



HARRIS
INTERTYPE
CORPORATION

GATES

transcription turntables

12" & 16" PROFESSIONAL TRANSCRIPTION
TURNTABLES • STEREO • TURNTABLE ACCESSORIES



Professional Transcription Turntables

16" CB-500
CB-510

12" CB-77
CB-88

Modern broadcast formats place heavy reliance on transcribed music, commercials and prepared programs. A typical 18-hour broadcasting day may have 12 hours or more of transcribed programming. Recent advances in recording techniques have made new demands on reproducing equipment. Now, stereo broadcasting adds to these demands for truly professional, high quality transcription equipment. To meet these demanding standards and increased usage, Gates designed new turntables in 12" and 16" sizes with a unique drive principle. The result is low rumble content without sacrifice of quick cueing, and a greatly improved reliability factor. As Gates turntables are a precision machined device, they may not be the lowest in initial cost but are far less expensive on the basis of per-hour operating cost. Heart of Gates turntable design is a drive hub which is an integral part of the machine's turntable platter and about one-half the radius of a 45 RPM disc. A single neoprene idler wheel for all speeds is floating and self-aligning. A 600 RPM hysteresis synchronous motor with 3-speed pulley engages the idler wheel to the inner hub. The combination of lower motor speed (one-third that of other models) and a drive section located inside the playing surface, results in remarkably low rumble, without sacrificing pickup-to-speed.



This cut-away illustration of a Gates turntable shows the fine machining and workmanship inherent in Gates 12 inch and 16 inch turntables.

Chrysler oilite bearings are used at all bearing points including the large center spindle bearing. Speed shift linkages are through monoball self-aligning bearings for smooth, silent and trouble-free operation. There are no belts, planetary drives or gear trains to wear.



SINGLE HAND CONTROL

Shift speeds to 78, 45 or 33 $\frac{1}{2}$ RPM by simply moving shift lever to the desired index point. Then touch the mercury-type switch to either start or stop. Switch illuminates when on. Complete one-hand operation leaves the other hand free.



M-6244

Monophonic Transistor Turntable Preamp

Single channel monophonic preamplifier designed for use in broadcasting, recording, and general sound requirements where low distortion and exacting frequency response characteristics are demanded. Features self-contained power supply and transformer output. Includes two-position equalizer with escutcheon and knob for RIAA/NAB or roll off equalization.

SPECIFICATIONS

INPUT: 6200 ohms, use with VR-II high impedance cartridge only.
OUTPUT: Adjustable from -22 dbm to 12 dbm, with 12 MV input.
RESPONSE: Within ±1 db of RIAA/NAB standard curve. Additional high frequency roll off filter position provided.
DISTORTION: Less than 0.5% at normal levels (-22 dbm to -12 dbm out). Less than 1.0% at 10 db overload (above 12 MV input).
NOISE: 58 db or lower, below -12 dbm output (with 12 MV input).
LOAD IMPEDANCE: 600 ohms or 150 ohms balanced or unbalanced.
MAXIMUM OPERATING AMBIENT TEMP.: +60°C (+140°F).
POWER: 115 volts, 50/60 Hz, 1 watt.
MOUNTING: Two holes for mounting to Gates Turntable.
SIZE: 2¹/₁₆" wide, 8⁵/₁₆" long, 2⁷/₁₆" high.

ORDERING INFORMATION

Monophonic Equalizer Turntable Preampifier.....M-6244



M-6442

Stereophonic Transistor Turntable Preamp

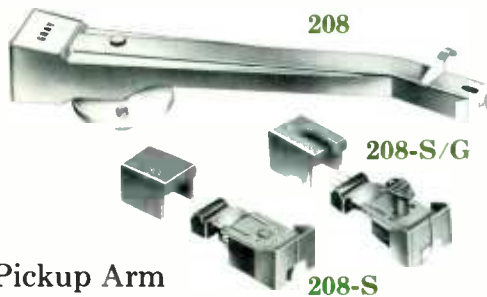
Designed for superior performance in stereo transcription systems, the M-6442 offers these new features: Three position response selector switch for flat, RIAA/NAB, and roll off equalization; plus a two position switch to provide a monophonic output from stereo discs, important in many AM/FM and special library situations. Fully shielded, and completely self-contained, including power supply.

