construction is terrific, but the lyrics are just a shade too clinical and expedient. Another standout here is brother Neil Finn's Missing Person, a gloomy, mystical description of a wish to escape from pain. There's enough of this sort of thing to convince me that Split Enz really doesn't need graphic gimmicks. Their songs will etch themselves in your memory with or without laser technology. —Joel Vance

SPLIT ENZ: True Colours. Split Enz (vocals and instrumentals). I Got You; Shark Attack; What's the Matter with You; Double Happy; I Wouldn't Dream of It; I Hope I Never; Nobody Takes Me Seriously; Missing Person; Poor Boy; How Can I Resist Her; The Choral Sea. A&M SP-4822 \$7.98.

oned him; he spent his last years playing at Wallace's Bar, an obscure establishment in New Jersey to which fans from all over the world flocked for an earful of lightning-fast stride piano. He was fond of striding the classics; his one Bluebird recording session (in 1941) consisted of works by Grieg, Wagner, Massenet, and Donizetti, and, as these two Pumpkin releases make evident, he laid some pretty wild versions of the classics on the crowd at Wallace's. The material was recorded at the bar, and the technical quality leaves something to be desired, but apart from the one for Bluebird, Lambert made only one other studio recording, a 1961 date from which a handful of takes have appeared on the Solo Art label.

"Harlem Stride Classics," first released in 1977, is clearly the better of the two records. Some of the recordings go back to 1959. The program is straight out of the repertoires of Fats Waller and James P. Johnson, two masters Lambert obviously greatly admired, and I defy anyone to be undazzled by Lambert's work on *Daintiness Rag, Russian Lullaby*, and Eubie Blake's *I'm Just Wild About Harry*.

While I'm just wild about "Harlem Stride Classics," I have some reservations about the follow-up, "Classics in Stride." I suspect that much of this material was recorded after Lambert's stroke, or it may simply be what was left over after the best (Continued on page 108)

DD YOU HEAR WHAT YOU'VE BEEN MISSING?

Listen with an 801 Omnisonic Imager,™ a quantum leap forward in sound reproduction!

OMNISONIC IMAGERY" IS HERE!

OMNISONIC IMAGERY" IS HERE!

Our innovative state of the art electronics restore the acoustical time-field characteristics and angular sonic positioning of the original recorded signal. The 801 analyzes the input signal and determines relative positions of instruments and vocals on the original source. They are then placed about the listening space creating the physiclogical sensation of three-dimensional sound – what we call omnisonic imagery" – using only two speakers! Sound appears to come from many sources within the listening space. A common reaction is to look about for other speakers. And you don't have to sit rigidly fixed at a focal point between the speakers to enjoy the 801! *2 or more speakers!

LIFETIME WARRANTY!

You get a lifetime warranty on the active circuitry and one year on all other components (case and line cord excluded) provided your 801 is used as specified.

NEW DIMENSIONS IN STEREO AND MONO!

•)

Stereo with an 801 Omnisonic Imager" creates a vivid feeling of "being there". Zepending upon the source, the system, and the listener, sound appears to surround you, emanating from well beyond the speakers, above and below, near and far. The music is so alive it envelopes you. It is the sounc of the future

From mono, the 8C1 creates omnisonic dimensional sound. You can incut an AM or TV source (from the earphone jack on your set) via the 801 and into your stereo system. There is a "live" sound with depth and clarity, as well as separation. Television sound is vastly improved with the 801!

RETROFITS TO MOST STEREO SYSTEMS!

Any system with an internal tape loop can connect to the 801. Component systems can insert the 801 between pre-amp, other accessories, and the amplifier. There's a built-in tape monitor button on the 801, so you don't lose your existing tape monitor tacility. The 801 works on any stereo or mona source - FM, tapes, records, AM, TV. You can record selections via the 801 and replay them on conventional home-use stereo equipment.

Now that you've reac all about our 801 Omnisonic Imager", don't you think it's time to hear one? If we have stimulated your nterest in seeking the finest sound reproduction in the purest sense, please ask your dealer for a live demonstration. If you have any questions, or need to know the name of the dealer nearest you, call or write to:

Qmnisonix,ltd.

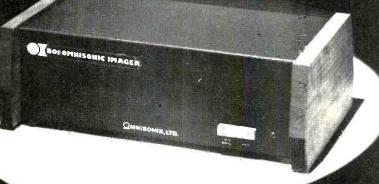
P.O. Box 430 Northford CT U.S.A. 06472

Call TOLL FREE 800-243-0688

In Conn. Call (203) 239-6213

Omnisonic Imager", Omnisonic Imagery", Omnisonic Dimensional Sound", and HBX" are trademarks of Omnisonix, Ltd. All rights raserved.

© 1980 OMNISONIX, LTD.



DON'T MISS: Highway HiFi Imagery Tith The 801-A Auto Unit Coaring Soon!

was culled for the first release. Nonetheless, there is still plenty of meat on this bone. All four selections are good, *Anitra's Dance* outstanding. If you have not yet experienced Donald Lambert, get these albums—and brace yourself.

C.A.

RAMSEY LEWIS: Routes. Ramsey Lewis (piano, Fender Rhodes); instrumental accompaniment. Whisper Zone; Tondelayo; Looking Glass; Crystals in Sequence; Hell on Wheels; and five others. COLUMBIA JC 36423 \$7.98, @ JCA 36423 \$7.98, @ JCT 36423 \$7.98.

Performance: Excellent Recording: Good

If Ramsey Lewis weren't as richly gifted an instrumentalist as he is—his keyboard work is genuinely dazzling—he'd be hard put to survive the flashy chaos of this album. Most of side two is devoted to the work of Allen Toussaint as producer and songwriter, and the result is a New Orleans gumbo that purports to be New Jazz. Don't believe it. The other six tracks were produced and arranged by Larry Dunn of Earth, Wind & Fire. Unfortunately, they are as pretentious and lifeless as Lewis' playing is elemental and vital. This is an album for fans who boast patience among their virtues. P.R.

RECORDING OF SPECIAL MERIT

SAM RIVERS: Contrasts. Sam Rivers (flute, soprano and tenor saxophones); George Lewis (trombone); Dave Holland

(bass); Thurman Barker (drums, marimba). Circles; Zip; Solace; Dazzle; and three others. ECM ECM-1-1162 \$8.98, © M5-1-1162 \$8.98.

Performance: Superb contrasts
Recording: Excellent

"Contrasts," Sam Rivers' new ECM album, is bursting with originality, from the upside-down photograph of a ceiling that graces the cover to the very last note played within. The seven compositions are all by Rivers, and they reflect the many facets of his music, not to mention his awesome instrumental skill. The quartet is a brilliant one, and if George Lewis' solo album (Sackville 3012) ignited a spark of enthusiasm in you, his pyrotechnics here on Dazzle ought to start a five-alarm fire. All the praise I have had for Sam Rivers in the past can now be underlined. This set will not disappoint the venturesome, but you don't have to be that to enjoy it. It is a stunning rainbow of musical inclinations.

COLLECTION

I REMEMBER BEBOP. Al Haig, Duke Jordan, John Lewis, Sadik Hakim, Walter Bishop Jr., Barry Harris, Tommy Flanagan, Jimmie Rowles (piano); instrumental accompaniment. A Night in Tunisia; Salt Peanuts; Lady Bird; Casbah; Afternoon in Paris; Django; Yardbird Suite; My Little Suede Shoes; Star Eyes; Ornithology; Epistrophy; In Walked Bud; Strictly Confidential; I'll Keep Loving You; Venus de

Milo; and twelve others. COLUMBIA C2 35381 two discs \$9.98.

Performance: **Well remembered** Recording: **Good**

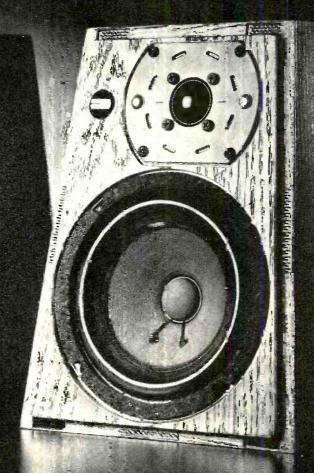
If you take eight outstanding pianists with roots in bop and have them play twenty-seven familiar bop compositions, the result ought to be interesting at the very least. That is exactly what French producer Henri Renaud did during a visit to New York in November 1977, and the result, "I Remember Bebop," is often quite outstanding.

Except for Jimmie Rowles, who performs "impressions of the Miles Davis Nonet" (actually three tunes recorded by Davis-led orchestras for Capital in 1949), each player was assigned compositions associated with one of the bop movement's star performers: Dizzy Gillespie, Tadd Dameron, Charlie Parker, Bud Powell, Thelonious Monk, and John Lewis. In the case of Lewis, composer and performer are one and the same, but I find his input to be the album's weakest spot. The rest is pure delight. I found particularly intriguing the three Parker tunes, which find a new life in the hands of Sadik Hakim; the powerhouse performances of Walter Bishop Jr., whose subject also is Parker; and Al Haig's sensitive exercises on four well-known themes by Dizzy Gillespie. One caution, however: this is an album that should be listened to a little bit at a time. These are rich servings that should not merely pass across one's plate.

(Continued on page 114)



When it comes to performance, size doesn't count...anymore.



Up until bow the sound quality of mini-speakers was exactly what you probably imagined...minimal Minimal bass response. Minimal power handling capacity. Winima definition.

handling capac by Minima definition.
That was and ADC perfected the incredible new M5-550 min speaker system. The only thing small about it, is its size.

Here's why. Unlike conventional mini-system drivers that can overhead and distort under high power, both the MS-650's 1" polyamide soft dome tweeter and 6½" high compliance woofer are specially cooled with femofluid in the voice coil gap for better frequency response, lower distortion and greater power handling.

They're so effective the new MS-650 mini-speaker system can handle up to 150 watts of power! Eurwhat's even more emazing sthat while it can handle all that power, it doesn' need it. A mere 20 watts input produces an awesome 02d3 output. That's enough to wake the neighbors. And the whole neighborhood. But that's not all.

To further enhance sound quality

the MS-630's fecture an effective combination of first and higher order crossover networks for a smooth, natural transition between high and low frequencies. That's a big difference between the crossover systems most mini-speakers use.

But the differences con't stop there. The MS-550's unique non-parallel cabinet sides were computed to allow a gracual termination of midrange frequencies at the cabinet edge. The sounc "cu'll hear will be more natural. It all levels Even the front face is slaped for improved phase coherency. To mir mize the adverse effects of cabinet resonances, the MS-650 scanstructed of Isapi r T.F.M., a specially formulated non-resonant materia.

The new ADC MS-650 minispeaker system. The only thing small about it is its size.

For your nearest ADC dealer or more information call (800) 243-9544 or write Aud o Dynamics Corporation, Pickett District Road New Milford, Connecticut 06776.

MS650 ADC
MINI-SPEAKER ABCOMPANY
CIRCLE NO. 3 ON READER SEFVICE CARD

Aloka



New Wave runaways Trini Alvarado and Robin Johnson

"Times Square" (The Movie)

HE movie *Times Square*, so the hype goes, is Robert Stigwood's attempt to do for New Wave rock what Saturday Night Fever did for disco and Urban Cowboy did for Nouveau Country. If one is cynical, of course, one might define "do" in this case as "turn into a bad joke" or even "kill off completely." But let's assume, for a moment, that the Times Square soundtrack album, which I have before me, really does come to dominate the charts in the manner of Fever or Cowboy. Will this mean that teenagers everywhere will suddenly cut their hair spiky short, abandon their Grateful Dead records, and affect cockney streeturchin accents? Will they renounce Billy Joel and Fleetwood Mac for a brief, passionate affair with XTC or the Cure?

I doubt it. There is, after all, a reason why Heavy Metal is making yet another comeback, why a Christopher Cross album has gone platinum while the Clash sells only moderately well, why Charlie Daniels is getting massive commercial mileage out of jingoistic sentiments one assumed had gone out with the Spanish-American War. And that reason is simply that, at heart, the American teenager circa 1980 is as thoroughly reactionary as his parents. Consequently, New Wave seems destined to be to the early Eighties what left-leaning folk music was to the Sixties: fringe music, the stuff only the oddballs at your local high school listen to. Whether it will be vindicated in the next five years by the larger social context, à la folk in the Sixties, is a

question I would not venture a guess about, but there seems little likelihood that *Times Square* will accomplish that revolution in taste all by itself. Even if the soundtrack sells, it's unlikely to be influential for the simple reason that it's not a particularly exciting package; mainstream rock seems quite interesting by comparison.

SINCE it is a Stigwood product, it was inevitable that it would include a contribution by at least one of the Brothers Gibb, and sure enough here's Help Me!, a pleasant enough slice of contemporary r-&-b, nondisco variety, sung by Robin Gibb and Clapton-associate Marcy Levy; what it has to do with New Wave is anybody's guess. Then there are a few "oldies," Lou Reed's Walk on the Wild Side and Patti Smith's Pissing in the River, neither of which represents their creators' strongest work. To further muddle things there's a cute Springsteenish cabaret ditty by Desmond Child and Rouge, a typically execrable bit of rabble rousing by Suzi Quatro (she really should stick to Happy Days), and a duet by David Johansen and Robin Johnson (one of the film's principals) that is soulful in a blustery way but otherwise forgettable.

The rest (and there's a lot) is a motley mishmash of recent New Wave "hits," new tunes by artists associated with the movement, and extremely fake punk stuff sung by the film's female leads; it ranges from the sublime to the ridiculous and seems to have been programmed totally at random.

Must-avoids: Gary Numan's Down in the Park, one of his tuneless bits of Gay Computer Programmer melancholia; Roxy Music's Same Old Scene, in which Bryan Ferry attempts yet again to pass off singles-bar Angst as avant-garde; and D. L. Byron's remake of the Supremes' You Can't Hurry Love, which has about as much soul as a KKK bake sale. Fair-to-middling: The Ruts' Babylon's Burning, in which the Clash meets Heavy Metal with passable results; Joe Jackson's Pretty Boys, an effective but transparent rewrite of several superior songs from his two albums; and Garland Jeffrey's Innocent Not Guilty, a catchy bit of Farfisa punk that works perhaps too hard at sounding street-wise. The winners: XTC's witty, imaginative Take This Town; Talking Heads' Life During Wartime, by now a trifle overfamiliar but still kinetic and compelling; the Ramones' I Wanna Be Sedated, which remains their funniest synthesis to date of punk and bubblegum; and the Pretenders' utterly magnificent Talk of the Town, which features Chrissie Hynde's inimitably sexy vocals and a twelve-string Riff for the Ages.

HAVEN'T yet seen the film, and given its title I have no idea what bearing a New Wave soundtrack has on it; the last time I was in Times Square the indigenes with the monster radios on their shoulders were blasting disco hits. Still, it may prove to be an interesting effort; stranger things have happened (Saturday Night Fever, for instance). As an album, however, it has problems: if you have a passing interest in New Wave you already own the good stuff, and if you're interested but green the programming is mostly wrong-headed. Of course, the successful Saturday Night Fever album (aside from the Bee Gees hits and the Trammps' Disco Inferno) was also quite blatantly padded out with mediocre ephemera and nowhere near the Basic Repertoire of Disco it pretended to be, so I may be underestimating the record-buying public's curiosity about this kind of thing. Certainly it would be nice if FM radio in the provinces picked up on the better selections; I, for one, would not object if Talking Heads became as ubiquitous on the airwaves as, say, Paul Simon. Hard-core New Wavers will likely find that a horrifying prospect and will also view this set as a crass bit of commercial exploitation, but the big question remains: Is Middle America ready to clutch to its bosom this (admittedly mild) threat to the musical status quo? At the very least, it might usher in what the Chinese refer to in a venerable curse: Interesting Times.

-Steve Simels

TIMES SQUARE. Original-soundtrack recording. Suzi Quatro, the Pretenders, Roxy Music, Gary Numan, Marcy Levy, Robin Gibb, Talking Heads, Joe Jackson, XTC, the Ramones, Trini Alvarado, the Ruts, D. L. Byron, Lou Reed, Desmond Child and Rouge, Garland Jeffreys, the Cure, Patti Smith Group, David Johansen, Robin Johnson (vocals and instrumentals). RSO RS-2-4203 two discs \$13.98, @ 8T-2-4203 \$13.98, © CT-2-4203 \$13.98.

AKAI QUICK-REVERSE. FOR PEOPLE WHO HATE TO INTERRUPT A GREAT PERFORMANCE.



Just pop in the cassette and spend the rest of the night making beautiful music together.

AKAI proudly announces the GX-F60R. Another superb example of quality in reverse.

It begins with the finest record/playback head in the industry. AKAI's glass and crystal ferrite Twin Field Super GX Head. Guaranteed for over 17 years of virtually wear-free performance on any cape formulation - low-noise through metal.

You'll also find a tape transport design that's sheer engineering wizardry.

And a two-motor system to lend even

more stability.

All this, combined with specially engineered channeled tape guides, maximize tapeto-head contact in both directions for both record and playback.

Wow and flutter is

reduced to less than 0 04% V/RMS. Distortion is less than 0.7% (1000 Hz "0" VU).

Now, add AKAI's second stroke of genius, our Ouick-Reversing mechanism.

Integrated into one of the two tape guides, is an infrared device that detects the tape leader and triggers the reverse.

The result virtually no interruption in place of the usual 12 to 14 seconds of silence between sides on conventional decks.



quick-reverse:

And just in case you thought we neglected the rest of the GX-FoOR's features in search of the perfect transport system, read on.

You'll also find full-logic solenoid

controls, two-color fluorescent VU/peak bar meters, Dolby, timer record/playback and remote control capabilities.

Plus a handsomely designed hydraulically-dampened panel that artfully conceals a full host of controls.

All in all, the finest reversing cassette deck AKAI has ever built.

And guaranteed to leave you with a lot more than time on your hands.

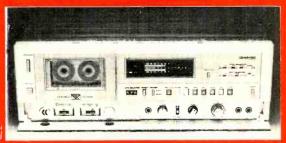
For much more information on the

GX-F60R — or our more economicallyminded CS-M40R. also metal-capable with Quick Reverse write AKAI, P.O. Box 6010, Compton, California 90224.

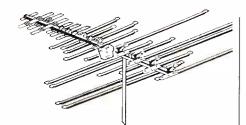
a ma Dolby Late. Inc.



Four-position tape selector.



The GX-F60R, our new Auto-Reverse, Quick-Reverse expert.



BETTER GET WINEGARD!



OUTDOOR ANTENNAS

Improve your TV picture with a new Winegard antenna. Patented design assures <u>more</u> signal . . . you get rid of ghosts, snew, weak color. Anodized, rugged, gives you strong, clear reception on all channels.

FM STEREO

Indoor antenna with solid-state amplifier reduces or eliminates multipath distortion, strengthens weak, fading stations an average of 5.6 times. Sits on or near FM tuner. Model FM-4400.



INDOOR TV-FM ANTENNA

Improves both TV pictures and FM sound. Perfect for apartments, dorms, homes. Goes up fast, easy. Complete package, including wire and plant hanger hooks. Model AT-5001.



AUTO FM STEREO SIGNAL BOOSTER

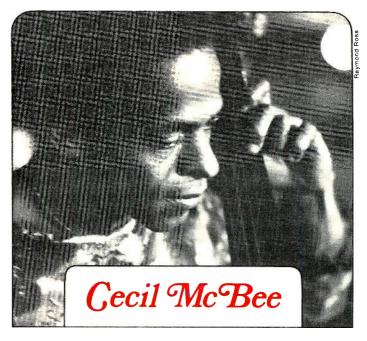
Extends range of auto FM stereo for more stations. Amplifies

signals an average of 8 times. Reduces fading. Fits under dash, with only switch visible. Model BF-8809.

Winegard: your assurance of quality and performance.

Write for the name of your Winegard Dealer.

WINEGARD®
TELEVISION SYSTEMS
® The Winegard Company
3000 Kirkwood St. • Burlington, IA 52601
CIRCLE NO. 67 ON READER SERVICE CARD



FIRST became aware of bassist Cecil McBee in the early Sixties when he was a member of Paul Winter's group, but I think I first became impressed by his playing some thirteen years ago when I heard him perform with Yusef Lateef's group at a Brooklyn concert. I wrote then that McBee gave the bass "new meaning," and it pleases me to be able to write now that he still does. The credits McBee has accumulated since coming to New York with Winter in 1964 are as numerous as they are impressive, but to grasp the scope of his talent one need go no further than his latest Inner City release, "Compassion." It stems from the same 1977 engagement at the New York club Sweet Basil that produced "Music from the Source" (Inner City IC 3023), and like that earlier release it is a set of extraordinary team efforts enriched with stunning individual statements.

Few groups today sound as fresh, generate as high an emotional charge, or leave as lasting an impression as McBee's sextet. It is as if each member were a unique piece of a puzzle, carefully placed to complete precisely the breathtaking picture intended. The music is adventurous enough to satisfy any aural daredevil who has not completely lost his or her sense of beauty, yet all the basic jazz values have been preserved with due reverence. Whether nodding to Oliver or Ornette, Morton or Monk, McBee and his colleagues-including the estimable Chico Freeman-all keep at least one foot firmly on the ground as they stomp, glide, or vamp their way to the magnificent heights they reach so many times on this record.

On the opening track, *Pepi's Samba*, the rhythm section slowly builds up steam until McBee's bass shifts into full gear and thunders through the interesting Chico Freeman tune with an awesome rhythmic rumble, energizing the keys of Dennis Moorman's piano and the percussion of Steve McCall and Don Moye. Together the four create a powerhouse back-up for their two front-line col-

leagues. Freeman-whose ongoing development becomes apparent as each new performance seems to fulfill a promise made by the preceding one-takes off in a mode that has his tenor bopping and 'Trane-ing through the rhythmic cumulus before finally breaking through and hurtling into the jazz stratosphere. There is a smooth re-entry, however, and our ears are gradually and gently prepared for McBee's Undercurrent, a soft, swirling piece that has Freeman's soprano sending ripples through the calm waters of bass and drums. The two percussionists hold back for this one, creating a subtle accompaniment of sonar-like accents for the probing crawl of the bass that follows in the soprano's wake.

HE final track, Compassion, takes the whole second side; a sinewy tenor solo, a profound upper-register bass statement, and a dialogue between trumpet and tenor are its highlights. The long track gives trumpeter Joe Gardner his only chance to solo on this release, but I have a feeling we shall all be hearing more of him before long (he was heard to greater advantage on McBee's previous album). Compassion tends to plod a bit here and there, but this was, after all, a live club performance, and what works exceedingly well traveling through the smoke and spirits of an intimate club may not seem quite so wonderful in your living room. But, as an album, "Compassion" definitely works, and quite eloquently at that. You don't have to have been there to appreciate these sounds, though there is obviously good reason to envy those who were. -Chris Albertson

CECIL McBEE: Compassion. Cecil McBee (bass); Joe Gardner (trumpet); Chico Freeman (soprano and tenor saxophones); Dennis Moorman (piano); Steve McCall (drums); Famoudou Don Moye (percusion). Pepi's Samba; Undercurrent; Compassion. INNER CITY IC 3033 \$7.98.

Will you still respect your speakers in the morning?

Sure, they sounded great last night.

But the **real** test of a speaker system is the morning after.

Will your speakers sweeten your morning coffee with Vivaldi, or will they make you wish you'd never turned your stereo on?

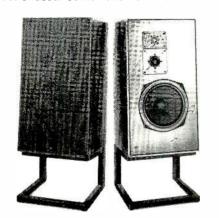
Do your speakers make you glad you're alive, or do they serve only to remind you of last night's excesses?

Some speakers are impressive when played loudly. But a truly great speaker is equally, if not more, impressive at low listening levels. "Loud" is desirable at times, but a speaker to be lived with must do much more.

