

# SHURE®

THE SOUND OF THE PROFESSIONALS® . . . WORLDWIDE



## Microphone and Circuitry Products



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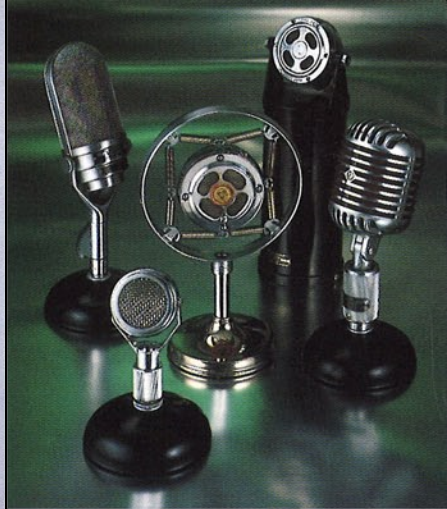
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**SHURE**

**W**hat does "Shure" mean to you?

If you have an active interest in any sector of the audio world, chances are you respond favorably to the word "Shure." Whether you're involved with musical performance, recording, sound reinforcement, broadcasting, or film/video production, "Shure" 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. In our Total Quality Program, the **Pursuit of Excellence**, we are committed to continuously evaluating and improving every process in our company. 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 (-20°F to 165°F) and humidity (100% at room temperature, 93% at 100°F), ultraviolet rays, salt spray, 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 outstanding 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, and Shure Wireless Microphone Systems. Specifications and technical information can be found in the gatefold section at the end of the catalog.

We hope you'll find this catalog to be useful and informative. 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.

James H. Kogen  
PRESIDENT





# 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)

**SM58S-LC** (with switch, less cable)

# 565

UNISPHERE® 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 cable)

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

**565SD-LC** (with on/off switch, less cable)

Back in the 1930s, Shure literally invented the unidirectional dynamic vocal microphone. Now, some 60 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 performance with maximum power and punch. The unidirectional polar patterns stay exceptionally 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.

# 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.

**SM78EB-LC** (less cable)

# SM48

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

**SM48-LC** (less cable)

**SM48S-LC** (with switch, less cable)

# 588SD

The time-proven versatility and economy champ for general sound reinforcement. Switch selectable dual-impedance design, with locking on/off switch.

**588SD-LC** (less cable)

# 587SB

Excellent sound and an 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.

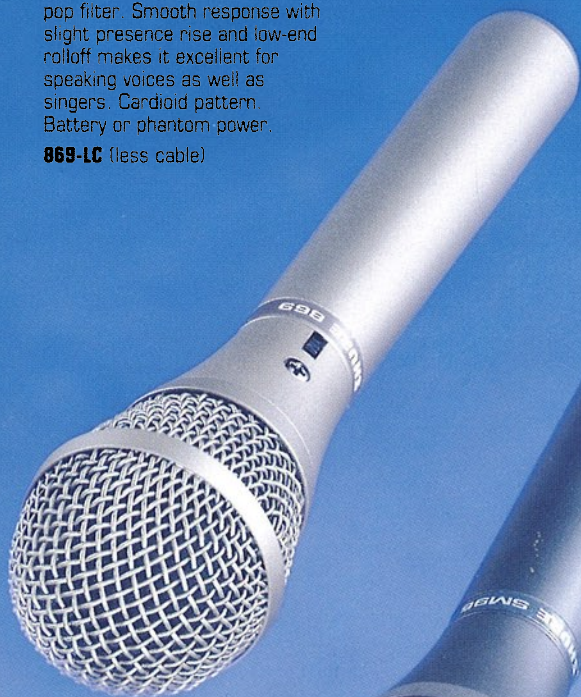
**587SB-LC** (less cable)



**869**

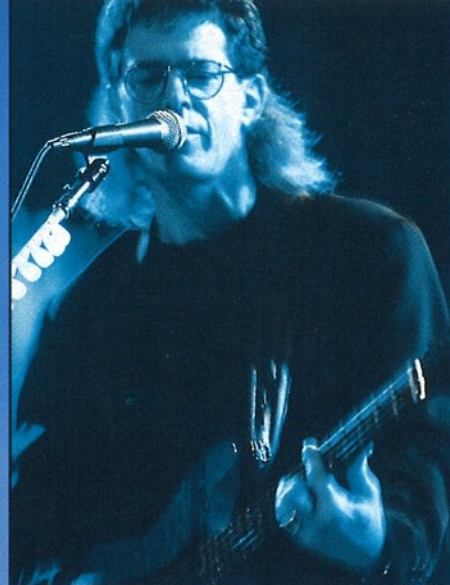
A perfect choice for vocal applications where cost is a major consideration but quality can't be compromised. Includes on/off switch, built-in wind and pop filter. Smooth response with slight presence rise and low-end rolloff makes it excellent for speaking voices as well as singers. Cardioid pattern. Battery or phantom power.

**869-LC** (less cable)

**SM96**

Top performance features at a moderate price. Especially well-suited for high-quality home recording applications. Three-stage wind/pop filter; battery or phantom power; cardioid pattern.

**SM96-LC** (less cable)



**Lou Reed**

**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 polar 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. Phantom power only.

**SM87-LC** (less cable)



Clarity, depth, precision and detail are the hallmarks of great condenser microphones. And an increasing number of 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 unidirectional transducer designs are recognized by sound engineers everywhere.



## 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, percussion and instrument amplifier 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. An excellent 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, speakers, and entertainers. Dual-impedance for use with most sound equipment. Available with or without locking on/off switch.

**545D-LC** (less 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** (lavalier version with attached cable)

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 unidirectional polar responses, heavy-duty shock mounting, and total reliability.

Shure's wide variety of cardioid 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.

## SM59

For applications that demand a flat frequency response, the SM59 is ideal. Patented mechano-pneumatic shock mount minimizes stand and handling noise. Smooth, natural reproduction of higher pitched voices and instruments.

**SM59-LC** (less cable)



## 515

A low-cost, all-purpose performer. Two versions are available to meet a variety of sound reinforcement applications. Each includes a lockable on/off switch.

**515SB** (low-impedance, attached cable)

**515SD-LC** (dual-impedance, less cable)

## SM62

Shure's smallest handheld 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 cardioid microphone is a must—in council chambers, in conference rooms, on lecterns.

