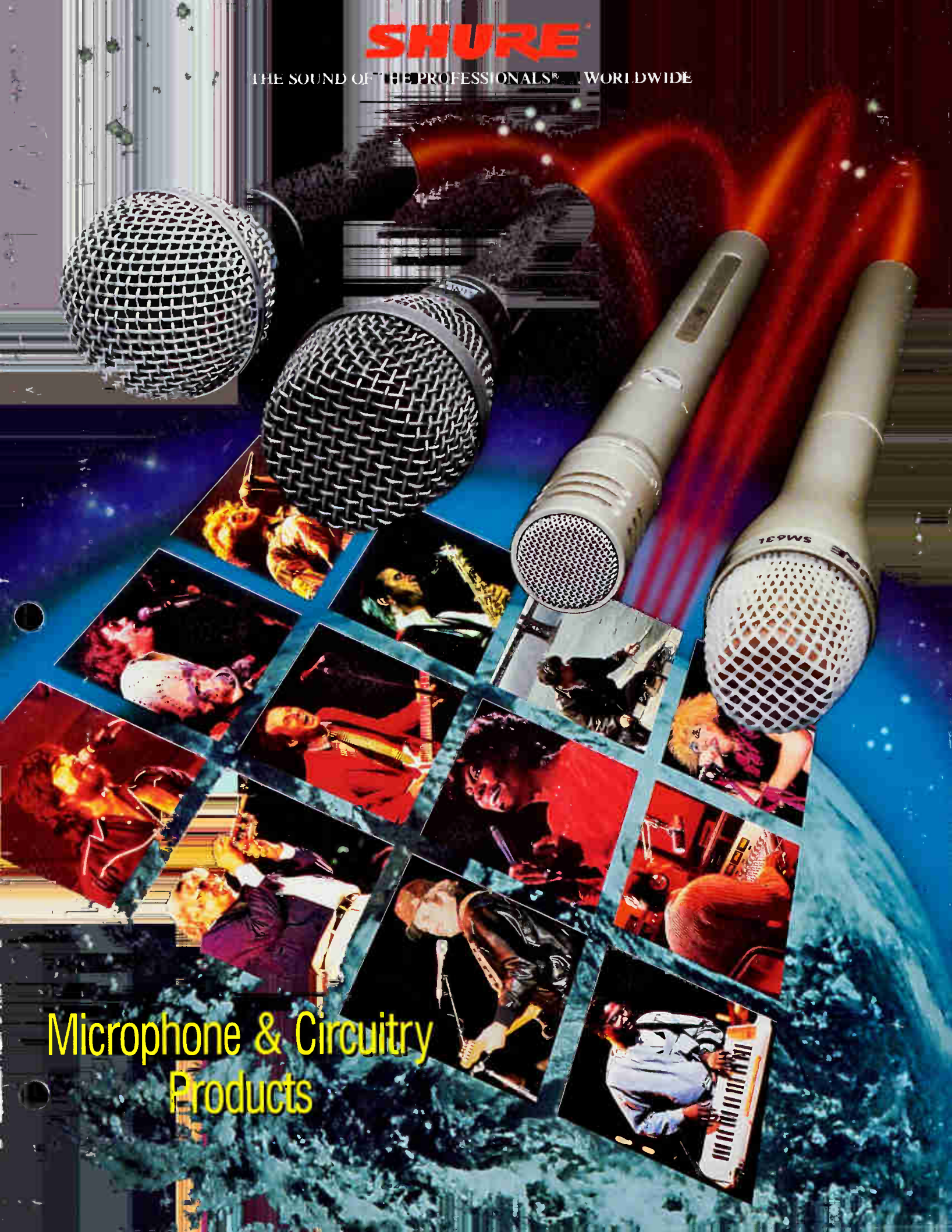


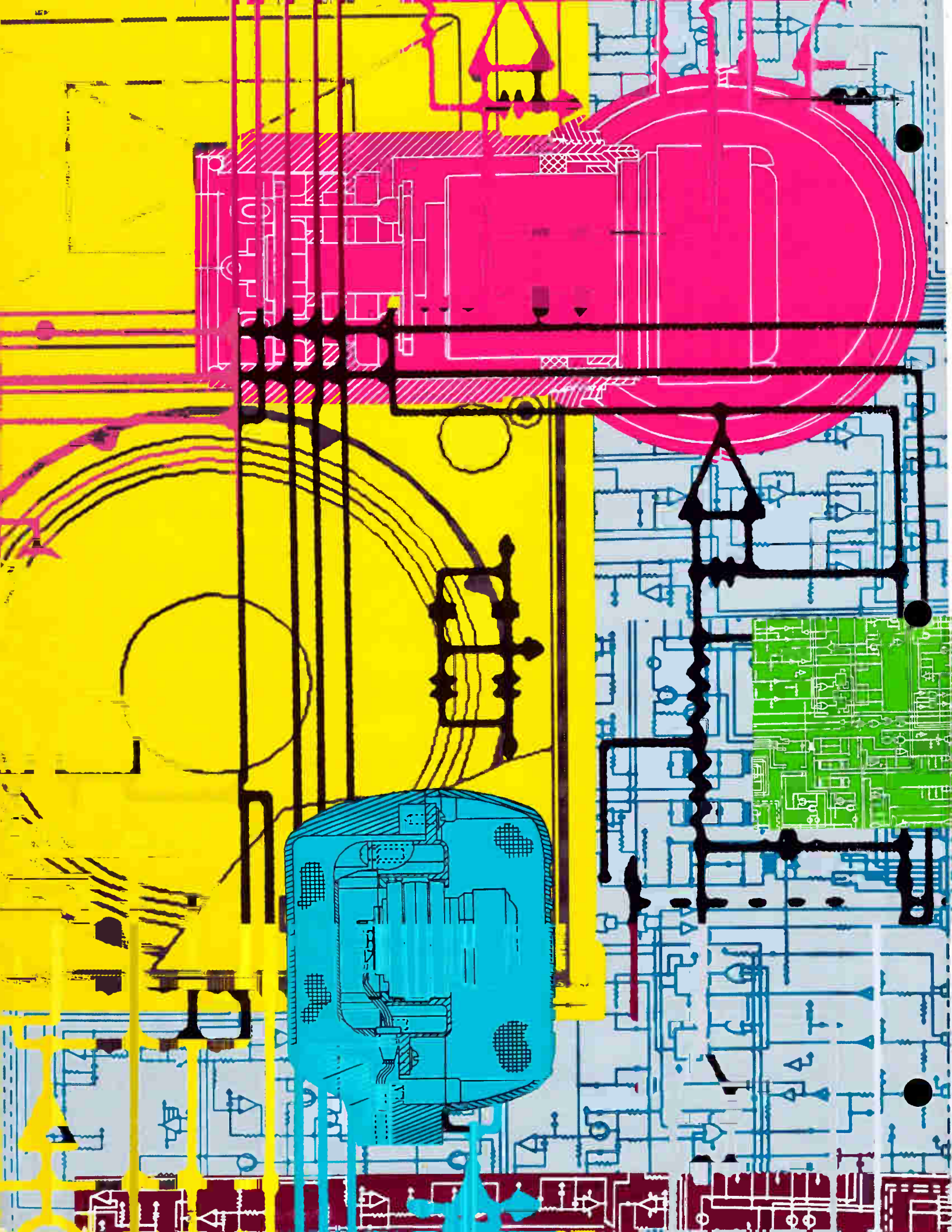
# SHURE

THE SOUND OF THE PROFESSIONALS<sup>®</sup> WORLDWIDE



Microphone & Circuitry  
Products





**SHURE®**

**W**

hat does "Shure" mean to you?

If you have an active interest in any sector of the audio world, chances are you respond strongly to the word "Shure." Whether you're involved with musical performance, recording, sound reinforcement, broadcasting, or film/video production, "Shure" probably represents clear, natural sound reproduction, practical design features, and complete dependability.

There's a good reason why the word "Shure" means so much to so many. Since we started in business back in 1925, we have never strayed from our emphasis on quality, a commitment we believe to be unsurpassed by any other company.

To us, quality is not an empty catchword in advertising copy. It's a very specific concept with very specific definitions. Among other things, Shure quality means innovation and thoroughness in design, uniformity and consistency in manufacturing, precision and accuracy in performance, and ruggedness and reliability in "real world" usage.

About that ruggedness: When we talk of Shure quality, we can back it up with the most stringent quality assurance testing program in the business. Before it can bear the Shure name, a microphone must be able to withstand extended exposure to extremes in temperature (165°F to -20°F) and humidity (100% at room temperature, 93% at 100°F), ultraviolet rays, salt sprays, alcohol, sand, water, violent vibrations, shipping tests, "drop tests" (repeated

drops from six feet onto hardwood floors), and ten torturous days of repeated cycling between simulated arctic and tropical environments. If a microphone doesn't work after all this, it's not a Shure.

This kind of dedication to good sound and reliability has made Shure "The Sound of the Professionals... Worldwide" for decades. Shure microphones are used virtually everywhere—on stages, lecterns, remote broadcast locations, and production sets all over the world.

This catalog will introduce you to a great many products that share "Shure quality." In these pages you'll find the industry's widest variety of microphones, for all applications. You'll also find our acclaimed "FP" Series and "M" Series circuitry products, plus such Shure "specialty audio" products as the Audiomaster® Sound Reinforcement System, the Shure Automatic Microphone System, Shure Wireless Microphone Systems, and Shure Professional Phonograph Cartridges. Specifications and technical information can be found in the gatefold section at the end of the booklet.

We hope you'll find this catalog useful and interesting. We're confident that the products presented here will provide you with years of the best possible service, no matter what your involvement with audio may be. After all, we believe in our commitment to quality the same way you believe in yours.



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THE SOUND OF THE PROFESSIONALS®... WORLDWIDE



# VOCAL MICROPHONES (Dynamic)

Back in the 1930's, Shure literally invented the dynamic vocal microphone. Now, some 50 years later, Shure dynamics are the most widely-used, widely-recognized, and widely-copied microphones in the world—and for good reason. Shure's much-imitated rising presence characteristic provides the distinctive "Shure sound," giving voices the ability to "cut through" the background and deliver crisp, detailed performances with maximum power and punch. The uniform unidirectional polar patterns stay uniform at all frequencies, providing unmatched gain-before-feedback capability. All models feature a built-in spherical windscreen/pop filter for noise-free use. And their roadworthy ruggedness is legendary.

Shure dynamic vocal microphones have truly left a distinctive stamp on the sound of contemporary music. And there's a model for every budget.



**SM48** Perfect for singers on the way up. Includes many of the outstanding performance features, similar appearance and sound, and ruggedness of the SM58, at a very affordable price.

**SM48-LC** (less cable)

**SM58** The unsurpassed first choice of professional performers around the globe, the SM58 is a genuine world standard and a true audio legend. Although the "58" is often imitated in appearance, its lively, intelligible, powerful sound and rugged reliability have never been duplicated. Makes rock, r&b, pop, and country vocals sound their best.

**SM58-LC** (less cable)  
**SM58-CN** (with cable)

**SM78** A compact and stylish alternative to the SM58, the SM78 combines the great "Shure sound" with an attractive, low-gloss, ebony finish and lighter weight. A great choice for jazz and pop singers.

**SM78E8-LC** (less cable)

**587SB** Excellent sound and attractive price make the 587 a popular choice for a variety of applications, including musical performance, sound reinforcement, and recording. With locking on/off switch.

**587SB-LC** (less cable)

**SD** The versatility and tonal charm for general use in sound reinforcement. Switchable dual-impedance option, with locking on/off switch.

**SD-LC** (less cable)

**565 Series UNISPHERE I**

565 Series models are the world's most relied-upon microphones for sound reinforcement applications, providing excellent voice reproduction on lecterns, stages, and in church and school applications. Dual-impedance, available with or without on/off switch.