For years, and without fanfare, ADS has been building monitor speaker systems for some of the most demanding sound engineers in the music industry. ADS technology is uniquely able to accommodate their diverse and challenging re-

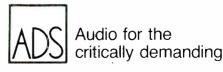
quirements This same technology, not surprisingly, produces some of the finest speaker systems available for home use.

The new ADS L730, for example, is a direct outgrowth of ADS' continuing involvement in digital recording technology. An unusual combination of extended fre-



quency range, uncanny sonic accuracy, razor-sharp stereo imaging and true-to-life dynamic range, the L730 delivers untiring musical performance. Although the system is capable of shaking walls with clean, undistorted sound, you'll appreciate it most on those mornings when quality counts more than quantity.

The L730 is only one of many ADS speakers, all meticulously engineered and superbly crafted. Your ADS dealer will be happy to help you select the model which best suits your purposes. For more information and the name of the ADS dealer nearest you, please write ADS, Dept. SR19, or call 1-800-824-7888 (California 1-800-£52-7777) toll free and ask for Operator 483.



Analog & Digital Systems, Inc., One Progress Way. Wilmington. MA 01887 (617) 658-5100

DECEMBER 1980 113



RECORDING OF SPECIAL MERIT

HONEYSUCKLE ROSE. Original-sound-track recording. Willie Nelson, Dyan Cannon, Jody Payne, Hank Cochran, Kenneth Threadgill, Amy Irving, Jeannie Seely, Emmylou Harris (vocals); Johnny Gimble (fiddle); vocal and instrumental accompaniment. COLUMBIA S2 36752 two discs \$13.98, © S2A 36752 \$13.98, © S2T 36752 \$13.98.

Performance: Often excellent Recording: Decent remote

Hmmm. Yet another country-music movie. Hollywood must think it knows something. Parts of this are musically the best yet (well, since *The Hank Williams Story* anyway). Willie Nelson dominates it, fortunately for everyone, and the project even coaxed him to write a few new songs for the first time in a long while. One of those, *On the Road Again*, is fraught with Willie Nel-

son stylistic quirks and subtleties and is just dandy. All the selections are live performances recorded and filmed in Austin and San Antonio; the recording has that lackof-walls sound you sometimes get with live recordings made in large places, but it treats the singers and more prominent instruments pretty well. The album would be tremendous if the other people who try to sing here could sing. Only Emmylou Harris and Willie have any class as vocalists, not to mention a true sense of pitch. Dyan Cannon is appealing enough in context, but she doesn't have much feeling for this kind of music. Hank Cochran and Kenneth Threadgill do, but they don't have the equipment to carry a tune. But all that doesn't matter all that much, since Nelson does dominate it, and he doesn't just throw his reputation out there—he performs. Gene Autry's ball club may fumble along in last place, but he can take some comfort in the return of the singing cowboy. N.C.

THE RED MILL (Victor Herbert-Henry Blossom). Rosalind Rees, Leonard Van Camp, Michael Willson, Kimball Wheeler, Samantha Genton, Mukund Marathe, William Powell, Walter Richardson (vocals). Gregg Smith Singers; Lake Placid Sinfonietta, Gregg Smith cond. TURNABOUT TV 34766 \$4.98.

Performance: Invigorating Recording: Excellent

Dublin-born Victor Herbert came to America with his wife Therese in 1886, when he

was twenty-seven. He later wrote two operas, Natoma and Madeleine, but at the time he came here he had turned most of his attention from classical composition to the musical stage, and it was operettas such as The Fortune Teller, Babes in Toyland, Naughty Marietta, and The Red Mill that endeared him to the American public.

The Red Mill, with book and lyrics by Henry Blossom, opened in 1906. As in many of Herbert's musicals, the story, such as it is, concerns two lovers somewhere in Eastern Europe who are engaged against their will to others whom they do not love but manage to get together in the end. It wasn't the story that kept The Red Mill running for 272 consecutive performances, but such songs as the lovely ballad Moonbeams, Because You're You, The Streets of New York, and that hardy perennial Every Day Is Lady's Day with Me.

For this recording of excerpts from The Red Mill, arranger/conductor Gregg Smith has kept the orchestra at eighteen players—the very size that would have been found in the pit in Herbert's day-and stayed faithful to period harmonies. The results are fresh and charming. There have been more arrestingly blustering governors than Michael Willson to boast of their successes with the ladies, but Rosalind Rees is sweet without being saccharine as Gretchen. Most praiseworthy of all is the chorus. The Gregg Smith Singers' invigorating treatments of the big numbers blow the dust right off Herbert's tunes and make them shine like new.



I don't go anywhere without my Fox.

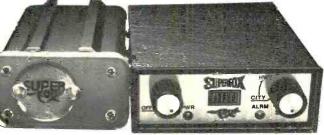
A driver's infatuation with his SUPERFOX radar detector is understandable. Once you've experienced SUPERFOX performance, you're inseparable. Because, the SUPERFOX is the most sophisticated super-heterodyne radar detector in existence.

SUPERFOX is sensitive to all traffic radar signals, at all polarizations; horizontal, vertical and every point in between. Super-het circuitry and microwave components give you up to 10 times the sensitivity of any other radar detector. Enabling SUPERFOX to detect traffic radar around curves or over hills, as easily as on straight-aways.

For permanent installation, choose the SUPERFOX REMOTE. It's weatherproof and mounts behind your grille—completely out-of-sight. Its small control box tucks under the dash.

SUPERFOX VIXEN is the smallest, super-het dash mount in existence and has all the performance features found in the SUPERFOX REMOTE.

Once you choose the SUPERFOX you want, you won't want to go anywhere without it.



SUPERFOX REMOTE, the world's first remote super-heterodyne radar detector



ComRadar Corp.

4518 Taylorsville Road, Dayton, Ohio 45424

Call 800-543-7892

CIRCLE NO. 13 ON READER SERVICE CARD

Classical Discs and Tapes



Reviewed by RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH STODDARD LINCOLN • ERIC SALZMAN

RECORDING OF SPECIAL MERIT

J. S. BACH: Complete Works for Violin and Basso Continuo: Sonata in G Major (BWV 1021); Sonata in C Minor (BWV 1024); Sonata in E Minor (BWV 1023); Fugue in E Minor (BWV 1026). Boston Museum Trio. TITANIC Ti-80 \$9.

Performance: Exquisite Recording: Superb

Here are exquisite performances of gorgeous music on superb period instruments. What more could one ask?

The instruments belong to the New York Metropolitan Museum of Art. Daniel Stepner plays a 1693 Antonio Stradivarius violin that is the only existing Strad to have been returned to its original proportions. The viola da gamba played by Laura Jeppesen is a fine early eighteenth-century German instrument. John Gibbons' harpsichord was built in Rome by Girolamo Zenti in 1666. Each instrument produces its own characteristic sound, but more important here is that the blend is smooth and velvety, ravishing the ear.

Stepner plays in what is now accepted as the Baroque style: each phrase minutely articulated by pauses and each segment subjected to a swelling and diminishing of the volume. Although this approach can make the music sound mannered, in his hands

Explanation of symbols:

- \(\text{8} = eight-track stereo cartridge \)
- © = stereo cassette
- \Box = quadraphonic disc
- digital-master recording
- $\mathbb{O} = direct-to-disc$

Monophonic recordings are indicated by the symbol $\[\Theta \]$

The first listing is the one reviewed; other formats, if available, follow it.

each articulation becomes highly expressive and each phrase is imbued with an individual beauty. Just listen to the elegance of the opening of the G Major Sonata or the whimsical charm of the closing movement of the C Minor. And for brilliance try the opening of the E Minor. Happily, the same comments are applicable to Jeppesen's gamba playing. The bass line is no mere continuo support in these works; its active melodic work is in equal partnership with the violin.

Sandwiched between two such powerful outer parts, the harpsichordist has taken the only possible course: his realizations are tasteful and simple, adding just the right sheen to the overall sonority. Such care and devotion applied to these all too rarely heard continuo works (which may or may not actually be by Bach) makes for some fine listening.

If you have missed the Boston Museum Trio's performance of Rameau's Pièces de Clavecin en Concerts (Titanic Ti-28), try to get hold of it. Playing on instruments from the Boston Museum of Fine Arts, including an especially fine Couchet harpsichord from the collection of Edwin M. Ripin, the trio demonstrates full understanding of the French style. Only musicians able to handle the difficult ensemble problems of these works can sound, as they do here, like a proper trio in continuo sonatas.

S.L.

J. S. BACH: Suite No. 2, in B Minor, for Flute and Strings (BWV 1067). TELE-MANN: Suite in A Minor for Flute and Strings. Ransom Wilson (flute); Los Angeles Chamber Orchestra, Gerard Schwarz cond. ANGEL © DS-37330 \$10.98, © 4ZS-37330 \$8.98.

Performance: **Fine solo playing** Recording: **Excellent**

The flute is an instrument that benefits especially well from the digital process, and there is nothing but pleasure to be had from Ransom Wilson's fine playing as so excellently recorded here by Soundstream. The orchestral playing, however, is not particular-

ly enlivening, and several movements, in the Telemann especially, seem to plod. This is not merely a question of tempo but of vibrancy and life in the playing itself, qualities that are rather harder to define, let alone measure, but which are recognizable enough when they are present and missed when they are not. A comparison of this performance of the Telemann suite with that by either of the groups partnering recorder soloist Frans Brüggen on Telefunken (Southwest German Chamber Orchestra under Friedrich Tilegant on 6.41039 and the Concentus Musicus under Nikolaus Harnoncourt on 6.41225) will make the difference clear enough; some of their tempos are actually slower than Wilson's and Schwarz's, but the orchestral contribution has more life because it has more character.

R.F

RECORDING OF SPECIAL MERIT

BARTÓK: Bluebeard's Castle. Kolos Kováts (bass), Bluebeard; Sylvia Sass (soprano), Judith; István Sztankay (speaker). London Philharmonic Orchestra, Sir Georg Solti cond. London OSA 1174 \$9.98.

Performance: Intense Recording: Rich

Could Béla Bartók, dying in New York forlorn and penniless in 1945, have foreseen that some day seven different recordings of his Bluebeard's Castle would be available in this strange country, and all in Hungarian? The strongest rival of this latest set is also on London: OSA 1158 with István Kertész conducting, only fourteen years old and in excellent sound. Of the five other versions, the two on the imported Hungaroton label are, for various reasons, not in contention; the one on Mercury (77012, Dorati conducting) is handicapped by less than first-rate singing; Columbia's (M 34217, Boulez) and Deutsche Grammophon's (2531 172, Sawallisch) suffer from notquite-idiomatic conducting. None of these problems apply to the present release. Georg Solti has good singers and displays a native command of the *parlando-rubato* rhythm of Hungarian song, an elusive element essential to the successful realization of Bartók's uniquely compelling opera.

In the earlier London set, Kertész offers a more lyrical view: the music unfolds majestically and unhurriedly in an aural perspective that keeps the singers prominent without slighting the orchestral splendors. Solti revels in the orchestral magnificence, at times to the detriment of the singers. While his pacing is closer to Bartók's markings, I find certain episodes overdriven. In sum, I am partial to the Kertész recording but can live happily with the Solti too.

Both singers in the new cast are Hungarians, and both are young. Sylvia Sass is internationally known, and Kolos Kováts no doubt soon will be. But neither artist is a seasoned interpreter of these roles; when the opera is staged in Budapest nowadays, it is done with other singers. Both handle the Bartókian song-speech competently without displaying a sovereign ease in it. The basso's enunciation is clearer; the soprano's suffers from occasional shrillness, particularly in the passage just preceding the episode of the seventh door, where Solti's tempo is merciless.

While I much prefer a mezzo Judith, I find no fault with the way Sass handles the tessitura. Her characterization, however, is too shrewish, an excess that should disappear with deeper involvement in the part. Kováts' solid bass sound is just right to suggest Bluebeard's sinister majesty. He has no trouble with the high-lying passages in which the part abounds, but the character he projects is rather two-dimensional.

My criticism of such details is more severe than the totality deserves. This new London set is not a perfect account of the opera, but it is surely one of the best. G.J.

BEETHOVEN: Piano Concerto No. 5, in E-flat Major, Op. 73 ("Emperor"). Radu Lupu (piano); Israel Philharmonic Orchestra, Zubin Mehta cond. LONDON 4 LDR 10005 \$9.98.

Performance: **Majestic solo playing** Recording **Fine**

Radu Lupu, musically and intellectually one of the most interesting pianists around just now, has not been very lucky so far in his recordings of Beethoven concertos with Zubin Mehta and the Israel Philharmonic. In this new Emperor, too, the conductor does not seem fully attuned to his soloist. Curiously, Mehta has made more recordings of this work than of any other. But, for whatever reason, the same conductor who was a complete and stimulating partner for Alicia de Larrocha (London CS 7121) does not respond on anything like the same level to the more majestic and poetic (but no less brilliant) interpretation by Lupu. Mehta gives only a rather humdrum "accompaniment" in a work that demands more, and the remarkably clean digital recording makes all too clear the occasional untidiness of the orchestra. It's a shame that so outstanding a pianist was not afforded more sympathetic partnership in so major a work as the last and grandest of the Beethoven concertos, but it is the solo playing alone that is of interest here. R.F.

(Continued on page 119)

The role of Violetta in Verdi's La Traviata was one of the most important in the career of the great soprano Maria Callas, and she lavished on it all her prodigious musical and dramatic gifts. Now, three years after her death, Angel has released a complete "live" Traviata with Callas. Recorded when her interpretation of the role had matured and when her voice was in excellent condition, it is a thrilling performance.

In the early 1950s Callas recorded La Traviata for the Cetra label; her colleagues on that set were not in her class artistically, but the recording (currently available on Turnabout) is interesting even though Callas' portrayal was somewhat tentative. In 1955 she worked with the director Luchino Visconti and conductor Carlo Maria Giulini

to you, and sometimes they seem to be at the opposite side of the stage. But just as you are there, so, too, is Callas there. I had the feeling that to leave the stage she would have to brush past me and go though my apartment to get to her dressing room. It's uncanny.

Alfredo Kraus, then at the beginning of his career, is an elegant, ardent Alfredo, and Mario Sereni is more than adequate as Germont. The conductor Franco Ghione, who gives sympathetic support to the singers, is not to blame for the cuts in the score, which were standard in most opera houses then.

In 1958, Callas had not yet become involved with Aristotle Onassis. Whether the dissolution of her marriage and the kind of



on a production of *Traviata* that made history at La Scala. The Violetta that emerged from that production was a more polished characterization that conveyed something of the feverish intensity of the consumptive personality while still emphasizing frailty and vulnerability. This subtle, three-dimensional interpretation is presented in the new set, which is derived from a performance in Lisbon on March 27, 1958.

Pirated recordings of Callas performances have included half a dozen *Traviatas* from Mexico City, La Scala, and Covent Garden, as well as this one from Lisbon. Angel's liner notes do not explain why this one was chosen—perhaps because it had been pirated least, perhaps because it was possible to get clearances from the other performers. I suspect it was chosen because it is an excellent performance overall and because the sound is surprisingly good. Though not of hi-fi quality, it suggests a quite listenable AM radio broadcast of its time.

The sense of immediacy captured by this recording is very exciting—you are simply there! As I played these records, I felt that I was hearing the performance from the wings. There are a few rather loud stage noises, and the prompter is frequently audible. Sometimes the singers sound very close

life she led with Onassis caused her catastrophic vocal problems or merely coincided with their onset is not important. Aside from a couple of vocal accidents with high notes, she is in splendid voice here.

This fall the London Sunday Times ran a series of gossipy excerpts from a new Callas biography by Arianna Stassinopoulos. It had such titillating subheads as "Aristo needed a woman with class' just like an addict needs a shot." It seemed fitting to me that Angel's new Traviata was released just then, because it balances the scales and documents the work of the great singing actress. Caring nothing for gossip columns or backstage intrigues, there was a large public who really loved Callas as an artist. Her heartrending performance on this album will show you why she deserved that love.

-William Livingstone

VERDI: La Traviata. Maria Callas (soprano), Violetta; Alfredo Kraus (tenor), Alfredo; Mario Sereni (baritone), Germont; Laura Zanini (soprano), Flora; Maria Cristina de Castro (soprano), Annina; Piero de Palma (tenor), Gastone; other soloists. Chorus and Orchestra of the San Carlos Opera House, Lisbon, Franco Ghione cond. ANGEL @ ZBX 3910 two discs \$18.98, © 4Z2X 3910 \$18.98.



ZUBIN MEHTA: his Petrouchka is an unqualified success

Three Digital Conductors

THREE recent Mastersound releases provided my first exposure to digitally mastered discs from CBS, and I can report that in terms of both sound and performance they range from good to absolutely first-rate. The pick of the lot is Zubin Mehta's recording of *Petrouchka* [the cassette version of this was issued somewhat earlier; see October's "Audio/Video News"]. Lorin Maazel's Richard Strauss disc runs a close second, but I am less enthusiastic about Leonard Bernstein's Prokofiev Fifth.

I compared the Maazel/Cleveland Orchestra recording both with their Telarc disc of the Mussorgsky/Ravel Pictures at an Exhibition-still my sonic benchmark for digitally mastered analog records-and with the identically programmed George Szell recording made in 1958 for Epic and now available on Odyssey (Y 30313). My guess is that the Maazel disc was recorded in the same hall as the Szell, Cleveland's Masonic Auditorium—one of the very best recording locales I know. The stereo staging is very wide on the new recording but also ample in depth; there is perhaps a shade too much reverberation for perfect capture of the full-orchestral outbursts, as at the very beginning of Don Juan. Both Don Juan and Till Eulenspiegel-nearly thirty-two minutes of music-are on side one, and this may account for low-bass reproduction that seems considerably less rich than in the Telarc Pictures. Side two is wholly devoted to Death and Transfiguration, and it seems more full bodied-but then so is the scoring. The climax of the Transfiguration music is truly magnificent, with an impressive increase in dynamic range over the Szell recording.

Interpretively, although Szell's performances of this music are among the finest he committed to discs, Maazel need make no apologies for his readings even in the face of such competition. His Don Juan has all the requisite brilliance, and he has added an individual touch through a very expansive reprise of the Don Juan theme before the final catastrophe. The first-chair oboe and clarinet do themselves proud in the well-known love music. Till Eulenspiegel likewise comes across as a tour de force of orchestral virtuosity; I have seldom heard the clarinet's portrayal of the tragicomic hero set forth with such vividness, especially in the final pages. The digital mastering does wonders in delineating the multifarious strands of the great chase sequence. Maazel made a very impressive recording of Death and Transfiguration with the Vienna Philharmonic for London in 1964, and this new one is the finest performance on the Mastersound disc.

HAVE given Zubin Mehta some critical minuses for his recent recordings with the New York Philharmonic (The Rite of Spring, Berlioz's Symphonie Fantastique), so it is a pleasure to report that his new Petrouchka is an unqualified success on all counts. The musical execution is brilliant, precise, and full of character throughout; pianist Paul Jacobs' playing—the part was expanded by Stravinsky for the 1947 version recorded here-alternately blends with the orchestra and comes to the fore in just the right fashion. Stravinsky's scoring (like that of Strauss toward the end of Till Eulenspiegel) seems made to order for digital recording; the web of polyphony in the final tableau at the fair is here imbued with all kinds of fascinating timbral subtleties that have tended either to get lost or to be overly accentuated in other recordings. The percussion transients, both low and high frequency, are crystal clear, and the stereo placement is highly effective without being exaggerated. A fine disc—and a fine performance—all the way!

In Leonard Bernstein's recording of the Prokofiev Fifth Symphony with the Israel Philharmonic, the tempos in the grandiose opening movement and the heroic-elegy slow movement are almost broader than the music can take. Each of these movements lasts three to four minutes longer than in the Gennady Rozhdestvensky recording once available on Angel/Melodiya-still my preferred version in stereo. On the other hand, Bernstein and the Israelis bring great power and brilliance to the scherzo and finale. The acoustic ambiance is less panoramic than in the Maazel and Mehta discs, but the depth imaging is excellent. The special advantages of digital mastering are not especially apparent in the heavily scored climaxes of this work, but they do show in the clarity of the percussion textures (the wood block particularly) in the scherzo and finale as well as in the magical coda of the slow movement.

VER the past couple of years I have heard a pretty good cross section of what's been done in terms of digital mastering by some ten labels (the main exception is Angel, none of whose digital product has yet come across my desk). It's encouraging that the pressing quality of these releases has hardly ever been less than good, with those from Denon, Delos, Varèse Sarabande, and Telarc in the forefront. These new CBS Mastersound pressings are also good, if not quite up to the highest standard set by the others named. In contrast to this relative uniformity of pressing quality is the considerable disparity in pricing for digitally mastered records, ranging from \$10.98 for London to \$17.98 for Delos and Telarc. The \$14.98 price tag for CBS Mastersound is toward the high end, but perhaps it is justified by the extra time required for the halfspeed mastering used for these discs. It will be interesting to see if and how the price situation stabilizes over the coming year. -David Hall

R. STRAUSS: Don Juan, Op. 20; Till Eulenspiegel's Merry Pranks, Op. 28; Death and Transfiguration, Op. 24. Cleveland Orchestra, Lorin Maazel cond. CBS MASTERSOUND © IM 35826 \$14.98, © HMT 35826 \$14.98.

STRAVINSKY: Petrouchka (1947 version). Paul Jacobs (piano); New York Philharmonic, Zubin Mehta cond. CBS MASTERSOUND © IM 35823 \$14.98, © HMT 35823 \$14.98.

PROKOFIEV: Symphony No. 5, in B-flat Major, Op. 100. Israel Philharmonic Orchestra, Leonard Bernstein cond. CBS MASTERSOUND ① IM 35877 \$14.98, ⑥ HMT 35877 \$14.98.

BRAHMS: Piano Sonatas in C Major, Op. 1, and F-sharp Minor, Op. 2 (see Best of the Month, page 82)

BRAHMS: Variations and Fugue on a Theme by Handel, Op. 24; Fantasies, Op. 116. Daniel Graham (piano). VIVACE VCR 1101 \$7.95 (plus \$1.50 postage and handling from Vivace Classic Recordings, 1422 Delgany, Denver, Colo. 80202).

Performance: Crisp and brilliant Recording: A mite hard

Daniel Graham is on the piano faculty of the University of Northern Colorado and has previously recorded works of Szymanowski and some offbeat nineteenth-century repertoire. For this new, Denver-based label he has taken on some major Brahms in both the grand and intimate veins. His chief competitors on readily available discs are Gilels in the Op. 116 Fantasies and Fleisher, Anievas, and Serkin, among others, in the great Handel Variations.

The tone of Graham's reading of the Handel Variations is set at the very beginning by his ultra-crisp articulation of the theme, including all its decorative facets. Also noteworthy is his powerful handling of the syncopated elements in Variation No. 4 and the canonic aspects of No. 7. He brings out the slow/fast pattern implicit in the "Hungarian" variations (Nos. 13 and 14), and his delicate finger work in the musette variation (No. 22) is charming. The buildup to the concluding fugue is impressive, and the fugue itself emerges as a not-sodistant relative of the late Beethoven's, though better mannered. In Op. 116, the agitated and passionate music of the capriccios (Nos. 1, 3, and 7 in the series) comes off most effectively here. Of the intermezzos, I like best the reading of the E Minor (No. 5) with its communication of suppressed Angst.

Although Graham's performances are altogether creditable, if not perhaps on the absolutely highest level (that of, say, Backhaus, Fleisher, and Solomon), the recorded sound is less admirable. The piano seems lacking in lower-register richness (so essential for the proper registration of the Brahmsian bass line), and the midrange is a bit hard, as is the acoustic character of the recording locale.

D.H.

BRUCKNER: Symphony No. 6, in A Major. Chicago Symphony Orchestra, Sir Georg Solti cond. LONDON CS 7173 \$9.98.