**SM62-LC** (less cable)





Michael Brecker

**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 performance and in the recording studio. A superior choice for choir and 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)

**R104A** Omnidirectional cartridge for SM81

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

**SM94-LC** (less cable)

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

**849-LC** (less cable)

### MINIATURE CONDENSERS

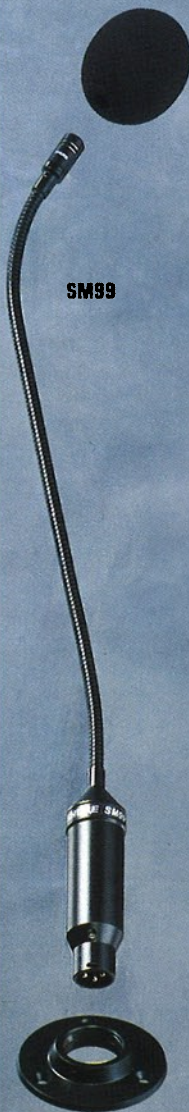
**SM98A** The SM98A is more than the world's finest miniature musical instrument microphone. It's a complete system with accessories that make it ideal for a wide range of applications. The SM98A displays an extremely uniform cardioid pickup pattern, a wide-range frequency response, and the ability to handle sound pressure levels up to 155 dB! It's an excellent choice for miking drums, horns, and other acoustic instruments. Supplied with preamplifier, universal swivel adapter, A98SPM Supercardioid Polar Modifier (which quickly and easily changes the SM98A's polar pattern from cardioid to supercardioid), and foam windscreens. Phantom power only.

**SM98A Accessories** include the A98KCS (which mounts the SM98A to the bell of most brass or wind instruments), A98KC "Keen Clamps" (for mounting the SM98A on wind instruments), A98MK Drum Mount Kit (for mounting the SM98A on drums), A98-G18 18-Inch Gooseneck, A98GM Gooseneck Mounting Flange, and A98PF Pop Filter and Locking Collar Kit.

**SM99** A miniature gooseneck-mount microphone for use on lecterns, pulpits, conference tables—anywhere a high-quality, unobtrusive gooseneck microphone is needed. The tight supercardioid pattern discriminates against sounds coming from the sides and rear of the microphone, resulting in plenty of volume *without* feedback, even in multiple microphone installations. Phantom power only.

**SM99-SE** Side-exit cable

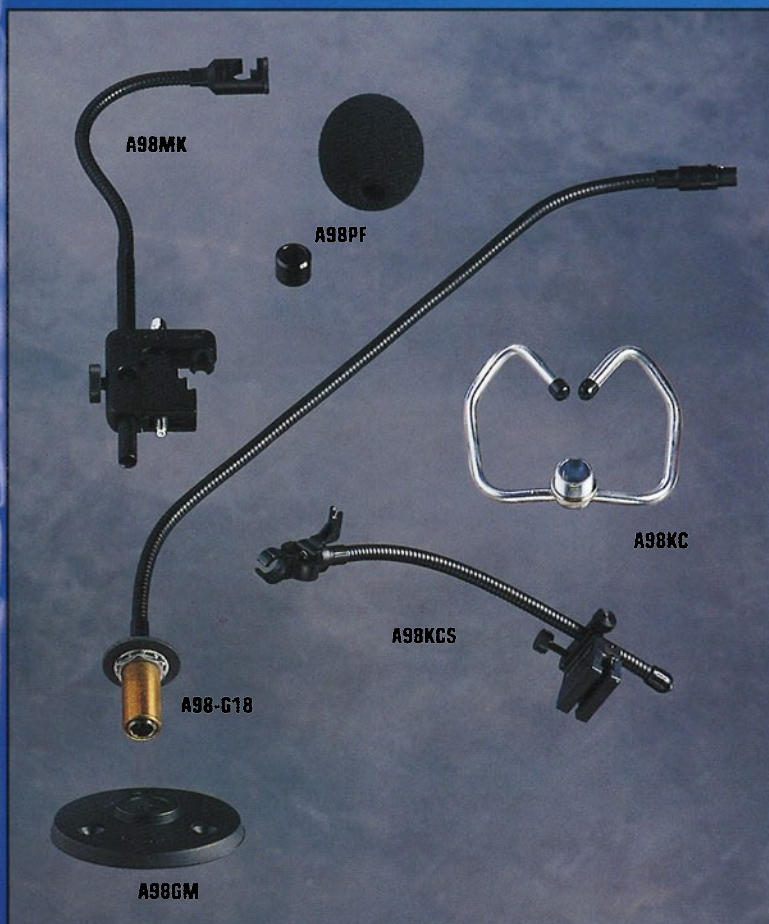
microflex™



SM99



SM98



A98MK

A98PF

A98KC

A98KCS

A98-G18

A98GM



# **BETA 58\***

Inspired in design by the legendary SM58 and destined to be the new world standard, the premium-quality Beta 58 is unequivocally the best dynamic microphone for demanding live vocal applications.

The Beta 58 polar pattern remains supercardioid at all frequencies, resulting in unprecedented gain-before-feedback, maximum sound source isolation, and minimum off-axis coloration. The Beta 58 frequency response is optimized for vocal use through its low-frequency rolloff to control proximity effect, the famous Shure presence rise for added intelligibility and punch, and extended high-frequency response to provide a clarity normally found only in condenser microphones. The neodymium magnet provides maximum output and sensitivity. Excellent for vocal applications, particularly those involving high sound pressure levels requiring high-volume monitoring.

**BETA 58C** (chrome grille, less cable)

**BETA 58M** (matte grille, less cable)

# **BETA 57\***

Owing its heritage to the world-standard SM57, the Beta 57 offers improvements such as an extended low-bass response, smoother and more gradual presence rise, and extended high-frequency response. The result is a more open, natural sound—with all the impact of the original SM57.

A true supercardioid pattern provides maximum isolation and minimum feedback. Also features a hardened steel grille. Designed for acoustic and electric musical instrument miking, live and in the studio. Great for drums, percussion instruments, horns, and instrument amplifiers.

**BETA 57C** (chrome grille, less cable)

**BETA 57M** (matte grille, less cable)

# **L2/BETA 58\***

It's also possible to get all the performance of the Beta 58 in a wireless version. The L2/Beta 58 Handheld Wireless Transmitter is designed to function with Shure L Series Wireless receivers, and exacting production standards are observed to ensure that all performance levels achieved by the L2/Beta 58 match those of its cabled counterpart. Except for its "Beta blue" finish, the transmitter portion of the L2/Beta 58 is equivalent to the Shure L2/58 and L2/96 Handheld Wireless Transmitters (opposite page).

**Taylor Dayne**



The new Beta Series is the culmination of the most extensive microphone research and development project ever undertaken at Shure, resulting in significant advances in dynamic transducer design and microphone performance. These microphones offer outstanding sound quality with extraordinary gain-before-feedback, and they have been optimized within all measurable parameters, including frequency and polar response, sensitivity, handling noise, and, of course, legendary Shure ruggedness and reliability.