**565D-LC** (less on/off switch and cable)  
**565SD-CN** (with on/off switch and cable)  
**565SD-LC** (with on/off switch and cable)

## VOCAL MICROPHONES (Condenser)



SM89 #1 choice for studio and live applications where cost is a major consideration but quality can't be compromised. Includes on/off switch, built-in wind and pop filter, may be powered by phantom power. Smooth response with slight presence rise makes it excellent for speaking voices as well as singers.

**SM89-LC (less cable)**



SM96 top performance features at a moderate price. Especially well-suited to high-quality home-recording applications. Includes wind/pop filter; may be powered by battery or phantom power sources.

**SM96-LC (less cable)**



SM85 For vocalists who want extra brightness and punch from a microphone, the SM85's pronounced presence boost makes it an extremely popular choice, especially for TV and video production. Uniform cardioid pickup pattern; 3-stage wind/pop filter; phantom power only.

**SM85-LC (less cable)**

SM87 The condenser choice of the world's top entertainers, the SM87 features a smooth frequency response that's specially tailored for warm, rich vocal reproduction. Supercardioid polar pattern means maximum volume without feedback, plus excellent rejection of unwanted sounds. Three-stage wind/pop filter minimizes breath noise problems. Phantom power only.

**SM87-LC (less cable)**



*Clarity, depth, precision and detail are the hallmarks of great condenser microphones. And more and more vocalists are demanding the superbly natural sound quality only a Shure condenser can deliver.*

*The models shown here all represent significant breakthroughs in condenser microphone design. Shure was the first to*

*overcome the fragility traditionally associated with condenser microphones—Shure condensers can handle every bit of the abuse that goes with extended touring. The exclusive 3-point elastomer space-frame shock mounts mean minimal handling noise. And Shure's advanced circuitry and transducer designs are recognized by sound engineers everywhere.*



## MUSICAL INSTRUMENT AND LECTERN MICROPHONES (*Dynanite*)

*When miking musical instruments and lecterns, professionals turn to Shure. They know that Shure microphones provide precise definition of instrumental timbres, accurate reproduction of speaking voices, uniform polar responses, heavy-duty shock mounting, and total reliability.*

*Shure's wide variety of dynamic microphones are industry "workhorses" for both live and studio applications. And Shure's flat-response, probe-style condensers (page 5) combine remarkable engineering with excellent value.*



**SM57** The classic SM57 is the "workhorse" microphone of stages and studios worldwide. Its carefully contoured presence rise means clean, beautifully defined instrumental reproduction and rich, warm vocal pickup on lecterns. The standard for drum and cymbal miking.

**SM57-LC** (less cable)  
**SM57-CN** (with cable)



**SM77** A compact alternative to the SM57 with a non-reflective ebony finish and sparkling sound. A superior choice for miking instrument amplifiers.

**SM77EB-LC** (less cable)



**545** The 545 UNIDYNE® III's remarkably faithful response makes it a favorite choice for instrument pickup, lecterns, singers, and entertainers. Dual-impedance for use with most sound equipment. Available with or without locking on/off switch.

**545D-LC** (less or /off switch and cable)  
**545SD-CN** (with on/off switch and cable)  
**545SD-LC** (with on/off switch, less cable)  
**545SH-LC** (with on/off switch and built-in swivel mount)  
**545L** (shorter version with attached cable)



**SM62** Shure's smallest hand-held dynamic microphone is less than five inches long and weighs only four ounces, but it's a big performer in every way. Flat, uncolored response with a low-end rolloff to prevent boominess. Excellent wherever an unobtrusive microphone is a must—on stages, in conference rooms, on lecterns.

**SM62-LC** (less cable)



**SM59** For applications that demand a flat frequency response, the SM59 is ideal. Patented mechano-pneumatic shock mount minimizes stand and handling noise. Brings mellowness to higher pitched voices and instruments.

**SM59-LC** (less cable)



**515** A low-cost all-purpose performer. Versions are available for a variety of applications. All include lockable on/off switches.

**515SA** (high impedance, attached cable)  
**515SB** (low impedance, attached cable)  
**515SD-LC** (dual impedance, less cable)

**SM17** The world's smallest dynamic-element microphone, the omnidirectional SM17 comes with hardware for mounting on practically any musical instrument. Widely used on violins and acoustic guitars. A small microphone with a robust, full-bodied sound.

**SM17-CN** (with attached cable)



## MUSICAL INSTRUMENT AND LECTERN MICROPHONES (*Condenser*)



SM81

**SM81** The crowning achievement of Shure microphone engineers, the unidirectional SM81 is one of the world's great studio microphones, providing the ultimate in precise, detailed sound reproduction. Excellent for miking all acoustic instruments, both in live



SM80

performance and in the recording studio. A superior choice for overhead cymbal miking. The SM81's ruler-flat response may be tailored with a built-in low-end rolloff switch. Built-in -10 dB attenuator. Phantom power only.

**SM81-LC** (less cable)



SM94

**SM94** A moderately priced unidirectional microphone of exceptional quality. Perfect for recording, instrument pickup on stage, and digital sampling. Especially good for reproduction of woodwinds and stringed instruments. Battery or phantom power.

**SM94-LC** (less cable)



849

**849** The first microphone to make a "studio quality" condenser available to users on a tight budget. A versatile performer that records acoustic instruments with excellent texture and detail. On/off switch; battery or phantom power.

**849-LC** (less cable)

## MINIATURE CONDENSER MICROPHONES



A98KC

A98HA

A98PF

A98-G18

A98GM

A98MK

A98SPM

SM98


**SM98** The SM98 is more than the world's finest miniature musical instrument microphone. It's a complete system with accessories that make it ideal for a wide range of applications. The SM98 displays an extremely uniform cardioid pickup pattern, a wide-range frequency response, and the ability to handle sound pressure levels up to 153 dB! It's an excellent choice for miking drums, horns, acoustic guitars and voices. Supplied with preamplifier, universal swivel adapter, and foam windscreen. Battery or phantom power

**SM98 Accessories** include the A98SPM Supercardioid Polar Modifier (which quickly and easily changes the SM98's polar pattern from cardioid to supercardioid), A98KC "Keen Clamps" (for mounting the SM98 on wind instruments), A98MK Drum Mount Kit (for mounting the SM98 on drums), A98HA Hanging Adapter, A98-G18 18-Inch Gooseneck, A98GM Gooseneck Mounting Flange, and A98PF Pop Filter and Locking Kit


**SM99 (not shown)** The SM99 is a miniature gooseneck-mount microphone for use on lecterns, pulpits, conference tables—anywhere a high-quality, unobtrusive gooseneck microphone is needed. The SM99 features a tight supercardioid polar pattern that discriminates against sounds coming from the sides and rear of the microphone. The result is plenty of volume *without* feedback, even in multiple microphone installations

## LAVALIER MICROPHONES

*Broadcasting, film and video production, sound reinforcement... Shure has a high-performance lavalier microphone for every requirement. All Shure lavaliers are engineered for maximum voice intelligibility, unobtrusive appearance, dependability, and complete serviceability.*



**SM83** Shure's omnidirectional condenser lavalier microphone features an electronically-generated frequency response dip at 730 Hz that minimizes the "chest resonance" phenomenon. Innovative accessories for unobtrusive mounting are provided, including a 4-way tie bar, double-mic tie bar, and two multi-purpose mounting blocks. Side-exit cable is unobtrusive, minimizes handling noise. Compact, lightweight belt-pack preamp takes standard 9-volt battery or phantom power. Foam windscreen included.




**570S** This versatile performer can serve as either a lavalier or a hand-held microphone. Widely used by lecturers, moderators, panelists, and clergy. Omnidirectional, dynamic; includes on/off switch, lanyard-style lavalier assembly, and 30-foot cable.




**SM11** For those who need a dynamic lavalier microphone, the SM11 is the smallest model available. Shure ruggedness and dependability in a microphone no longer than a paper clip. Comes with tie tack and tie bar mounting accessories. Omnidirectional.

**SM11-CN** (with attached cable)



**839** A low-priced alternative to the SM83. A good-sounding, super-reliable lavalier. Low distortion and RF susceptibility. Windscreen, 4-way tie-bar mount. Omnidirectional. Battery or phantom power.



**SM84** The great features, performance, and accessories of the SM83 in a unidirectional version. Provides excellent rejection of unwanted sounds.



## HEAD-WORN MICROPHONES

*When it comes to head-worn microphones, Shure offers a wide selection with superior sound and comfort. From broadcasting to sound reinforcement to computer voice recognition, Shure head-worn microphones are consistent hands-free performers... and the professionals' choice. All models include cables and removable foam windscreens.*

**SM2** The great SM10A microphone element mounted on a lightweight headband with a single "open air" earphone monitor. Easy to adjust. Excellent for performers who like to twist and turn; also ideal for voice recognition applications.

**SM2** A professional headset with a close-talking dynamic cardioid microphone and dual-ear headphones. Microphone element designed for excellent rejection of noise and unwanted sounds. Ideal

for other applications: large pillow-soft ear pads for external noise isolation; double-braced, covered, metal headband for security.

**SM1** (not shown) Same as SM2 but with single-ear headphone.

**SM10A** The favorite of singing drummers, keyboardists, and guitarists who want complete freedom of movement on stage. Adjustable close-talking dynamic microphone element provides great isolation and minimal feedback problems. Also available with one earphone monitor.

**SM10A-CN** (with attached cable)

**SM12A-CN** (with attached cable, one earphone monitor)

**SM15** Shure's head-worn condenser model is a superior microphone for vocal sound reinforcement, particularly in musical applications. Punchy, crisp sound similar to hand-held mics; secure headband assembly. Belt-pack preamp is rugged and compact, uses 9-volt battery or phantom power.



# SURFACE-MOUNT MICROPHONES

*Surface-mount microphones have become more and more popular because of their enhanced sensitivity and low-profile appearance. They can solve application problems requiring distant pickup, such as on a stage floor or in the center of a conference table. When surface miking is called for, Shure offers a complete range of models to choose from. Shure surface-mount microphones are frequently requested, because we build them without forgetting that exacting audio performance is your foremost consideration.*

**SM91** The world's first unidirectional surface-mount microphone has yet to be surpassed, thanks to the SM91's exceptional condenser transducer element and excellent preamplification system. A world-class microphone that's rugged enough to drive a truck over

Ideal for TV settings, news conferences, dramatic productions, choirs... wherever inconspicuous microphone placement is desired. Also excellent for miking kick drums and acoustic pianos. Preamp includes low-cut filter switch. Battery or phantom power.

**SM90 (not shown)** An omnidirectional version of the SM91. Same extraordinary features and performance. Useful when large area must be covered by one microphone.



819

**819** For applications where price is a consideration, the 819 offers an excellent, economical alternative to the SM91. Wide-range frequency response, super durability. Great for general sound reinforcement applications in churches, schools, etc. Single 9-volt battery or phantom power.

**809 (not shown)** The 819's omnidirectional version.



SM18

**SM18** A favorite in churches and meeting rooms, the SM18 dynamic is low in cost, good-sounding, and amazingly unobtrusive. Available in either white or brown foam casing to blend with white or wood grain surfaces.

**SM18W-CN** (white, attached cable)  
**SM18B-CN** (brown, attached cable)



# OMNIDIRECTIONAL MICROPHONES



SM63L

SM61

SM63

**SM63L** An extra-long (25 1/2") handle and flexible cable make this 1.5 lb. exceptional microphone a favorite for news-gathering, where extra "reach" is needed. Effective wind and pop filter. Durable VERA-FLEX grille. Extra-high output. Output is higher than comparable omnidirectional microphones.