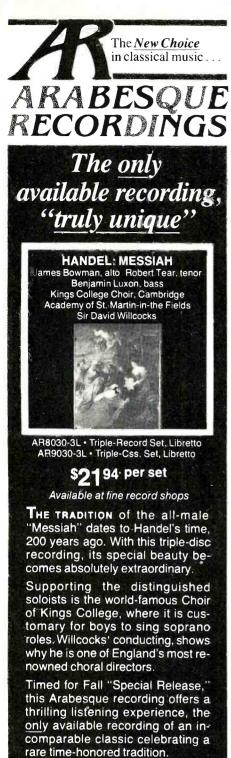
Performance: Rugged Recording: Very good

BRUCKNER: Symphony No. 7, in E Major. Dresden State Orchestra, Eugen Jochum cond. Angel SZB-3892 two discs \$17.96.

Performance: Accentuates the lyrical Recording: Brass a mite raw

The Sixth Symphony is atypical of Bruckner's mature output both in its relatively short length (one hour) and in its lack of ecclesiastical evocation. A nervous dotted figure rather than the familiar Brucknerian tremolo carries much of the musical texture of the first movement's turbulent, even defiant utterance. There is a broody and intense slow movement followed by a foreboding and sinister scherzo—the trio of which, (Continued on page 122)





"The flood gates of Handel's genius burst wide . . . MESSIAH arose."

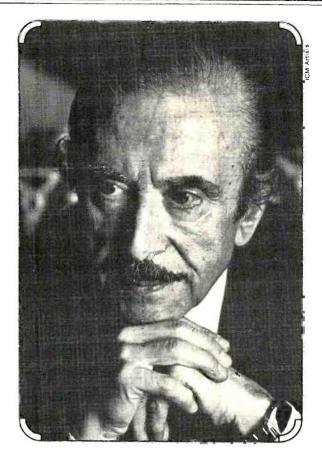
-N.D. BOYLING, London

Make your New Choice today . . . request catalog:

Caedmon/*ARABESQUE*

A Raythaon Company

1995 Broadway · New York 10023



Arrau's Debussy

LAUDIO ARRAU recorded several works by Debussy more than thirty years ago but apparently none since then until his new Philips recording of the Préludes, Book I. This is music he had never recorded before, and his performance suggests a lifetime well spent in preparation for a supreme realization of the twelve fascinating and often elusive pieces. It suggests too that Arrau's long identification with the music of Liszt-the Années de Pèlerinage and Transcendental Etudes in particular-may have been a significant factor in that preparation. There is, in any event, nothing reticent in his large-scale, clear-textured approach, none of the veiled or blurred quality so often cultivated in the name of "Impressionism," nor is there a trace of the mincing crispness favored by those determined to relate Debussy directly to Rameau. In terms of full-bodied color as well as breadth and clarity, these performances are magical.

In the opening Danseuses de Delphes Arrau seems to serve notice that he is not about to be hurried, and by the time the piece has run its brief but expansive course he has created an atmosphere in which disbelief and resistance are unthinkable. He manages to show not only an incredibly complete response to the mood of each piece but a regard for the nuance and character to be felt in every note-and yet notes and phrases are not held up for display but unfailingly fall into place in a mesmerizing

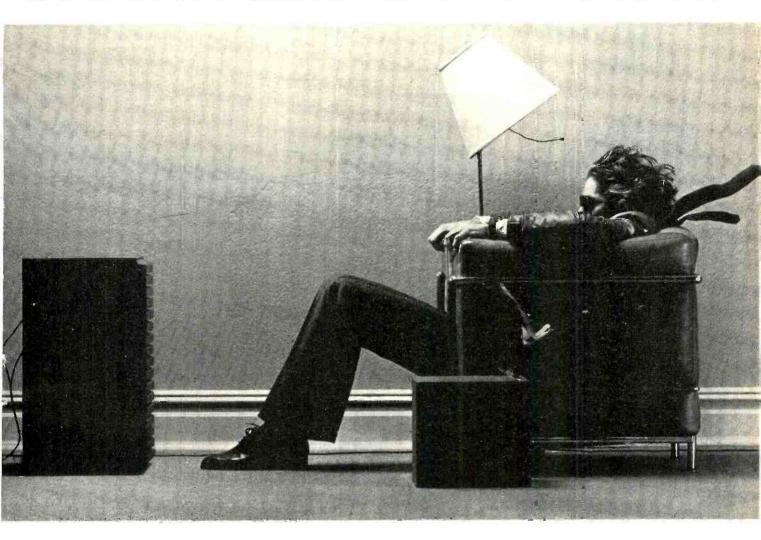
flow. Elemental forces are unleashed in Ce Ou'A Vu le Vent d'Ouest, and La Cathédrale Engloutie is incomparably moving in its tragic grandeur; but the big and bold approach does not rule out subtlety, tenderness, or wit. La Fille aux Cheveux de Lin has seldom had a warmer embrace-or responded with such unexpected freshness. The humor in La Sérénade Interrompue and Minsirels and the shimmer in Voiles are the more telling for Arrau's insistence on clarity. Virtually every one of the twelve pieces seems to represent a most successful voyage of discovery—or rediscovery—and the sequence in full is a brilliant example of a whole that is greater than the sum of its parts.

The piano itself is gorgeous in its responsiveness and superbly, if a little closely, recorded. I could not determine whether the raspy sound I heard occasionally was breathing, a mechanical noise, or something in the disc surface, but it is so infrequent and so dim as to be easily ignored in the face of such glorious music making. I hope and trust we shall not have to wait another thirty years for Book II of the Préludes from Arrau. I would advise you not to wait at all before beginning to enjoy Book I.

Richard Freed

DEBUSSY: Préludes, Book I. Claudio Arrau (piano). Philips 9500 676 \$9.98, © 7300 771 \$9.98.

AFTER 500 PLAYS OUR HIGH FIDELITY TAPE STILL DELIVERS HIGH FIDELIT



If your old favorites don't sound as good as they used to, the problem could be your recording tape.

Some tapes show their age more than others. And when a tape ages

prematurely, the music on it does too.

What can happen is, the oxide particles that are bound onto tape loosen and fall off, taking some of your music with them.

At Maxell, we've developed a binding process that helps to prevent this. When oxide particles are bound onto our tape, they stay put. And so does your music.

So even after a Maxell recording is 500 plays

old, you'll swear it's not a play over five.

English Record

Superb Stereo Import Pressings by Top Line Artists

 $$6^{98} + 1^{00} postage/packaging This price good until December 31, 1980. Send Cashiers check or Money Order made out to Caroline Exports, P. O. Box 48551, Atlanta, Georgia 30362, with number(s) and title(s) of record(s).

A catalog of other albums is available upon request.

ERS 001 The Horn Conce England/Davison Concertos. James Brown/Virtuosi of

Brandenburg Concertos-No. 1 in F: No. 2 in F: No. 3 in G. Virtuosi of England/Davison

BACH ERS 003 Brandenburg Concertos-No. 4 in G; No. 5 in D; No. 6 in B flat. Virtuosi of England/Davison

VIVALDI The Four Seasor England/Davison FRS 004 Seasons, Kenneth Sillito/Virtuosi of

ROSSINI OVERTURES/Davis/RPO ERS 005

HANDEL ERS 006 Water Music, Virtuosi of England/Davison ERS 007

Piano Concerto No. 1 in C major Op. 15. John Lill, Scottish National Orchestra/Gibson FAURE REQUIEM

Victoria de los Angeles; Dietrich Fischer-Dieskau; The Paris Conservatoric Orchestra/Cluytens ERS 009

GILBERT & SULLIVAN

ERS 00
Highlights from: The Mikado; Yeoman of the Guard;
Iolanthe Gondoliers; Pirates of Penzance; HMS
Pinafore. Soloists and the Pro Arte Orchestra.
Glydebourne Festival Chorus/Sargent

BACH ORGAN RECITAL ERS 010 Includes Fantasia & Fugue in C minor and Toccata & Fugue in F. Nicolas Kynaston/Clifton Cathedral

DACH Double Concerto in D minor BWV 1043, Concerto in E minor 1041, Concerto in E MWV 1042.Hugh Bean, Kenneth Sillito/Virtuosi of England/Davison

Violin Concerto, Serenade for Tenor, Horn & Strings. London Philharmonic Orchestra conducted by John Pritchard, Ian Partridge (Tenor) REETHOVEN ERS 013

Piano Concerto No. 3. Lill/Gibson/ SNO VAUGHAN WILLIAMS ERS () A 'London' Symphony. LPO/Handley (Lambert & Butler Master Series) ERS 014

TCHAIKOVSKY

Serenade for Strings Op. 48 Theme and Variations From Suite No. 3 Op. 55. LPO/DelMar (Lambert & Butler Master Series)

SERENADE FOR FLUTE ERS O
The London Virtuosi, James Galway (Flute), Music
by BEETHOVEN, BACH & TELEMANN

CIRCLE NO. 11 ON READER SERVICE CARD

all Intosh STEREO CATALOG and FM DIRECTORY

Get all the newest and latest information on the new McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.











	McIntosh Laboratory, Inc. East Side Station P.O. Box 96 Binghamton, N.Y. 13904						
	NAME	 					
1	ADDRESS	Ī					
I	CITYSTATEZIP	i					

If you are in a hurry for your catalog please send the coupon to McIntosh. For non rush service send the Reader Service Card to the magazine.

however, has some of Bruckner's most delectably bucolic writing for horn choir. The rugged accents of the opening movement reassert themselves in a finale that is a summation of what has gone before and ends on a note of triumph.

In contrast to Daniel Barenboim's lyrical 1978 Deutsche Grammophon recording, Georg Solti's new version of the Sixth Symphony goes all out for drama and architectural cohesion. The performance is characterized by rock-steady tempos, sharply defined rhythmic articulation (in the timpani especially), and wide-ranging dynamics, and the fairly close-miked recording is very effective in capturing them.

The Seventh Symphony is typical of the mature Bruckner at his most affirmatively seraphic. Eugen Jochum, a seasoned Brucknerian, here essays the Seventh for the third time since his World War II Telefunken recording with the Vienna Philharmonic. Unlike Herbert von Karajan, whose recent Berlin Philharmonic set of the Seventh for DG I find the most impressive version currently available, Jochum tends to soft-pedal elements of urgency and passion and to set forth, often with unique eloquence, the more lyrical aspects of the score. I am not entirely convinced of the soundness of this approach, and, though Jochum does give a wonderful "swing" to the main body of the scherzo, on the whole I find his reading rather bland. The sonics are not up to the standard of either Karajan's recording or Jochum's own 1967 version with the Berlin Philharmonic. The Dresden hall may be in part to blame; the climaxes in particular here sound raw and unfocused. One more complaint: was it really necessary to spread the music over four sides? Side three is less than ten minutes long, and I think I'd feel shortchanged if I paid nearly \$18 for this D.H.

CRAWFORD-SEEGER: String Quartet (see DOWNEY)

DEBUSSY: Sonata for Violin and Piano (see FRANCK)

DOWNEY: String Quartet No. 2. JOHNS-TON: String Ouartet No. 4. CRAWFORD-SEEGER: String Quartet. Fine Arts Quartet. GASPARO GS-205 \$7.98.

Performance First-rate Recording: Very good

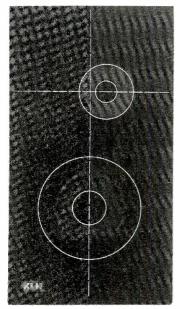
The Fine Arts Quartet is now more than thirty years old, and it has remained constant over the years in both personnel and devotion to new American music-and high performing standards. This recent record by the Fine Arts reaffirms that devotion and those high standards.

Ruth Crawford-Seeger was one of the founders of the folk-song movement in American music after having previously been one of the major avant-garde innovators. Her 1931 String Quartet-possibly the only major American work in that medium before World War II-is an extraordinarily imaginative work, brilliantly played here. Whereas Seeger's quartet grew out of a period of ferment that eventually resolved itself (for a while) in the Great Folk Revival, Ben Johnston's Fourth Quartet, composed for the Fine Arts in 1973, is a

(Continued on page 124)

STEREO REVIEW

WHAT TO LOOK FOR IN YOUR FIRST GOOD SPEAKER SYSTEM.



OFFSET TWEETER
Offset tweeters provide
smoother response and help to
prevent distortions caused by
baffle and cabinet effects.



DOME TWEETER
You'll find dome tweeters used almost universally in expensive speakers because they provide better dispersion, better response and smoother sound than conventional cone tweeters.



POLYPROPYLENE WOOFERS By reducing cone "breakup," polypropylene woofers reproduce the original signal more accurately than either paper or bextrene.

At KLH, we've got a philosophy that stands hard and fast. A low price is no excuse for a poor speaker.

That's why we pack more technology into our speakers—even our least expensive systems—than any other speaker near the price.

And while it's true that you'll have to trust your ears to make the ultimate decision, a few simple tips can help you understand what makes one \$125 speaker sound better than another.

THE TWEETER

Look for a dome tweeter. Since cone tweeters are much less expensive, they're used almost universally in this price range. But cone tweeters can restrict the optimum listening area to a narrow range. A dome tweeter, such as the one you'll find on the KLH-160, gives wider dispersion, wider response, and smoother, more natural sound.

THE WOOFER

Typically, woofer cones are constructed of conventional materials like paper or bextrene. However, the KLH-160 uses a unique polypropylene formulation that reproduces the signal more faithfully. Polypropylene reduces coloration caused by cone "breakup"—the result of uncontrolled cone motion.

THE CROSSOVER NETWORK

The crossover network, through a series of steps, sorts out the different frequencies and directs them to the appropriate drivers. The KLH-160 uses a 7-element crossover network instead of the 2- or 3-element network used in other comparably priced systems.

THE DESIGN

There are so many approaches to driver array, baffle and cabinet design, entire books have been written on the subject. But there are two basic considerations to be concerned with.

First, baffle and cabinet effects. The KLH-160 uses offset tweeters to minimize irregularities in frequency response caused by the cabinet and baffle.

Second, stereo imaging. If the tweeters are offset, the speakers must be a mirror image pair. Buying 2 "left" speakers will radically affect stereo imaging.

THE PRICE

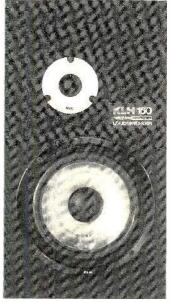
In this price range, extra money doesn't always buy extra quality. Which is why we urge you to compare the \$125 KLH-160 with any other comparably priced speaker. Compare point for point. You'll find a few of these features in some speakers. But we don't think you'll find them all in a speaker anywhere near the price.

And if you'd like the additional benefit of a three-way system, compare the \$190 KLH-150 with any other comparably priced speaker. Its larger cabinet, more powerful woofer and polypropylene midrange driver give it deeper lows, smoother midranges, and allow it to play louder.

The new KLH speakers. Now that you understand the difference, wouldn't you like to hear the difference?

To find out where you can hear the full line of KLH speakers (including our Computer Controlled Loudspeakers™), call 800-225-6042 (in Mass. 800-532-9566). KLH Research and Development Corporation, 145 University Avenue, Westwood, MA 02090. In Canada: The Pringle

Group, Ontario, Canada. © KLH 1980



MIRROR IMAGE PAIRS
If the tweeters are offset, make
sure the speakers are mirror
image pairs. Two "left"
speakers will ruin stereo
imaging.



THE CROSSOVER NETWORK
This 7-element network
provides smoother sound and
higher reliability than the
simpler 2- or 3-element designs
found in most lower priced
oudspeakers.



THE PRICE
Speakers should represent at least 40% of the cost of your system. The KLH-160 will fit very nicely in a \$500-\$700 system. The three-way KLH-150 is priced right for a system costing \$700-\$1,000.

CIRCLE NO. 31 ON READER SERVICE CARD

product of the very same dynamic but lies on the other side of what Johnston calls "the abyss." Originally meant to be performed after the composer's Third Quartet and a generous dollop of silence, it is an attempt to rethink tradition outside the conventions of modern Western equal-tempered tuning. This attempt was a logical outcome of Johnston's long-standing interest in microtones, and, more significantly, it resulted in an intriguing and moving piece of music.

John Downey's Second Quartet, inspired by bell and water sounds, is eventually about fluidity, and it is fluidly composed and performed. It's not as striking as its companions, perhaps, but it is well done nonetheless. In case you thought only various forms of country and pop music came out of Nashville, Gasparo Records (P.O. Box 90574, Nashville, Tenn. 37209) proves otherwise.

FRANCK: Sonata for Violin and Piano in A Major. DEBUSSY: Sonata for Violin and Piano. Kyung-Wha Chung (violin); Radu Lupu (piano). LONDON CS 7171 \$9.98.

Performance: **Debussy brilliant** Recording: **Very good**

This is a brilliant performance of the Debussy sonata, and it raises that late and still somewhat obscure work to an impressive stature. The Franck is less successful because Kyung-Wha Chung's level of involvement does not seem as great as in the Debussy—or, in fact, as great as her partner's. Radu Lupu's constant effort to sweep everything before him is in conflict with Chung's gorgeous but too well-mannered playing.

E.S.

RECORDING OF SPECIAL MERIT

GOLDMARK: Symphony No. 1, in E-flat Major, Op. 26 ("Rustic Wedding"). Pittsburgh Symphony Orchestra, André Previn cond. ANGEL SZ-37662 \$8.98, © 4ZS-37662 \$8.98.

Performance: Affectionate Recording: A-1

Along with Karl Goldmark's other most successful scores, the A Minor Violin Concerto and the colorful opera The Queen of Sheba, the Rustic Wedding Symphony dates from the middle 1870s. A leisurely kind of piece, in some ways more suite than symphony, the work is nevertheless a real charmer, especially when performed with the kind of care and affection bestowed on it here by André Previn and the Pittsburgh Symphony. The opening Wedding March movement with its thirteen variations moves along in thoroughly delectable fashion, and one gets a whiff every now and then of Brahms' Haydn Variations (repeated notes at the close of the theme). The Bridal Song second movement, the folk-flavored serenade (played just a mite "straight" here), and the tender slow movement (the cadenza for violins near the close echoes that of the Wagner Siegfried Idyll) are among Goldmark's happiest inspirations in terms of melodic content and delicate orchestral tone painting. The whole is capped by an exuberant final dance with fugato elements adding momentum where needed.

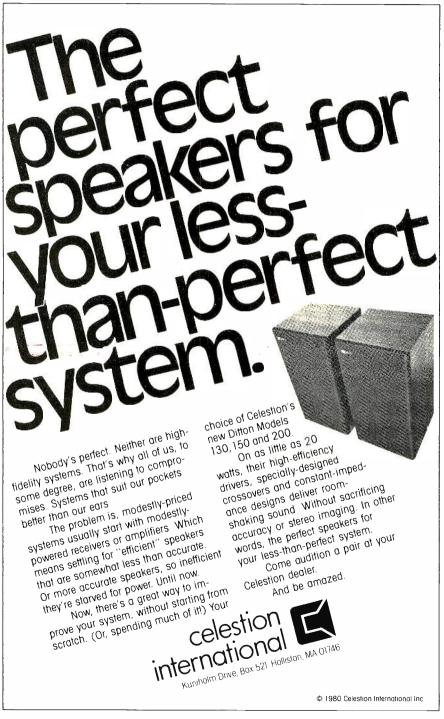
The Rustic Wedding Symphony has not had a great number of recordings, but almost all have been distinguished both musically and sonically. The most notable have been those by Sir Thomas Beecham (minus two of the first-movement variations) and Leonard Bernstein, and on all counts Previn's version certainly belongs in that excellent company.

D.H.

HANDEL: Samson. Janet Baker (mezzosoprano), Delilah; Helen Watts (alto), Micah; Robert Tear (tenor), Samson; John Shirley-Quirk (baritone), Manoah; Benjamin Luxon (bass-baritone), Harapha; Norma Burrowes (soprano), Philistine Woman; Felicity Lott (soprano), Israelite Woman; Philip Langridge (tenor), Philistine Man; Alexander Oliver (tenor), Israelite Man. London Voices; English Chamber Orchestra, Raymond Leppard cond. RCA ARL4-3635 four discs \$35.92, © ARK3-3635 \$26.94.

Performance: **Serious** Recording: **Good**

Handel wrote Samson in 1741 and 1742, just after Messiah; it was popular in his lifetime and moderately so afterwards. The text is by Newburgh Hamilton, more or less after Milton. It contains such gems as "I begin to feel some inward motions, which do bid me go" and "But who is this? that so bedeck'd and gay comes this way sailing (Continued on page 126)



TEACTODAY: THE X-SERIES.

You're looking at four new machines that have more in common with data recorders than audio recorders. Together they are called the X-Series. And they bring a totally new kind of technology to the open reel format.

Each
X-Series transport
is an instrumentation mechanism.
For 15 years, this
TEAC design has
stood the grueling test of time in
computer installations where
dependability is
worth millions.

The basic configuration is closed-loop dual capstan. It's extraordinarily quiet, stable and precise. Wow & flutter is very low. Speed accuracy very high.

Three DC motors drive the tape. They're used to keep changes in motor temperature to a minimum under different loads so constant torque is maintained.

Our Magnetloat flywheel assembly, a completely new concept, uses magnetics rather than mechanics to eliminate problem-causing springs and pressure plates. Axial variations between the tape and capstans are prevented so proper tracking is assured. The result is highly accurate audio reproduction even after years of hard use.

The X-Series transport maintains ideal tape-tohead contact. Audible drop-outs, level and trequency losses are absolutely minimized. Frequency response is wide and flat. And signal articulation is unusually clear.

The brain behind the transport is our LSI control chip. It eliminates the need for mechanical relays so transport control is faster, more positive and reliable. The LSI also lets us provide full motionsensing in the X-10 and X-10R. Within the X-Series. machines have been specifically designed for bidirectional record and playback. Perfectly symmetrical head stacks (6 heads in all) assure top performance in both directions. There's automatic reverse and repeat. And two-way cue monitoring.

accompany this new transport technology. Record and playback amplifiers are quieter and completely free of audible distortion. The sound is cleaner, more faithful to the source. The

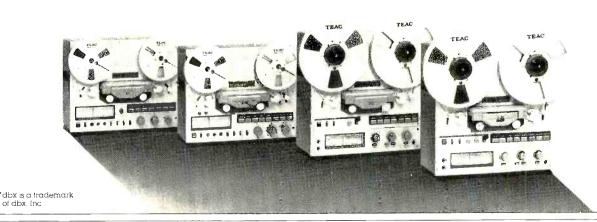
New audio electronics

The sound is cleaner, more faithful to the source. The fidelity is unsurpassed.

For master quality recordings, dbx II* is

available as an optional accessory for the X-10 and the X-10R. This remarkable noise elimination system adds 30dB to the already high S/N ratio, and provides up to 10dB more headroom.

If your audio perception is critical, your listening standards high, audition an X-Series recorder. The performance is flawless. The sound peerless.



We've prepared a pamphlet that answers questions about buying loudspeakers.

You can get it for free, just by calling us toll free*

What's in it for us? We'll also send you our full-line brochure of rave-reviewed Ohm loudspeakers

A free guide. And a free brochure.

Just for calling this number:

1-800-221-6984

* (Except in New York, call 212-783-1120).



CIRCLE NO. 43 ON READER SERVICE CARD



.Zip_

CIRCLE NO. 56 ON READER SERVICE CARD

like a stately ship? With all her streamers waving in the winds, an odorous perfume her harbinger, a damsel train behind? 'Tis Delilah, thy wife."

Nevertheless, this is often considered one of the best librettos Handel had to work with, and it certainly inspired some of his most affecting music. "Total eclipse"—the blind Samson's cry in the darkness-is one of the best-known arias; "Let the Bright Seraphim" is another. But the work is full of strong music in a reflective, sorrowing, painful, or elegiac mood, though, interestingly, much of the most immediately appealing music is assigned to the Philistines rather than the Israelites. Samson is not as dramatic as other Handel oratorios or as the subject might lead one to expect (the climactic event, Samson's bringing down the house, takes place offstage), but it is full of Baroque lyric high points.