SPECIFICATIONS

INPUT: 47,000 ohms.
OUTPUT LEVEL: Adjustable from -22 dbm to -12 dbm from 8 MV input.
RESPONSE: With ±1 db of RIAA/NAB standard curve. Additional high frequency roll off and flat response switch position provided.
DISTORTION: Less than 0.5% at normal level (-22 to -12 dbm out). Less than 1.0% at 10 db overload (above 8 mv input).
NOISE: 60 db or lower, with -63 dbm input. (123 db relative input noise.).
LOAD IMPEDANCE: 600 ohms or 150 ohms, balanced or unbalanced.
MAXIMUM OPERATING AMBIENT TEMP.: +60°C (+140°F).
POWER: 117 volts, 50/60 Hz, 1 watt.
MOUNTING: Two holes for mounting with Gates turntable.
SIZE: 3" wide, 9¹/₂" long, 5" high.
WEIGHT: Net 2 lbs. Packed 8 lbs. Cubage: 1 cu. ft.

ORDERING INFORMATION

Stereophonic Transistor Equalizer Turntable Preampifier.....M-6442



Pickup Arm

A fine 16" professional tone arm available in two models. The model 208-S comes with a slide and modular weights for mounting single play stereo or monophonic cartridges.

The model 208-S/G has a special slot cut into the front of the arm to clear the stem of a G.E. turn-around cartridge allowing plug-in operation, and comes with specific hardware for this application. For 16" turntables only.

Viscous-damped arm.....Model 208-S
 Viscous-damped arm for turn-around cartridge.....Model 208-S/G



Pickup Arm

This new micro-balanced tone arm has sealed viscous-damping on both vertical and horizontal axis for better tracking and lower resonance. Designed for records up to 12 inches in diameter. Stylus force adjustable. Use with 12" turntables only, such as CB-77 chassis.

Viscous-damped arm.....Model 212-TN



GATES RADIO COMPANY • QUINCY, ILLINOIS 62301, U.S.A.

A subsidiary of Harris-Intertype Corporation

16" CB-500

33 $\frac{1}{3}$ -45-78 RPM

The Gates CB-500 is the most widely used 16 inch turntable in the broadcasting industry. Designed for continuous 24-hour commercial service, the CB-500 is ruggedly constructed to meet the strain of modern control room operation.

Time proven features include heavy machined aluminum platter, rubber shock mounted cast aluminum chassis, "oilite" hub bearings, self-centering neoprene idler wheel, "monoball" self-aligning speed shift bearing, and a functional speed selector mechanism.

This turntable will come up to speeds at 33 $\frac{1}{3}$ RPM in $\frac{1}{8}$ turn, and at 45 RPM in $\frac{1}{6}$ turn for fast up-to-speed cueing.



MODEL CB-500 16-inch Professional Transcription Turntable

SPECIFICATIONS:

CHASSIS SIZE: 21 $\frac{1}{4}$ "x 21 $\frac{1}{4}$ "x 1 $\frac{5}{16}$ ".

MOTOR HANG BELOW BOTTOM OF CHASSIS: 4 $\frac{7}{8}$ ".

CONSTRUCTION: Both platter and base of machined aluminum.

FINISH: Beige gray with escutcheon in black and turntable platter cover in heavy gray felt.

PLATTER SIZE: 17".

STROBOSCOPE: Inbuilt on platter for all 3 speeds.

CENTER SPINDLE: Spring locking type, snaps up for 45 RPM hub, locks down for smaller spindle records.

CENTER BEARING: 1" diameter hardened steel rotates in Chrysler oilite bearing.

MOTOR: Hysteresis synchronous, single phase, 600 RPM with 2 mfd. running capacitor and 40°C temperature rise.

CUEING: At 33 $\frac{1}{3}$ RPM, $\frac{1}{8}$ turn. At 45 RPM, $\frac{1}{6}$ turn. At 78 RPM, $\frac{3}{4}$ turn.

NOISE OR RUMBLE: At 33 $\frac{1}{3}$ RPM, rated -45 db. At 45 RPM, rated -40 db. At 78 RPM, rated -35 db.

WOW: Rated 0.1% at 33 $\frac{1}{3}$ RPM, capable .08%.

FLUTTER: Rated 0.07% at 33 $\frac{1}{3}$ RPM, capable .05%.

MOTOR START: Rocker type illuminated mercury switch.

IDLER WHEEL: Special shear action neoprene, self-aligning.

SPEED CHANGE: To 33 $\frac{1}{3}$, 45 or 78 RPM by single indexed level control.