**SM63-LC** (less cable)

**SM61** A lightweight, versatile microphone with a smooth, wide frequency response. Shure-patented shock mounting, built-in pop filter, and VERA-FLEX grille. Widely used in broadcasting, particularly for on-camera, hand-held use.

**SM61-LC** (less cable)

**SM63** Same as SM63L, but more compact (handle is 3 1/2" shorter). Rugged and elegant.

**SM63-LC** (less cable)

*When pickup of ambient sound or freedom from proximity effect is desirable and feedback is not a problem, an omnidirectional microphone is an excellent choice. And Shure's array of omni's is unmatched in versatility and performance.*



571

579SB

575SB

**571** The OMNIDYNE Model 571 is a studio-quality miniature omni microphone with optimized voice reproduction characteristics. Used in TV, motion pictures, theaters... wherever a very small but great-sounding microphone is needed.

**579SB** A slim, rugged, natural-sounding omni that's ideal for all kinds of applications, especially recordings that take advantage of natural room reverberation. Includes lockable on/off switch.

**579SB-LC** (less cable)

**575SB** THE VERSADYNE Model 575SB is an outstanding low-cost omni that's widely used for home recording and general sound reinforcement. Built-in on/off switch, attached cable.



## SPECIALTY MICROPHONES

**SM89** (shown with A89SM accessory shock mount and foam windscreen)—A highly directional professional "shotgun" condenser microphone, specially designed for location film and TV production, theater sound reinforcement, and spot news coverage. The SM89 is the first shotgun mic to overcome the problem of off-axis coloration. Thanks to its exclusive Accu-Port™ interference tube system—which eliminates the peaks and dips caused by the comb-filter characteristics of most shotgun mics—and fine-tuned frequency response, off-axis sound is much easier to control. Aluminum casing makes the SM89 30 to 40% lighter than other models and extremely easy to handle. The A89SM accessory shock mount virtually eliminates vibration noise. All in all, the SM89 is the most natural-sounding, easy-to-use "shotgun" available.

**SM7** A fixture in studios around the world, the "smooth and silky" SM7 is famous for making voices sound their best. Extremely popular for radio and television work, especially voice-over recording. Unique graphic tailoring switches (for presence boost and low-end rolloff) permit the choice of four different response curves. Yoke assembly allows exact positioning. Acclaimed as one of the finest dynamic microphones in use today.

**SM82** A hand-held, self-contained, unidirectional condenser microphone with a built-in line level amplifier, peak limiter and battery operation. An outstanding choice for on-location broadcasting, sound reinforcement, and recording applications where a line-level microphone with a built-in limiter is needed. May be directly "hard wired" to a telephone line. Extra-long (11<sup>27</sup>/<sub>32</sub>" handle gives great "reach" to interviewers.

**SM82-LC** (less cable)



*No matter how specialized your applications may be, chances are Shure has a microphone to fit your requirements.*

**55SH Series II**

**55SH Series II** An excellent modern microphone with a classic appearance, the 55SH Series II is perfect for performers who want the look and feel of the '50s and '60s. The same casing and appearance of Shure's 55 Series UNIDYNE® II microphones, but with the latest in dynamic transducers inside. A limited edition microphone.



**520D** A legend in the music business, the 520D "Green Bullet" is the *only* authentic choice of blues harmonica players who want the funky, down-home sound associated with Little Walter, Sonny Boy Williamson, Walter Horton, Sugar Blue, and other "Chicago-style" harp masters.

**520D**





# PROFESSIONAL CIRCUITRY PRODUCTS

The circuitry products in the Shure FP (Field Production) Series have taken their place as industry standards for their problem-

solving, feature-packed design, and extreme ruggedness. Built especially for broadcast and field production environments, Shure FP products have become synonymous with convenience and reliability to audio technicians worldwide.



**FP51** The FP51 lets you ride gain automatically in critical remote-to-studio feeds, assuring consistent signal output. It combines a 4-input, 1-output audio mixer with a high-quality gated-memory compressor that provides an adjustable 40 dB compression range (compression ratio of approximately 10:1 in normal operating range) and maximizes the output level regardless of the program material's peak-to-average ratio. Includes: transformer-balanced inputs and outputs (switchable for line or microphone level operation), phantom power, a built-in 1 kHz tone oscillator, pull-pot cuing for line or level checks, 1/4" and mini (3.5 mm) headphone jacks with level control, low-

cut filter switches for each channel, and an illuminated dual-range VU meter that indicates output level, dB compression, or battery condition. AC or battery (three standard 9-volt) power. A great labor-saving device for busy audio technicians.

**FP16** A 1-input, 6-output compact audio distribution amplifier for routing multiple audio feeds without sacrificing signal clarity. Includes: transformer-balanced inputs and outputs (each switchable for microphone or line level operation), link jacks for connecting additional FP16 units or outboard

devices. Battery or AC power, screwdriver-adjustable gain controls. Ideal as a portable press bridge.

**FP42** All the features and ruggedness that have made Shure's M267 an industry standard... plus full stereo capability. Four transformer-balanced inputs, two outputs (one for each stereo channel). May be battery or AC powered. The FP42 simplifies mic cuing (so important in sports remotes) and enables users to mix down stereo in editing suites.

**M267** One of the most popular field production mixers ever. The industry standard M267 mixer incorporates a switchable limiter, phantom power, LED peak indicator, built-in battery pack, headphone rack and level control, automatic muting circuit, battery check function, tone oscillator, and level switches on each input/output. Low-cut switches on each channel, and much more. Four transformer-balanced inputs, rack mountable, battery (three standard 9-volt) or AC power.



**FP12** A 1-input, 2-output headphone bridging amplifier, the FP12 is a must for shotgun and boom operators. It can provide headphone feeds from any type of audio input without "terminating" the input signal when operated in-line. Includes both XLR and 1/4" in/out connectors (two each) and both 1/4" and mini (3.5 mm) phone jacks. Features Mic/Line input switch, Hi Z/Lo Z headphone switch, headphone level control, battery test jacks, and removable belt clip. Takes standard 9-volt battery. Great for troubleshooting, multiple headphone feeds, and as an intercom.

**FP11** The FP11 Mic-to-Line amplifier provides up to 84 dB of additional gain in 15-6 dB steps for boosting microphone and auxiliary level devices to line level. This handy, compact, problem-solving amplifier includes balanced, locking XLR inputs and outputs; switchable peak limiter; peak/limiter LED indicator; aux level mini-phone jack input; balanced line-level binding post output; and removable belt clip. Powered by standard 9-volt battery.

**FP31** An instant field production classic, the FP31 Audio Mixer packs an amazing number of convenience features into an exceptionally compact package. Includes three XLR connector inputs and two outputs, each switchable for microphone or line level. Additional features include VU meter, timed meter lamp, peak LED overload/limiter indicator, adjustable limiter, tone oscillator, stereo headphone mini and 1/4" jacks, phantom and A-B power, tape-out mini jack, and more. Built-in switchable slate tone and microphone make it easy to mark takes. Battery (three standard 9-volt) or AC powered.

**FP32** A stereo version of the Shure FP31 Audio Mixer, with a center-detented stereo pan pot for each input channel, plus a concentric, slotted stereo master gain control. Includes all FP31 convenience features, plus playback monitor through the headphones.



# CIRCUITRY PRODUCTS



M68A/M68FCA



PS1A



M64A

*Shure "M" Series circuitry products are compact, durable, reliable, and functional. It's no surprise that they're so widely used for sound reinforcement, paging, and audio/visual applications.*

**M268** A compact, light-weight, 5-input mixer for use in PA/paging applications in hotels, community centers, and hospitals. It's also widely used by performers as an add-on mixer for expanding current equipment (such as for drum or keyboard sub-mixes). Includes four transformer-coupled low-impedance balanced-line microphone inputs and four high-impedance 1/4" phone jack inputs, plus a high-level auxiliary input. Also features switchable phantom power, mix bus, peak indicator. Individual volume controls for each channel plus master volume.

**M68A/M68FCA** Practical, efficient, and low in cost, the M68 Series is perfect for all applications requiring an economical microphone mixer. Four microphone channels, each switchable for use with high-impedance or low-impedance microphones. Also features aux level input channel, master volume control, high- and low-impedance outputs. Excellent for paging, tape recording, A/V work, and many other applications. (M68A features 3-pin input connectors; M68FCA incorporates 3-socket connectors).

**PS1A** An AC power supply that provides phantom power for one or two condenser microphones. Designed to operate from 90 to 132 Vac, 50/60 Hz or 180-264 Vac, 50/60 Hz (internal switch-selectable). A useful accessory for all Shure and other electret condenser microphones.

**M64A** A compact, professional stereo preamplifier which solves a variety of preamplification and equalization problems. The 3-position slide switch selects standard RIAA equalization (PHONO) or NAB equalization for tape heads (TAPE). In the flat position, the M64A can be used as a microphone preamplifier or a low-gain buffer amplifier where long cable lengths are necessary. Ideal for interfacing phonographs with PA systems.



# WIRELESS MICROPHONE SYSTEMS



W20R

W25DR



W10BT



W15HT/58



W15HT/87

*Shure wireless microphone systems are unmatched for performance, flexibility, reliability, and value. Body-pack systems offer optimum performance with a wide range of microphones as well as electronic musical instruments. Hand-held systems offer sound equal to their "wired" counterparts, thanks to an unprecedented*

*testing program which measures the acoustic performance through the wireless link. No other wireless systems come close to Shure's matched combination of acoustical, audio, and RF engineering, resulting in the excellent sound quality and dependability so important to your performance.*

**W25DR Diversiphase® Receiver** Dual-antenna diversity receiver increases antenna gain while it minimizes dropout.

**W20R Receiver** A non-diversity receiver incorporating Shure "mirror image" companding circuitry, linear-phase filters, and crystal-controlled frequency generation.

**W10BT Body-Pack Transmitter** Works optimally with both microphones and musical instruments. Separate power on/off mic on/off, and mic sensitivity switches. Battery condition indicator.

**W15HT Hand-Held Transmitter** (shown with SM58 and SM87 heads)—The first transmitter to deliver the *exact* sound of the world's most popular microphones. Acratune™ dipole antenna system ensures reliable operation. Interchangeable heads. Power and mic on/off switches, with locking security cover.



Shure offers the widest variety of wireless-ready microphones available—hand-held, lavalier, and head-worn, miniature and full-sized. And there's a complete line of accessories too, such as rack-mount kits and step-up antennas.



# AUTOMATIC MICROPHONE SYSTEM (AMS)



AMS8000 Mixer

AMS24



AMS26



AMS components include: the AMS8000 Mixer (eight channels), the AMS4000 Mixer (not shown, four channels), the AMS24 Gooseneck Microphone, the AMS26 Probe Microphone, the AMS22 Low-Profile Microphone, the AMS28

Lavalier Microphone, and the AMS880 Video Switcher Interface (not shown). Additional channels (up to a total of eight) may be added to the AMS4000 Mixer with replacement parts RKC188 and RKC189.

AMS22



AMS28



*Shure was the first to develop an integrated, automatic microphone/circuitry system to control the number of open microphones in an installation. Since its introduction, the AMS system has become the number one choice among sound installers and broadcasters because of its foolproof operation and ease of set-up. The Shure AMS solves such common problems as false and choppy gating, muddy sound, system "pumping," and missed syllables—thanks to its patented direction-sensitive gating capability.*

*The Shure AMS has been installed in hundreds of conference rooms, courtrooms, churches, colleges, and other facilities around the world. The system also has found a home in a wide range of broadcast and security applications.*

*The variety of AMS microphones available makes the AMS perfect for any situation. And the logic terminals that accompany each AMS channel permit many special capabilities, including chairman-controlled muting and automatic video camera switching.*



# AUDIOMASTER PORTABLE SOUND REINFORCEMENT SYSTEM

The world's best-kept secret is compact sound systems. It's also the most flexible. The feature-packed 6-input Audiomaster 1200

powermixer can be easily expanded to an 8-input 10-input powermixer with Audiomaster A1200M Expansion Modules.