Stoddard Lincoln's notes for this new RCA set contain some fascinating information. John Beard, the first Samson, was a singer better known for musicianship and presence than for his vocal endowments. The original Delilah was Kitty Clive, a ballad singer; today we would probably call her a musical-comedy star. And Micah was sung by Mrs. Cibber, who was known as an actress, not a singer, though she did make a sensation in Messiah. Of one thing, then, we can be sure: the Samson directed by Handel and beloved of the London public in the eighteenth century sounded nothing like the Samson we have here. The original performances must have been dramatic, inflected, not particularly beautiful, but highly interpreted and full of force. This recorded Samson is vocally and musically sumptuous, undramatic, and quite cautious. Conductor Raymond Leppard has made a reputation as an Olde Musick man, but this performance is squarely in the great Victorian oratorio tradition. For what it is, it is certainly excellent: serious, well bred, well mannered, well sung, well played, a bit stodgy, but always beautiful. And it has been very well recorded by-surprisingly-Erato Records of France.

RECORDING OF SPECIAL MERIT

HAYDN: Symphony No. 86, in D Major; Symphony No. 98, in B-flat Major. Concertgebouw Orchestra of Amsterdam, Colin Davis cond. PHILIPS 9500 678 \$9.98, © 7300 773 \$9.98.

Performance. Wonderful! Recording: The very best

These two topnotch realizations of symphonies from Haydn's Paris and London sets are the latest in the growing roster of recordings of this repertoire by Colin Davis and the Amsterdam Concertgebouw. The musical high points of No. 86 are the elaborate variations-style slow movement, the Ländler episode of the minuet, and the exhilarating presto finale, while No. 98 is, along with the Drum Roll (No. 103), my favorite of the London group.

Davis and the great Dutch orchestra bring both works off with marvelous poise and vitality. They treat them as big orchestral works rather than more intimate pieces, but the playing has a discipline and finesse that prevent the phrasing or dynamics from (Continued on page 129)

CONSUMERS CO. TAPES - DISCOUNTS - STEREO Minimum Order 10 Tapes.

ATOK 2.99 DC-45 2.19 DC-60 1.59 DC-90 1.66 DC-120 2.39 DC-180 3.69 Metal C-90 SAC-90 SAC-60 ADC-45 ADC-60 ADC-90 ADC 120 - VIDEO 14.95 13.95 VT-60 VT 30

SONY

FECR C-90 FECR C-60 EHF C-90 EHF C-60 1.62 1.10 VIDEO BETA L 500 10.95 L 750 13.50 L 830 16 95

Scotch SC C-60 1.95 SC C-90 2.59 Open RL 206-1200 ft. 4.79 Open RL 207-1800 ft. 5.59 Open RL MXS 1800 ft. 7.99 Record Care System 18.95 Metal C-60 Metal C-90 Master I C-60 Master I C-90 4.69 6.39 2.29 Master II or III C-60 2.39 Master II or III C-90 2.99 VIDEO

BETA L-500 10.95 BETA L-750 13.95 BETA CLEANER 15.95 VHS VT-60 12.98 VHS VT-120 14.98 VHS Cleaner 17.95

®KOSS SOUND **GUARD** HEADPHONES PRO 4 AAA HVI LC HVX LC Pres'v Kit CInr. Kit Total Kit 41.50 Stylus Care 6.95

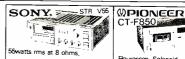
> MAXELL UDXL1or1l C-90 3.30 We carry Sanyo Car Stereo

New! Video Clnr — BETA 9.95, VHS 11.95

y delivery, send M.O., Cert. Check or use Credit Card hecks, 2 wk. del'y. Add \$2,75 for shpg. & hdlg. per 10 tapes add sls. tx. No C.O.D.'s Free Catalog.

CONSUMERS CO. Box 550 Dept. SR 1280 Mt. Vernon, N.Y. 10551

CIRCLE NO. 14 ON READER SERVICE CARD



HPM 700

OPIONEER.

\$169

\$239

KPX 9500

KE 5000

no more than .02% thd

\$295 Flouroscan, Solenoid Technics SLB1

\$66

6.46

OPIONEER

Servo Motor Belt Drive Turntah

maxell UDC 90 10" 4way Speakers \$106

UDXL II C90 TDK SA90 \$3.30 \$2.80 SONY. EHF C90 \$2.70 Extended Range FECR 90 \$2.90 Chrome Bias

KE 3000 \$196 **KP 8500** \$129 Cassette Tape \$171 KE 2100 BLAUPUNKT KP 5500 \$125 \$92 CR 2000 D CR 2001 KP 575 \$239 \$48 GM 40 CR 3001 \$440 GM 120 \$106 CR 4000 \$240

J 1033 CALL 6x9 tri-ax II J 1037 6x9 coax II CALL J 1065 6x9 tri-ax \$62 J 1069 \$40 6x9 coax R 430 IN DASH CALL R 420 IN DASH CALL R 410 IN DASH CALL R 402 IN DASH CALL

800-638-0935

All orders shipped in factory sealed cartons with full manufactors' warranty VISA, Mastercard, and C.O.D. orders accepted. Call or write for quotes.



1362 HOLTON LANE LANGLEY PARK, MD. 20783 (301) 434-5330





seeming overblown. The concertante episode for solo violin and harpsichord at the end of No. 98 works just beautifully. The whole disc has a well-balanced, natural sound that is on a par with that of the best digital recordings, and the surfaces are D.H.

JOHNSTON: String Quartet No. 4 (see DOWNEY)

RECORDING OF SPECIAL MERIT

MENDELSSOHN: Songs Without Words. Op. 19: No. 1, in E Major; No. 5, in Fsharp Minor; No. 6, in G Minor ("Venetian Gondola Song"). Op. 30: No. 3, in E Major; No. 4, in B Major; No. 6, in F-sharp Minor ("Venetian Gondola Song"). Op. 38: No. 2, in C Minor; No. 3, in E Major; No. 5, in A Minor. Op. 53: No. 2, in E-flat Major; No. 3, in G Minor. Op. 62: No. 1, in G Major; No. 5, in A Minor ("Venetian Gondola Song"); No. 6, in A Major ("Spring Song"). Op. 67: No. 2, in F-sharp Minor; No. 4, in C Major ("Spinning Song"); No. 5, in B Minor; No. 6, in E Major ("Cradle Song"). Op. 85: No. 3, in E-flat Major; No. 6, in B-flat Major. Op. 102: No. 1, in E Minor; No. 4, in G Minor; No. 6, in C Major. Daniel Barenboim (piano). DEUTSCHE GRAMMOPHON 2531 260 \$9.98.

Performance: Ideal Recording: Very good

In the March 1975 STEREO REVIEW, commenting on Daniel Barenboim's three-disc set of the complete Songs Without Words, from which the present collection was extracted, Irving Kolodin described the performances as "rooted in an affinity, rarely encountered, between creator and re-creator." Barenboim, he continued, "addresses this music with neither awe nor condescension, but as one who really comprehends a miracle-even in scant two-page scopewhen he encounters one." Collectors for whom the complete set (Deutsche Grammophon 2740 104) is more than is necessary (and/or affordable) should be delighted to have these twenty-three pieces, some of the best and most familiar of the lot, ranging from the beginning of the series in 1829 to its conclusion in 1845.

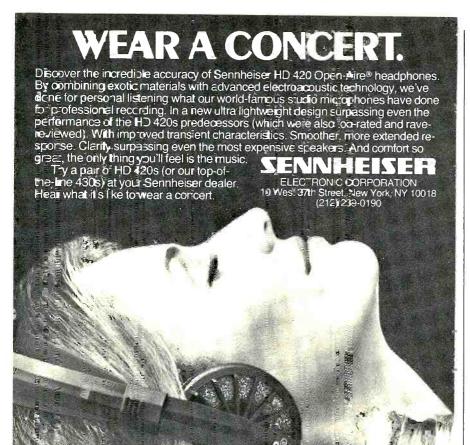
MOZART: Concertos for Horn and Orchestra. Hermann Baumann (horn); Salzburg Mozarteum Orchestra, Leopold Hager cond. Telefunken 6.42360 AW \$10.98, © 4.42360 CX \$10.98.

Performance: Friendly Recording: Good

Mozart wrote his four horn concertos (actually only three real concertos, the socalled No. 1 consisting of two unrelated allegros) for Joseph Leutgeb, a fellow Salzburger transmigrated to Vienna who was apparently a very good player. Hermann Baumann is also a very good player, but not a great one. These are lively, friendly performances with a few quirks-enough to give this record an odd moment or twoand a lot of very solid, attractive playing. It's not quite Dennis Brain or Barry Tuckwell, but it is very good horn playing right from the heart of the tradition.

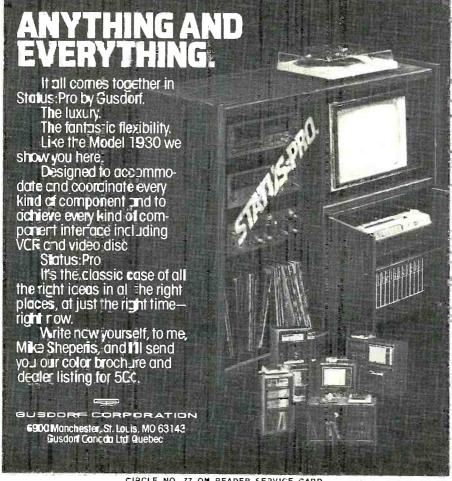
(Continued overleaf)





ing Plant; Eissendor annover, West Germany © 1980, Sennneiser Electronic Corporation (N.Y.)

CIRCLE NO. 73 ON READER SERVICE CARD



RECORDING OF SPECIAL MERIT

ORFF: Carmina Burana. Arleen Augér (soprano); Jonathan Summers (baritone); John Van Kesteren (tenor); Southend Boys' Choir: Philharmonia Chorus and Orchestra, Riccardo Muti cond. ANGEL SZ-37666 \$8.98, © 4ZS-37666 \$8.98.

Performance! Gorgeous Recording: Stunning

I always slip off rather shamefacedly and occasionally even resort to headphones to avoid the sneers and jibes of sophisticated colleagues when I develop a longing to hear the marvelously vulgar music from Carl Orff's choral trilogy Trionfi-especially the perhaps too popular and too oft-recorded Carmina Burana ("Orff, orff," they mock me, making canine sounds). Anyway, as almost everyone knows by now, Orff took the texts of Carmina Burana from a thirteenthcentury manuscript found in an old monastery in the early nineteenth century. It is a collection of irreverent songs celebrating the life of the flesh and scribbled down in low Latin and early French and German by a bunch of hard-drinking, hard-loving, clerical drop-outs. Orff arranged his selections with a vengeance, creating spectacular settings for three soloists, two choruses, and a large orchestra in a neo-archaic style all his own. The piece is long on big moments and short on nuances. Orff wanted to simplify music and bring it back to its primitive origins, so he used insistent rhythms, coarse melodies, and unison choruses. Sophisticates disdain the results, but I wallow in the music's intoxicating extravagance. Others who still get a bang out of the roasted swan's lament, the drunkard's tale of his fall from respectability, and the impassioned celebrations of the joys of spring, strong drink, and love may wish to know that this new Angel recording is in many ways one of the most satisfying the work has ever had (and there are ten others in the current Schwann). Of the soloists, only tenor John Van Kesteren enters wholeheartedly enough into the spirit of the occasion, but Riccardo Muti's enthusiastic leadership of the choral and orchestral forces sweeps all before it, and the recorded sound is simply glorious.

PUCCINI: Tosca. Katia Ricciarelli (soprano), Floria Tosca; José Carreras (tenor). Mario Cavaradossi; Ruggero Raimondi (bass), Baron Scarpia; Gottfried Hornik (baritone), Angelotti; Heinz Zednik (tenor), Spoletta; Fernando Corena (bass), Sacristan; Victor von Halem (baritone), Sciarrone/Jailer; Wolfgang Bünten (boy soprano), Shepherd Boy. Chorus of the German Opera, Berlin; Berlin Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON 2707 121 two discs \$19.96, © 3370 033 \$19.96.

Performance: Good, but . . . Recording: Mostly very good

It can safely be said of Herbert von Karajan's opera recordings, whether you like them or not, that his leadership generally overshadows the contributions of his singers. The current state of opera singing being what it is, this is not as unusual now as it would have been even, say, a decade ago. In any case, the familiar marks of a "Karajan performance" are clearly present in his second complete recording of Puccini's *Tosca*: fastidious preparation, consummate control of an orchestra that is finely tuned to his intentions, and orchestral sounds that are uncannily luscious yet transparent, revealing rather than submerging the singers. Singers generally cherish the experience of working with Karajan; they seem to accept his judgment unquestioningly even to the point of undertaking roles beyond their natural capabilities.

Certainly Karajan's ways have become quirkier and more willful with time; there is a great deal of calculation and not enough spontaneity in his recordings, and his tempos have become damagingly slow. His earlier (1963) Tosca with the Vienna Philharmonic (London OSA 1284) was quite deliberately paced; this new one is nearly seven minutes longer. The Te Deum (finale of Act I) is a good example of his present style. The soaring orchestral phrase that leads into it is marked "con grande espressione," and the music soars grandly indeed, but the flow is retarded and the baritone must begin his "Tre sbirri, una carrozza" in a way that suggests a sight-reading exercise. To be fair, the scene does build to a magnificent climax, the like of which can be found in no other Tosca except Karajan's own earlier version.

Like Toscanini, Karajan prefers working with singers new to their roles, singers he can bend, Svengali-like, to his will. Here only José Carreras has sung his part before; Katia Ricciarelli and Ruggero Raimondi are singing their first Tosca and Scarpia. The results are quite positive in Ricciarelli's case. She may not accomplish anything truly memorable, but she does just about everything right, including a properly subdued, supplicating "Visi d'arte." Her high notes do not ring freely and her intonation is occasionally flawed, but the performance suggests that she will grow into an outstanding Tosca.

I am less optimistic about Carreras, whose once fresh and youthful sound continues to show signs of premature aging. His suave phrasing of "O dolci mani" is to be applauded, but there are too many effortful top notes and his phrasing loses subtlety above the staff. No doubt the tenor's longtime association with Karajan has enhanced his international stature, but he has paid a heavy price for it. Raimondi's Scarpia is the most interesting performance among the principals. His voice is a smooth basso cantante that would be ideal for Don Giovanni or Verdi's Attila but lacks the full majestic sonority needed for King Philip or Padre Guardiano. Karajan's preference for such a dark timbre here is understandable: Scarpia's sinister quality is innate in the sound. On the other hand, the role's tessitura is high enough to be merciless for a bassbaritone. Raimondi produces all the notes but often with clear signs of discomfort. Interpretively, his is not a particularly illuminating personification—no role can be mastered immediately upon learning it-but much of it is superbly vocalized.

Little need be said about the supporting cast, a view with which the producers seem to agree since Angelotti and Spoletta are given little audio prominence. The Sciarrone/Jailer is very good, the Angelotti totally colorless, the Spoletta intrusive with

CALL TOLL FREE (800) 223-2706

Audiomatic special of the month





(800) 223-2706	special of	the month	السالج الأساسا
PIONEER Car Stereo	PIONEER KE-3000		BLANK TAPES
INDASH CASSETTE UNITS	In-mash all-eletronic Supertuner	() CHINADINA	maxell
KEX 20 214.99	AM/FM stereo w/cassette deck		C-90 UDX L-II (Cr)
KPX 9500 177.99	Digital read-out for station freq-		C-60 UDX L-II (Cr) 2.49
KPX 9000 156.99	uency. Scan tuning. 10 station pre-set tuning. Built-in PNS		C-90 UDX L-I 3.39
KE 5000 249.99	noise suppression.		C-60 UDXL-I 2.49
KE 3000 214.99	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO I		C-90 UD
KE 2002 210.99	JENSEN Car Stereo	● BLAUPUNKT Car Stereo	C-60 UD 1.89
KE 2100 177.99	IND ASH CASSETTES UNITS	CR3001 Indash Cass 435.99	REEL-TO-REEL
KP 8500 142.99	R-430	CR5001 Indash Cass 349 99	UD35-90B 7"6.79
KP 8000 155.99	R-420 269.99	CR4000 Indash Cass 269 99	UD35-90 7" 5.49
KP 7500 179.99	R-410 209.99	CR2001 Initash Cass 239.99	UD35-180 10" 15.29
KP 6500 159.99	R-405 199.99	CR2000D Indash Cass 205.99	⊕TDK
KP 5500 129.99	R-402 172 99	CR2000 Indash Cass 184.99	SAC-90 (Cr) 2.99
UNDERDASH CASSETTES	R-400 144.99	RECORDS	SAC-60 (Cr) 2.19
KPX 600 119.99	SPEAKERS	ENTIRE SCHWARN CATALOG	ADC-902.49
KP 88G 99.99	Triax II J1033 (6x9"). 79.99/pr	ROCK JAZZ, CLASSICAL	ADC-60
KP 66G 78.99	Coax II J1037 (6x9") 59.99/pr	Minimum Order 4 Records	DC-90
KP 500	Coax II J1041 (5¼") 49.99/pr	A£1 7.98 List Oal 4.85	DC-601.19
POWER AMPLIFIERS	Triax J1001 94.99/pr	ALL 8.88 List. Out 5,35	REEL-TO-REEL
GM 40 49.99	Triax J1065 (6x9") 62.99/pr	ALL 9.98 List Only 5.85	LB-1800 7" 6.39
GM 120 107.99	Triax J1101 (4x10") 62.99/pr	Fages, Casestles, or 8: Tranks	L-1800 7" 5.29 L-3600 10" 14.89
AD 30 Equalizer 92.99	Triax J1174 (5%") 62.99/pr	40 anitri	
AD 50 Equalizer 142 99	Coax J1069 (6x9") 40.99/pr	No Telephone Orders Accepted	Sony FeCr C-90 Special 2.79 (Minimum order – 10 Tapes)
C D 5 Component Eq 91.99	Coax J1105 (4x10") 40.99/pr	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
CD 7 Component Eq 125.99		NMENT SPECIALS	BLANK VIDEO CASSETTES
SPEAKERS	Teac CX350 Cassette 184 99	Koss CM1020 Speakers 535.39/pr	Sony L-750(Beta) Special 15.99
TS 695 84.99/pr	Teac A550RX Cassette. 399.99	Koss K4DS Delay 349.99	Sony L-500 (Beta) 13.99
TS 698 99.99/pr	MXR 10 Band Equalizer 149.99	Scott 350R Receiver 229,99	Fuji T-120 (VHS) 15.49
TS X6	MXR 15 Band Equalizer 249.99	Scott PS97XV Turntable 179.99	All merchandise is Factory Fresh and
TS X9 131.99/pr	KLH 331 Speakers 119.99/pr	BIC T-D5 Cassette 134.99 BIC T-4M Cassette 526.99	complete with Manufacturer's War- ranty. For immediate shipment, send
TS 167 45.99/pr	KLH 327 Speakers . 259.99/pr	BIC T-4M Cassette 526 99 Atari CX2600 Video 149.99	Certified Check, Money Order, Cash-
TS 168 73.99/pr	Koss CM1010 Speakers 354.99/pr PHONO CARTRIDGES	HE ADPHONES	ier's Check, or Master Charge or Visa
Clation Car Stereo	Shure V15 Type IV 102.99	Koss Pro 4AAA Special 45.99	(Send Card Number and Expiration
PE958A	Shure V15 Type III HE 83.99	Koss HVX LC 48.99	Datel. Call us toll-free Mon-Fri 9AM 7PM, Sat 10AM-7PM (Eastern Time)
PE751C	Shure M97 HE 53.99	Koss HVX	for Credit Card orders, Personal
PE662C	Shure M95 HE	Sennheiser HD-430 75.99	Checks are subject to hold for bank
300 EQ8 Equalizer 141.99	Audio-Technica AT135EC 103:33	Sennheiser HD-222 /3.99	clearance_Shipping & handling charge
100 EQ8 Equalizer 81.99	Audio Technica AT125LC 46.99	Sennheiser HD-420	\$3.50 (Canada, Puerto Rico, Hawali, & Alaska \$7.00) Allow 5-12 days for
SANYO Car Stereo	Stanton 881S	Audio-Technica ATH-7 89.99	U.P.S. delivery. For all matters other
FT1490-2 Indash Cass 166.99	Stanton 681 EEES 56.99 Stanton 681 EEE 47.99	Audio Technica ATH-6 19.99	than to place orders, please call
FT1498 Indash Cass 229.99	Empire 2000Z 54.99	Sony MDR-7	212-686-5500 No C.O.D. orders
FT1496 Indash Cass 184.99	Empire 2000E3 18 99	Sony MDR-3 34.99	accepted, N.Y. Residents must include Proper Sales Tax.
FT2400 Indash Cass 229 99	Pickering XSV4000 68.99	Sany MDR 5 49.99	Include Proper Sales Tax.
Audioma	FREE CATALOG	nies (8C	CALL TOLL FREE O)223-2706
New More Brown New	York N.Y. 10001 - call (Z Z 080-5500 in:	N.Y., Hawaii Alaska Canada

CIRCLE NO. 7 ON READER SERVICE CARD

CONSTANTY



Technics

Zero tracking error

Marantz The most asked for

\$209 ea.

HD-880

\$359

Pioneer's Newest Receiver



SX-D5000 \$4.3

Tape Specials

Video Tape

TDK-D-C90 \$ 40 Case of 10



Teac Auto Reverse

497

X-7R



Weekdays 9-9

Saturdays 9-5

TOLL FREE 800-356-9514

Over 100 Brands like:

Technics Maxell Sony Cerwin Acutex Craig Empire Teac Vega Pioneer Scotch Marantz Altec Akai **IBL** Sharp B I C. Kenwood Dual Audio Technica Stanton Phillips Koss Sansui Shure TDK Clarion Pickering ensen



WISCONSIN DISCOUNT STEREO 2417 w. badger rd. madison, wi 53713 his Germanic delivery, and Fernando Corena, once a peerless Sacristan, has reached a stage of virtual tonelessness. There are many—too many—*Toscas* in the catalog, and the mono Angel 3508 remains the classic version despite its age. Karajan's earlier version heads the stereo list, challenged only by Callas' second one (with Bergonzi and Gobbi on Angel S-3655). All others are in a lower category, but among them I rate this new arrival near the top. And Deutsche Grammophon's packaging is beautiful.

G.J.

PURCELL: King Arthur. Honor Sheppard, Jean Knibbs, Rosemary Hardy (sopranos); Alfred Deller, Mark Deller (countertenors); Paul Elliott, Leigh Nixon (tenors); Maurice Bevan (baritone); Nigel Beavan (bass); the Deller Choir; the King's Musick, Roderick Skeaping cond. MUSICAL HERITAGE SOCIETY MHS 4188/89 two discs \$13.90 (plus \$1.25 postage and handling charge from the Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

Performance: Tasty but odd Recording: Okay

John Dryden's King Arthur with music by Henry Purcell was produced in London in 1691 at the Queen's Theatre, Dorset Garden, the most elaborate and best-equipped theater of the day. All of Purcell's music for the London theater consists of song-and-dance interludes in spectacle plays, which often had a great many separate numbers and scenes in the tradition of the old





Mordaunt-Short Inc Importers and Distributors of Mordaunt Short High Fidelity Loudspeaker Systems

Mordaunt Short High Fidelity Loudspeaker Systems
1919 Middle Country Road, Centereach, N.Y. 11720 (516) 981-0066

CIRCLE NO. 40 ON READER SERVICE CARD



The New 1980 Basic Repertoire

STEREO REVIEW again presents the annual revision of the Basic Repertoire. In pamphlet form, the 1980 updating includes disc and tape recommendations for over 180 standard musical works. For your copy, send \$1.00 in cash, plus a stamped (20¢), self-addressed No. 10 envelope (9½ x 4½ in.), to Esther Maldonado, STEREO REVIEW, I Park Avenue, New York, N.Y. 10016.

masque. Purcell had the knack of striking a perfect balance between a highfalutin, contrapuntal, Baroque opera style and a more popular idiom influenced by English traditional music. He wrote some of his greatest and most inspired music for the theater, and King Arthur is both. Since the subject is English mythological history—the subtitle is "The British Worthy"—there are lots of opportunities for expressing grand patriotic sentiments, as well as for rustic humor, weird pagan invocations to Wodan (!), drunken revelry, sex, pastoral idyls, picturesque speech and patter, and as many classical-type gods, nymphs, and shepherds as Dryden and Purcell could cram in. What more could you want from a great seventeenth-century score?