The Beta Series microphones are the first to combine a true supercardioid polar pattern with the extra-hot output of a neodymium magnet. Many other microphones are claimed to have supercardioid or hypercardioid patterns, but actually maintain these patterns only at certain frequencies. The Beta pattern stays uniform at **all** usable frequencies, eliminating the peaky off-axis response that increases monitor feedback and adds coloration to the sound.

In addition, an advanced shock isolation system minimizes handling and stand noise, extra-rugged steel grilles resist denting for increased cartridge protection, and a humbucking coil is used to reduce lighting and power interference by over 20 dB.

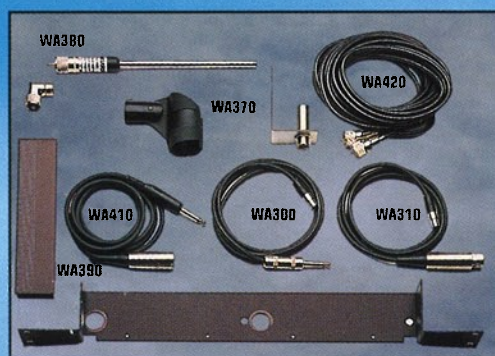
The dependable result is high-output performance featuring the famous "Shure sound"—without feedback!



L4



L3



WCM16

WL83

WL84

WM98

Shure L Series Wireless Microphone Systems are highly reliable and packed with professional features, yet their price makes them affordable even to users on a budget.

## RECEIVERS

**L4 Diversity Receiver** Two independent RF sections and exclusive MARCAD™ circuitry combine the two signals when both are usable, providing improved signal-to-noise ratio and outstanding reception. Rack mounting hardware is supplied.

**L3 Receiver** The economical L3 incorporates a host of professional features for excellent performance and unmatched value. Removable, insulated 1/4-wave whip antenna. Rack mountable with accessory kit.

*Step-up 1/4 wave antenna and remote cable kit are available for both receivers.*

## L SERIES ACCESSORIES

**WA300 Instrument Cable**  
**WA310 Microphone Cable**  
**WA330 TA4F Connector**  
**WA360 Remote Audio Mute Switch**  
**WA370 Swivel Adapter**  
**WA380 1/4-Wave Antenna**  
**WA390 Rack Mount Kit**  
**WA400 Antenna Distribution System**  
**WA410 Output Cable**  
**WA420 Antenna Cable**  
**WA440 Antenna Rack Mount Kit**  
 (See page 19 under Wireless Accessories for specifications.)

## ADDITIONAL WIRELESS MICROPHONES

**WCM16\*** Hypercardioid, head worn.  
**WL83** Premium omnidirectional lavalier.  
**WL84** Premium supercardioid lavalier.  
**WM98** Cardioid, miniature instrument.

## TRANSMITTERS

L Series handheld transmitters feature outstanding audio quality, durable, lightweight, and compact construction, enclosed loop antennas, and easily interchangeable heads.

**L2/58** Same performance as cabled SM58 (pg. 2).  
**L2/96** Same performance as cabled SM96 (pg. 3).

**L11 Body-Pack Transmitter** The L11's circuitry design and special shielding provide trouble-free performance with remarkable freedom from interference. The standard 4-pin TA4F connector lets you use the L11 for a variety of applications. Several wireless microphone choices are available, plus special adapter cables to permit use with electronic musical instruments and conventional microphones. Includes separate audio mute switch and battery indicator.

**839W Lavalier Microphone** A reliable, unobtrusive wireless lavalier microphone with excellent sound. Tie-bar mounting accessory; windscreen.

\*A product of Countryman Associates.



839W

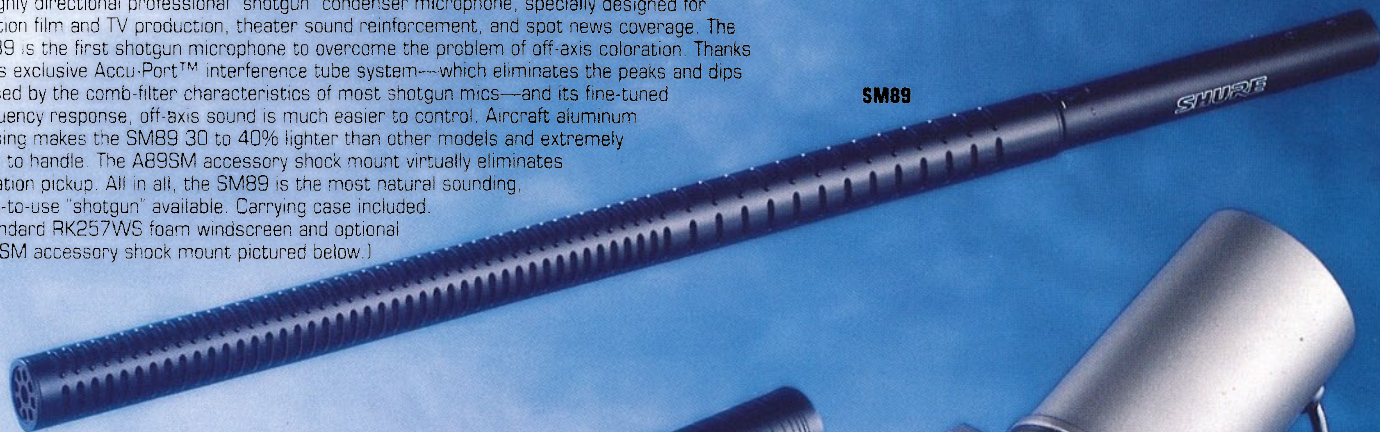
L2/96

L2/58



**SM89**

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 microphone 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 its fine-tuned frequency response, off-axis sound is much easier to control. Aircraft aluminum housing makes the SM89 30 to 40% lighter than other models and extremely easy to handle. The A89SM accessory shock mount virtually eliminates vibration pickup. All in all, the SM89 is the most natural sounding, easy-to-use "shotgun" available. Carrying case included. (Standard RK257WS foam windscreens and optional A89SM accessory shock mount pictured below.)

**SM89****VP88**

**VP88** This single-point MS stereo condenser microphone is unique in its ability to capture all of the realism and drama of "being there" while being able to withstand the punishment of daily use in rigorous production environments.

The VP88 incorporates a forward-facing cardioid Mid capsule, a perpendicular bidirectional Side capsule and a built-in stereo matrix to provide wide, natural, uncolored response for optimal stereo imaging. Yet it is 100% mono compatible.

Three switch-selectable levels of stereo effect control the degree of stereo "spread" and ambience pickup. A fourth switch position provides Mid and Side outputs directly. Also switch-selectable are phantom or 6-volt internal battery power and low-frequency rolloff.

Mounting options are diverse with the use of various standard and optional accessories.