POWER: 117 volts, 60 Hz, 35 watts. (50 Hz available, see below.)

SHIPPING WEIGHT AND CUBAGE: 45 lbs. (net weight: 34 lbs.) Export, 70 lbs. 6 cu. ft.

ORDERING INFORMATION:

CB-500 Transcription turntable chassis only, for 60 Hz.....M-5739-A

CB-500A Transcription turntable chassis only, for 50 Hz.....M-5739-A



MODEL CB-510

Complete ready to operate 16" turntable assembly. Includes CB-500 16" low noise chassis, viscous damped pickup arm, turn-around 1 mil and 3 mil variable reluctance cartridge, 2-position variable equalizer to RIAA/NAB and high frequency roll off curves and M-6244 transistorized preamplifier with self-contained power supply. Output: 150 or 600 ohms adjustable from -22 dbm to -12 dbm.

ORDERING INFORMATION:

Complete CB-510 16" transcription turntable, including self-contained transistorized preamplifier, power supply, CB-500 chassis, 2-position equalizer, pickup arm and dual sapphire stylus for 115 v, 60 Hz.....M-6053

CB-510A complete transcription turntable, same as above but with dual diamond stylus.....M-6053A

(50 Hz Models also stocked)

12" CB-77

33 $\frac{1}{3}$ -45-78 RPM

Here are professional 12-inch transcription turntables, built identically to the companion 16-inch models. In the new CB-77 chassis will be found the same inner hub drive system, the same convenient speed change system, the same illuminated rocker arm off-on switch... the only difference being reduced size, affording broadcasters a more compact turntable arrangement for today's busy control room.

The CB-77 is the 12" chassis only, ready to attach pickup arm of your choice. For 33 $\frac{1}{3}$, 45 and 78 RPM speeds with hysteresis synchronous motor.



MODEL CB-77 12-inch Professional Transcription Turntable

SPECIFICATIONS:

CHASSIS SIZE: 16"x 16"x 1 $\frac{1}{16}$ ".

MOTOR HANG BELOW BOTTOM OF CHASSIS: 5 $\frac{3}{4}$ ".

CONSTRUCTION: Platter and base of machined aluminum.

FINISH: Beige gray with escutcheon in black and turntable platter cover in heavy gray felt.

PLATTER SIZE: 13 $\frac{3}{8}$ ".

STROBOSCOPE: Inbuilt for all 3 speeds.

CENTER SPINDLE: Spring locking type, snaps up for 45 RPM hub, locks down for smaller spindle records.

CENTER BEARING: 1" diameter hardened steel rotates in Chrysler oilite bearing.

MOTOR: Hysteresis synchronous, single phase, 600 RPM with mfd. running capacitor and 40°C temperature rise.

CUEING: At 33 $\frac{1}{3}$ RPM, $\frac{1}{8}$ turn. At 45 RPM, $\frac{1}{8}$ turn. At 78 RPM, $\frac{3}{4}$ turn.

NOISE OR RUMBLE: At 33 $\frac{1}{3}$ RPM, rated -45 db; at 45 RPM, rated -40 db; at 78 RPM, rated -35 db.

WOW: 0.1% maximum, capable .08%.

FLUTTER: .07% maximum, capable .05%.

MOTOR START: Rocker type illuminated mercury switch.

IDLER WHEEL: Special shear action neoprene, self-aligning.

SPEED CHANGE: To 33 $\frac{1}{3}$, 45 or 78 RPM by single indexed lever control.

POWER: 117 volts, 60 Hz, 35 watts, (50 Hz model available, see below).

SHIPPING WEIGHT: 40 lbs. (net weight, 30 lbs.) Export, 65 lbs. Cubage: 3.6 ft.

ORDERING INFORMATION:

CB-77 12-inch transcription turntable chassis only,
60 Hz M-5798B

CB-77A 12-inch transcription turntable chassis only,
50 Hz M-5798C



MODEL CB-88

Complete ready to operate 12" turntable assembly. Includes CB-77 12" low noise chassis, M-6244 transistor preamplifier, dual viscous damped pick-up arm, turnaround 1 mil and 3 mil, variable reluctance cartridge with your choice of sapphire or diamond styli, 2-position equalizer to RIAA/NAB and high frequency roll off curves and self-contained power supply.