The big name among the performers here is Alfred Deller, who is, of course, an old hand at this repertoire. But he is surrounded with Olde Musicke singers and players, and the approach is a little too tasteful; we get neither first-class vocalism nor very much of a popular or theatrical style (one exception is tenor Leigh Nixon, who does a most amusing rustic swain). In effect, both the performance and recording employ a court or madrigal style for a theatrical score. The result, while charming, is not always appropriate. E.S.

RECORDING OF SPECIAL MERIT

RIMSKY-KORSAKOV: Scheherazade, Op. 35. Concertgebouw Orchestra, Amsterdam, Kiril Kondrashin cond. Philips 9500 681 \$9.98, © 7300 776 \$9.98.

Performance: Expansive Recording: Full-bodied

More than twenty years ago Kiril Kondrashin recorded for RCA the Rimsky and Tchaikovsky Capriccios, and his performances, in their combination of dignity, verve, and finesse, gave the impression of a kind of Russian Beecham. (That coupling is available now on Quintessence PMC-7063, and the sound does not hint at its age.) If Kondrashin's subsequent recordings from Moscow did not always sustain that impression, this may have had more to do with the different levels of orchestral playing and sound recording than with a lowering of his own standards. As if determined to show that you don't have to go digital to make superb recordings, Philips has been achieving remarkable realism lately, especially with the Concertgebouw Orchestra, so I had the highest expectations for Kondrashin's recording debut with that orchestra, to which he recently became attached.

My expectations were in large part realized by this handsome Scheherazade. Both the interpretation and the sonics might be described as spacious and full-bodied. Kondrashin takes the piece seriously, with an expansive, voluptuous, but finely detailed approach that bespeaks respect and affection for the score. Herman Krebbers, the orchestra's concertmaster, is absolutely attuned to this concept in his eloquent solos, his colleagues are all in top form, and everything fairly glows. My one reservation has to do with tempo: one listener's "unhurried" can be another's "dragging," and the momentum here is stretched perilously thin in one or two spots. But it never quite snaps, and the extremes of tempo-in the fast sections as well as the more numerous slow ones—seem as convincing, within this concept, as the steadier and more flowing speeds adopted by Pierre Monteux for his quite different but similarly persuasive recording (London STS 15158). This is, in sum, a distinguished issue. R.F.

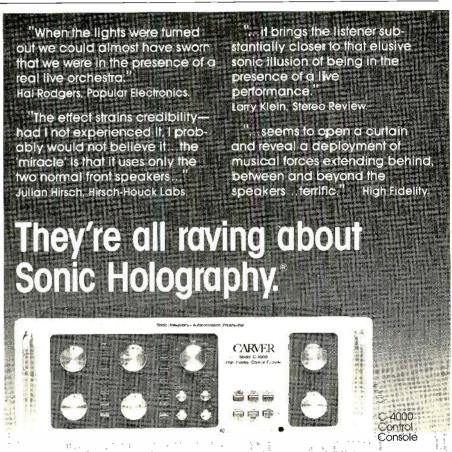
SCHUMANN: Liederkreis, Op. 39; Liederalbum für die Jugend, Op. 79 (see Best of the Month, page 86)

RECORDING OF SPECIAL MERIT

R. STRAUSS: Le Bourgeois Gentilhomme, Suite, Op. 60; Concerto for Oboe and Small Orchestra. Peter Frankl (piano, in suite); Neil Black (oboe, in concerto); English Chamber Orchestra, Daniel Barenboim cond. CBS M 35160 \$8.98, © MT 35160 \$8.98.

Performance. **Winning**Recording: **Crisp and true**

Of all the conductors who might address themselves to the *Beurgeois Gentilhomme* Suite, Daniel Barenboim is the one I would have most expected to perform this work as Ferdinand Leitner did in his old Deutsche Grammophon recording, with members of the orchestra grouped around his piano. Instead, Barenboim has an eminent colleague playing the keyboard part in what must be (Continued on page 135)



Sonic Holography is only the most spectacular achievement of the Carver C-4000. The others are merely extraordinary.

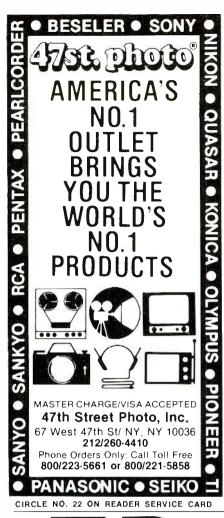
Consider what you actually have in the C-4000:

- A full function stereo preamplifier
- A time-delay system with controllable reverberation mix
- A built-in 40 watt (total) power amplifier for time delay speakers
- The Autocorrelator system that reduces noise up to 8 dB with any source material
- A peak unlimiter/downward expander that nearly doubles dynamic range
- And the Sonic Hologram system that aroused the quotes above.

Please write for the complete test reports, brochures and list of authorized Carver dealers. Then you can rave all you want about your own C-4000.



PC Box 664, Woodinville, Washington 98072





Your National Headquarters for Name Brand Electronics by Mail

- ★ Full Manufacturer Guarantee Applies to All Sales!!
- ★ Orders Shipped in Factory-Sealed Cartons— Most Within 24 Hours
- **★ Multi-Million \$\$\$ Inventory**

TOP DISCOUNT AUDIO

1150 N Powis Rd., West Chicago, IL 60185 SR-12 TOLL FREE 800-323-2518

	rCharge and VISA e for the LOWEST	
MR MS(First)	(Initial)	(Last)
(1 11 51)	(Number and Street	
(City)	(State)	(Zip Code)

In Illinois, Alaska & Hawaii call (312) 293-1825 CIRCLE NO. 62 ON READER SERVICE CARD

WE CARRY THE TECHNICS PRO SERIES-Call for Quotes!



OHN ELIOT GARDINER became conductor of the CBC Vancouver Orchestra earlier this year, but few of us in the U.S. have had opportunities to hear his concerts. He has hitherto been identified primarily with the seventeenth-century material recorded by his London-based Monteverdi Choir and Orchestra, and he has also recorded guitar concertos by Lennox Berkeley and Joaquín Rodrigo with Julian Bream. But none of this activity could have hinted at the flair for Massenet that is so brilliantly evident in an unexpected but very welcome two-disc set from the Musical Heritage Society containing four of that composer's seven suites for orchestra.

The Scènes de Féerie, consisting of a Cortège, Ballet, Apparition, and Bacchanale, is the slightest of the four suites and has not been recorded before. The Scènes Dramatiques, based on episodes in Shakespeare's Tempest, Othello, and Macbeth, has been recorded by Richard Bonynge (London CS 7048, with the Scènes Alsaciennes); the two remaining suites are the most popular in Massenet's cycle, but even they have hardly been overexposed. All the performances in the new set are downright delicious, with more of the straightforward warmth of heart shown by Albert Wolff in his unforgettable old London recordings of Suites Nos. 4 and 7 than made its way into the rather perfumed versions of Nos. 3 and 7 under Bonynge. The Monte Carlo Orchestra responds in kind to Gardiner's tasteful

enthusiasm, the recording (by Erato) is rich and especially well defined, and there are some agreeable little fillers on two of the four sides.

With the ebullient Scènes Hongroises (Suite No. 2) available under Pierre Cao on Turnabout QTV 34570, it only remains now for someone to give us at last the Suite d'Orchestre (No. 1) and Scènes Napolitaines (No. 5). I hope Gardiner completes the cycle himself, perhaps filling out a second volume with one of Massenet's suites of theater music (the one from Les Erinnyes, with the famous Elégie, or the one from Phèdre, with its similarly famous overture, or the one from Perce-Neige et les Sept Gnomes, or . . .). In the meantime, enjoy these four sides. The music is not great, or even "important," but it is, I repeat, delicious-and the release is as timely now as a plum pudding. -Richard Freed

MASSENET: Suites for Orchestra: No. 3, Scènes Dramatiques; No. 4, Scènes Pittoresques; No. 6, Scènes de Féerie; No. 7, Scènes Alsaciennes. La Vierge: Scene No. 4, Prelude ("Le Dernier Sommeil de la Vierge"). Don Quichotte: Interludes I and II. Monte Carlo National Opera Orchestra, John Eliot Gardiner cond. MUSICAL HERITAGE SOCIETY MHS 4212/13 two discs \$13.90 (plus \$1.25 postage and handling from the Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

the first recording of this music to give the pianist solo billing (which Peter Frankl's stylish playing fully justifies). But that is not all that is unexpected here. Some very eminent Straussians-Krauss, Leitner, Kempe, Ormandy, Maazel-have recorded this suite, as well as Strauss himself, whereas this is Barenboim's first Strauss recording. Yet it is a real winner, extraordinarily sympathetic to the character of the piece and the specific moods of its component sections; it is so freshly thought out and enlivening that it should transform a piece that has been regarded as something for connoisseurs only into a popular favorite. While there is plenty of lilt in the Tailors' Dance and gemütlich charm in such sections as the minuet and intermezzo, the traditionally Straussian sumptuousness of texture is reduced in favor of a leaner, crisper frame that is far better suited to both the Molière/Lully allusions and the elegant wit that runs through the whole sequence. It is not that Barenboim turns a series of "esoteric" comments into something more obvious, but that he succeeds, as few have before, in drawing all of us inside the special little world of this brilliant confection.

The Oboe Concerto of 1946 precedes the suite on side one, happily avoiding anticlimax. I have never felt that what Strauss put into this work really sustains its twenty-five-minute length, but it does have some lovely moments and gets a lovely performance here from Neil Black. CBS has provided sound as crisp and true as the performances themselves, absolutely silent surfaces, and a further bonus in the form of Peter Eliot Stone's exceptionally thorough notes on the suite.

R. STRAUSS: Ein Heldenleben, Op. 40. Philadelphia Orchestra, Eugene Ormandy cond. RCA ARL1-3581 \$8.98, © ARK1-3581 \$8.98.

Performance The Hero in retrospect Recording Very good

If we include the prewar 78s, this is Eugene Ormandy's fourth go-around with Ein Heldenleben, all with the Philadelphia Orchestra. I still have his 1961 Columbia stereo recording (now available on Odyssey), and Strauss' hero there is an exuberant, immensely confident fellow. Ormandy's latest re-creation is a more benign character, perhaps looking back on his life as a job well done. He presents himself initially in more sedate fashion than heretofore, yet he has plenty of venom left for his critics. In the recollective closing sections of the score Ormandy and his Philadelphians achieve a genuine and moving eloquence. Particular praise is due concertmaster Norman Carol, whose violinistic portrayal of the hero's helpmate is imbued not only with character but remarkable agility and intonational accuracy. The sonics are up to RCA's best recent Philadelphia standard, being amply full and spacious.

TELEMANN: Suite in A Minor for Flute and Strings (see J. S. BACH)

RECORDING OF SPECIAL MERIT

VERDI: Stiffelio. José Carreras (tenor), Stiffelio; Sylvia Sass (soprano), Lina; Matteo Manuguerra (baritone), Stankar; Wla-

IF YOU THINK YOUR STEREO DELIVERS GREAT BASS, ALLOW US TO LOWER YOUR STANDARDS.

Right now, your stereo system doesn't deliver bass frequencies much below 50Hz. Simply because that's the limit of most records, tapes and FM signals.

But now there's a way to hear the kind of bass so deep, you actually feel it. With the dbx Model 110 Subharmonic Synthesizer.

Technically, what the 110 does is simple. It samples the low frequency signal of your music, reproduces it a full octave lower, and then mixes it back in.

Musically, what the 110 does is extraordinary. It re-creates the natural subharmonics of the original sound so your room vibrates with a depth of bass you've never heard before. Or felt. Except in a live performance.

Visit your authorized dbx retailer for a demonstration.

Because just one listen to the dbx Model 110, and your standards will be lowered forever.

dbx, Incorporated, 71 Chapel Street, Newton, MA 02195. 617/964-3210



MAKING GOOD SOUND BETTER

CIRCLE NO. 16 ON READER SERVICE CARD

SIGHT & SOUND AT YOUR FINGERTIPS!



Fall 1980
Hi-Fi & Home Entertainment Buying Guide
Complete Catalog of Too Jame Bland Sereou Video Composers to the Hutter are) Cut
in the Modern Schowel Price:

STEREO DISCOUNTERS

Our new 84-page Fall 1980 Hi-Fi & Home Entertainment Buying Guide is available FREE! It's full of manufacturer's specifications & illustrations of the latest in sight & sound, for your home & car. Call one of our audio/video consultants today—toll free—to order yours. And be sure to ask about our many unadvertised specials!

CALL TOLL FREE 1-800-638-3920

For price quotes or our catalog of the latest in audio & video equipment!



V/SA*

6730 Santa Barbara Ct. Baltimore, MD. 21227

dimiro Ganzarolli (bass), Jorg; Ezio di Cesare (tenor), Raffaele; Maria Venuti (mezzo-soprano), Dorotea; Thomas Moser (tenor), Federico. ORF Symphony Orchestra and Chorus of Vienna, Lamberto Gardelli cond. Philips 6769 039 two discs \$19.96.

Performance: Very good Recording: Very good

In the 1850 Stiffelio, as in the preceding Luisa Miller, Verdi tackled a family tragedy. But if Luisa Miller represented a notable change after so many historical and biblical subjects, Stiffelio went even further in dealing with almost "contemporary" happenings, being based on a play set in the early years of the nineteenth century. Even

more unconventional for the Italian operatic stage were the opera's principal characters, a Protestant minister and his adulterous wife, and the censors had a field day with it. After years of frustration Verdi abandoned hope of ever seeing the opera in its original form and rewrote it as Aroldo, radically changing music and text and moving the action back to the Middle Ages. By that time, however, Rigoletto, Il Trovatore, and La Traviata had been triumphantly launched; both Stiffelio and Aroldo vanished in their shadows. Recent scholarship has focused interest on both operas, with an apparent critical consensus that Stiffelio is dramatically the superior of the two.

My first reaction on hearing this set,

sounds at the source. And be-

which many a Verdian will echo, was simple gratitude, not only for the experience itself, but for encountering this interesting, though by no means flawless, work in such a committed and compelling performance. But then nothing less could be expected from the authoritative leadership of Lamberto Gardelli, an outstanding Verdian.

Stiffelio's basic flaw is a common nineteenth-century phenomenon that is surely frequent in Verdi: a complicated play cannot be turned into an opera without significant cuts that impair logic and continuity. In this case, as noted in Julian Budden's excellent annotations, the opera begins halfway through the play, with the result that the circumstances of the heroine's infidelity are never clarified and the seducer himself appears in a role of little more than comprimario level. The characters of Stiffelio and his father-in-law, Stankar, on the other hand, are interestingly drawn. Both are devout Christians, yet they are driven by a passion for revenge. Their internal conflicts enliven the opera's best scenes and account for the considerable strength and vitality of Verdi's score.

The youthful ardor of José Carreras' sound is not really ideal for the music of Stiffelio, who is a man of mature age and whose low tessitura suggests an early vocal image of Otello. This is, nonetheless, a praiseworthy portrayal of a man torn between fury and forgiveness, and it is attractively vocalized, though Carreras' tones are at times overburdened by emotional and dynamic pressures. The part of Lina, the errant wife, is both ornate and wide-ranging. Sylvia Sass, an interesting singer, handles its demands with intelligence and musicality. Her prayer in Act I is beautifully done, but that level of tonal security is not always sustained. Above all, she should shake herself loose from the Callas influence, which lends a certain imitative self-consciousness to her singing.

Stankar is one of the great Verdian baritone roles, or at least so it seems in Matteo Manuguerra's commanding interpretation. His arias and his long duet with Lina are among the score's most effective pages. Ezio di Cesare makes a very promising debut in the limited role of Raffaele, the seducer whom Stankar dispatches in a duel in the final act. Wladimiro Ganzarolli is not quite the basso cantante to do justice to the Padre Guardiano kind of music Verdi wrote for Jorg, but he is more than adequate.

But principal credit for the success of the enterprise should go to Lamberto Gardelli. His vital leadership captures the spirit of this opera, a work no longer burdened by the crudities apparent in earlier Verdi, showing delicate touches of orchestral writing, and, in specific details, clearly anticipating the great Verdi operas to come.

G.J.

WILLIAMS: The Empire Strikes Back, Symphonic Suite. National Philharmonic Orchestra, Charles Gerhardt cond. CHALFONT O SDG 313 \$15.

Performance: Rousing Recording: Excellent

What? Another recording of John Williams' unabashedly old-fashioned romantic score for *The Empire Strikes Back*? Just what the world needs, right? Well, in this

BEYER spects HEADPHON GET YOU cause being sound TO THE most buy. SOURCE model

As manufacturers of the world's most respected performance, studio and broadcast microphones, we have an intimate knowledge of how music

cause we know how music sounds when it's being created, we know how it should sound when it reaches your ears.

That's why Beyer headphones are the most faithful reproducers of music you can buy. Whether it's our most expensive model — the ET1000 Electrostatic Supraaural stereo headphones — or our least expensive model — the DT302, the lightest

full-fidelity stereophone you can buy — you'll find they have uncommon fidelity.

To find out why Beyer has such an awesome appeal to musicians, engineers, and audiophiles throughout the world, visit your Beyer dealer. Listen to our full line of high-performance headphones. Then you'll know why Beyer is better.



Beyer**)))** Dynamic

BEYER DYNAMIC, INC. 5-05 Burns Avenue, Hicksville, NY 11801 • (516) 935-8000 In Canada, H. Roy Gray, Ltd.









case, maybe. Fact is, as I observed in my review of the original soundtrack (August), two records of this stuff goes a fairly long way without the visuals, and Williams' own quite canny suite, which Chalfont offers here augmented with a few other selected highlights, seems like the ideal alternative for those of you who loved the film but whose attention span wanders without all those dazzling shots of the Millenium Falcon careening through an asteroid belt in a weird game of intergalactic pinball. My feelings about the score itself have not changed: though it's effective, melodic stuff, it lacks the sly humor of the Star Wars music, and though Darth Vader's march theme remains a small gem, I find the whole thing generally a stuffy letdown. But no matter. It gets an extraordinarily sympathetic reading here from film-score veterans Charles Gerhardt and the National Philharmonic, and Chalfont's digital recording is characteristically excellent (to these layman's ears, the disc is noticeably more "natural" sounding than RSO's soundtrack version). If Mr. Williams' admittedly less-than-profound but undeniably entertaining symphonic wall paperings are your cup of tea, or if you simply want a big orchestral audio showcase for your system, this might be a record worth investing in. Steve Simels

WILLIAMS: *Pops in Space* (see "Highbrow Digital Popcorn," page 77)

COLLECTIONS

AMERICAN BRASS QUINTET: Music of the Mid-1800's (see Best of the Month, page 89)

LUCERNE FESTIVAL STRINGS: La Notte. Vivaldi: Flute Concerto in G Minor, Op. 10, No. 2 ("La Notte"). Biber: Serenade in C Major ("Night Watchman"). Mozart: Serenade in G Major (K. 525, "Eine Kleine Nachtmusik"). Boccherini: Quintettino in C Major, Op. 30, No. 6 ("Night Music of the Streets of Madrid"). James Galway (flute, in Vivaldi); Karl Ridderbusch (bass, in Biber); Lucerne Festival Strings, Rudolf Baumgartner cond. VANGUARD VSD-71266 \$7.98.

Performance **Charming** Recording: **Good**

This is a charming record of "nighttime" serenade music from the Baroque and Classical periods. In an age when people's lives were more closely tied to the sun, night was a much darker and more extraordinary time than it is for us today. Music for or about the night stood apart—outside the passions of daylight and the workaday world.

Probably the most unusual work here is the serenade by Heinrich Biber. Its centerpiece is a traditional night-watchman's song—the same text was used by Wagner in Die Meistersinger—that is actually sung. There's no singing in Luigi Boccherini's hardly less charming and striking (though less significant artistically) "quintettino," but the street sounds imitated by the strings include a bell tolling the Ave Maria, strolling guitar players (the cellists are instructed to hold their instruments on their laps as they strum them), and street singers. There's also a movement of obscure signifi-

SABA

Because your listening satisfaction is ultimately what's most important. That's why the entire SABA line gives you top value for your dollar. Whether you choose an economical 3-way combination or an exclusive HiFi system combined from SABA components, you're assured of total quality and superb value.





Professional receiver with infra-red remote control.

ULTRA HI-FIDELITY DIST.

1001 E. TOUHY AVE., SUITE 112, DES PLAINES, IL 60018 312/827-9818

CIRCLE NO. 63 ON READER SERVICE CARD

TAKE HOME A PAIR OF KLH-3's WITHOUT PAYING FOR THEM.

For a limited time, participating KLH dealers will let you take home a pair of the new, widely acclaimed, computer-controlled KLH-3's for a free home trial. Try them out in your own home and compare them to the speakers you have now. You'll soon find that these tiny little speakers will outperform conventional speakers up to 4 times their size.

FREE ALBUM OFFER. You'll also receive Sheffield Lab's latest direct-to-disc recording "Growing up in Hollywood Town" featuring Amanda McBroom singing her Golden Globe award winning song "The Rose." Free. Whether you keep the speakers or not.

So head for your nearest KLH dealer. Take home the KLH-3's without paying for them. And keep the album just for listening.

For your nearest KLH dealer. Take home the KLH-3's without paying for them.



© KLH 1980

cance called Rosario ("rosary"), which includes intentional wrong notes, and a military "retreat"—which has nothing to do with defeated armies (as the sleeve annotator seems to think) but represents a changing-of-the-guard ceremony. Vivaldi's La Notte flute concerto with James Galway and Mozart's well-known Eine Kleine Nachtmusik are the obvious selling points of this release, but the performances of the Biber and Boccherini works—as well as the music—are much fresher.

E.S.

RECORDING OF SPECIAL MERIT

THE SILVER SWAN. Dowland: Fine Knacks for Ladies. Gibbons: The Silver

Swan. Vautor: Sweet Suffolk Owl. Weelkes: Since Robin Hood; Cease Sorrows Now; Come Sirrah, Jack Ho. Mundy: Were I a King. Wilbye: Thus Saith My Clovis Bright; Adieu Sweet Amaryllis. Morley: Now Is the Month of Maying; April Is in My Mistress' Face; My Bonny Lass; Leave This Tormenting; Though Philomela Lost Her Love; O Grief, Even on the Bud; Those Dainty Daffadillies; Daemon and Phyllis; I Love, Alas; Fire, Fire. The Scholars. Nonesuch H-71387 \$5.98.

Performance: Razor sharp Recording: Clear

The Scholars are one of the finest vocal ensembles recording today. These four men

and one woman can sing anything. The essence of their technique is word coloration, which is also the essence of the madrigal. What is next most impressive about their performances is the rhythmic control; they use subtle fluctuations of tempo to enhance the meaning of each verse. As for ensemble, they sing with the kind of precision with which a good string quarter plays. Any group that can portray the kaleidoscopic range of moods in Vautor's Sweet Suffolk Owl and still hold the piece together deserves the highest praise. The Scholars can and do.

S.L.

THE WORLD OF RED SEAL—DIGITAL. Schumann: Symphony No. 1, in B-flat Major, Op. 38 ("Spring"), First Movement. Philadelphia Orchestra, James Levine cond. Mendelssohn: Hebrides Overture, Op. 26. Brahms: Hungarian Dances, Nos. 11-16. Philadelphia Orchestra, Eugene Ormandy cond. Mozart: Piano Concerto No. 20, in D Minor (K. 466), Excerpt from First Movement. Emanuel Ax (piano); Dallas Symphony Orchestra, Eduardo Mata cond. Stravinsky: Suites Nos. 1 and 2 for Small Orchestra. Dallas Symphony Orchestra, Eduardo Mata cond. RCA OXRC1-3624 \$9.98.