Suitable for use when smooth, extended response and excellent stereo imaging are required from a single microphone, such as in video production, electronic news gathering, sporting events coverage, sound reinforcement, live music recording, stereo sampling, drum overhead and ambient studio miking.

**VP88 ACCESSORIES****A88ZM Rycote Pistol Grip Suspension Shock Mount**

An effective shock mount/microphone suspension assembly and a form-fitted handle provide maximum comfort and stable mechanical isolation.

**A88ZP Rycote Zeppelin Windshield** Completely surrounds the VP88 to create a dead air space around the microphone while diffusing threatening winds from the outside. The lightweight shield does not affect microphone response and mounts easily on the A88ZM.

**A88WC Rycote Wool Cover Wind Muff** Increases the effectiveness of the Zeppelin Windshield in high wind environments with no audible effect.

**A88WJ Rycote Windjammer** Furry surface provides maximum wind noise protection. For complete diffusion of very high winds, use the Windjammer and the Wool Cover Wind Muff.

**A88SM Microphone Isolation Mount**

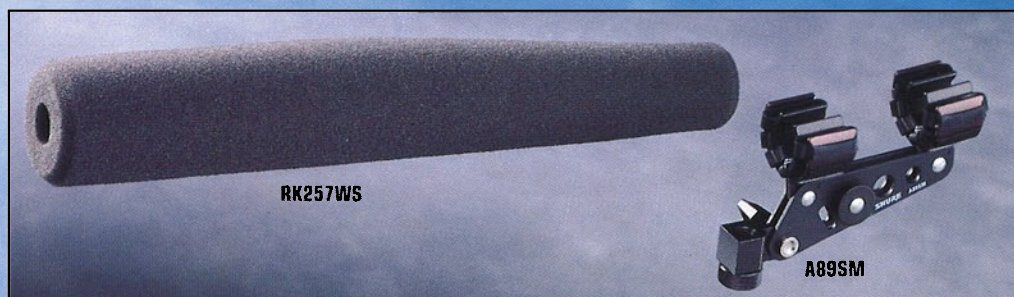
(See page 19 under Mounts and Adapters.)

**C110 25-Foot Microphone Extension Cable**

(See page 19 under Mic Cable Selection Guide.)

**SM7**

A fixture in studios around the world, the "smooth and silky" unidirectional SM7 is famous for making voices and other sources 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.

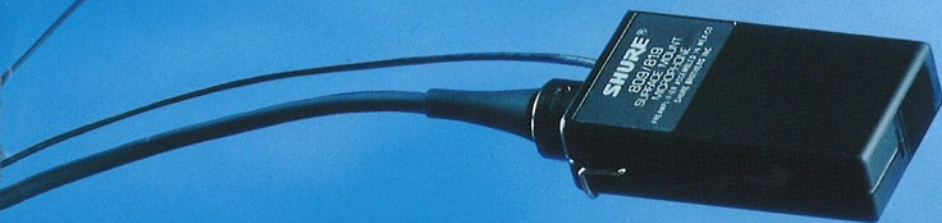
**SM7****RK257WS****A89SM****A88WJ****A88ZP****A88ZM****A88WC****C110****A88SM**

Y-cable, 6 V battery, swivel adapter, and foam windscreen included with VP88.





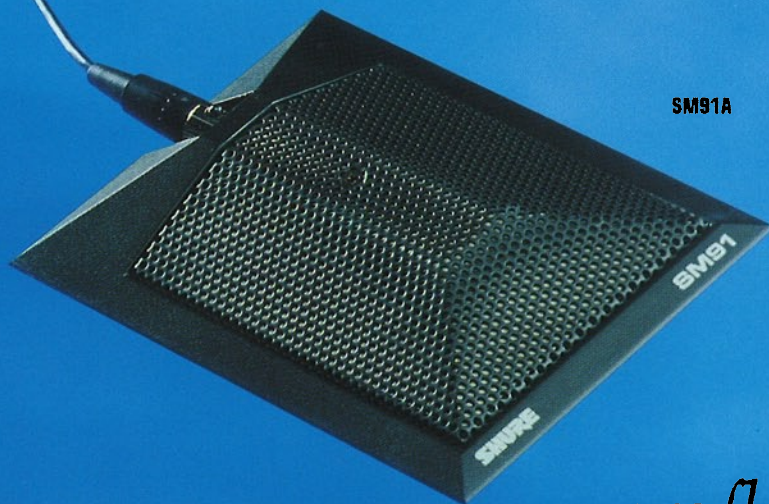
**SM18**



**819**



**SM91A**



**The Goodman Theater, Chicago**

Surface-mount microphones have become increasingly 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.

**SM18** A favorite in churches and meeting rooms, the SM18 dynamic is low in cost, good-sounding, and amazingly unobtrusive. Brown foam casing blends with wood grain surfaces. (White foam available through Shure Service Department.)

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

**819** For applications where price is a consideration, the unidirectional 819 condenser offers an excellent, economical alternative to the SM91A. Wide-range frequency response, super durability. Great for general sound reinforcement applications in churches, schools, on stages, etc. Single 9-volt battery or phantom power.

**809** (not shown) The omnidirectional version of the 819. Same extraordinary features and performance. Useful when large area must be covered by one microphone and feedback is not a problem.

**SM91A** The world's first unidirectional surface-mount microphone has yet to be surpassed, thanks to the SM91A's exceptional condenser transducer element and excellent preamplification system. A world-class microphone that's rugged enough for any application. Ideal for TV settings, news conferences, dramatic productions, stages ... wherever inconspicuous microphone placement is desired. Also excellent for miking kick drums and acoustic pianos. Preamp includes switchable low-cut filter and 10dB gain. Phantom power only.

**SM90A** (not shown) An omnidirectional version of the SM91A.

*microflex*<sup>TM</sup>

**SURFACE MOUNT MICROPHONES**



**SM102** A highly sensitive miniature unidirectional condenser designed for distant pickup. Flat, extended frequency response provides highly natural audio quality with minimum off-axis coloration. Available in black or white to minimize visibility, with a flexible gooseneck for precise positioning when suspended from overhead. In-line cylindrical preamplifier features low-cut and 10dB gain switches. Ideal for overhead miking of choirs, dramatic productions, musical ensembles and solo instruments—indoors or out. Slender 30-foot attached cable; windscreen supplied.

**SM102B** Black finish, in-line cylindrical preamplifier with mounting bracket.

**SM102W** White finish, preamp as above.

**SM102PB** Black finish, wall plate preamplifier fits in standard electrical box.

**SM102PW** White finish, preamp as above.

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

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

**SM84** The great features, performance, and accessories of the SM83, yet with a supercardioid polar pattern. Provides excellent rejection of unwanted sounds and minimizes PA system feedback.