ORDERING INFORMATION:

Complete CB-88 12-inch transcription turntable, including self-contained transistorized preamplifier, power supply, CB-77 chassis, 2-position equalizer, pick-up arm and dual sapphire stylus for 117 volts, 60 Hz M-5890

Complete CB-88A transcription turntable, same as above but with diamond stylus M-5890-A

(50 Hz Models also stocked)

CB-1525



COMPLETE 16" SYSTEM

A complete transcription system, including CB-510 turntable with an attractive M-6448A floor cabinet. Beautiful Walnut Formica styling and 28" over-all height meets NAB standard for reproduction equipment. M-6448A cabinet has adjustable leveling screws, removable grill for record storage or rack-mounting control room equipment. Size 24"x 24"x 26", (plus 2" to platter surface). Shipping weight, 124 lbs.

ORDERING INFORMATION

- Complete 16" transcription equipment in floor cabinet, consisting of CB-510 equipment and M-6448A cabinet . . . CB-1525
- Complete 16" transcription equipment in cabinet, consisting of CB-510A (diamond styli) and M-6448A cabinet . . . CB-1525A
- Floor cabinet only with cutout for CB-500 Chassis . . . M-6448A
(60 Hz Models listed, 50 Hz also available)

CB-1880



COMPLETE 12" SYSTEM

This complete 12" transcription unit consists of CB-88 equipment housed in the functionally attractive M-6448B floor cabinet. Beautifully styled in walnut and neutral tone formica. Accents in satin black, including expanded metal grill which is removable to reveal 19" standard rack mounting angles. Size: 24"x 24"x 26", (plus 2" to platter surface). Shipping weight 110 lbs.

ORDERING INFORMATION

- Complete 12" transcription equipment in floor cabinet, consisting of CB-88 equipment and M-6448A cabinet . . . CB-1880
- Complete 12" transcription equipment in cabinet, consisting of CB-88A (diamond styli) and M-6448B cabinet . . . CB-1880A
- Floor cabinet only with cutout for CB-77 chassis . . . M-6448B
(60 Hz Models listed, 50 Hz also available)

M-6465



STEREO TURNTABLE EQUIPMENT

Many broadcasters, now monaural but having stereo in their future, will desire this transcription turntable which superbly reproduces stereo or monaural recordings. Includes CB-77 low rumble chassis with 212-TN viscous-damped transcription arm, M44-7 stereo dynetic cartridge with diamond stylus and the new Gates M-6442 compatible stereo-monaural preamplifier with self-contained power supply. Switching from monaural to stereo is by one switch. RIAA/NAB, flat and roll off curves are rotary switch selected.

ORDERING INFORMATION

- Complete Stereo Turntable equipment with diamond stylus and M-6448B Cabinet M-6465
(60 Hz Models listed, 50 Hz also available)

M-6449B



DOUBLE TURNTABLE CABINET

Beautifully styled, and dimensioned to accommodate either twelve or sixteen-inch Gates Turntables. Total of 64 inches of 19-inch rack mount space available front and back both sections. 2½-inch steel base and floor levelers. Over-all dimensions 24"x 46"x 26".

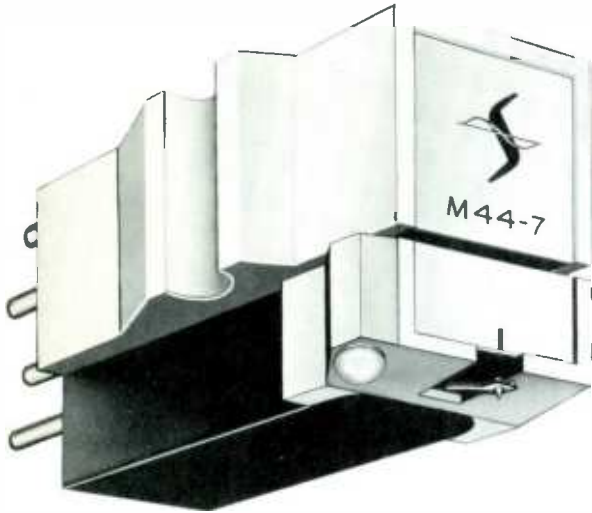
ORDERING INFORMATION

- Dual Turntable Cabinet, with cutouts for two CB-77 or CB-88 equipments M-6449B
- Dual Turntable Cabinet, with cutouts for two CB-500 or CB-525 equipments M-6449A
(60 Hz Models listed, 50 Hz also available)

STEREOPHONIC AND MONOPHONIC PICKUP CARTRIDGES

STEREOPHONIC PICKUP

The Model M44-7 stereo dynetic cartridge is recommended for faithful reproduction of stereophonic recordings with the M-6442 preamplifier. It offers superior stereo separation, smoother response, and is designed to complement the 15° effective cutting angle now being used on stereo disc recordings.