All Audiomaster 1200 controls and LED indicators are logically arranged and color-coded for foolproof operation. Other features include a 200-watt fan-cooled amplifier, phantom power, built-in reverb, monitor mix

control, a built-in compressor/limiter, 150-watt 8-ohm speaker, and it can be installed in the optional A1200C portable case.

The Audiomaster's sound is something special, thanks to the Audiomaster 3200 loudspeaker's exclusive time-sync crossover network, constant directivity horn, compression high frequency driver, and 12-inch low frequency driver. All this, plus Shure durability, make Audiomaster an outstanding choice for top quality portable sound reinforcement.



Audiomaster 3200



Audiomaster 1200

**Audiomaster 3100** (not shown). Same performance as Model 3200, but with cabinet designed for permanent installation. Beige textured finish (may be repainted for custom look), dark brown grille, suitable hardware for permanent mounting.

## PROFESSIONAL PHONOGRAPH CARTRIDGES



SC39B



SC35C



SC39EJ



BC90



BC80



BC70



BC60



BC50



BC40

### SC SERIES

**SC39EJ** Shure-designed bearing assembly and telescoped stylus shaft structure help the SC39EJ achieve exceptional trackability. Includes Shure's exclusive SIRRA (Stylus Resonance Reduction Assembly) for long life. Tracks all types of gramophone records.

**SC35C** The SC35C has come with the new, lighter weight track arm. Tracks all types of gramophone records.

**SC39B** Like the SC39EJ, but with standard bearing.

### BC SERIES

The BC series is the most widely used. The BC series cartridges have proven sound reproduction and long life. Tracks all types of gramophone records.

**BC60** Tracks all types of 1.0 to 1.5 grams, elliptical tip.

**BC80** Tracks all types of 1.0 to 1.5 grams, elliptical tip.

**BC70** Tracks all types of 1.0 to 1.5 grams, elliptical tip.

### DC SERIES

Designed for direct connection to amplifier. Tracks all types of gramophone records.

**DC60** Tracks all types of 1.0 to 1.5 grams, elliptical tip.

**DC50** Forward tracks of 1.0 to 1.5 grams, elliptical tip.

**DC40** Tracks all types of 1.0 to 1.5 grams, elliptical tip.

*Shure Professional Phonograph Cartridges are designed to provide clean, undistorted playback of even the toughest-to-track recordings. And they're built to last, too.*



# ACCESSORIES — CABLES AND "PROBLEM SOLVERS"

Cables



Shure cables and "Problem Solvers" are famous for making audio technicians' lives much simpler. "Problem Solvers" include a wide variety of compact "in-line" microphone attenuators, equalizers, transformers, adapters, and other devices.

**Cables** Shure has a complete selection of durable, fully-shielded microphone cables. See the Microphone Cable Selection Chart on page 21 for models

**A15RS Response Shaper** Provides sibilance filtering (removes presence peak) for recording, broadcasting, and PA applications.

**A15PRS Switchable Phase Reverser** Instant switch selection of normal or reversed phase of a balanced line without modification of equipment.

**A95UF Low-Impedance to High-Impedance Line Matching Transformer** Low impedance connector—3 socket XLR connector. High impedance connector—Amphenol MC1M-type connector with mating standard 1/4-inch phone jack and phone plug.

**A120S Accessory In-Line Switch** May be used to add an On, Off, Push-To-Talk, Mute, or Transmitter Keying function to a microphone or any other device.

**A15BT Bridging Transformer** Matches balanced or unbalanced devices of different impedances. (33 kilohm primary, 600 or 7,500 ohm secondary)

**A15PA Presence Adapter** Adds presence to vocals or instruments in recording, broadcasting, and PA applications.

**A95U** Same as A95UF, but with 5-pin XLR for low-impedance connector.

**50AC Telephone Acoustic Coupler** Designed to acoustically couple tape-recorded information to a telephone handset transmitter. Useful in recording, interview, broadcast applications when a tape recorder cannot be connected to a telephone line. Comes with a 300 to 3,000 Hz frequency response.

**A15LA Line Input Adapter** Converts balanced low-impedance microphone input to bridging line-level input.

**A15HF High Pass Filter** Provides a low-frequency cutoff to reduce unwanted low-frequency noises.

**A97A Low-Impedance to Medium-Impedance Line Matching Transformer** Low impedance connector—3 pin XLR connector. Medium impedance connector—Amphenol MC1M-type connector with mating standard 1/4-inch phone jack and phone plug.

**A15AS Switchable Microphone Attenuator** Preferred means to load microphone without cutting signal. When set, all audio signals applied to a microphone input. Provides 15, 20, or 25 dB attenuation.

**A85F Low Impedance to High-Impedance Line Matching Transformer** Low impedance connector—3 socket XLR connector. High impedance connector—permanently wired 1/4 inch phone plug.

## SHURE "PROBLEM SOLVERS" IN" MICROPHONE ATTENUATORS, EQUALIZERS, AND ADAPTERS

**A15TF Tone Generator** Produces a continuous 1000 Hz signal capable of driving low-impedance balanced lines. Extremely useful in setting up and troubleshooting audio equipment. Battery operated.

**A15LP Low Pass Filter** Provides a high frequency cutoff to reduce objectionable high frequency noises.

# ACCESSORIES



## MICROPHONE ACCESSORY BAGS

**26A07** A heavily padded bag for storing microphones and accessories. Dimensions are 9 $\frac{1}{8}$ " x 4" x 1 $\frac{1}{16}$ ".

**26A08** In addition to its padded and zippered main compartments, the 26A08 has two more separately zippered compartments for accessories. Dimensions are 9 $\frac{5}{16}$ " x 4 $\frac{1}{2}$ " x 2".

**26A10** A functional, multi-purpose storage bag. Dimensions are 4 $\frac{1}{2}$ " x 10 $\frac{1}{8}$ ".

## STANDS AND ADAPTERS

**A27M** Stereo Microphone Adapter Permits mounting two microphones on one stand, with complete flexibility in positioning. Accepts all Shure microphone mounts and adapters.

**A45Z** Z-Bracket Small, lightweight alternative to standard microphone stand and boom combination, which can be positioned on top of or underneath any speaker cabinet or guitar amplifier.

**S39A** Vibration Isolation Stand For tables, desks, lecterns, etc. Isolates microphone from mechanical vibration.

**A55HM** "Shock Stopper"™ Isolation Mount/Swivel Adapter (Half-Mount Version) Permits instant removal of microphone on stage. Fits Models SM48, SM57, SM58, SM77, SM78, 515, 545, 565, 587, and 588. Model A53HM (not pictured) fits Models SM59, SM61, SM62, SM63, SM63L, SM80, SM81, SM82, SM85, SM87, SM94, SM96, 849, and 869.

**A55M** "Shock Stopper"™ Isolation Mount/Swivel Adapter A breakthrough in noise isolation. Reduces mechanical and vibration noise by more than 20 dB. Fits same models as A55HM. A53M (not pictured) fits same models as A53HM (except SM94, SM96, 849, and 869).

**A25B** Swivel Adapter Black. Designed for use with Models SM48, SM57, SM58, SM77, SM78, 515, 545, 565, 587, and 588. A25C (not pictured), designed for use with Models SM94, SM96, 849, and 869.

**A57E** Swivel Adapter Black. Fits Models SM85, SM87, SM89, and AMS26.

**A57D** Swivel Adapter Same as A57E, but Champagne color. Designed for use with Models SM59, SM61, SM62, SM63, SM63L, SM80, and SM81.

**A58WS** WINDSCREENS Fit all Shure "ball-type" microphones.

**A58WS-OR** Orange.

**A58WS-BR** Brown.

**A58WS-GN** Green.

**A58WS-RD** Red.

**A58WS-BL** Blue.

**A58WS-WH** White.

**A58WS** Gray.

**A58WS-YL** Yellow.

**A58WS-BK** Black.

**A2WS** WINDSCREENS Locking feature. For use with Models 545, SM57, and SM77.

**A2WS** Gray.

**A2WS-BK** Black.

**A81G** Pop filter grille for Models SM80 and SM81.



# ADDITIONAL AVAILABLE ACCESSORIES

## FLOOR AND DESK STANDS

### BB-77 Baby Boom A 31"

chrome-plated, adjustable boom arm. Fits Model MS-10C Floor Stand.

### MS-10C Floor Stand

Quickly and easily adjusts from 35" to 64" high.

### S15 Tripod Floor Stand

Extra-tall, rugged and stable... yet portable and lightweight. Five telescoping sections. Stand may be used at any height between 3½ and 14 ft.

**S37A Desk Stand** Modern, low-profile design. Non-reflective, textured gray finish (27/8" x 4 1/16" x 6 1/2").

## MOUNTS AND ADAPTERS

**A26X Desk Stand Extension** Stem pipe for AMS26 microphone. Black, threaded on both ends.

**CO-1 Stand Adapter** Black. Screw-type clamp for mounting second microphone on floor stand or for mounting a microphone directly to a desk or table.

**A25M Dual Microphone Mount** Designed for use with Models 545, SM57, and SM77.

**A26M Dual Microphone Mount** Designed for use with models 545, SM57, and SM77 when using A2WS Windscreens and with 515, 565, 588, SM58, and SM78.

**A89SM Shock Mount Holder** For use with SM89 Shotgun. Also fits Models SM80 and SM81.

## WINDSCREENS

**A1WS** For 515 Series.

**A3WS** Fits Models SM94, SM96, 849, and 869.

**A61WS** Fits Models SM61, SM62, SM63, and SM63L.

**A81WS** Specially designed for Models SM80 and SM81.

**A85WS** For SM85.

**RK184WS** Fits Models SM1, SM2, SM10A, and SM12A.

**RK204F** For SM81B (Brown).

**RK205F** For SM18W (White).

**RK229WS** Fits Models SM63, SM63L.

**RK242WS** Fits Models 839, SM83, WL83.

**RK257WS** For Model SM89.

**49A64A** For 512.

**49A74A** Fits Models SM15, WM15.

**49A66** For SM98.

**90A2089** For SM7.

**90B4016** For SM99.

## GOOSENECKS

**G6A** 6" flexible with side vent.

**G12** 12" flexible.

**G12-CN** 12" flexible with three-socket professional audio connector.

**G18** 18" flexible.

**G18A** 18" flexible with side vent.

**G18-CN** 18" flexible with three-socket professional audio connector.

**90B1120A** 12" lightweight.

**A12 Mounting Flange** Standard 5/8"-27 external thread.

## LAVALIER MOUNTING HARDWARE

**A51L** Plastic. Fits Models 570S and 571.

**A54L** Plastic. Fits Model 545L.

**A57L** Rubber. Fits Models 570S and AMS28.

**RK239MB Mounting Block** Fits Models SM83, SM84, WL83, and WL84.

**RK240SB Single Bar** Fits Models SM83, SM84, WL83, and WL84.

**RK241DB Dual Mount Tie Bar** Fits Models SM83, SM84, WL83, and WL84.

## CIRCUITRY MOUNTING KITS

**A16R** Rack panel for FP16 and FP42.

**A68R-BL** Rack panel for M68A, M68FCA. Black finish.

**A268R** Rack panel for M267 and M268. Black finish.

**RKC169** Bracket kit, adapts A68R to fit M267 and M268.

## WIRELESS ACCESSORIES

### Rack Mount Kits

**WA200** Single for W20R. 1¾" high.

**WA210** Double for W20R. 1¾" high.

**WA220** Single for W25DR. 3½" high.

**WA230** Double for W25DR. 3½" high.

### Instrument Cable

**WA300** Connects W10BT Body-Pack Transmitter to a guitar or other instrument. Cable is 4 ft. with a 1/4" phone plug and Switchcraft TA4F connector.