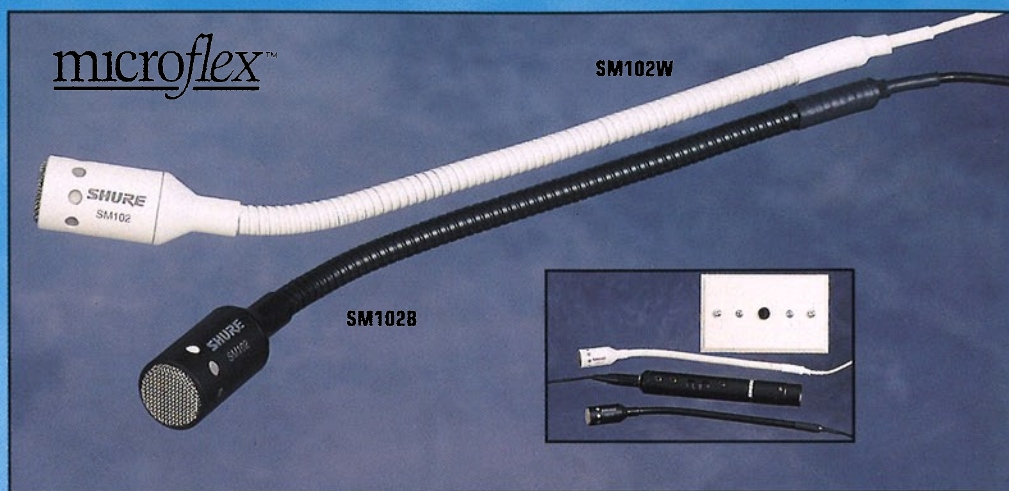
**839** A low-priced alternative to the SM83. Lavalier microphone with excellent sound and reliability. Low distortion and RF susceptibility. Windscreen, 4-way tie bar mount. Omnidirectional. Battery or phantom power.

**570S** This versatile performer can serve as either a lavalier or a small 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 supplied without connector.

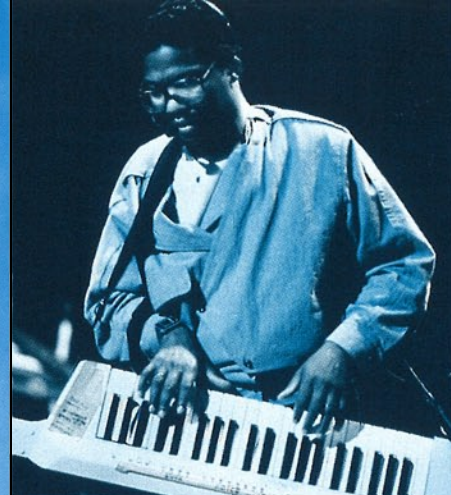
**SM11** For those who need a dynamic lavalier microphone, the SM11 is the smallest model available. Shure ruggedness and dependability in a microphone no longer than a paper clip. Comes with tie tack and tie bar mounting accessories. Omnidirectional.

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

**RK279** Mounting kit to adapt the SM11 to instrument miking applications.







**Herbie Hancock**

When it comes to head-worn microphones, Shure offers a wide selection with superior sound and user 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** A professional headset with a close-talking dynamic cardioid microphone and dual-ear headphones for mono or stereo operation. Microphone element designed for excellent rejection of noise and unwanted sounds. Ideal for TV, radio, film, video, and other applications. Large pillow-soft ear pads for external noise isolation; double-braced, covered metal headband for security; cable supplied without connectors.

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

**SM10A** The favorite of singing drummers, keyboardists, and guitarists who want complete freedom of movement on stage. Adjustable close-talking dynamic microphone element provides excellent isolation and minimal feedback problems.

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

**SM12A** Same features and performance as the SM10A, but with one earphone monitor.

**SM12A-CN** (with attached cable)





When pickup of sound from all directions or freedom from proximity effect is desirable—and feedback is not a problem—an omnidirectional microphone is an excellent choice. Shure omnis are unmatched in versatility and performance.

**SM63L** An extra long (9 1/4"), streamlined handle makes the SM63L an exceptional microphone for interviews and electronic newsgathering... wherever extra "reach" is needed. Effective wind and pop filter, durable VERAFLX® grille. Extra-high output—up to 6 dB higher than comparable competitive dynamic microphones.

**SM63L-LC** (less cable)

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

**SM63-LC** (less cable)

**VP64** A sleek, ergonomic design and an extra-high energy neodymium magnet make the VP64 the perfect choice for electronic news gathering and video production. The upper midrange presence rise adds clarity to speech, while the low-end rolloff minimizes boominess and background noise. Handsome on-camera appearance, consistent audio quality on or off axis, high output, low noise, effective shock isolation and extremely rugged construction. Windscreen and swivel adapter supplied.

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

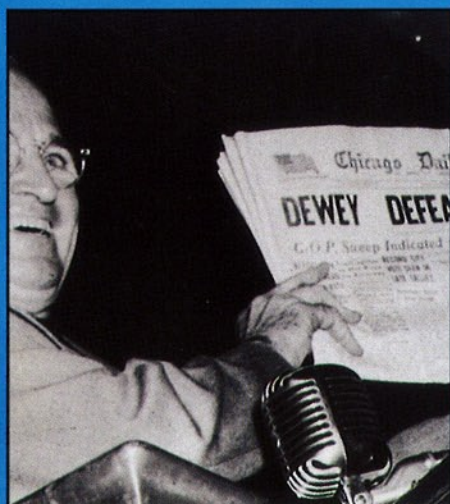
**579SB-LC** (less cable)

Shure products are famous for becoming standards of the audio industry, and the longevity of some models has caused them to be known as classics. The current versions of these classic models still meet today's demanding performance requirements.

**55SH Series II** A technically contemporary 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 appearance as Shure's famous 55 Series UNIDYNE® II microphones, but with the latest in dynamic transducers inside.

**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. Dual-impedance; supplied without connector.

President Harry S. Truman







The Shure Automatic Microphone System consists of dedicated microphones and mixers that function exclusively together. AMS solves the many problems of multi-microphone applications. It is used in thousands of systems worldwide such as those found in boardrooms, legislative chambers, senates, city halls, conference rooms, courtrooms, churches, broadcast studios, and the fast-growing interactive classroom environment.

Shure's patented Automatic Microphone System provides unique direction-sensitive gating by continually "reading" and comparing the separate audio signals provided by two matched unidirectional capsules placed back-to-back in each AMS microphone. AMS microphones are activated only when addressed within a 120° acceptance angle. No threshold or sensitivity adjustments are necessary.

The AMS 4000/8000 incorporates a full complement of logic terminals to provide functions such as LED indicators, mute switches, loudspeaker attenuation, chairman override, etc.