Performance: Good to superb Recording: Good to superb

Except for the Mendelssohn Hebrides Overture, which is presumably the same performance included as a filler in Eugene Ormandy's recording of Die Erste Walpurgisnacht released late last year, the contents of this disc are samples of forthcoming RCA discs from digital tape masters. The Schumann, probably the most recent in the series, is both sonically and musically the most successful thing here, and this first movement whets my appetite to hear what James Levine does with the rest of the Spring Symphony. As usual, it is the fine details of sonority and texture that tell: an extra bit of overtone, especially in the violin E-strings, a lovely glint to the triangle, and highly effective localizing of the various orchestral choirs (which appears to have been accomplished through careful microphone placement and setup rather than extensive post-mixing).

Ormandy's Mendelssohn is marginally less spectacular, but it is a fine performance with ample atmosphere. The Brahms Hungarian Dances (in the Albert Parlow orchestration?) could use more get up and go and more gypsy atmosphere than I detect here. I'm sorry that a complete movement of the Mozart concerto was not included; we get the lead-in to the Beethoven cadenza and fine reproduction of Ax's piano work, but enclosed within a rather tight orchestral ambiance-clearly not the same surround used for the Dallas Symphony's recordings of the two Stravinsky Suites for Small Orchestra. These little musical-hall-style suites seem to be from the same sessions that produced Eduardo Mata's earlier digital Stravinsky records, for the room ambiance is much the same and the faint offstage metallic noises I noted in the previous discs are very much present. The pieces themselves are played with verve and style, if not always with impeccable ensemble. The sound is clear as a bell, with a nice amalgam of brilliance and warmth. D.H.

TOLL FREE 800-638-6666

CAR STEREO

Р	IONEEF	≀KP-8	50	10	١.			÷			٠						\$1	13	8
Р	IONEEF	KPX-	90	0	Ю	١.											\$1	15	3
Ρ	IONEER	KE-3	00	0													\$2	20	5
	IONEER																		
	ANYO F																		
S	anyo f	T-149	5.													C	À	LI	L
J١	ENSEN	R-430															\$2	9	7
J١	ENSEN	J-1033	3.													C	A:	LI	L
JE	ENSEN.	H-106	5.					,							\$	6	2	рг	
JI	ENSEN	J-1069	١,		-										\$	4	0	pr	

CALL FOR PRICES ON ALL PIONEER, CRAIG, SANYO, AND JENSEN MODELS

Technics



SL-D1 Turntable —
Direct Drive, pitch control, strobe

CALL FOR PRICES ON ALL TECHNICS MODELS

COME AND GET

THE LOWEST PRICES, THE WIDEST SELECTION, AND THE FASTEST SERVICE—IT'S ALL AT DISCOUNT SOUND...SO COME AND GET IT!

OPIONEER



SX-3800 AM/FM Receiver—
60 watts per channel,
Digital-Quartz CALL
PL—200 Turntable—

Direct Drive, Semi-auto., strobe..........\$99
CT-F650 Cassette Deck—

CT-F650 Cassette Deck—
Fluroscan meters, Metal tape capable CALL

CALL FOR PRICES ON ALL PIONEER MODELS

AKAI



GX-M50 Cassette Deck —
Fluorescent meters, Metal tape, Program Locator, etc. CALL

CS-M01A Cassette Deck—
Metal tape, Sendust Head,
MPX filter.....\$129
AT-V04 AM/FM Tuner—

Digital Synthesizer, 7station presets CALL
CALL FOR PRICES ON ALL
AKAI MODELS

Sansui.

R-30 AM/FM Receiver— 25 watts per channel,

LED tuning\$159 4900Z AM/FM Receiver— 55 watts per channel,

55 watts per channel, Digital tuner, 12 station presets...........CALL AU-D7 DC Amplifier—

80 watts per channel, 0.015% THD, 4 Band equalizer CALL

CALL FOR PRICES ON ALL SANSUI MODELS



1200 PARK LAWN DRIVE, ROCKVILLE, MD. 20852 All orders shipped immediately • Phone orders accepted • Use your Bank-Americard or Master Charge • Call or write for price quotes on all the top audio brands • Write for free catalog • All merchandise in factory sealed cartons with full manufacturer's warranty.

800-638-6666

301-881-8890



• AUDIO BASICS (Greene) Why Buy Components?, Jan. 32 Volume Control, Feb. 26 Cassette Versus Open Reel, Mar. 24 Preamplifiers, Apr. 34 Audio Education, May 28 Turn the (Car) Radio On, Jun. 28 Tenescentrol Courage, Jul. 24 Tone-control Courage, Jul. 24 Selecting a Speaker, Aug. 22 Books for Beginners, Oct. 24 What's in a Name, Nov. 26 The Force That's with You, Dec. 30

• AUDIO/VIDEO NEWS
Car-stereo Standards (Ranada), Jan. 28
Audio for the Eighties (Copland), Feb. 22
Digital-recording Standards (Ranada), Mar. 20
Dbx-encoded Digital Discs (Ranada), Apr. 26
CBS Mastersound (Ranada), Oct. 28

EQUIPMENT REVIEWS (Hirsch-Houck Laboratories)

Amplifiers and Preamplifiers Adcom GFA-1 (power), Jul. 34 Apt 1 (power), Nov. 40 Carver M-400 (power), Oct. 46 Crown SL-1 (preamplifier) and PL-1 (power), Feb. 48 Hafler DH-200 (power), Jan. 40 Heath AP-1800 (preamplifier), Sep. 40 Nikko Alpha VI (power), Aug. 44 Optonica SX-9305 (power), Dec. 46 SAE Model A7 (integrated), May 49 Spectro Acoustics 200SR (power), Apr. 58

Cassette Decks
Eumig FL-1000, Apr. 62
Fisher DD-300, Sep. 30
Harman Kardon hk 705, May 38
Hitachi D-85S, Dec. 38
Marantz SD9000, Jun. 49
Nakamichi 680ZX, Aug. 49
Phase Linear 7000 Series Two, Mar. 34
Technics RS-M24, Oct. 54

Headphones

Headphones
Audio-Technica ATH-7, Jun. 44
Beyer DT440, Feb. 44
Koss HV/X and HV/XLC, Jul. 41
Sennheiser HD-420, Mar. 44

Phono Cartridges ADC Integra XLM III, Sep. 28 Empire 600LAC, Nov. 46 Micro-Acoustics 3002, Dec. 40 Pickering XSV/4000, Oct. 52 Shure SC39ED, Jan. 56 Sonus Dimension 5, Apr. 50

Receivers
Aiwa AX-7800U, Jun. 40
Luxman R-3045, Nov. 50
Mitsubishi DA-R20, Aug. 38 Mitsubishi DA-R20, Aug. 38 Onkyo TX-5000, Sep. 44 Realistic STA-2200, Feb. 40 Sansui G-7700, Jul. 42 Sanyo Plus 75, Jan. 52 Sony STR-V55, Mar. 50 Vector Research VRX-9000, May 41

Signal Processors
ADC Sound Shaper Three equalizer, Feb. 36
Audio Control C-101 equalizer/analyzer, May 48
Audio Pulse Model 1000 time delay, Aug. 34
Sound Concepts IR2100 image-restoration control, Dec. 52

Speaker Systems Acoustic Research AR93, Nov. 38 Avid Model 110, Dec. 36 Boston Acoustics A100, Jun. 46 Bozak MB-80, Sep. 38 Dynaco A-150, Jul. 36

JBL L150, Feb. 46 Jensen System C, May 46 KLH 1, Apr. 42 Ohm M/N, Mar. 46 Polk Model 10, Jan. 44 Scott Model 166, Oct. 40

Tuners

Philips AH 180, Apr. 52 Revox B760, Jun. 52 Technics ST-8077, Jan. 49

Turntables, Automatic and Manual Dual 1264, Nov. 44 Garrard GT350ap, Jul. 38 JVC QL-F6, Mar. 40 Pioneer PL-400, Aug. 32 Yamaha P-750, Oct. 56

TAPE TALK (Stark)

Prerecorded Cassettes for the Critical, Mar. 26 Reader Questions and Answers, Jan. 34, Feb. 28, Apr. 36, May 30, Jun. 30, Jul. 26, Aug. 24, Oct. 32, Nov. 38, Dec. 28

TECHNICAL TALK (Hirsch) • TECHNICAL TALK (Hirsch)
Dynamic Range and Other Matters, Jan. 39
FM Tuning, Feb. 35
Metal Tape, Mar. 33
More on Stereo Imaging, Apr. 41
IHF Amplifier Measurements, May 35
Variations on an Amplifier, Jun. 36
Double Blind Equipment Comparisons, Jul. 31
Speaker Design in the Digital Age, Aug. 29
Hi-Fi Is Getting Better, Sep. 25
An Important New Power-amplifier Design,
Oct. 30

Oct. 39
Hi-Fi Is Getting Better (Part 2), Nov. 35
Cartridge Response and Temperature, Dec. 35

● TECHNICAL FEATURES

Amplifiers, A Buyer's Guide (Stark), Feb. 60

Car Stereo (Berger), Jun. 60

Cassette Decks, Buyer's Guide (Ohr), Mar. 60; Cassette Tape (Dale), Mar. 74

Digital Decade (Traiman), Jan. 69; A Dozen Digital Demo Discs (Ranada), Jan. 64; also see Superdiscs see Superdiscs
Equalizers (Sheffield), Apr. 72
Installation of the Month (Ranada, Greene),
Jan. 59, Feb. 54, Jun. 34, Oct. 36
Listening Tests (Claudy), Jul. 52
Loudspeakers: Placement (Mitchell), Aug. 56;
Power Requirements (Allison), Aug. 62
New Audio Products 1980: Winter CES, May 62; Summer CES, Sep. 49, Oct. 70
Readouts, Hi-fi (Berger), Oct. 64
Reality, Sonic (Klein), Aug. 18
Remote Control (Ranada), Jul. 60
Superdiscs (Ranada et al.), Dec. 60
Tape Recording, A Basic Vocabulary (Ranada),
Mar. 68 see Superdiscs Upgrading for the Eighties (Ranada), Nov. 58 Videodiscs, The Coming War of the (Ranada),

BEST OF THE MONTH

Classical

Bach, C. P. E.: Four Hamburg Symphonies, Bach, J. S.: Suites for Orchestra Nos. 3 and 4, Apr. 87 Bernstein: Serenade; Fancy Free, Jul. 66 Brahms: Piano Sonatas Nos. 1 and 2, Dec. 82 Copland: Music for Solo Piano, Apr. 87 Grieg: Complete Works for String Orchestra, Aug. 72 Aug. 72
Handel: Ariodante, Jul. 68
Hindemith: Mathis der Maler, Jan. 86
Mahler: Symphony No. 4, Feb. 81
Martinů: Symphonies Nos. 2 and 6, Oct. 83
Mozart: The Magic Flute, Nov. 70; Piano
Concertos Nos. 14 and 26, Jun. 76; Piano
Concertos Nos. 8 and 22, Nov. 75; Sacred

Arias, Jan. 92; Symphonies Nos. 18-27, May 72 Pettersson: Symphony No. 8, Aug. 74 Ruggles: The Complete Music, Oct. 80 Rutter: The Beatles Concerto. Rutter/Goodwin: Six Beatles Impressions, Sep. 75 Six beattes Impressions, Sep. 73
Saint-Saens: Organ Symphony, Aug. 73
Scarlatti: Thirty Essercizi for Cembalo, May 74
Schoenberg: Gurrelieder, Mar. 82
Schumann: Liederkreis, Op. 39, Jul. 74;
Liederkreis, Op. 39, and Liederalbum, Op.
79, Dec. 86 Shostakovich: Three Song Cycles, Mar. 84 Verdi: Luisa Miller, Sep. 72; Rigoletto, Feb. 78

American Brass Quintet: Music of the Mid-1800's, Dec. 89 The Canadian Brass and Friends: Unexplored The Canadian Brass and Friends: Unexplored Territory, Sep. 74
DeGaetami, Jan, and Gilbert Kalish:
Rachmaninoff and Chausson Songs, Jun. 79
Gabrieli Quartet: Chamber Works of Bridge Marcoulescou, Yolanda: Opera Arias, Feb. 80 Melos Quartet: Debussy and Ravel Quartets, Mar. 91 Panocha Quartet: Quartets by Dvořák, Haydn, and Schubert, May 81 Suk, Josef, and Jan Panenka: Czech Violin Sonatas. Apr. 84

Popular

Popular
Benson, George: Give Me the Night, Dec. 85
Clapton, Eric: Just One Night, Aug. 75
Dalton, Lacy J., Jun. 79
Di Meola, Al: Splendido Hotel, Oct. 80
The Emotions: Come into Our World, Apr. 91
Franklin, Rodney: You'll Never Know, Jun. 80
Gatlin, Larry: The Pilgrim, Nov. 72
Gismonti, Egberto: Solo, Jan. 86
Gordon, Dexter: Great Encounters, Apr. 82
Hayes, Isaac: And Once Again, Aug. 73
Jackson, Joe: I'm the Man, Jan. 89
Jackson, Millie, and Isaac Hayes: Royal
Rappin's, Feb. 81
Joel, Billy: Glass Houses, Jun. 74
The Kendalls: Heart of the Matter, Feb. 82
King, Carole: Pearls, Sep. 74
Lewis, Jerry Lee: When Two Worlds Collide,
Jul. 71
Lowe, Lucy: Vaudeville Songs, Mar. 87
Middler Batter, Thinks, and Whitneys. Log. 85 Jul. 71
Lowe, Lucy: Vaudeville Songs, Mar. 87
Midler, Bette: Thighs and Whispers, Jan. 85
Nash, Johnny: Let's Go Dancing, Mar. 84
Parsons, Gene: Melodies, May 78
Peters, Bernadette, Aug. 70
The Pretenders, Apr. 88
Ray, Goodman & Brown, May 77
The Records: Crashes, Nov. 76
Robinson, Smokey: Warm Thoughts, Jul. 73
The Searchers, May 74
Simon, Carly: Come Upstairs, Oct. 78
Simon, Paul: One-Trick Pony, Dec. 80
Stewart, Amii: Paradise Bird, Feb. 80

Cornelia Street: The Songwriters Exchange, Dec. 85
The MUSE Concerts: No Nukes, Mar. 88
New York, New York: Sounds of the Apple, Jul. 71

GOING ON RECORD (Goodfriend) Ye Olde Authentick, Jan. 62 Campaign Sounds, Feb. 56 A Canticle for Nonesuch, Mar. 59 The Past Recorded, Apr. 66
Mail-order Mozart, May 54
Movies I Heard with You, Jun. 56
The Classical Market (Again), Jul. 50
One Natien, Invisible, Aug. 54
Music and the Good Life, Oct. 62 Misunderstanding Technology, Nov. 56 Home Piracy, Dec. 59

THE POP BEAT Midler Acts (Weiss), Jan. 60

(Overleaf)

The Silly Season (Weiss), Feb. 58 Mad About the Boy (Weiss), Mar. 56 The New Country Woman (Coppage), Jun. 58 Useless "Art" (Salzman), Jul. 48 Benign Piracy (Albertson), Oct. 60

• SIMELS LIVE Marshall Chapman, Superstar, Jan. 150 "Folk" Music, Feb. 142 Scouting Talent, Mar. 140
Dodging the Shrapnel, Apr. 146
Return of the Cover Band, May 122
Big Noise from West Orange, Jun. 130 Trend Bucking, Jul. 114
Penetrating Parodies, Aug. 106
New Folks at Home, Oct. 134 The Asbury Jukes Come Home (Again), Nov. 138 You Didn't Have to Be There, Dec. 144

• SPEAKING OF MUSIC (Anderson)
Digital Decade, Jan. 6
Missing Ingredients, Feb. 6
Have We Got It All Taped?, Mar. 6
Culture Management, Apr. 6
The Original-instrument Rag, May 6
Testing in a Wicked World, Jun. 6
Good News Tonight?, Jul. 6
Citizen's Banter, Aug. 6
Video Software, Sep. 6
The Performer/Audience Conspiracy, Oct. 6
God Bless Butterfly, Nov. 6
Necessary Noise, Dec. 6 SPEAKING OF MUSIC (Anderson)

MUSICAL FEATURES Arrau, Claudio: Historic Recordings, Albéniz's Iberia, Chopin's Nocturnes (Kipnis), Jan. 112; Debussy Préludes (Freed), Dec. 120
Bach, J. S.: German Organ Mass (Lincoln), Mar. 93; Keyboard Works (Lincoln), Jul. 78; Brandenburg Concertos (Goodfriend), Sep. 78 Bach, P. D. Q.: Black Forest Bluegrass (Kresh), Barnum (Kresh), Oct. 98
Barous Jazz: Gowers and Bolling (Salzman), Bartók: Piano Concertos Nos. 1 and 2 (Salzman), Jan. 95 The Beatles: Rarities (Simels), Jul. 94 Beethoven: Op. 131, string-orchestra version (Freed), Mar. 96; Leonore (Salzman), May 90; Quartets, Op. 18 (Hall), Jun. 111; Fidelio (Goodfriend), Aug. 98; also see Bernstein Berg: Lulu (Salzman), Mar. 104; also see Stravinsky Bernstein's Beethoven Nine (Hall), Aug. 94 The B-52's: Wild Planet (Simels), Dec. 91
The Boomtown Rats: The Fine Art of Surfacing (Simels), Jan. 117 Brackeen, JoAnne: Prism; Mythical Magic (Albertson), Jun. 104 Browne, Jackson: Hold Out (Coppage), Nov. Bryson, Peabo—see Cole, Natalie Buffett, Jimmy: Volcano (Reilly), Jan. 120 Cage: Vocal Works; Etudes Australes, Nos. 1-16; The Seasons (Salzman), Apr. 124 Callas, Maria—see Verdi: La Traviata CBS Mastersound Digital (Hall), Dec. 118; also see Audio/Video News, Oct. 28 Chase, Chevy (Simels), Dec. 100 Christmas, Music for: A Basic Library (Goodfriend, Thompson), Dec. 69 The Clash: London Calling (Morthland), Jun. Clooney, Rosemary: Sings the Lyrics of Ira Gershwin (Reilly), Sep. 89 Cole, Natalie, and Peabo Bryson: We're the Best of Friends (Garland), Apr. 94 Costello, Elvis, and the Attractions: Get Happy!! (Coppage), Jun. 86
The Crusaders: Rhapsody and Blues (Garland), Dalton, Lacy J. (Nash), Nov. 66; Hard Times (Coppage), Nov. 124 Daniels, Charlie (Nash), Jan. 80; Full Moon (Coppage), Dec. 92
Davies, Gail: The Game (Coppage), Apr. 98
Davis, Miles: Circle in the Round (Albertson),

Denver, John: Autograph (Reilly), Jun. 92 Digital Recording: Choral Triumph in Boïto and Verdi (Jellinek), Oct. 109; also see Gould, CBS Mastersound The Doobie Brothers: The Captain and Me Coppage), Oct. 90
Dvořák: Trio in F Minor, Op. 65 (Freed), Feb. 121; Symphonies Nos. 7-9 (Hall), Nov. 82
Early Keyboard Music (Lincoln), May 94
Ellis, Anita: Echoes; A Legend Sings (Reilly), Apr. 102 Emerson, Lake & Palmer: In Concert (Simels), Feb. 94 Epic's Nu Disk (Simels), Sep. 96 Evita (Reilly), Feb. 109 The Fabulous Poodles: Think Pink (Vance), Fleetwood Mac: Tusk (Coppage), Jan. 124 Foxy: Party Boys (Buxbaum), Apr. 112 Freeman, Chico (Albertson), May 106 Gould, Morton: Digital Recordings (Hall), Feb. 128; dbx-Encoded Recordings (Ranada), Nov. 94 Nov. 94
Harris, Emmylou: Roses in the Snow
(Coppage), Oct. 94
Havana Jam (Coppage), Mar. 134
Hill, Dan: If Dreams Had Wings (Coppage), Oct. 88 Hines, Earl (Dance), Feb. 70 Horne, Lena, and Gabor Szabo: Lena and Gabor (Albertson), Oct. 100 Humes, Helen: And the Muse All Stars (Vance), Aug. 87



The Isley Brothers: Go All the Way (Vance),

Aug. 77

Jackson, Millie: Live and Uncensored (Garland), Apr. 104 James, Tommy: Three Times in Love (Vance), Jul. 102 Janáček: The Makropulos Case (Jellinek), Apr. 126
Jazz: Violin (Albertson), Mar. 118; Early Jazz in Film Shorts (Garland), Oct. 104; Baroque Jazz (Salzman), Nov. 86
Jefferson Starship: Freedom at Point Zero (Coppage), Feb. 104
Jennings, Waylon: Music Man (Coppage), Oct. Jones, George: My Very Special Guests (Coppage), Feb. 114 (Coppage), reb. 114
Judge, Here Comes the (Livingstone), Jun. 72
Kid Creole and the Coconuts: Off the Coast
of Me (Cohn), Nov. 107
Knopfler, Mark (Simels), Jun. 66
Kreisler: Violin/Piano Music (Goodfriend), Oct. 128 L.A. Four: Live at Montreux (Albertson), Feb. Larrocha, Alicia de (Livingstone), Mar. 78; Mostly Mozart, Vol. 4 (Anderson), Oct. 114 Lee, Peggy: Close Enough for Love (Reilly), May 97 Liberacesee Judge, Here Comes the Lightfoot, Gordon: Dream Street Rose (Coppage), Jun. 88 Lynn, Loretta: Loretta; Coal Miner's Daughter (Coppage), Jul. 100; also see Videodisc Lyrics and Lyricists, Vol. 2 (Kresh), Jan. 136 Mahler—see Tennstedt Massenet: Werther (Jellinek), Jun. 120; Four Orchestral Suites (Freed), Dec. 134
Mathieu, Mireille: Sings Paul Anka (Reilly), May 104 McBee, Cecil: Compassion (Albertson), Dec. McCartney, Paul: McCartney II (Reilly), Sep. Medtner: Piano Works (Salzman), Jul. 88 Mendelssohn: Symphonies Nos. 4 and 5; Overtures (Hall), Apr. 132 Mercer, Mabel: Echoes of My Life (Livingstone), Dec. 95 Movie Soundtracks: Star Trek (Simels), Mar. 130; 1941 (Anderson), Apr. 93; Kings Row and McVicar (Simels), Nov.