### Microphone Cable

**WA310** Connects W10BT Body-Pack Transmitter to a dynamic or battery-powered condenser microphone for unbalanced operation. Cable is 4 ft. with a 3-socket (female) professional connector and Switchcraft TA4F connector.

## NEED MORE INFORMATION?

There is a technical data sheet for every Shure product. It provides such information as detailed specifications, technical descriptions, product features, impedance change instructions, optional power conversions, circuit diagrams, wiring considerations, descriptions of controls, connectors and indicators, as well as a list of optional accessories and replacement parts.

Selection guides which recommend the most appropriate Shure microphones for various applications are also available.

These include:

**AL693** Microphone Selection Guide—Broadcast Applications

**AL702** Microphone Selection Guide—Sound Reinforcement and Recording Applications

**AL707** Microphone Techniques For Music

Data sheets and application guides may be obtained free of charge by contacting: Shure Brothers Inc., Consumer Relations Department, 222 Hartrey Avenue, Evanston, IL 60202-3696, (312) 866-2560. When ordering please indicate the product model number(s) for data sheets and the "AL" number for selection guides.

# REPLACEMENT PARTS AND ACCESSORIES SELECTION GUIDE

Microphone Model Number	Cable	Cartridge	Screen & Grille Assembly	Swivel Adapter	Windscreen	(4) Misc. Accessories
55SH Series II	(1)	R115	—	—	—	—
512	—	R93 (Microphone) R143 (Receiver)	—	—	49A64A*	A120S
515SA	C62	R15	RK54G	A25B*	A1WS	—
515SB	C63	R15	RK54G	A25B*	A1WS	—
515SD	(1)	R15	RK254G	A25B*	A1WS	—
520D	70A2047	R44D	—	—	—	—
545D	(1)	R45	RK244G	A25B*	A2WS	A25M (5), A55M
545L	70A2004	R45L	RK244G	A25B	A2WS	A25M (5), A54L*
545SD	(1)	R45	RK244G	A25B*	A2WS	A25M (5), A55M, A55HM
545SH	(1)	R45	RK244G	—	A2WS	—
565D	(1)	R65	RS65	A25B*	A58WS (2)	A26M, A55M, A55HM
565SD	(1)	R65	RS65	A25B*	A58WS (2)	A26M
570S	70A295	R70	RK91G	A57E	—	A120S, A57L*
571	70A287	90F995	RK91G	A57E*	A2WS	A57L
575SB	70B1006	R50	—	—	—	—
579SB	(1)	R50	RK161G (Gray) RK221G (Champagne)	A57D*	A58WS (2)	—
587SB	(1)	R136	RK252G	A25B*	A58WS (2)	A26M, A55M, A55HM
588SD	(1)	R15	RK253G (Champagne)	A25B*	A58WS (2)	A26M, A55M, A55HM
809	—	R130	—	—	—	PS1A (6)
819	—	R129	—	—	—	PS1A (6)
839	90A3875	R133	—	—	RK242WS* (3)	PS1A (6), RK240SB (3)
849	(1)	R138	—	A25C*	A3WS	PS1A (6), A53M, A53HM
869	(1)	R137	RK256G	A25C*	A58WS (2)	PS1A (6), A53M, A53HM
SM1	C108	R93 (Microphone) R135 (Receiver)	—	—	RK184WS*	—
SM2	C108	R93 (Microphone) R135 (Receiver)	—	—	RK184WS*	—
SM7	C25E	99A673	90A3004B	—	90A2089	—
SM10A	—	R93	—	—	RK184WS*	A120S
SM11	C91	R99	—	—	—	A120S

- (1) See Cable Selection Guide on Page 21.  
 (2) A58WS Windscreens are available in an assortment of colors.  
 (3) Kit contains four.  
 (4) See Accessories on Pages 16, 17 and 18.

- (5) With A2WS Windscreen, use A26M.  
 (6) PS1A for 90-132 Vac; also 240 Vac (180-264).  
 — Indicates accessory cannot be used with product.  
 \* Furnished accessory.



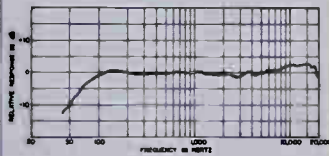
Microphone Model Number	Cable	Cartridge	Screen & Grille Assembly	Swivel Adapter	Windscreen	(4) Misc. Accessories
SM12A	—	R93	—	—	RK184WS*	A120S
SM15	90A3792	R145	—	—	49A74A*	A120S, PS1A (6)
SM17	90B2505	R99	—	—	—	—
SM18B	90B3111	99C669	—	—	RK204F	—
SM18W	90A3111	99C669	—	—	RK205F	—
SM48	(1)	R136	RK248G	A25B*	A58WS (2)	A26M, A55M, A55HM
SM57	(1)	R57	RK244G	A25B*	A2WS	A25M (5), A55M, A55HM
SM58	(1)	R59	RK143G	A25B*	A58WS (2)	A26M, A55M, A55HM
SM59	(1)	R100	90CD2600	A57D*	A59WS-BR	A53M, A53HM
SM61	C25F	R61	RK164G	A57D*	A61WS	A53M, A53HM
SM62	(1)	90A3007	—	A57D*	A58WS (2)	A53M, A53HM
SM63	C25F	90A2902	90DK2600	A57D*	RK229WS*	A53M, A53HM
SM63L	C25F	90B2902	90DK2600	A57D*	RK229WS*	A53M, A53HM
SM77EB	C25E	R140	RK244G	A25B*	A2WS	A25M (5), A55M, A55HM
SM78EB	C25E	R141	RK210G	A25B*	A58WS (2)	A26M, A55M, A55HM
SM80	C25F	R104A	—	A57D*	A81WS	A53M, A81G*, PS1A (6), R104
SM81	C25F	R104	—	A57D*	A81WS	A53M, A81G, PS1A (6), R104A
SM82	C25F	99F671	90BU2600	A57D*	90CC2600	50AC, PS1A (6)
SM83	C106	R127	—	—	RK242WS* (3)	PS1A (6), RK239MB, RK240MB, RK241MB (3)
SM84	C109	R146	—	—	RK261WS* (3)	PS1A (6), RK239MB, RK240MB, RK241MB (3)
SM85	C25E	R112	RK214G	A57E*	A85WS	A53M, A53HM, PS1A (6)
SM87	C25E	R128	RK243G	A57E*	A85WS	A53M, PS1A (6)
SM89	C25E	R144	—	A57E	RK257WS*	A89SM, PS1A (6)
SM90	C107	R130	—	—	—	PS1A (6)
SM91	C107	R129	—	—	—	PS1A (6)

(1) See Cable Selection Guide on Page 21.  
(2) A58WS Windscreens are available in an assortment of colors.  
(3) Kit contains four.  
(4) See Accessories on Pages 16, 17 and 18.

(5) With A2WS Windscreen, use A26M.  
(6) PS1A for 90-132 Vac; also 240 Vac (180-264).  
— Indicates accessory cannot be used with product.  
\* Furnished accessory.

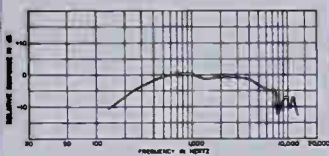
### MODEL 809

Type: Condenser for surface mounting  
 Frequency Response: 50 to 20,000 Hz at 30° incidence to infinite surface  
 Polar Pattern: Omnidirectional in hemisphere above mounting surface  
 Impedance: 600 ohms  
 Output Level: (at 1,000 Hz, measured with sound source at 30° incidence to flat surface)  
 Open Circuit Voltage\* ..... -68.0 dB (0.4 mV)



### MODELS SM18B and SM18W

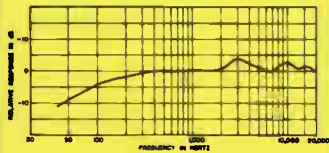
Type: Dynamic  
 Frequency Response: 150 to 10,000 Hz, at 25°, 1m (39.4 in.) from sound source, microphone on flat surface  
 Polar Pattern: Cardioid (unidirectional), at 1m (39.4 in.) from horizontal sound source, microphone on flat surface  
 Impedance: 150 ohms (180 ohms actual)  
 Output Level: (at 1,000 Hz, 25°, 1m [39.4 in.] from sound source, microphone on flat surface)  
 Open Circuit Voltage\* ..... -73.0 dB (0.22 mV)  
 Power Level\*\* ..... -52.0 dB



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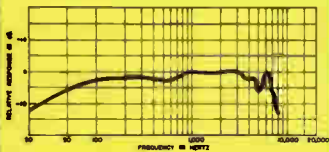
### MODELS SM63 and SM63L

Type: Dynamic  
 Frequency Response: 50 to 20,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (270 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -76.0 dB (0.16 mV)  
 Power Level\*\* ..... -56.5 dB



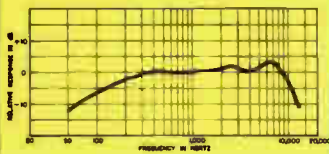
### MODEL SM61

Type: Dynamic  
 Frequency Response: 50 to 14,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -82.0 dB (.08 mV)  
 Power Level\*\* ..... -60.5 dB



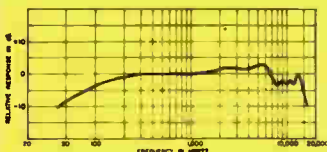
### MODEL 571

Type: Dynamic  
 Frequency Response: 50 to 10,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -81.5 dB (.084 mV)  
 Power Level\*\* ..... -60.5 dB



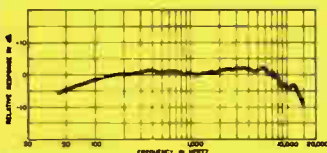
### MODEL 579SB

Type: Dynamic  
 Frequency Response: 50 to 14,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -78.5 dB (0.13 mV)  
 Power Level\*\* ..... -57.0 dB



### MODEL 575SB

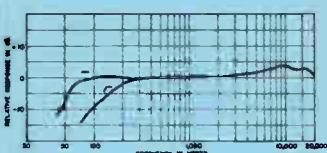
Type: Dynamic  
 Frequency Response: 40 to 15,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -79.0 dB (.112 mV)  
 Power Level\*\* ..... -58.0 dB



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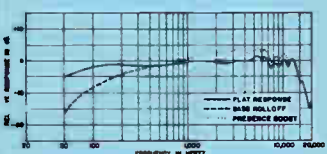
### MODEL SM89

Type: Pressure gradient/line combination  
 Transducer: Condenser  
 Frequency Response: 60 to 20,000 Hz  
 Polar Pattern: Hypercardioid at low frequencies, lobar at frequencies above 1 kHz  
 Impedance: 150 ohms (100 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -53 dB (2.2 mV)



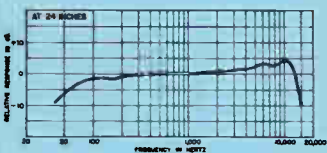
### MODEL SM7

Type: Dynamic  
 Frequency Response: 40 to 16,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (150 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -79.0 dB (.11 mV)  
 Power Level\*\* ..... -57.0 dB



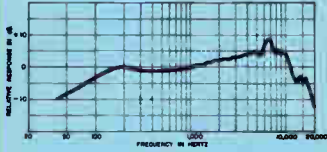
### MODEL SM82

Type: Cardioid condenser with line level amplifier and limiter  
 Frequency Response: 40 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 250 ohms actual (designed for use with 600-ohm or greater loads)  
 Output Level: (1,000 Hz response)  
 Open Circuit Voltage: -23 dBV (0.11V) for 74 dB SPL  
 Power Output: -4 dBm into 600 ohms for 94 dB SPL