AMS mixers can be linked together to control up to 200 AMS microphones.

## MICROPHONES

**AMS26** Probe style, dark bronze.

**AMS24** 15" gooseneck mic with attached 20' cable.

**AMS28** For hanging mount or lavalier use.

**AMS22** Low profile, attached 20' cable/connector.

## CIRCUITRY

**AMS4000/8000** Four or eight channel versions, respectively, of AMS mixer. AMS4000 can be expanded to provide up to eight channels. 120/240 Vac. Rack mountable.

**AMS880** (not pictured) Video Switcher Interface. Tells a video switcher which camera to call up based on which AMS microphone is activated.

AMS8000





FP410



**FP410** The world's first portable automatic mixer. By automatically keeping unused microphones turned down, the FP410 dramatically improves audio quality and provides a "seamless" mix. Minimizing the number of open microphones provides greater gain before feedback, reduces the pickup of ambient noise and reverberation, and virtually eliminates comb filtering effects. Shure IntelliMix, the patented operational concept behind the FP410, is manifested in three key features FP410 circuitry: the *Noise-Adaptive Threshold* activates any standard microphone for speech but not for constant room noise, such as air conditioning; *MaxBus* limits the number of activated microphones to one per talker; and *Last Microphone Lock-On* keeps the most recently activated microphone open until a newly activated microphone takes its place. Features include: four transformer-balanced mic/line inputs; removable AC power cord; 48V phantom power; link jacks (with supplied cable) for interconnecting additional FP410 Mixers (a maximum of 25 for 100 total inputs); Auto/Manual Mode operation switch; input level LED indicators; Tape Out jack; two transformer-balanced XLR mic/line outputs; low-cut filters; 1 kHz tone oscillator; adjustable peak limiter with LED indicator; switchable Peak or VU meter;  $\frac{1}{4}$ " and mini-plug headphone jacks; and Monitor In jack to connect an external source to the headphone amplifier. Primary applications include video production, corporate television, radio and TV broadcast, and field production. Also useful for convention facilities, hotels, A/V rental houses and permanent sound installations. One rack space high, accessory rack ears supplied. Battery (two standard 9-volt) or 120/240 Vac power.

**FP42** All the features and ruggedness that have made Shure mixers industry standards... plus full stereo capability. The FP42 is perfect for stereo mixdown in video editing suites. Four XLR transformer-balanced mic/line inputs and two outputs (one for each stereo channel). Pull-pot cuing on all inputs provides channel previewing (so important in sports remotes). Three standard 9-volt battery or 120/240 Vac power. Rack mountable with A16R.

**FP51** The FP51 rides gain automatically, assuring consistent signal output. It combines a 4-in, 1-out mixer with a high-quality compressor featuring a gated memory that provides an adjustable 40 dB compression range (compression ratio of approximately 10:1 in normal operating range). Features: XLR transformer-balanced mic/line inputs and outputs, phantom power, 1 kHz tone oscillator, pull-pot cuing on all inputs,  $\frac{1}{4}$ " and mini (3.5 mm) headphone jacks with level control, low-cut filters for each channel, and an illuminated dual-range VU meter that indicates output level, dB compression, or battery condition. 120/240 Vac or battery (three standard 9-volt) power. Rack mountable with A16R.

FP42



FP51





The circuitry products in the Shure FP (Field Production) Series are industry standards for their problem-solving, feature-packed designs and extreme ruggedness. Built specifically for broadcast and Field Production applications, Shure "FP" products are synonymous with convenience and reliability to audio technicians worldwide.

Shure "M" Series circuitry products are compact, durable, reliable, and functional. It's no surprise that they've become standards for broadcast, sound reinforcement, paging, and audio/visual applications.

**FP31** The world standard in field production, the FP31 Audio Mixer packs an amazing number of features into an exceptionally compact package. Includes three XLR transformer-balanced mic/line inputs and two outputs, VU meter, timed meter lamp, peak LED overload/limiter indicator, adjustable limiter, tone oscillator, mini and 1/4" headphone jacks, phantom and A-B (T) power, tape-out mini jack, and more. Built-in slate tone and microphone make it easy to mark takes. Battery powered (two standard 9-volt; three standard 9-volt batteries required for A-B power).

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

**FP16A** A 1-input, 6-output portable audio distribution amplifier for routing multiple audio feeds. Ideal as a portable press bridge. Includes: XLR transformer-balanced input and outputs (each switchable for microphone or line level operation), phantom power, link jacks for connecting additional FP16A units or outboard devices, screwdriver-adjustable gain controls. Battery (three standard 9-volt) or 120/240 Vac power. Rack mountable with A16R.

**FP11** The FP11 Mic-to-Line amplifier provides up to 84 dB of additional gain in fourteen 6 dB steps for boosting microphone and auxiliary level devices to line level. This compact amplifier includes: a transformer-balanced XLR input and output; 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.

**FP12** A 1-input, 2-output headphone bridging amplifier, the FP12 is a must for remote broadcasts, audio troubleshooting, and boom operators. When operated in-line, it can provide headphone feeds from any type of audio input without interrupting the input signal. Includes both XLR and 1/4" in/out connectors and both 1/4" and mini (3.5 mm) headphone 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. *Extremely* high output makes the FP12 great for high noise situations and for use as a simple intercom.



FP31

FP32



FP16A



FP11

FP12



**M267** The most popular field production mixer ever. The industry standard M267 mixer incorporates a switchable limiter, phantom power, LED peak indicator, built-in battery pack, headphone jack and level control, battery check function, tone oscillator, mic/line switches on each input and output, low-cut switches, mix bus jack, and much more. Four XLR transformer-balanced inputs; an XLR output and a binding post output; battery (three standard 9-volt) or 120/240 Vac power. Rack mountable with A268R.

**M268** A compact, lightweight, 5-input mixer for use in PA/paging applications. It's also widely used by performers as an add-on mixer for input expansion (such as drum or keyboard sub-mixes). Includes four transformer-balanced low-impedance microphone inputs and four high-impedance 1/4" phone jack inputs, plus a high-level auxiliary input. Also features phantom power, mix bus, mic level transformer-balanced output and aux level unbalanced output. 120/240 Vac power. Rack mountable with A268R.

**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 high-impedance or low-impedance microphones. Also features aux level input channel, master volume control, aux level and microphone level outputs. Excellent for paging, tape recording, A/V work, and other applications. 120/240 Vac power. Rack mountable with A68R. *M68A features male XLR input connectors. M68FCA incorporates female XLR connectors.*

**PROLOGUE® 200M** An economical, portable mixer with four low-impedance microphone inputs. Input 4 is switch-selectable to accommodate either a low-impedance microphone or an auxiliary level source, such as a tape recorder. One balanced, low-impedance microphone-level output and one auxiliary phono jack output can be used simultaneously. Two mixers can be connected together for more inputs. Stackable with Prologue 210 Amplifier for convenient operation. Available in 120 or 240 Vac versions.