SPECIFICATIONS

FREQUENCY RESPONSE: From 20 to 20,000 Hz.
 CHANNEL SEPARATION: More than 25 db. @ 1,000 Hz.
 OUTPUT VOLTAGE: 9 millivolts per channel @ 5 CM/Sec.
 LOAD IMPEDANCE: 47,000 ohms per channel.
 TRACKING: 1.5 to 3.0 grams.
 STYLUS: Features "No Scratch" retractable design.
 INDUCTANCE: 680 Millihenries.
 D. C. RESISTANCE: 650 ohms.
 MOUNTING: Std. 1/2" mounting center.
 WEIGHT: 7 grams, net.

ORDERING INFORMATION

M44-7 Stereophonic cartridge with 0.7 mil.
 diamond stylus723-0236
 Replacement 0.7 mil. stereo stylus (diamond)723-0237

MONOPHONIC PICKUPS

Proven, rugged broadcast transcription cartridges for monophonic recordings. Response 20-20,000 Hz with output of 12 MV @ 7 CM/Sec. Tracking pressure 4 grams. Have replaceable clip-in styli. Use high impedance type with M-6244 equalized preamplifier, low impedance with Gray 602-C type passive equalizer.

GE TYPE VR-11 PICKUP

High Impedance VR-11 Triple Play (turnover cartridge)	Cat. No.
Sapphire .001" and sapphire .003"	4G050
Diamond .001" and sapphire .003"	4G052
Diamond .001" and diamond .003"	4G053
Low Impedance VR-11 Triple Play (turnover cartridge)	
Sapphire .001" and sapphire .0025"	4GD-01S02S
Diamond .001" and sapphire .0025"	4GD-01D02S
Diamond .001" and diamond .0025"	4GD-01D02D
High Impedance Single Stylus VR-11	
Sapphire .003"	4G-040
Sapphire .001"	4G-041
Diamond .001"	4G-061
Diamond .003"	4G-063
Low Impedance VR-11 Single Stylus	
Diamond .001"	4GS-01D
Diamond .0025"	4GS-02D
Sapphire .001"	4GS-01S
Sapphire .0025"	4GS-02S



GATES

GATES RADIO COMPANY • QUINCY, ILLINOIS 62301, U.S.A.
A subsidiary of Harris-Intertype Corporation