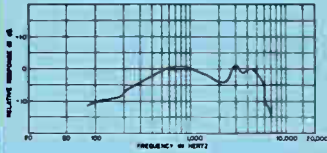
### MODEL 55SH SERIES II

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (270 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -78.0 dB (0.13 mV)  
 Power Level\*\* ..... -58.5 dB



### MODEL 520D

Type: Controlled Magnetic  
 Frequency Response: 100 to 5,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: (at 1,000 Hz)  
 Dual. Microphone rating impedance is 150 ohms (160 ohms actual) and "High."  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -73.0 dB (0.22 mV) (LO Z) -56.0 dB (HI Z)  
 Power Level\*\* ..... -51.0 dB



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### MODEL FP11

Output Clipping Level: +18 dBm  
 Equivalent Input Noise: -129 dBV  
 Battery Life:\*\*\* 25 hours

### MODEL FP12

Output Clipping Level: 4 to 8 ohms: 750 mV  
 1 Kohm or higher: 15V  
 Equivalent Input Noise: -118 dBV  
 Battery Life:\*\*\* 10 hours

### MODEL FP16

Output Clipping Level: Line: +14 dBm  
 Equivalent Input Noise: -129 dBV  
 Phantom Power Voltage: 30 Vdc  
 Battery Life:\*\*\* 20 hours

### MODEL FP31

Output Clipping Level: Line: +16 dBm  
 Equivalent Input Noise: -129 dBV  
 Phantom Power Voltage: 11 to 18 Vdc  
 Battery Life:\*\*\* 8 hours

### MODEL FP32

Output Clipping Level: Line: +16 dBm  
 Equivalent Input Noise: -128 dBV  
 Phantom Power Voltage: 11 to 18 Vdc  
 Battery Life:\*\*\* 6 hours

### MODEL FP42

Output Clipping Level: Line: +18 dBm  
 Equivalent Input Noise: -129 dBV  
 Phantom Power Voltage: 30 Vdc  
 Battery Life:\*\*\* 10 hours

### MODEL FP51

Output Clipping Level: Line: +18 dBm  
 Equivalent Input Noise: -129 dBV  
 Phantom Power Voltage: 30 Vdc  
 Battery Life:\*\*\* 10 hours

### MODEL M68A/M68FCA

Output Clipping Level: Line (10 Kohm): 4V  
 Equivalent Input Noise: -123 dBV

### MODEL M267

Output Clipping Level: Line: +18 dBm  
 Equivalent Input Noise: -128.5 dBV  
 Phantom Power Voltage: 30 Vdc  
 Battery Life:\*\*\* 20 hours

### MODEL M268

Output Clipping Level: Line (10 Kohm): 7.9V  
 Equivalent Input Noise: -128 dBV  
 Phantom Power Voltage: 30 Vdc  
 \*\*\*With alkaline batteries, continuous use, normal operating conditions.

### MODEL PS1A

Open Circuit Supply Voltage: 21.5 ± 1.5 Vdc, regulated  
 Frequency Response: +0/ -0.2 dB, 20-20,000 Hz  
 Hum and Noise: (20 Hz-20 kHz, unweighted)  
 Common Mode ..... -90 dBV maximum  
 Differential Mode ..... -115 dBV maximum

### MODEL M64A

Gain: (Measured at 1 kHz; input through 680 ohms; output terminated in 47 kilohms)  

Switch Position	High-Level Output	Low-Level Output
Phono	+34.5 dB	+11 dB
Flat	+27.5 dB	+4 dB
Tape	+37 dB	+13.5 dB

 Frequency Response:  
 Phono: ±2 dB of Standard RIAA curve from 40 Hz to 15 kHz  
 Flat: 20 Hz to 20 kHz, ±2 dB  
 Tape: ±2 dB of 7-1/2 ips NAB curve from 50 Hz to 15 kHz  
 Total Harmonic Distortion: Less than 1% with 2V output at 1 kHz in all switch positions. Phono position only: Less than 1% at 30 Hz with 2V output.  
 Hum and Noise: (20 Hz to 20 kHz)  
 Phono: Better than 71 dB below 10 mV input  
 Flat: Better than 64 dB below 10 mV input

(All Shure circuitry products are listed by Underwriters Laboratories, Inc. and listed by Canadian Standards Association as Certified.)

All Shure circuitry products operate (or can be modified to operate) on 120 or 240 Vac.

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### MODEL W20R RECEIVER

Distortion: (at ±12 kHz deviation) Less than 0.5% THD, 100 to 15,000 Hz; 0.3% at 1 kHz typical  
 Dynamic Range: 98 dB A-weighted  
 92 dB unweighted  
 Audio Frequency Response: 50 to 15,000 Hz, ±1 dB  
 Output: -20 dB across 200 ohms maximum (mic level adjustable)  
 Antenna Type: 1/4 wavelength omnidirectional vertical  
 Power: 13.5 Vdc nominal (negative ground); 200 mA power converter supplied

### MODEL W25DR RECEIVER

Distortion: (at ±12 kHz deviation) Less than 0.5% THD, 100 to 15,000 Hz; 0.3% at 1 kHz typical  
 Dynamic Range: 98 dB A-weighted  
 92 dB unweighted  
 Audio Frequency Response: 50 to 15,000 Hz, ±1 dB  
 Mic/Line Output:  
 Line ..... 600 ohms, +13.5 dB maximum across 200 ohms, -10 dB maximum (mic level adjustable)  
 Mic ..... -10 dB maximum (mic level adjustable)  
 Antenna Type: 5/8 wavelength omnidirectional vertical  
 Power: 13.5 Vdc nominal (negative ground); 200 mA power converter supplied

### MODEL W15HT/87

RF Power Output: 50 mW maximum  
 Transducer Type: Condenser  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Supercardioid (unidirectional)  
 Maximum SPL: (for 3% THD at 1 kHz) 138 dB  
 Battery: Standard 9-volt alkaline; 12-14 hours typical life

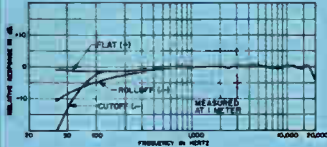
### MODEL W15HT/58

RF Power Output: 50 mW maximum  
 Transducer Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Maximum SPL: (for 3% THD at 1 kHz) 138 dB  
 Battery: Standard 9-volt alkaline; 12-14 hours typical life



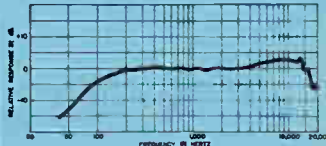
**MODEL SM81**

Type: Cardioid condenser  
 Frequency Response: 20 to 20,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (85 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -65 dB (0.56 mV)  
 Power Level\*\* . . . . . -40.5 dB



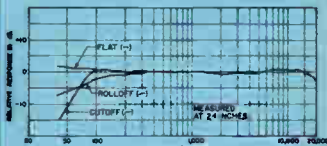
**MODEL SM99**

Type: Supercardioid condenser  
 Frequency Response: 80 to 20,000 Hz  
 Polar Pattern: Supercardioid (unidirectional)  
 Impedance: 150 ohms (90 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -73.0 dB (0.22 mV)



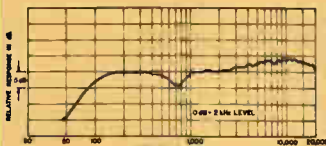
**MODEL SM80**

Type: Omnidirectional condenser  
 Frequency Response: 20 to 20,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (85 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -65 dB (0.56 mV)  
 Power Level\*\* . . . . . -40.5 dB



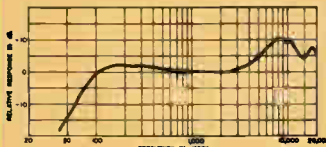
**MODEL SM83**

Type: Condenser  
 Frequency Response: 80 to 20,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (90 ohms actual)  
 Output Level: (at 2,000 Hz)  
 Open Circuit Voltage\* . . . . . -69 dB (0.35 mV)



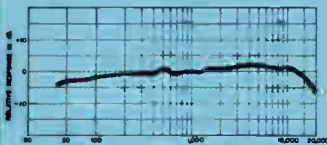
**MODEL 839**

Type: Condenser  
 Frequency Response: 80 to 20,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 600 ohms  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -70 dB (0.32 mV)



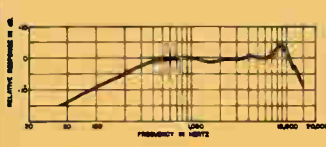
**MODEL SM94**

Type: Cardioid condenser  
 Frequency Response: 40 to 16,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -69 dB (0.35 mV) (phantom)  
 . . . . . -70 dB (0.32 mV) (battery)



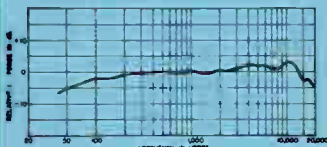
**MODEL SM11**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -65 dB (0.06 mV)  
 Power Level\*\* . . . . . -64 dB



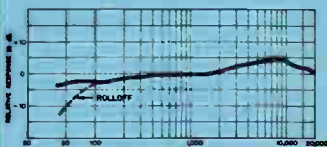
**MODEL 849**

Type: Cardioid condenser  
 Frequency Response: 40 to 16,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 600 ohms  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -71 dB (0.28 mV)



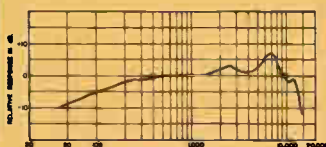
**MODEL SM98**

Type: Cardioid condenser  
 Frequency Response: 40 to 20,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (90 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -80.0 dB (0.10 mV)



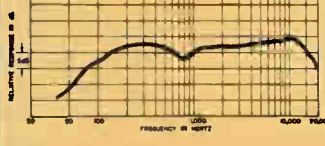
**MODEL 570S**

Type: Dynamic  
 Frequency Response: 50 to 12,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (180 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -81.5 dB (.08 mV)  
 Power Level\*\* . . . . . -60.0 dB



**MODEL SM84**

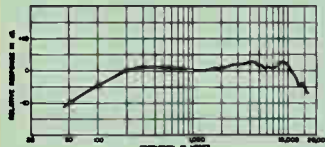
Type: Condenser  
 Frequency Response: 80 to 20,000 Hz  
 Polar Pattern: Supercardioid (unidirectional)  
 Impedance: 150 ohms (90 ohms actual)  
 Output Level: (at 2,000 Hz)  
 Open Circuit Voltage\* . . . . . -73 dB (0.22 mV)



**MODEL 512**

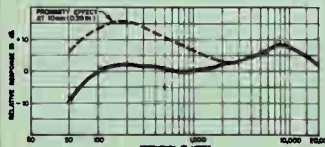
MICROPHONE  
 Type: Dynamic, Close-Talking  
 Frequency Response: (at 8 mm [5/16 in.])  
 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (close-talked at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -47.0 dB (4.5 mV)  
 Power Level\*\* . . . . . -66.0 dB

RECEIVER  
 Type: Dynamic, open air, left-side only  
 Frequency Response: 100 to 10,000 Hz  
 Impedance: 300 ohms at 1,000 Hz  
 Output Level: (at 1,000 Hz)  
 94 dB SPL at ear with 1 mW input



**MODEL SM15**

Type: Condenser  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (95 ohms actual)  
 Output Level: (close-talked at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -74 dB (0.2 mV) at 610 mm (24 in.)  
 . . . . . -72 dB (0.025 mV) at 10 mm (0.39 in.)