**PROLOGUE® 210A** Ten watts continuous power into 4 ohms. One balanced low-impedance input with female XLR connector accepts a microphone directly or the output of a Prologue 200 Mixer when multiple inputs are required. Two auxiliary level phono jack inputs may be used simultaneously with the microphone input, or to link multiple 210 Amplifiers together. Two 1/4" speaker jacks will operate two 8-ohm speakers simultaneously. Available in 120 or 240 Vac versions.





M64A



PS1A



50AC

A120S

A15LP

A15HP

A15PA

A15AS

A15PRS

A15RS

A15BT

A15LA

A15TG



A95U

A95UF

A97A

A85F

A97F

Shure "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.

**M64A** A compact 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. 120/240 Vac.

**PS1A** A 20 Vdc power supply that provides phantom power for one or two condenser microphones. 120/240 Vac.

**50AC Telephone Acoustic Coupler** Designed to feed audio information to or from a telephone handset. Useful in recorded interview broadcast applications when a tape recorder cannot be "hard wired" to a telephone line. Can be used as a microphone or speaker for recording or playback. Dynamic transducer with a 300 to 3,000 Hz frequency response.

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

**A15AS Switchable Microphone Attenuator** Prevents preamp overload in applications where very strong signals are applied to a microphone input. Provides 15, 20, or 25 dB attenuation.

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

**A15HP High Pass Filter** Provides a low-frequency cutoff to reduce unwanted low-frequency noise.

**A15LA Line Adapter** Provides 50 dB attenuation, allowing a balanced line-level source to be connected to a balanced microphone input.

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

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

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

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

**A15TG Tone Generator** Produces a continuous 700 Hz mic-level signal capable of driving low-impedance balanced lines. Extremely useful in setting up and troubleshooting audio equipment. Battery operated.

**A85F Low- to High-Impedance Matching Transformer** Low-impedance connector: 3-pin XLR female. High-impedance connector: standard 1/4-inch phone plug.

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

**A95U** Same as A95UF, but with 3-pin XLR male low-impedance connector.

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

**A97F Low- to Medium-Impedance Transformer with Miniplug Output Connector** Allows standard balanced low-impedance microphones to be connected to miniplug audio inputs found on most camcorders or small tape recorders.



## A58WS WINDSCREENS

Fit all Shure "ball-type" microphones.

**A58WS** Gray.

**A58WS-BK** Black.

**A58WS-BL** Blue.

**A58WS-BR** Brown.

**A58WS-GN** Green.

**A58WS-OR** Orange.

**A58WS-RD** Red.

**A58WS-WH** White.

**A58WS-YL** Yellow.

## A2WS WINDSCREENS

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

**A2WS** Gray.

**A2WS-BK** Black.

## A81G FILTER GRILLE

For Model SM81.

Additional Windscreen models listed on page 19.



**A2WS-BK**



**A2WS**



**A58WS-YL**



**A81G**



**A58WS-RD**



**A58WS-WH**



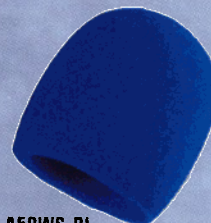
**A58WS-GN**



**A58WS-BR**



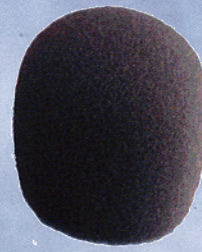
**A58WS-OR**



**A58WS-BL**



**A58WS-BK**



**A58WS**

## STANDS AND ADAPTERS

**A55M "Shock Stopper"™ Isolation Mount/Swivel Adapter**

A breakthrough in noise isolation. Reduces mechanical and vibration noise by more than 20 dB. Fits Models SM48, SM57, SM58, SM77, SM78, 515, 545, 565, 587, and 588.

**A55HM "Shock Stopper"™ Isolation Mount/Swivel Adapter (Half-Mount Version)**

Permits instant insertion or removal of microphone on stage. Fits same models as A55M.

**A53M "Shock Stopper"™ Isolation Mount/Swivel Adapter**

Fits models SM59, SM62, SM63, SM63L, SM81, SM85, and SM87.

**A53HM "Shock Stopper"™ Isolation Mount/Swivel Adapter (Half-Mount Version)**

(not pictured) Same as A55HM, except fits Models SM59, SM62, SM63, SM63L, SM81, SM85, SM87, 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 Swivel Adapter** (not pictured) designed for use with Models SM94, SM96, 849, and 869.

**A27T Triple Microphone Mount** Fits models SM57, SM77, and 545 and accepts three microphones.

**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, SM62, SM63, SM63L, and SM81.

**S37A Desk Stand** Modern, low-profile design. Non-reflective, textured gray finish (2 1/4" x 4 3/4" x 6 1/2").

**S39A Vibration Isolation Stand** For tables, desks, lecterns, etc. Provides the ultimate in isolation of microphone from mechanical vibration.

**A27M Stereo Microphone Adapter** Permits mounting of two microphones on one stand for recording, 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. Can be positioned on top or underneath any speaker cabinet or guitar amplifier. Includes 5/8"-27 threaded connector.







## MICROPHONE CABLE SELECTION GUIDE

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

Model	Microphone Connector	Equipment Connector	Cable Type	Cable Length	Cable Conductors
<b>C15A</b>	3-Pin XLR female	1/4" Phone Plug	Hi-Flex	15 Feet (4.6 m)	1
<b>C20B</b>	3-Pin XLR female	1/4" Phone Plug	Hi-Flex	20 Feet (6.1 m)	1
<b>C20D</b>	3-Pin XLR female	none	Heavy Gauge	20 Feet (6.1 m)	2
<b>C20H</b>	3-Pin XLR female	3-Pin XLR male	Heavy Gauge	20 Feet (6.1 m)	2
<b>C25B</b>	3-Pin XLR female-Black	3-Pin XLR male	Heavy Gauge	25 Feet (7.6 m)	2
<b>C25E</b>	3-Pin XLR female-Black	3-Pin XLR male	Triple-Flex***	25 Feet (7.6 m)	2
<b>C25F</b>	3-Pin XLR female	3-Pin XLR male	Triple-Flex***	25 Feet (7.6 m)	2
<b>C25J*</b>	3-Pin XLR female	3-Pin XLR male	Hi-Flex	25 Feet (7.6 m)	2
<b>C110</b>	5-Pin XLR female	5-Pin XLR male	Triple-Flex***	25 Feet (7.6 m)	4

\*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 premium connectors.