TRANSCRIPTION EQUIPMENT PRICE LIST

JULY 1, 1966

ORDER NO.	DESCRIPTION	PRICE	ORDER NO.	DESCRIPTION	PRICE
<p style="text-align: center;">16" TURNTABLES AND PACKAGES FOR 60 CYCLE USE</p>			<p style="text-align: center;">STEREO TURNTABLE PACKAGES</p>		
994-5739-003	CB-500, 16" turntable, chassis only NOTE: Basic CB-500 turntable may be drilled to accommodate any standard transcription arm with no additional cost to the customer.	\$290.00	994-6465-017	M-6465H, stereo turntable assembly, consisting of: CB-77 12" turntable chossis, M-6442 equalized stereo preamp, 212-TN tone arm, and M-44-7 stereo cartridge with .0007" diamond stylus	583.00
994-6053-005	CB-510, turntable with M-6244 preamp, two-position equalizer, arm and dual sapphire styli	459.00	994-6465-011	M-6465B, stereo package. As above, except with M-6448B walnut pedestal	698.00
994-6053-006	CB-510A, turntable. Same as above but with diamond styli	466.00	994-6465-013	M-6465D, stereo turntable assembly, consisting of: CB-77 12" chassis, M-6442 stereo preamp, 212-TN tone arm, NO CARTRIDGE	563.00
994-5828-005	CB-525, turntable assembly, consisting of CB-510 (sapphire styli) in a CAB-6 floor cabinet	554.00	TURNTABLE CABINETS		
994-5828-006	CB-525A, turntable assembly. As above, but with CB-510A (diamond styli)	561.00	994-6448-002	M-6448A, single turntable pedestal (walnut) with cutout for CB-500	115.00
994-6463-005	CB-1525, turntable assembly, consisting of CB-510 (sapphire styli) and an M-6448A walnut pedestal	574.00	994-6448-003	M-6448B, single turntable pedestal (walnut) with cutout for CB-77	115.00
994-6463-006	CB-1525A, turntable assembly. As above, but with CB-510A (diamond styli)	581.00	994-6449-002	M-6449A, double turntable pedestal (walnut) with cutouts for two CB-500	195.00
<p style="text-align: center;">12" TURNTABLES AND PACKAGES FOR 60 CYCLE USE</p>			994-6449-003	M-6449B, double turntable pedestal (walnut) with cutouts for two CB-88	195.00
994-5798-005	CB-77, 12" turntable, chassis only NOTE: Basic CB-77 turntable may be drilled to accommodate any standard transcription arm with no additional cost to the customer.	275.00	HIGH IMPEDANCE TRIPLE PLAY WITH STYLI		
994-5890-007	CB-88, turntable with M-6244 preamp, 2-position equalizer, arm and dual sapphire styli	429.00	4G-050 sapphire .001" sapphire .003"		12.95
994-5890-008	CB-88A, turntable. Same as above, but with dual diamond styli	436.00	4G-052 diamond .001" sapphire .003"		16.95
994-5941-005	CB-880, turntable assembly, consisting of CB-88 (sapphire styli) in a CAB-8 floor cabinet	508.00	4G-053 diamond .001" diamond .003"		19.95
994-5941-006	CB-880A, turntable assembly. As above but with CB-88A (diamond styli)	515.00	LOW IMPEDANCE CARTRIDGES WITH SINGLE STYLUS		
994-6464-005	CB-1880, turntable assembly, consisting of CB-88 (sapphire styli) and an M-6448B walnut pedestal	545.00	4GS-01D diamond .001"		13.95
994-6464-006	CB-1880A, turntable assembly, as above but with CB-88A (diamond styli)	552.00	4GS-02D diamond .0025"		13.95
			4GS-01S sapphire .001"		9.95
			4GS-02S sapphire .0025"		9.95
			LOW IMPEDANCE WITH TRIPLE PLAY STYLUS		
			4GD-01DO2D dual diamond .001" and .0025"		19.95
			4GD-01S02S dual sapphire .001" and .0025"		12.95
			4GD-01D02S diamond .001" sapphire .0025"		16.95
			HIGH IMPEDANCE CARTRIDGES WITH SINGLE STYLUS		
			4G-041 sapphire .001"		9.95
			4G-040 sapphire .003"		9.95
			4G-061 diamond .001"		13.95
			4G-063 diamond .003"		13.95



GATES RADIO COMPANY

A SUBSIDIARY OF HARRIS-INTERTYPE CORPORATION

123 HAMPSHIRE STREET • QUINCY, ILLINOIS 62301 • 217-222-8202

DO TURNTABLES HAVE YOU IN A SPIN ????

Chances are, the answer is YES when you consider the load your transcription equipment carries. An average music-format radio station may originate as much as 80% of its programming from records, and other formats can be as demanding.

Evaluate your present equipment. Is it built for the broadcasting requirements of 1966? Do your turntables have low rumble to assure the most faithful reproduction of stereo? Does the extended frequency response and wide dynamic range of popular 45's and new albums tax your amplifiers. Do the tone arms track precisely?

If you are still in a spin, Gates has the answer --- the finest professional transcription equipment available.

After all, Gates pioneered with the very first turntables for broadcast use over 40 years ago and our current 12" and 16" transcription systems reflect the sumtotal of engineering development and manufacturing experience of thousands of Gates turntables.

To replace or expand your control room equipment, check this new Gates Transcription Guide. You will find turntables, cabinets, and accessories for superb monophonic or stereophonic systems. Delivery of any equipment is from stock, and extended payment terms are available if desired.

Write or phone today for immediate service.

L. T. Pfister
Manager - Audio Products

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P. S. Here is additional information for the price sheet.

Monophonic Equalizer Turntable Preamplifier M-6244	\$104.00
Stereophonic Transistor Equalizer Turntable Preamplifier M-6442	\$250.00
Viscous-damped arm Model 208-S	\$ 52.00
Viscous-damped arm for turn-around cartridge Model 208-S/G	\$ 52.00
Viscous-damped arm Model 212-TN	\$ 37.50