**MODEL SM2**

MICROPHONE  
 Type: Dynamic, Close-Talking  
 Frequency Response: (at 8 mm [5/16 in.])  
 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (close-talked at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -47.0 dB (4.5 mV)  
 Power Level\*\* . . . . . -66.0 dB

RECEIVERS  
 Type: Dynamic  
 Frequency Response: 100 to 8,000 Hz  
 Impedance: 2,000 ohms at 1 kHz  
 Output Level: (at each ear)  
 104.0 dB SPL with 1.4V at 1 kHz

**MODEL SM1**

MICROPHONE  
 Type: Dynamic, Close-Talking  
 Frequency Response: (at 8 mm [5/16 in.])  
 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (close-talked at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -47.0 dB (4.5 mV)  
 Power Level\*\* . . . . . -66.0 dB

RECEIVER  
 Type: Dynamic  
 Frequency Response: 100 to 8,000 Hz  
 Impedance: 2,000 ohms at 1 kHz  
 Output Level: 104.0 dB SPL with 1.4V at 1 kHz

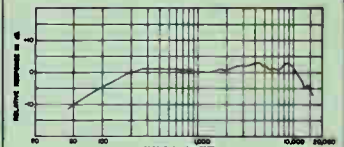
**MODEL SM10A**

Type: Dynamic, Close-Talking  
 Frequency Response: (at 8 mm [5/16 in.])  
 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (close-talked at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -47.0 dB (4.5 mV)  
 Power Level\*\* . . . . . -66.0 dB

**MODEL SM12A**

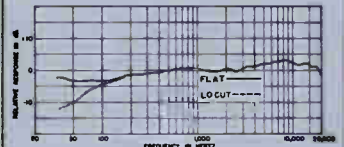
MICROPHONE  
 Type: Dynamic, Close-Talking  
 Frequency Response: (at 8 mm [5/16 in.])  
 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (close-talked at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -47.0 dB (4.5 mV)  
 Power Level\*\* . . . . . -66.0 dB

RECEIVER  
 Type: Dynamic  
 Frequency Response: 70 to 12,000 Hz  
 Impedance: 2,000 ohms at 1 kHz  
 Output Level: 105 dB SPL with 1.4V at 1 kHz



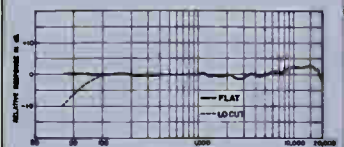
**MODEL SM91**

Type: Cardioid condenser for surface mounting  
 Frequency Response: 20 to 20,000 Hz at 30° incidence to infinite surface  
 Polar Pattern: Half-cardioid (cardioid in hemisphere above mounting surface)  
 Impedance: 150 ohms (90 ohms actual)  
 Output Level: (at 1,000 Hz, measured with sound source at 30° incidence to infinite surface)  
 Open Circuit Voltage\* . . . . . -69.0 dB (0.35 mV)



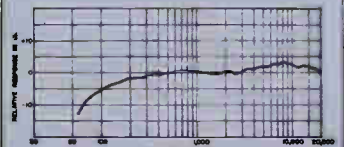
**MODEL SM90**

Type: Condenser for surface mounting  
 Frequency Response: 20 to 20,000 Hz at 30° incidence to infinite surface  
 Polar Pattern: Omnidirectional in hemisphere above mounting surface  
 Impedance: 150 ohms (90 ohms actual)  
 Output Level: (at 1,000 Hz, measured with sound source at 30° incidence to flat surface)  
 Open Circuit Voltage\* . . . . . -66.0 dB (0.5 mV)



**MODEL 819**

Type: Cardioid condenser for surface mounting  
 Frequency Response: 60 to 20,000 Hz at 30° incidence to infinite surface  
 Polar Pattern: Half-cardioid (cardioid in hemisphere above mounting surface)  
 Impedance: 600 ohms  
 Output Level: (at 1,000 Hz, measured with sound source at 30° incidence to infinite surface)  
 Open Circuit Voltage\* . . . . . -71.0 dB (0.28 mV)

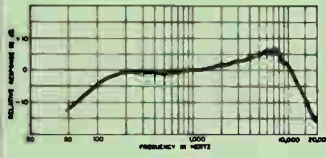


\*0 dB = 1 V/μbar    \*\*0 dB = 1 mW/10 μbar



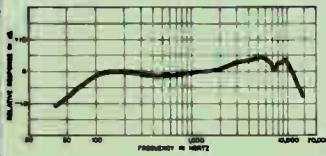
**MODEL SM48**

Type: Dynamic  
 Frequency Response: 55 to 14,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (270 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -77.5 dB (0.13 mV)  
 Power Level\*\* . . . . . -59 dB



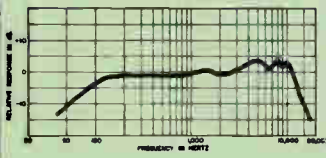
**MODEL SM58**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (310 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -75.5 dB (0.17 mV)  
 Power Level\*\* . . . . . -56.0 dB



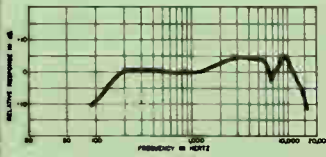
**MODEL SM78**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (250 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -77.5 dB (0.13 mV)  
 Power Level\*\* . . . . . -57.5 dB



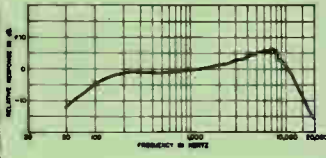
**MODEL 588SD**

Type: Dynamic  
 Frequency Response: 80 to 13,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: LO Z: 150 ohms (180 ohms actual)  
 HI Z: "High"  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -82.0 dB (0.08 mV) -59.5 dB (1.1 mV)  
 Power Level\*\* . . . . . -60.5 dB



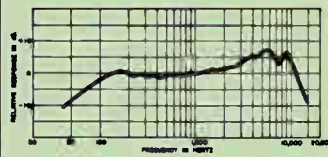
**MODEL 587SB**

Type: Dynamic  
 Frequency Response: 55 to 14,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (270 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -77.5 dB (0.13 mV)  
 Power Level\*\* . . . . . -59 dB



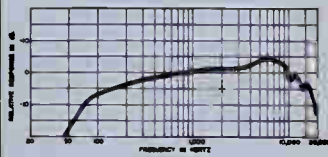
**MODELS 565D and 565SD**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: LO Z: 150 ohms (180 ohms actual)  
 HI Z: "High"  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -76.0 dB (0.16 mV) -54.0 dB (2.0 mV)  
 Power Level\*\* . . . . . -56.0 dB



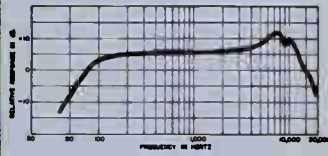
**MODEL SM87**

Type: Supercardioid condenser  
 Frequency Response: 50 to 18,000 Hz  
 Polar Pattern: Supercardioid (unidirectional)  
 Impedance: 150 ohms (85 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -74 dB (0.2 mV)



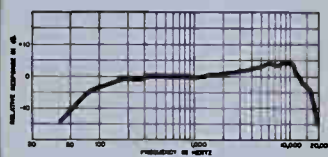
**MODEL SM85**

Type: Cardioid condenser  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (85 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -74 dB (0.2 mV)



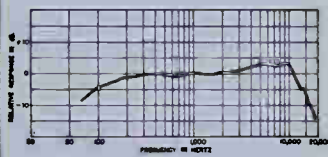
**MODEL SM96**

Type: Cardioid condenser  
 Frequency Response: 70 to 16,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -74 dB (0.2 mV) (phantom)  
 -75 dB (0.18 mV) (battery)



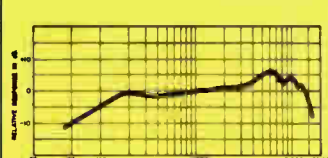
**MODEL 869**

Type: Cardioid condenser  
 Frequency Response: 70 to 16,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 600 ohms  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -78 dB (0.13 mV)



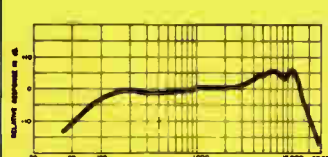
**MODEL SM57**

Type: Dynamic  
 Frequency Response: 40 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (310 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -75.5 dB (0.17 mV)  
 Power Level\*\* . . . . . -56.0 dB



**MODEL SM77**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (250 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -77.5 dB (0.13 mV)  
 Power Level\*\* . . . . . -57.5 dB

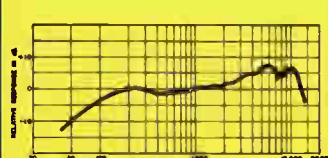


**MODELS 545D and 545SD**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: LO Z: 150 ohms (275 ohms actual)  
 HI Z: "High"  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -78.0 dB (0.13 mV) -55.0 dB (1.76 mV)  
 Power Level\*\* . . . . . -58.5 dB

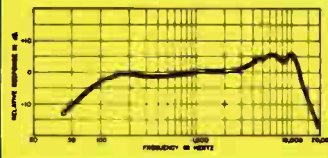
**MODEL 545SH**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: LO Z: 150 ohms (250 ohms actual)  
 HI Z: "High"  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -76.0 dB (0.16 mV) -54.0 dB (2.0 mV)  
 Power Level\*\* . . . . . -56.0 dB



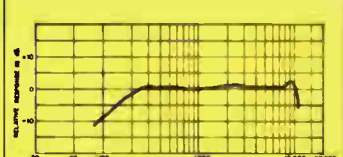
**MODEL 545L**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (250 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -77.5 dB (0.13 mV)  
 Power Level\*\* . . . . . -57.5 dB



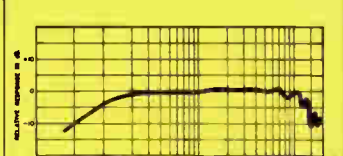
**MODEL SM62**

Type: Dynamic  
 Frequency Response: 100 to 10,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (180 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -81.5 dB (.08 mV)  
 Power Level\*\* . . . . . -60.0 dB



**MODEL SM59**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 150 ohms (160 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -83 dB (.07 mV)  
 Power Level\*\* . . . . . -61 dB

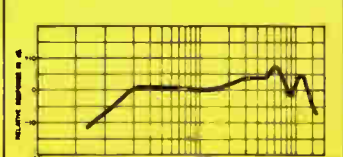


**MODELS 515SA and 515SB**

Type: Dynamic  
 Frequency Response: 80 to 13,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: 515SA - "High"  
 515SB - 150 ohms (170 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . 515SA -59.0 dB (1.1 mV) 515SB -82.5 dB (.074 mV)  
 Power Level\*\* . . . . . -61.0 dB

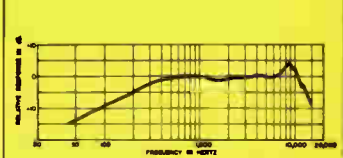
**515SD**

Type: Dynamic  
 Frequency Response: 80 to 13,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Impedance: LO Z: 150 ohms (170 ohms actual)  
 HI Z: "High"  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . LO Z -82.5 dB (0.074 mV) HI Z -59.0 dB (1.1 mV)  
 Power Level\*\* . . . . . -61.0 dB



**MODEL SM17**

Type: Dynamic  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: 150 ohms (200 ohms actual)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* . . . . . -84.5 dB (.06 mV)  
 Power Level\*\* . . . . . -63.5 dB



\*0 dB = 1 V/μbar \*\*0 dB = 1 mW/10 μbar



### MODEL W10BT

RF Power Output: 50 mW maximum  
 Input Impedance: Actual: 16k (20k dc), pin 4  
 wired to pin 3 for WL83 microphone; 91k, pin  
 4 open for microphone or instrument pickup  
**Maximum Input Level:**  
 Gain pot minimum,  
 gain switch high ..... 432 mVrms  
 Gain pot minimum,  
 gain switch low ..... 1.075 Vrms  
 Antenna: Attached, 305mm (12 in.),  
 omnidirectional, flexible wire  
 Battery: Standard 9-volt alkaline; 6-8 hours  
 typical life