Mozart: Requiem (Freed), Apr. 123; Songs (Jellinek), Nov. 79; also see Larrocha Musgrave: Mary, Queen of Scots (Kresh), Jan. Musica Reservata of London: A Concert of Early Music (Salzman), Nov. 90 Newton-John, Olivia—see Videodisc Newton-John, Olivia—see Videodisc Nock, Mike: Climbing: In Out and Around (Albertson), Jan. 140 NRBQ: Kick Me Hard (Vance), Feb. 85 Oklahoma! (Kresh), Jun. 100 One Mo' Time (Albertson), Oct. 85 Phantasmagoria Musica (Perry), Jan. 104, Feb. 132, Mar. 102, Apr. 140, Jul. 84, Oct. 124, Nov. 102 Nov. 102
Pink Floyd: The Wall (Coppage), Mar. 110
Pointer, Bonnie (Garland), May 108
Pop Music in the Eighties (Bangs), Jan. 74
Pop Rotogravure (Simels), Jan. 114, Apr. 120,
Jun. 108, Oct. 106 Presley, Elvis (Simels), Oct. 86 Previn, André (Livingstone), Sep. 66 Professor Longhair: Crawfish Fiesta (Vance), Jul. 106 Ramones: End of the Century (Morthland), Jun. 90 Record of the Year Awards, Feb. 67; Party, Record of the Year Awards, Feb. 67; Party, Apr. 78
Apr. 78
Reed, Jerry (Coppage), Aug. 67; Sings Jim Croce (Coppage), Aug. 69
Reimann: Lear (Kolodin), Jan. 108
Robles, Marisa (Livingstone), Jul. 63
Rogers, Bobbi: Tommy Wolf Can Really Hang You Up the Most (Albertson), Oct. 96
Rogers, Kenny (Nash), Apr. 68
The Rolling Stones: Emotional Rescue (Simels), Sen. 98 Sep. 98 Ronstadt, Linda: Mad Love (Coppage), May 100 Rouson's Keyboards, Apr. 80, Oct. 76; Kinderscenen, Nov. 64 Rushing, Jimmy: Mister Five by Five (Albertson), Nov. 134
Satie: Geneviève de Brabant; Mass for the Poor; Songs (Goodfriend), Jun. 124 Schwarz, Gerard: The Sound of Trumpets; The Classic Trumpet Concerti (Hall), Feb. 136 Segovia, Andrés: The EMI Recordings, 1927-1939 (Salzman), Aug. 93
Shearing, George: Blues Alley Jazz; with Stéphane Grappelli, Reunion (Albertson), Ind. 108 Jul. 108 Sinatra, Frank: Trilogy (Pleasants), Aug. 84 Sirone: Artistry (Albertson), Mar. 126 Slick, Grace: Dreams (Peel), May 110 Smith, Carrie: Do Your Duty (Reilly), Mar. 109 Split Enz: True Colours (Vance), Dec. 106 Stewart, Al: 24 Carrots (Coppage), Dec. 102 Storyville Jazz Reissues (Vance), Jan. 142 Stravinsky and Berg: Violin Concertos (Freed), Int. 82 Jul. 82 Stuyvesant Quartet: Kreisler and Paganini Quartets (Freed), Sep. 86 Sweet, Rachel: Protect the Innocent (Vance), Tchaikovsky: 1812 Overture, Capriccio Italien, Cossack Dance (Hall), Jan. 96; Romeo and Juliet, Francesca da Rimini (Hall), Jul. 77 Tennstedt, Klaus: Mahler Ninth (Hall), Oct. 110 Teresa: Class Reunion (Buxbaum), Jun. 85 Thomas, Irma: Safe with Me (Albertson), Sep. 103 Tonio K. (Simels), Oct. 72; Amerika (Simels), Aug. 80 Tormé, Mel: A New Album (Albertson), Oct. 100 Utopia: Adventures in Utopia (Coppage), Apr. 110 Verdi: Don Carlos (Jellinek), Apr. 136; La Traviata (Livingstone), Dec. 117 Videodisc Debuts: Olivia Newton-John and Loretta Lynn (Simels), Nov. 108 Von Stade, Frederica: Aria Recital (Jellinek), Sep. 82 Vox Boxes on Cassettes (Kresh), Mar. 107 White, Robert: *Danny Boy*; Beethoven's British Folk Songs (Anderson), May 86 Williams, John (Livingstone), Dec. 74; Pops in Space (Simels), Dec. 77
Wonder, Stevie (Allen), May 56; Journey
Through the Secret Life of Plants (Allen), Feb. 86 Zelenka: Six Trio Sonatas (Lincoln), Oct. 120 Zevon, Warren: Bad Luck Streak in Dancing School (Simels), May 116

128; Times Square (Simels), Dec. 110

Apr. 118 Daye, Cory (Albertson), Jul. 56

A Day in Hollywood/A Night in the Ukraine

dbx Encoding—see Gould
Debussy: Pelléas et Mélisande (Goodfriend),
Mar. 100; Images for Orchestra, Prélude à
l'Après-midi d'un Faune (Goodfriend), Jun.
116; Préludes, Book I (Freed), Dec. 120

STEREO REVIEW CLASSIFIED

CLASSIFIED RATES: Per Word, 15 Word Minimum. COMMERCIAL: \$3.20. EXPAND-AD": \$4.80. PERSONAL RATE: \$1.80. No Minimum. DISPLAY: 1" x 2½", \$390.00. 2" x 2½", \$780.00. 3" x 2½", \$1,170.00. GENERAL INFORMATION: Frequency rates and prepayment discounts available. Payment must accompany order except credit card — Am. Ex., Diners, MC, VISA (include exp. date) — or accredited ad agency insertions. Copy subject to publisher's approval; must be typewritten or printed. First word set in caps. Advertisers using P.O. Boxes MUST supply permanent address and telephone number. Orders not acknowledged. They will appear in next available issue after receipt. Closing date: 5th of the 2nd month preceding cover date (e.g., Mar. issue closes Jan. 5th). Send order & remittance to: Classified Advertising, STEREO REVIEW Magazine, 1 Park Avenue, New York, NY 10016. Direct inquiries to Linda Lemberg. (212) 725-7686.

EQUIPMENT

DIAMOND NEEDLES and STEREO CARTRIDGES at DIS-COUNT PRICES for SHURE, PICKERING, STANTON, EM-PIRE, GRADO, AUDIO TECHNICA, ORTOFON and ADC. Send for free catalog, LYLE CARTRIDGES, Dept. S. Box 69, Brooklyn, NY 11218, For fast service Toll Free 800-221-0906. 9AM - 8PM except Sunday.



WHOLESALE PRICES on stereo/esoteric components, cartridges, tonearms, tapes. Free Catalog. Audio Unlimited, 1798 Technology Drive, San Jose. CA 95110. (408) 279-0122 1-6 M-Th.





TOP-RATED CARTRIDGES UP TO 70% OFF!! We offer Acutex, ADC, Dynavector, Grado, Nagatron, Ortofon, Shure. Sonus, and many more at the lowest possible prices Just Call 212-254-3125 for more information, or write to DIRECT DISCOUNTS LTD., P.O. Box 841. New York, NY 10276.

ATTENTION SOUTHERN AUDIOPHILES. Yamaha. Nakamichi, Carver, Dahlquist, Polk, Audio, Bang & Olufsen, Advent. Aiwa. Great American Sound, Ortofon, Denon, Technics, Visonik, Alpine and Jensen car stereo. Mail order inquiries welcome. We pay all shipping charges. Available at Sound Advice of Ruston, Village Plaza, Ruston, LA 71270. (318) 255-8000.

BUY DIRECT and save British and European Hi-Fi Attractive prices. Send Reply Coupon for Quote, \$3 bills for brochures. Goodwins, 7 The Broadway, Wood Green, London N22. Phone 888-0077 VISA Mastercharge, Visitors welcome.



SPEAKERS SAVE 50%, Build your own speaker system. Write McGee Radio Electronics, 1901 McGee Street, Kansas City, Missouri 64108.

Call for best price!



PHILIPS AND AUOAX LOUDSPEAKERS in stock at good prices with competent service. Madisound Speaker Components. 537 Holly Avenue, Madison, Wisconsin 53711, (608) 256-7337

WISCONSIN HAS: Audionics, Denon, Dahlquist, Hafler, Audio Control. NAD, Polk, Grafyx, Adcom, Connoisseur, STAX, Onkyo, Grado, Revox, Luxman and Aiwa. We invite specific inquiries. The Sound Seller, 1706 Main Street. Marinette, WI 54143. (715) 735-9002.

HORNS-WOOFERS-MIDS-TWEETERS at tremendous OEM savings. Altec, Electro-Voice, Philips, Peerless, Polydax and many others. Dozens of hard to find items used in major manufacturers most expensive systems. Huge selection of crossover network components, automobile systems, and musical instrument loudspeakers. Send \$2.00 for catalog refundable with purchase. SRC Audio. Dept. SR12, 3238 Towerwood Dr., Dallas, TX 75234.



21624 E. Highbluff Rd., Diamond Bar, CA 91765

TOP QUALITY SPEAKERS AND KITS. Send \$1 00. Speaker Warehouse, 809 North Route 441, Hollywood, FL 33021.

LOWEST PRICES BOSE, SAE, NAKAMICHI, and MORE. Dynamic Sound, Box 168(A), Starkville, MS 39759. (601) 323-0750. 1 P.M. - 9 P.M.

ACCURATE, QUALITY AUDIO: Reasonable Prices. Carl Home. Send stamp: Denco, P.O. Box 6104-R, El Monte, CA 91734, (213) 444-9978 Evenings, Weekends.

CARTRIDGES AT WHOLESALE — Other stereo bargains, Free price list. Audio Component Systems. 1329 Union Mill Road, Olympia, WA 98503.

USED HI FI. Buy, Sell, Trade: Broker. Bob Heenan, Box 782, Brookline Village. MA 02147 (617) 969-2727 Wanted McIntosh, Marantz: Western Electric Tube Equipment.

TOP-NAME AUDIO AT LOW LOW PRICES!! Advent, Aiwa, AR, Bose, dbx, Denon, Dual, ESS, Haffer, Harman Kardon, Infinity, JBL, Mitsubishi, NAD, Nikko, Onkyo, Phase Linear, SAE, Soundcraftsmen, Tandberg, Thorens and many more we can't even mention by name—all at the lowest possible prices. All, of course, are factory fresh and include the full manufacturer's warranty. Compare prices, selection and service and we're the best in the business. Our representatives are available for phone quotes and additional information Monday thru Saturday from 10AM to 7PM (EST) at 212–254-3122 Or send \$2.00 for our informative brochure to DI-RECT DISCOUNTS LTD., P.O. Box 841. Cooper Station, NY 10276. For your convenience we accept MrC and VISA over the phone and DON T charge sales tax to out-of-state customers.

ATTENTION: "FOREIGN" AUDIOPHILES AND DEALERS! Western World Audio Exporters can supply virtually ALL brands of hi-fi components, speakers, cartridges, etc. (including esoteiic lines) at very attractive prices. Quotes, terms and availability furnished on request. Write to WESTERN WORLD, 373 Fifth Avenue, Suite 1556, New York, NY 10016. TELEX: 223826 SAKI UR.

DOLBY FM CORRECTLY DECODED - \$100. Also encoded decode kit for recordists. Detailed information; reviews. SRD INTEGREX, Box 747, Havertown, PA 19083.

TV SOUNDS through your Stereo System, Play-Record TV programs 24 feet or more away from TV. Safe, isolated adaptor delivers brilliant simulated stereo sounds. Universal: OK tube. Solid State TV's. Simple to install Instructions included. \$19.95 PP Check or PMO Les Gaskell Enterprises, 11852 S. Hawthorne Blvd., Hawthorne, CA 90250. TEL: (213) 675-2335.

VIDEO RECORDERS TAPES. Panasonic,RCA, Quasar, etc. Best pricing anywhere. MC/VISA, B&J, Box 248-S, Howard Beach, NY 11414 (212) 845-2861, M-F, 11-8 EST.

MAIL OFIDER SAVINGS! Maxell UDXL II C-90 \$3 19. TDK SAC-90 \$2.89, Maxell MX-C-90 (metal tape) \$8.29 (case lots only). NEW! Discowasher D-4 products-record cleaner \$9.95, ADC XLM MK II cart \$26.95. Call or write for prices on AIWA cassette decks, JVC cassette decks, Marantz receiver. O Sullivan Audio Furniture, Sherwood. Rotel. Synergistics speakers, Scott, Thorens, (Auto Sound). SUPER ROAD-STAR SPECIAL! Audiobahn, Grundig, Royal Sound, Magnum, Jensen. COD/Check-MO (please allow for shipping) Belmont Trading Co., 12 Flanders Rd, Belmont, MA 02178. (617) 489-3731. Dealer inquiries welcome.

LOW PRICES ON A HUGE SELECTION OF AUDIO EQUIP-MENT. Many hard to find items Cail for prices and helpful advice — we're among the most knowledgeable in the country! AudioWorld, Box 6202, G.R., MI 49506. (616) 451-3868, 1–8 PM.

CABLE TV DESCRAMBLERS AND CONVERTERS. Build or buy Plans and parts. For information send \$2.00. C&D Company, P.O. Box 21, Jenison, MI 49428.

HIGH RESOLUTION SPEAKERS, bextrenes, ribbons, Audiophile Grade parts and kits, catalog \$1.00 Transcendental Audio, Dept. 6, 6796 Arbutus Street, Arvada, CO 80004. (303)

SPEAKER STANDS The Original GoldStands improve any speaker, custom models, so good they're imitated but never duplicated. Send for catalog, Dealers welcome. GoldStands, 229 Nassau Rd., Huntington, NY 11743. (516) 427-4813

GOLD PLATED phono plugs 90¢ ea., jacks \$1.20, \$1.00 handling. Details SASE. Reference Audio, 368S, Rindge, NH



OMNISONIX 3 dimensional imager—greatly improves any stereo system. In stock for immediate delivery anywhere in the continental U S. for only \$179.95, Call Sound Shed Hi Fi (914) 258-4077, 9AM–9PM Monday–Saturday, MC/VISA accepted



BEST IN THE WEST! Haffler, Nakamichi, Dahiquist, DCM, Magneplanar, Beveridge, APT, Threshold, Polk, Audionics, Harmon Kardon, B&W, Adcom, Rocky Mountain HI-FI, 812 Central, Great Falls, MT 59401, (406) 761-8683.

CUT HIGH SPEAKER COSTS. Speaker Factory Mail Order has ten sound ways to save you



- I can hardly wait! I'm enclosing \$1.00 for 1st class postage and special handling.
- ☐ I'm anxious to find out more, but regular mail is O.K.

Address _____

Oltra (Ot et e 177 e 1

City/State/Zip

Mail to:Speaker Factory Mail Order,Inc.,Dept. SC12 1101 N. Northiake Way, Seattle, WA 98103



Our new speaker kits were designed utilizing the finest bextrene woofers, soft dome tweeters, and matched 2nd and 3rd order networks. These speaker kits offer unparalleled accuracy of reproduction for the price. Send \$2, refundable upon purchase to:

The Speaker Works Box 303 Canaan, NH 03741 603-523 7389

THE ABSOLUTE BEST IN CAR STEREO Brands not found mail order. Personalized instal-

lation information with every order. Custom kits, specializing in foreign, exotic and American Cars.

72 PAGE CATALOG UPON REQUEST Send .50 postage/handling refundable with order.

THE MUSIC BOX

357 Windsor Hwy., P.O. Box 4156 New Windsor, NY 12550

ELECTRO-VOICE HiFi component loudspeakers. Building your own speaker system? Use the best. Free discount catalog. SONIX, Dept. SR, Box 58, Indian Head, MD 20640. (301) 753-6432.

NOT BE BEAT!

- 1. Super Selection
- 2. Strong Guarantee
- 3. Fast Delivery
- 4. Full Warranty

CALL 203-932-4265

\$1 Rebate for all orders over \$50

MAC VISA COD

★ AUDIO PEOPLE ★

998 Orange Ave., West Haven, CT 06516

LOWEST PRICES on AR. ADVENT, ALLISON, Bose, ESS, Fried, Harmon Kardon, Infinity, JBL, Onkyo, SAE, Tandberg, and Thorens, For quotes, Mon. Sat.: Audio Discounts, 1026 McCeney Ave., Silver Spring, MD 20901, (301) 593-8244.

ABATE HIGH ESOTERIC PRICES - closeouts Audio Research, G.A.S., OMI Quatre, Lux, Supex, Sony, Advent & others. For list write: STEREO SHOP, 107 Third Ave. S.E., Cedar Rapids, lowa 52401. (319) 365-3387

PRINTED CIRCUIT BOARDS from schematics, your artwork or ours. FREE Drilling and quotes. Assembly services also available Write: Production Development, 1320 Water Street, Brownsville, PA 15417.

ELIMINATE YOUR "PATCHCORD HEADACHE"

with a CPM-31 Universal Component

Patching Matrix.

For more information, write or call:

NILES AUDIO CORPORATION Dept. SR/P.O. Box 160818 Miami, FL 33116/(305) 271-9181

QUALITY AUDIO COMPONENTS, Multi-Track Equipment, Programmable Calculators, Accessories, Competitive Pricingi Prompt Deliveryl Knowledgeable Staffl Service Facilityl Credit Cards Accepted. FREE Catalog. SOUND IDEAS, Dept. SR. P.O. Box 340, Cary, NC 27511 1-800-334-2483, (NC-919-467-8462)

HERE'S WHAT YOU'VE BEEN MISSING! The Omnisonic Imager produces a 3-D image from two speakers. \$169.95 PPD. AudioWorld, Box 6202, G.R., MI 49506, (616) 451-3668.

PROFESSIONAL ELECTRO-VOICE SPEAKER KITS. Free catalog Soundmove Speaker Kits, P.O. Box 236, Jericho, NY 11753

DO-IT-YOURSELF

SAVE 60% to 75%, BUILD YOUR OWN speaker systems P.C crossovers, woofers, mids, tweeters, instructions. Complete selection, HI-FI, M.I., PRO, DISCO and AUTO SYSTEMS. Send \$2.00 for catalog refundable with purchase. DKI Audio, Dept. SR12, Box 284, Davis, II. 61019.

SAVE 70%. Bulld your own audio video cabinet. For illustrated instructions send \$3.00 to MAK, 3207 Loyola, Dept. 101SR, Austin, TX 78723.

EDUCATIONAL OPPORTUNITIES

LEARN WHILE ASLEEP. Hypnotize! Astonishing details, strange catalog free! Autosuggestion, Box 24-ZD, Olympia, Washington, 98507:

FOR INVENTORS

INVENTIONS WANTED NO IDEA TOO SMALL

Disclosure registration. Potential cash or royalties from manufacturers seeking new ideas. For free information on how to register your ideas, call or write.

AMERICAN INVENTORS CORP.

59 Interstate Dr. Dept SR West Springfield, MA 01089 (413) 737-5376 A Fee Based Marketing Company

TAPES & RECORDERS

SCOTCH RECORDING TAPE, exclusively, all new, lowest prices, TAPE CENTER, Box 4305, Washington, D.C. 20012.

1930-1962 RADIO PROGRAMS. Beats Television!! Tapes, \$1.00 Hour! Established esteemed dealer. Informative 200 page catalog, \$1.25. AM Treasures, Box 192SR, Babylon, N.Y. 11702.

LIVE OPERA TAPES (REELS) — CASSETTES. Unbelievable treasure since 1926. Over 4,000 selections. Free DELUXE Catalog: Mr. Tape, Box 138. Murray Hill Station, N.Y. 10016.

YESTERDAY'S RADIO ON TAPE. Reels-Cassettes. Quality Sound. Reliable Service, Catalog \$2,00. ADVENTURES, Box 4822-S. Inglewood, CA 90302,

The Saxitone Hotline 800-424-2490

IT'S HERE! Saxitone, America's *1 merchandiser of recording tape, has just put in new TOIL FREE Phone Order Lines to serve you better Call now for America's lowest prices on top name recording tape, video tape, recorders, tape decks and recording accessories Order from a full inventory of TDK Maya'i BASE

a full inventory of TDK, Maxell, BASF.
Scotch, Sony, Superscope, B-I-C, Sanyo, EV, Telex & others
Most orders shipped same day FREE 32-page catalog.
Master Charge & Visa honored. Call now and find out why
Saxitone is #1

SAXITONE TAPE SALES

1776 Columbia Road NW, Washington, DC 80009 In Washington metropolitan area call 462-0800

VIENNESE LIGHT MUSIC SOCIETY — Strauss, Lanner, Etc. on Dolby Cassettes. KC Company, Box 793, Augusta, Maine 04330.

VINTAGE RADIO and T.V. — Lowest rates, Post Free, Trading, Video too; Signals, Box 5063, Station E, Edmonton, Alta., Canada T5P 4C1. U.S Inquiries

OPEN REEL TAPES from studio masters. Philips, Argo, Telefunken, Vanguard, Unicorn. Catalogue \$1.00. Barclay-Crocker, Room 1470-S, 11 Broadway, NYC 10004.

LIVE PERFORMANCE TAPES — opera, conductors, instrumentalists. Superior Sound. Open Reel Only. Catalogues. Good Sound Associates, POB 263, Planetarium Station, New York, NY 10024.

EXCITING OLD RADIO TAPES. Large selection available. Free catalog Radio Memories. Box 56-R. California, MD 20619.

OLD RADIO PROGRAMS, \$1.99 hour cassettes- open-reels. Big catalog \$1.50 refundable with order. Nostalgia, Box 254, Simi Vly, CA 93065.

OPEN REEL TAPES. Major labels - RCA, DG, London, others. Rock. classical, pop. soundtracks, quad. 100% guarantee. Bank cards welcome. Catalog/ordering information - \$1.00. REEL SOCIETY, P.O. Box 55099-R. Valencia, CA 91355.

GOLDEN AGE RADIO—Your best source for radio tapes Free catalog. Box 25215-T, Portland, Oregon 97225.

NOSTALGIC VIDEO and radio tapes, books, magazines. Catalog \$2.00. Nostalgia Warehouse, Box 267, Yonkers, NY 10710.

Free S5.00 T-Shirt								
TRE \$3.00 T-3 T-3 TRE \$3.00 T-3 T-3	\$2 59 2 89 4 49 14 95							
TDK SA-C60 (New) 2.25 TDK L-1800 TDK MA-C60 (New) 2.65 TDK LB-1800 TDK D C90 (New) 169 Ampac Gandmaster 1800 ft Reel	5 19 6 49 5 00							
BASE PRO It or III-C90 2.89 Scotch 707-7R-1800 Scotch. Master II or III-C90 3.09 Scotch Master I or II C60 (SALE). Free T-Shirt with every order over 40.00 State size. All lages can be assort.	5 49 1 99							
Add 3.50 shipping. Also will match any price on complete line of Maxell products Free catalog. 100% guaranteed. 412-283-8621. M-Th. 8-3.30. VISA & MC. Tapes. World, 220. Soring ST. Butter PA. 16001.								

8-TRACK & CASSETTE TAPES at discount. All labels. Schwann-1 Guide \$1.25. LTS-2, 40 Bartels, Springfield, MA 01128.

NAME BRAND RECORDING TAPE, custom loaded. In cassettes, reels, cartridges. Huge savings from manufacturer. Low prices on Maxell, TDK, Ampex, etc. Large SASE for catalog. MMJS, 2514 Seaboard Avenue, San Jose, CA 95131. (408) 262-8793

AUDIO/VIDEO TAPE SALE! TDK SAC-90, \$2.89, ADC-90 \$2.35, DC-90 \$1.49, L1800 \$5.10, LB1800 \$6.25, Maxell UDXL2 C-90 \$3.25, RCA VK 250 \$13.99, SONY L500 \$11.49, L750 \$13.99, others. MC/VISA. \$3.00 Shipping (USA). NY Orders taxable! B&J, Box 248S, Howard Beach, NY 11414, (212) 845-2861, M-F, 11–8 EST.

STAR TREK, SCI-FI CASSETTES. Send SASE to: Startone Recordings-A, 2765 West 5th St., Room 19E, Brooklyn, NY

QUALITY TAPES AT WHOLESALE PRICES	
TDK SA C 90 . \$2.72 ALL VHS T120 (Except HG)	\$14.75
TDK \$A C 60 . 2 08 ALL L 750	14.75
TDK AD C-90 . 2 32 ALL L-500 .	10.75
TDK D C-90 1 42 SONY FeCt C-90	3 15
MAXELL UDXL 1 or 2 C-90 3 23 TDK L-1800	4 95
MAXELL UDXL 1 or 2 C-60 2 37 MAXELL UD35-90 1800 .	5 38
MAXELL UD C-90 2.75 MAXELL UDXL35-90B 1800'	15 49
BASE PRO 2 or 3 C-90 2.75 TDK HEAD DEMAGNITIZER HD 01 BASE PRO 1 C-90 2.65 DISHWASHER COMPLETE SYSTEM	10 50
AMPEX GRANDMASTER 2 C-90. 2 95 DISHWASHER ZEROSTAT GUN	14 50
SCOTCH MASTER 2 or 3 C-90 3 10 DISHWASHER ZEROSTAT GON	10 50
ORDERNOW CHK MO/CHG NO COD SHIPPING = 3 50 (USA) 6 50 (OTHERS) 212-3	
QUALITY TAPES, 2085 E 8th St. Dept. MS Brooklyn N.Y. 11223 12-6 P	IVI

RECORDS

SHOW ALBUMS, Rare, Out-of-Print LP's. 64 pg. list. \$1.00. Bakers Wife or Nefertiti — original cast LP \$9.95. Broadway/ Hollywood Recordings, Georgetown, Conn. 06829

COLLECTORS' Soundtracks, Mint. List 50 cents (refundable). Jemm's, P.O. Box 157, Glenview, III. 60025.