### MODEL WL83

Type: Condenser  
 Frequency Response: 50 to 16,000 Hz  
 Polar Pattern: Omnidirectional  
 Output Impedance: 1,200 ohms  
 Output Level:  
 Open Circuit Voltage\* ..... -65.5 dB (.53 mV)  
**Maximum Sound Pressure Level:** 136 dB

### MODEL WL84

Type: Condenser  
 Frequency Response: 50 to 16,000 Hz  
 Polar Pattern: Supercardioid (unidirectional)  
 Output Impedance: 1,200 ohms  
 Output Level:  
 Open Circuit Voltage\* ..... -66 dB (.50 mV)  
**Maximum Sound Pressure Level:** 136 dB

### MODEL WM98

Type: Condenser  
 Frequency Response: 40 to 20,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Output Impedance: 1,200 ohms  
 Output Level:  
 Open Circuit Voltage\* ..... -74.0 dB (0.2 mV)  
**Maximum Sound Pressure Level:** 144 dB

### MODEL WM15

Type: Condenser  
 Frequency Response: 50 to 15,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Output Impedance: 1,200 ohms  
 Output Level: (close-talked at 1,000 Hz)  
 Open Circuit Voltage  
 -31.0 dB (2.82 mV) at 10 mm (0.39 in.)  
 -32.5 dB (2.37 mV) at 610 mm (24 in.)  
**Maximum Sound Pressure Level:** 141 dB

RF frequency range on all wireless units  
 is 163-216 MHz, high band VHF-FM.  
 15 frequencies are stocked.

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### MODELS AMS4000 & AMS8000 MIXER

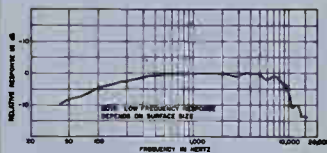
**Output Level:**  
**Microphone Input:** (72 dB SPL in)  
 Line: +15.8 dBV (+18 dBm)  
 Mic: -34 dBV  
 Aux: +17 dBV  
 Direct: -56 dBV  
 Phones: -4 dBV  
 Input Clipping Level at 1 kHz: 128 dB SPL  
**Aux Input:** (-22 dBV in)  
 Line: +15.8 dBV  
 Mic: -34 dBV  
 Aux: +17 dBV  
 Phones: -4 dBV  
 Input Clipping Level at 1 kHz:  
 +7 to +20 dBV\*  
 \*Depending on Aux control setting.  
**Frequency Response:**  
 Aux Input to Outputs: 30 to 20,000 Hz +2 dB  
 Mic Input to Outputs: 70 to 20,000 Hz +2 dB  
 (controlled low-frequency rolloff below 50 Hz)  
**Operating Voltage:** 105-132 Vac, 50/60 Hz, 20W.  
 Can be rewired for 210-264 Vac, 50/60 Hz,  
 20W.

### MODEL AMS880 VIDEO SWITCHER INTERFACE

Inputs: Eight, plus ground, TTL logic level  
 Outputs: Eight, plus common, FET optically  
 isolated; not connected to input ground  
**External power transformer:** 120 Vac + 10%,  
 60 Hz, 6W

### MODEL AMS22

Type: Low-Profile  
 Frequency Response: 50 to 10,000 Hz  
 Polar Pattern: Hemi-Cardioid  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -47 dB

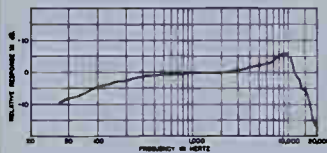


### MODEL AMS24

Type: Gooseneck  
 Frequency Response: 50 to 16,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -54 dB

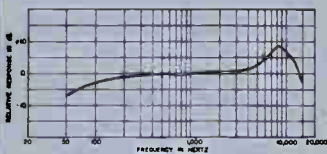
### MODEL AMS26

Type: Probe  
 Frequency Response: 50 to 16,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -54 dB



### MODEL AMS28

Type: Lavalier  
 Frequency Response: 50 to 16,000 Hz  
 Polar Pattern: Cardioid (unidirectional)  
 Output Level: (at 1,000 Hz)  
 Open Circuit Voltage\* ..... -54 dB



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### MODEL 1200 POWERMIXER

Type: Mono Powermixer  
 Frequency Response: Flat +1, -3 dB, 40 Hz to  
 20 kHz (any input to any output)  
 Inputs: Six input channels: six unbalanced high-  
 and/or balanced low-impedance inputs;  
 channels 1 and 2 high-impedance inputs  
 switchable to Aux level; available expansion  
 modules each contain 2 high- and 2 low-  
 impedance microphone inputs; two modules  
 (4 channels) can be added to each 1200.  
**Power Output:** (1 kHz, 120 Vac, 1% THD)  
 200 watts minimum with 4 ohm speaker  
 120 watts minimum with 8 ohm speaker

### MODEL 3100/3200 SPEAKER

**Power Rating:** Maximum recommended amplifier  
 output to 8 ohms: 120 watts program,  
 31 Vrms, 44 V peak  
**Frequency Response:** 60 Hz to 13 kHz ± 5 dB  
**Impedance:** 8 ohms rated 5.6 ohms minimum  
**Sound Pressure Level:** 98 dB SPL at 1 m with  
 1 W input (2.83 V)

### MODEL SC39EJ

**Stylus Configuration:** Biradial (elliptical)  
**Mounting Style:** 1/2-inch  
**Tracking Force Range:** 1.5 to 3.0 grams  
**Frequency Response:** 20 to 20,000 Hz  
**Output Voltage:** 4.0 mV  
**Channel Separation:** 20 dB at 1 kHz

### MODEL SC39B

**Stylus Configuration:** Spherical  
**Mounting Style:** 1/2-inch  
**Tracking Force Range:** 1.5 to 3.0 grams  
**Frequency Response:** 20 to 20,000 Hz  
**Output Voltage:** 4.0 mV  
**Channel Separation:** 20 dB at 1 kHz

### MODEL SC35C

**Stylus Configuration:** Spherical  
**Mounting Style:** 1/2-inch  
**Tracking Force Range:** 4.0 to 5.0 grams  
**Frequency Response:** 20 to 20,000 Hz  
**Output Voltage:** 5.0 mV  
**Channel Separation:** 20 dB at 1 kHz

### MODEL BC70

**Stylus Configuration:** Spherical  
**Mounting Style:** 1/2-inch  
**Tracking Force Range:** 2.5 to 3.5 grams  
**Frequency Response:** 20 to 15,000 Hz  
**Output Voltage:** 5.0 mV  
**Channel Separation:** 20 dB at 1 kHz

### MODEL BC80

**Stylus Configuration:** Elliptical  
**Mounting Style:** P-mount  
**Tracking Force Range:** 1.0 to 1.5 grams  
**Frequency Response:** 20 to 20,000 Hz  
**Output Voltage:** 5.0 mV  
**Channel Separation:** 20 dB at 1 kHz

### MODEL BC90

**Stylus Configuration:** Elliptical  
**Mounting Style:** 1/2-inch  
**Tracking Force Range:** 1.0 to 1.5 grams  
**Frequency Response:** 20 to 20,000 Hz  
**Output Voltage:** 5.0 mV  
**Channel Separation:** 20 dB at 1 kHz

### MODEL DC40

**Stylus Configuration:** Spherical  
**Mounting Style:** 1/2-inch  
**Tracking Force Range:** 2.5 to 3.5 grams  
**Frequency Response:** 20 to 20,000 Hz  
**Output Voltage:** 5.0 mV  
**Channel Separation:** 20 dB at 1 kHz

### MODEL DC50

**Stylus Configuration:** Elliptical  
**Mounting Style:** P-mount  
**Tracking Force Range:** 1.0 to 1.5 grams  
**Frequency Response:** 20 to 20,000 Hz  
**Output Voltage:** 5.0 mV  
**Channel Separation:** 20 dB at 1 kHz

### MODEL DC60

**Stylus Configuration:** Elliptical  
**Mounting Style:** 1/2-inch  
**Tracking Force Range:** 1.0 to 1.5 grams  
**Frequency Response:** 20 to 20,000 Hz  
**Output Voltage:** 5.0 mV  
**Channel Separation:** 20 dB at 1 kHz

Supplies  
 Technical  
 Solutions

\*0 dB = 1 V/μbar



Microphone Model Number	Cable	Cartridge	Screen & Grille Assembly	Swivel Adapter	Windscreen	(4) Misc. Accessories
SM94	(1)	R138	RK249G	A25C*	A3WS	A53HM, PS1A (6)
SM96	(1)	R137	RK243G	A25C*	A85WS	A53HM, PS1A (6)
SM98	C107	R134	—	RK245*	49A66*	A98MK, A98G-18, A98HA, A98PF, A98KC, A98SPM, A98GM, PS1A (6)
SM99	—	99A878	—	—	90B4016*	A25C, A57E, PS1A (6)
WL83	90A4015	90CG2600	—	—	RK242WS* (3)	RK239MB* (3), RK240SB* (3)
WL84	90A4015	90DM2600	—	—	RK261WS* (3)	RK239MB* (3), RK240SB* (3)
WM15	—	R145	—	—	49A74A	—
WM98	90A4039	R134	—	RK245*	49A66*	A98PF, A98KC Series, A98SPM
W15HT/58	—	R149	RK143G	WA370*	A58WS (2)	—
W15HT/87	—	R150	RK214G	WA370*	A85WS	—
AMS22	C101	—	—	—	—	—
AMS24	90BZ2600	—	90BZ2600	—	49C55*	—
AMS26	C25E	—	RK228G	A57E*	RK229WS*	A26X
AMS28	R124	—	—	—	—	A57L

(1) See Cable Selection Guide on Page 21.

(2) A58WS Windscreens are available in an assortment of colors.

(3) Kit contains four.

(4) See Accessories on Pages 16, 17 and 18.

(5) With A2WS Windscreen, use A26M.

(6) PS1A for 90-132 Vac; also 240 Vac (180-264).

— Indicates accessory cannot be used with product.

\* Furnished accessory.

## MICROPHONE CABLE SELECTION CHART

The cables listed in this chart represent just some of the many cables available from Shure. These cables are high durability and shielded for use with low or high impedance microphones.

Model	Microphone Connector	Equipment Connector	Cable Type	Cable Length	Cable Conductors
C15A	3-socket	1/4" Phone Plug	Hi-Flex	15 Feet (4.6m)	1
C20B	3-socket	1/4" Phone Plug	Hi-Flex	20 Feet (6.1m)	1
C20D	3-socket	—	Heavy Gauge	20 Feet (6.1m)	2
C20H	3-socket	3-Pin	Heavy Gauge	20 Feet (6.1m)	2
C25B	3-socket Black	3-Pin	Heavy Gauge	25 Feet (7.6m)	2
C25E	3-socket Black	3-Pin	Triple-Flex**	25 Feet (7.6m)	2
C25F	3-socket	3-Pin	Triple-Flex**	25 Feet (7.6m)	2
C25J*	3-socket	3-Pin	Hi-Flex	25 Feet (7.6m)	2

\*Also available in 50-foot (15m) and 100-foot (30m) lengths (C50J and C100J).

\*\*Triple-Flex cable features greatly extended flex life, superior hum shielding, and Switchcraft connectors.



# SHURE®



Microphones pictured (left to right):  
Model 720B (crystal, 1938), Model 703S (crystal, 1936),  
Model 33N (carbon, 1932), Model 40D (condenser, 1935),  
Model 556B (dynamic, 1938).

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