OLDIES oldies, 45rpm. Also current hits. Free Catalog. Corny's Record Shop, Box 166L, Mason, Ohio 45040.

PROTECT YOUR ALBUMS. White cardboard replacement jackets 35 cents, Plastic lined sleeves 15 cents. Postage \$1.25. Opera Boxes, 78 Sleeves. Free Catalog. CABCO 400-1, Box 8212, Columbus, Ohio 43201

NOTICE: Record Listeners Wanted

(No experience required). You will receive nationally released albums to rate. There is no extra charge for the LP's you receive - all you pay is a small membership fee which covers all costs of the LP's including postage and handling. In return for your opinion you will build a substantial album collection - "first come basis". For application write

EARS SYSTEMS

Box 10245 5521 Center St., Milwaukee, WI 53210. Dept SR

RARE ORIGINAL RECORDS, all kinds, mostly mint. 5000 list \$2.00, refundable. Carl, Box 828, Princeton, NC 27569.

RECORD HOUND, Box 88, Eagleville, PA 19408. Fills "wantlists"? DOGGONE RIGHT!! 33-1/3 Specialist. Fast, Friendly Service.

CUTOUT OVERSTOCK RECORDS -- UNBELIEVABLE SE-LECTION. \$2.99 Super Specials. \$1.00 for catalog (refundable). Cutouts, 742 Route 18, East Brunswick, NJ 08816.

THE BEST RECORD STORE IN THE WORLD DELIVERED TO YOUR DOOR FREE! Rock, soul, jazz, new wave, space, easy listening, more. Rather Ripped Records Search Service, 1878 Euclid SR12, Berkeley, CA 94709.

ORIGINAL SHOWS & SOUNDTRACKS. "Once-In-A-Lifetime" Auction Sale! Thousands of rare albums. Write for list. MUSICMAN MURRAY, 5516 Santa Monica Blvd., Hollywood, CA 90038.

BEETHOVEN/MOZART/PACHABEL. Samplers. 3 LPs. \$5.98. 3 cassettes, \$7.49. Free catalog: Musical Concepts. Box 53SR, Cedarhurst, NY 11516

RARE OUT-OF-PRINT ALBUMS, 25,000 in stock (FS). List \$2.00 refundable. Record Warehouse, Box 4617, Dept. SR, Rochester, NY 14613.

AUDIOPHILE RECORDS: Save 20% to 40%. Free Catalog Super Sound Record Service, P.O. Box 411237, Chicago, IL 60641

COMPLETE YOUR RECORD COLLECTION. Authentic Calypso Music of the Bahamas. Most requested songs of Bahama Islands. Leading Bahamian Vocal Group. Stereo LP ideal gift. Send Certified Check, Cash or Money Order for U.S. \$15.00 to: Sun Trading Company, Dept. SR80, P.O. Box N4427, Nassau, Bahamas. Sorry, No C.O.D.'s. Allow three weeks for delivery. Shipped P.P. Order two for U.S. \$25.00

CLASSICAL LP'S & TAPES, VAST SELECTION, (In-print only), order from Schwann Catalog, Free price list, (Schwann I LP & tape catalog \$1.75). Classics Unlimited, 328 S. Lake Ave., Pasadena, CA 91101

OUT-OF-PRINT LP's (no rock/classical) - Free list. Davidson, 6114 Gist, Baltimore, MD 21215.

CRYSTAL RECORDS, Inc.: Free Chamber Music Catalog. specializing Brass and Woodwinds. Sedro Wooley, Washington 98284

DISCOUNT OLDIES \$1.00 ea. Thousands of titles. Free catalog, Discount Oldies, Dept. S, Box 64, Bryn Mawr, PA 19010.

TUBES

TV and Radio Tubes 49 cents. Free 48 page color catalog. Cornell, 4215-H University, San Diego, California 92105

INSTRUCTION

RADIO BROADCASTING: Become DJ, engineer. Start your own station - investment/experience unnecessary! Receive free equipment, records. Free details. Broadcasting, Box 130-R12, Paradise, CA 95969.

WANTED

GOLD, silver, platinum, mercury, tantalum wanted. Highest prices paid by refinery. Ores assayed. Free circular. Mercury Terminal, Norwood, MA 02062.

CASH FOR YOUR Unwanted LP's and Prerecorded Reel to Reel Tapes. Reder, Box 323S, Hillburn, NY 10931.

TOP DOLLAR PAID for all types LP's & 45's in good condition. We'll travel for quantity. Nuggets, (617) 536-0679

WANTED. 1969 FULL RANGE 12" & 8", 2-3 way speakers AND speaker systems by Jensen (TF-3A). Electro-Voice (Four). Wharfedale (W-60C), University (Medallion Monitor) Kalish, 565 Walnut Ave., Redlands, CA 92373.

MCINTOSH & MARANTZ tube tape equipment wanted. (213) 576-2642, 576-9103. David Yo, P.O. Box 832, M.P., CA

HYPNOTISM

FREE Hypnotism, Self-Hypnosis, Sleep Learning Catalog! Drawer H400, Ruidoso, New Mexico 88345.

RUBBER STAMPS

RUBBER ADDRESS STAMPS, BUSINESS CARDS Free Catalog — Fast Service. Jackson's, Brownsville Road-E-101. Mt. Vernon, III. 62864.

BUSINESS OPPORTUNITIES

I MADE \$40,000.00 Year by Mailorder! Helped others make money! Details 25c. Torrey, Box 318-NN, Ypsilanti, Michigan

STEREO REPRESENTATIVES NEEDED!!! Lowest Possible Prices!! Over 100 Brands!!! Krasco-Rep SR, 998 Orange Ave., West Haven, Conn. 06516.

AUDIOPHILES WANTED!! Put your knowledge to use, earn an excellent spare time income. We need campus Dealers to sell name brand stereo equipment at substantial discounts in your area. No investment necessary. For information and application please write: ABCOT SR, 1201 East Main Street, Meriden, Conn. 06450. Call (203) 238-7979.

FRASE DEBTS with fittle-known law -- CREATE wealth! Details FREE — Blueprints, No. DD12, Box 100, La Grangeville,

BORROW \$25,000 "OVERNIGHT". Any purpose. Keep indefinitely! Free report! Success Research, Box 29263-RI, Indianapolis, IN 46229.

COLLEGE DEALERS -- WRITE for details on College Programs. Fast shipments, low prices, specify college. Sound Reproduction, 7 Industrial Rd., Fairfield, NJ 07006.

FREE BOOK "2042 Unique, Proven Enterprises." Fabulous unknowns, second inflation income. Haylings-M. Carlsbad, CA 92008

CAMPUS REPRESENTATIVES earn commissions, start a career selling Hi Fi equipment on campus. Large national firm. Call toll free 1-800-638-8806. 9AM to 9PM.

STEREO SALESMEN sell brands to friends and co-workers. good commissions, free training. Call toll free 1-800-638-8806 or 1-301-488-9609, Mr. Murray or Mr. Krizman.

MAKE MONEY IN COLLEGE. Sell brand name audio components. No investment. Unbelievable prices. Call Mr. Kay TOLL FRFF at 800-241-6270.

HIFI REPS NEEDED for America's best dealer program. Over 100 brands available. Full dealer support program. University Reps, P.O Box 355, Pine Island, NY 10969

OVER \$22.50 AN HOUR. Spare time at home! Rubber Stamp industry needs small manufacturers. We furnish all equipment and know-how! Particulars free! Write: ROBERTS, Room RC-374-JP, 1512 Jarvis, Chicago, IL 60626

GOVERNMENT SURPLUS

SURPLUS JEEPS . . \$19.30 . CARS 650,000 ITEMS ... \$19.30" ... CARS ... \$13.50! ... 650,000 ITEMS ... GOVERNMENT SURPLUS ... MOST COMPREHENSIVE DIRECTORY AVAILABLE Tells how, where to buy ... Your area ... \$2 ... MONEYBACK GUARANTEE ... "Government Information Services", Department EC-47, Box 99249, San Francisco, California 94109.

ELECTRONICS

ELECTRONICS BARGAINS, Closeouts, Surplus! Parts, stereo, Industrial, educational. Amazing values! Fascinating items unavailable in stores or catalogs anywhere. Unusual FREE catalog. ETCO-014, Box 762, Plattsburgh, NY 12901.

MOVIE FILMS/VIDEO TAPES

16mm SOUND Features, Shorts, New, Used for Sale. Free Catalog, National Cinema, P.O. Box 43, Ho-Ho-Kus, NJ 07423

OPERA VIDEO - Magnificent performances from Europe on BETA, \forall HS Videocassettes. Free listings. H.R.E., Box 12, Kew Gardens, NY 11415

VIDEOCASSETTES ALL RATINGS ONLY \$6.95 after subscription Videocassettes exchanges for only \$19.95. National Video Exchange, Box 1012, Warren, PA 16365.

BOOKS & MAGAZINES

WORLD'S LARGEST RECORD COLLECTOR'S PUBLICA-TION! 40,000 + records offered each monthly issue! Sample \$1.50. Subscription \$15.00. "Goldmine", Box 187Z, Fraser, MI 48026

PUBLISHERS' OVERSTOCKS, BARGAIN BOOKS. 2,000 titles, all subjects! Free catalog: Hamilton, 98-85 Clapboard, Danbury, CT 06810.

TOTAL MIND POWER (How to use the other 90% of your mind). FREE BOOKLET. Total Mind Power Institute #37, Larkspur, CA 94939

MOBILE DISCOS - Illustrated Book - Everything you must know - Advertising, Deejaying, Buying, etc. Send \$5.00. Mobile Discos, 923 College, Bowling Green, KY 42101.

SAVE MONEY ON HI FI! Previous Dealer reveals how in new booklet. Fifty places listed to buy from. Send only \$1.98 to: Audio-Info, P.O. Box 445R, Walnut Cove, NC 27052.

SEEKING QUALITY SOUND and confused by the marketplace? Comprehensive quide to selecting clean sounding stereo, dealers, and tips to improve your system inexpensively. \$5.95. Far West Audio #S, 14 Angell Street, Irvine, CA 92715.

EMPLOYMENT INFORMATION

ROCKY MOUNTAIN EMPLOYMENT NEWSLETTER!! Colorado, Idaho, Montana, Wyoming!! Current openings - all occupations!! Write today for FREE details to: Intermountain-W, 3506 Birch, Cheyenne, WY 82001.

PERSONALS

MAKE FRIENDS WORLDWIDE through international correspondence. Illustrated brochure free. Hermes-Verlag, Box 10660/Z, D-1000 Berlin 11, W. Germany.

PENFRIENDS - ENGLAND - USA, Through correspondence, Send age, interests. Free reply. Harmony, Box 89SR, Brooklyn, New York 11235.

CORRESPONDENCE FOR FRIENDSHIP IN PHILIPPINES, MALAYSIA Free information. AACC-(SR), Box 1542, Canoga Park, CA 91304.

MISCELLANEOUS

Don't miss your copy! -

1981 STEREO DIRECTORY & BUYING GUIDE

Here are the facts you need to make sense out of today's bewildering stereo marketplace. It's over 250 pages of product listings, facts and data, compiled by the best team of experts in the business. Thousands of products are fully described, complete with photographs, manufacturers' descriptions, even latest retail prices!

Order from 1981 Stereo Directory, Dept. 01453, P.O. Box 278, Pratt Station, Brooklyn, NY 11205. Enclose \$3.95' (\$2.95 plus \$1.00 postage and handling). Outside USA \$5.00. "Residents of CA, CO, DC, FL, IL MA, MO, MI, NY State, UT and VT add applicable sales for

sales tax

MICROFILM EDITIONS **AVAILABLE**

Copies of STEREO REVIEW Magazine are available on microfilm from Xerox University Microfilms, Ann Arbor, Michigan; Microfiche from Bell & Howell, Micro Photo Division, Wooster, Ohio.

ISTEREO REVIEW

	VERTISERS'	
READER SERVICE N	IO ADVERTISER	PAGE NUMBER
	Acoustic Research	28
4	ADC (Audio-Dynamics Corp.) ADC (Audio-Dynamics Corp.)	53
2	ADC (Audio-Dynamics Corp.)	65
3	ADC (Audio-Dynamics Corp.) ADS	
	Akai America, Ltd	111
	AKG Acoustics Allison Acoustics	
5	Ampex Corp	31
6 7	Arabesque/Caedmon Records Audio-Matic Electronics	
•	Audio Pro	16
	Audio-Technica U.S., Inc	
9 6	BASF	
	Beyer Dynamics, Inc	136
10	Robert C. Bosch Bose Corporation	45
11	Caroline Imports	
12	Canver Corporation	122
13	Celestion Industries, Inc	124
14	Consumers Company	126
15 16	Crown International dbx, Inc.	54
17	Denon America, Inc.	
18	Discount Music Club	18
19 20	Discount Sound	
56	District Sound, Inc	126
21	Dodge Division of Chrysler Corp Dual	
	Electro-Voice, Inc	
72	Empire Scientific Corp	34
22	Fisher Corp	
22	47th St. Photo Fuji Photo Film, USA	134
23	GE Audio Electronics	
7,7	Gusdorf Corp	130
25	David Hafler Co	
26	Hi-Fi Buys	
27	Illinois Audio	29
28	International Hi-Fi Dist	129
30	Jack Daniel's	119
74	J & R Music World	102
29	Jensen Sound Laboratories .	97
31 32	KLH	123
33	KLH Klipsch & Associates	
34	Koss Corporation	Cover 4
36 37	3M Company	
38	Mointoch Laboratory Inc.	122
39 76	Micro-Acoustics Corp Misubishi	114
40		132
41	Mura Corp	96
	MXR Innovations, Inc.,	
35		87
43	Ohm Acoustics Corp	126
71	Omnisonix, Ltd	106,107
70	Phase Linear	
57	Philips High-Fidelity Laboratories	s99
45 46	Philips High-Fidelity Laboratories Philips High-Fidelity Laboratories	s 101
47	Philips High-Fidelity Laboratories Philips High-Fidelity Laboratories	s 105
48	Polk Audio	
	B. I. Reynolds / Camel	49
	R.J. Reynolds/Salem	49
49	Ron Rico Rum	
73	Sansui Electronics Corp Sennheiser Electronic Corp	130
50	Shure Brothers	55- 58
52	Sony Corporation	23
51	Sony Corporation	25-27
53 54	Shure Brothers Sonic Research Sony Corporation Sony Corporation Sony Corporation Sony Corporation Sony Corporation Sony Corporation Soundcraftsmen Sound Marchine Sound Mar	12
55	Sound Machine	129
56	Sound Reproduction, Inc Southern Comfort	
44	Southern Comfort	19
58	Stereo Corp. of America Stereo Discounters	129
59	TDK Electronics	
60	Teac Corporation of America	105
61 62	Technics by Panasonic	41
63	Ultra High Fidelity	134
	Ultra High Fidelity	
64 65		
66	U.S. Pioneer	8,9
67 68	Winegard Co Stereo	
69	Yamaha International Corp	

DECEMBER 1980

Simely Live

By Steve Simels

The Beach Boys. worried about terrorist attacks, warmed up for their "Concert" album with a Marine escort.



YOU DIDN'T HAVE TO BE THERE

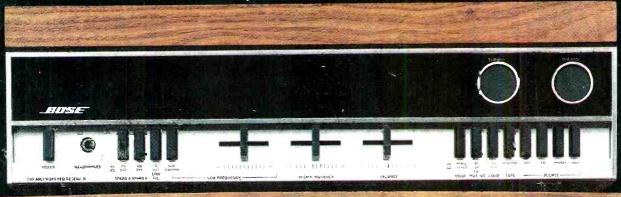
Say what you will about pop music in the Seventies, there was at least one trend that came into its own during the period that seems largely to have been overlooked. No, I don't mean disco, country-chic, punk/ New Wave, singer/songwriters, glitter, reggae, fusion jazz, or what have you. I'm referring, instead, to the commercial ascendancy of the live album. Granted, this doesn't sound like a big deal, but, believe it or not, before the decade just past live albums were generally anomalies. In the Fifties, for instance, outside of jazz circles they were all but unheard of (as far as I can determine, the only Fifties rock star officially recorded live in his prime was Ritchie Valens, whose "Live at Pacoima High School" is something of a collector's item). In the Sixties, they remained curiosities, and even at the end of the decade, when recording technology began to get sophisticated, only a handful of artists sold them in any quantity. But the Seventies . . . ah, there was a whole 'nother ball of wax. Everybody did them. In fact, some people did two (Bowie), three (Dylan), and even more (Elvis). People actually built careers out of live albums: Bob Seger and Peter Frampton would probably be laboring in cult obscurity still had it not been for the multi-platinum success of, respectively, "Live Bullet" and "Frampton Comes Alive," the latter being one of the two or three sales behemoths of the decade.

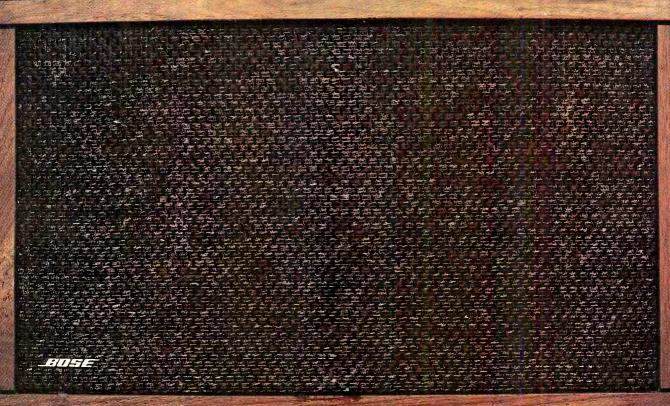
In any event, given the current ubiquity of the live album, I thought it might be fun to break format this month and talk about some of them. Specifically, my ten favorites. Notice, I did not say the ten best. This is for purely pragmatic reasons. First of all, if I were to talk about the ten best anything and leave out one you hold near and dear, you would brand me a low-grade moron, and I get enough of that at home. Second, you may recall that in the late Sixties it was a doctrine of faith among rock critics that B. B. King's "Live at the Regal" was one of The Greatest Achievements of Western Art, a premise to which I dutifully subscribed although I was by no stretch of the imagination a blues nut. Imagine my shock, then, when a certain well-known rock critic out of Detroit (he knows who he is) recently

confessed to me that, although he had praised it in print on numerous occasions. he had never listened to it and, in fact, had no intention of doing so! A rude and overdue awakening from innocence, to be sure, but one I have no desire to inflict on the reader. So here are ten of my all-time favorite live albums, genus rock-and-roll, in no particular order:

- (1) The Rolling Stones: "Get Yer Ya-Yas Out" (LONDON NPS-5/7). It's been downhill for their live show ever since, but this document remains: gut-bucket raunch distilled into art.
- (2) Bob Dylan: "Albert Hall '66" (BOOT-LEG). Dylan and the Band in an amphetamine confrontation with an angry audience. Ghostly, majestic stuff.
- (3) The Who: "Live at Leeds" (MCA 3023). Some prefer the Fillmore bootleg from 1968, but this one, especially side one, defines the band for all time.
- (4) The Yardbirds: "Five Live Yardbirds" (CHARLY import). Modern rock begins here. Heavy Metal before they coined the term and slowed down the tempos.
- (5) The Velvet Underground: "Live at Max's Kansas City" (COTILLION 9500). Nelson Algren meets New York Street Soul, recorded on a portable cassette deck and ineffably poignant.
- (6) The Beach Boys: "Concert" (CAPI-TOL SM-2198). From 1964, the last innocent gasp of the Teen Scream. Overdubbed in the studio, and you still can't hear everything above the racket, but
- (7) Jimi Hendrix/Otis Redding: "Live at Monterey" (REPRISE S-2029, deleted). Two legendary masters facing down a skeptical audience and emerging triumphant.
- (8) MC5: "Kick Out the Jams" (ELEK-TRA 74042, deleted). Agit-prop rock that makes the Clash sound effete.
- (9) The Kinks: "The Live Kinks" (RE-PRISE 6260). Ray Davies and Company at their peak; rock meets vaudeville, and both
- (10) Bruce Springsteen: "Roxy '75" (BOOTLEG). Humor, pathos, r-&-b from the greatest American rocker ever.

The Bose 901/550 Music System. Dollar for dollar, there is no better value.



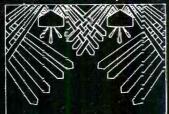


It's a fact. More than any other component, the speakers you buy will determine the final quality of your music system. So it makes sense to get the best you can afford.

Bose 901 Direct/Reflecting® speakers are the state of the art. Jnequivocally. No other loud-speaker can match the legendary spaciousness and darity of the 901 speaker.

Bose has designed allow-cost receiver specifically for 901 speakers. The Bose 550 Receiver, it has adjuilt-in £01 Active Equalizer that saves you more then £100 when you buy a pair of 901 speakers. And 40-watt DC amplifiers that can drive the highly efficient 901 system to

output levels equal to a 16C-wat receiver with conventional speakers.



The Bose 901/550 Direct/Reflecting® music system. Now you can't afford not to own 901 loud-speakers.

Beter sound through research.

For more information, write Bose Corporation, Dept. SR, 100 The Mountain Rd., Framingham, MP01701.

Covered by patent rights issued and/or pending.

Copyright 1980 Bose Corporation.

CIRCLE 40. 10 ON READER SERVICE CARD

Introducing a totally new concept in stereophones.

The new Koss HV/X high velocity stereophone represents a remarkable breakthrough in hear-thru stereophone design and performance. For the first time. Koss engineers have been able to create a lightweight, hear-thru stereophone that combines the transparency of high velocity phones with the superior bass performance of closed-type phones. The result is a breathtaking musical experience.

CONTOURED VARIABLE-DENSITY EARCUSHIONS

While most lightweight, hear-thru stereophones have earcushions that fit against the ear, the new Koss HV/X features a unique, contoured, variable-density cushion that fits around the ear. Not only does this unique earcushion design create

a far
more comfortable
stereophone but
it has also
allowed
Koss engineers to
create a
dramatically better element



Koss HV/XLC

design as well.

These new variable-density earcushions are made up of a very porous material that is acoustically transparent at the perimeter of the earcushion yet compressed toward the center region. This

varies the pattern of acoustic resistance over portions of the earcushions creating the proper seal for specific bass frequencies while allowing the flow of middle and high frequencies at the perimeter of the earcushions.

LIGHTWEIGHT ELEMENT

The uniqueness of the new variable-density earcushions made it possible for Koss engineers to design a lightweight element that reproduces a Sound of Koss you have to hear to believe. Incredibly, even though the overall weight of the element was reduced, Koss engineers were able to develop a magnet with enough magnetic density to drive an extra large diaphragm. With a response range of 15 to 35,000 Hz, the new Koss HV/X will drive you into ecstacy and our competitors nuts.

HEARING IS BELIEVING.

Slip into the new Koss HV/X or HV/XLC with volume/balance controls at your audio dealer soon. You'll like the best of both worlds: the open, airy, upfront sound of hear-thru stereophones and the deep, rich bass performance of closed-type stereophones.

And while you're with your audio dealer, listen to our full line of Koss stereophones and CM loudspeakers. There's no sound quite like the Sound of Koss.

For more information on the HV/X, our full line of stereophones and loudspeakers or our new Koss K/4DS digital delay system, write c/o Virginia Lamm.

↑ 1980 Koss Corp

© KOSS stereophones/loudspeakers hearing is believing •