## ADDITIONAL ACCESSORIES

### AMS ACCESSORIES

**A24Q6** Black metal adapter. Threads onto AMS24 gooseneck and provides an XLR male connector.  
**A26X** 3" black extension tube for table stand.  
**RKC188** Input channel expansion kit for AMS4000.  
**RKC189** Ribbon cable provides four additional channel board connectors for AMS4000 expansion.  
**RKC190** XLR in/XLR out interface. Allows a wireless receiver or any line-level signal to be connected to an AMS input.  
**90RW1371** Mounting Flange for AMS24.

### WIRELESS ACCESSORIES

**WA300** Instrument cable. Connects L11 Body-Pack Transmitter to a guitar or other instrument. Cable is 4 ft. with a 1/4" phone plug and Switchcraft TA4F connector.  
**WA310** Microphone cable. Connects L11 Body-Pack Transmitter to a dynamic or battery-powered condenser microphone for unbalanced operation. Cable is 4ft. with a 3-pin XLR female connector and Switchcraft TA4F connector.  
**WA330** Connector (Switchcraft TA4F 4-pin miniature connector). Adapts small-diameter microphone cable to L11 transmitter.  
**WA360** Remote audio mute switch adds an external momentary or locking audio on-off capability.  
**WA370** Swivel Adapter for L Series and other handheld transmitters. Standard 9/16"-27 thread.  
**WA380** 1/2-wave antenna for use with L3 or L4 Receivers. (WA380A for frequencies from 169-185 MHz; WA380B for 185-200 MHz; WA380C for 200-216 MHz.)  
**WA390** Single or double rack mount kit for L3 1 1/4" high.  
**WA400** Antenna distribution system utilizes only two antennas for the operation of four diversity receivers.  
**WA410** Output cable. 6-foot output cable for L3. 1/4" phone plug on receiver end; 3-pin XLR male professional connector on other end. Unbalanced.  
**WA420** Antenna cable. Cable kit for remote placement of WA380 Antenna with L3 or L4 Receivers. Includes 20-foot RF extension cable with UHF type plugs, adapter for mating with the WA380, and a wall-mounting bracket.

### BOOMS AND FLOOR 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 3 1/2 and 14 ft. Excellent for use with VP88.

### CIRCUITRY MOUNTING KITS

**A16R** Rack panel for FP16A, FP42, and FP51.  
**A68R-8L** 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.

### GOOSENECKS

**G6A** 6" flexible with side vent.  
**G12** 12" flexible.  
**G12-CN** 12" flexible with 3-pin XLR female professional audio connector.  
**G18** 18" flexible.  
**G18-CN** 18" flexible with 3-pin XLR female professional audio connector.  
**90B1120A** 12" lightweight.

### GOOSENECK MOUNTING FLANGES

**A12 Mounting Flange** Standard 9/16"-27 external thread, mounts to flat surface.  
**A13HD Mounting Flange** Heavy-duty flange designed to provide increased stability. Standard 9/16"-27 external thread.

### LAVALIER MOUNTING HARDWARE

**A51L** Plastic. Fits Model 570S.  
**A57L** Rubber. Fits Models 570S and AMS28.  
**RK240SB Single Mount Tie Bar** (package of four) Fits Models SM83, SM84, WL83, WL84, 839, and 839W.  
**RK241DB Dual Mount Tie Bar** (package of four) Fits Models SM83, SM84, WL83, WL84, 839, and 839W.

### MOUNTS AND ADAPTERS

**A25M Dual Microphone Mount** Designed for use with Models SM58, SM78, 515, 565, and 588, and with Models SM57, SM77, and 545 when using A2WS windscreens.  
**A26X Desk Stand Extension** Stem pipe for AMS26 microphone. Black, threaded on both ends.  
**A88SM Microphone Isolation Mount** For use with VP88. Utilizes dual shock isolators and a cable locking design to eliminate noise associated with stands, booms, fishpoles and cable movement. Six mounting options include 9/16"-27, 7/8"-16, 5/8"-18 threaded adapters for stands and booms; locking "foot" and 1/4"-20 screw-type adapter for cameras; and a pistol grip adapter plate.  
**A89SM Shock Mount Holder** For use with SM89 Shotgun. Also fits Model SM81.  
**CO-1 Stand Adapter** Black. Screw-in type clamp for mounting second microphone on floor stand or for mounting a microphone directly to a desk or table.

### WINDSCREENS

**A1WS** For 515 Series.  
**A3WS** Fits Models SM94 and 849.  
**A61WS** Fits Model SM62.  
**A81WS** Specially designed for Model SM81. Large, multiple-layer design for use in high wind environments.  
**A85WS** For SM85, SM87, SM96, and L2/96.  
**RK184WS** Fits Models SM2, SM10A, and SM12A.  
**RK204F** For SM18B (Brown).  
**RK229WS** Fits Models SM63, SM63L, AMS24, and AMS26.  
**RK242WS** Fits Models SM83, WL83, 839, and 839W.  
**RK257WS** For Model SM89.  
**49A66A** For SM98A.  
**90A2089** For SM7.  
**90B4016** For SM99.  
**90RX1371** For 512.



Microphone Model Number	Cable	Cartridge	Screen & Grille Assembly	Swivel Adapter	Windscreen	Misc. Accessories ④
<b>55SH Series II</b>	①	R115	—	—	—	—
<b>512</b>	—	R93 (Microphone) R143 (Receiver)	—	—	90RX1371*	A120S
<b>515SB</b>	70A2057	R15	RK54G	A25B*	A1WS	—
<b>515SD</b>	①	R15	RK254G	A25B*	A1WS	—
<b>520D</b>	70A2047	R44D	—	—	—	—
<b>545D</b>	①	R45	RK244G	A25B*	A2WS	A26M, A55M
<b>545L</b>	70A2004	R45L	RK244G	A25B	A2WS	A26M, 94C282*
<b>545SD</b>	①	R45	RK244G	A25B*	A2WS	A26M, A55M, A55HM
<b>545SH</b>	①	R45	RK244G	—	A2WS	—
<b>565D</b>	①	R65	RS65	A25B*	A58WS ②	A26M, A55M, A55HM
<b>565SD</b>	①	R65	RS65	A25B*	A58WS ②	A26M
<b>570S</b>	70A295	R70	RK91G	A57E	—	A57L*
<b>579SB</b>	①	R50	RK221G (Champagne)	A57D*	A58WS ②	—
<b>587SB</b>	①	R136	RK252G	A25B*	A58WS ②	A26M, A55M, A55HM
<b>588SD</b>	①	R15	RK253G (Champagne)	A25B*	A58WS ②	A26M, A55M, A55HM
<b>809</b>	—	R130	—	—	—	PS1A
<b>819</b>	—	R129	—	—	—	PS1A
<b>839</b>	90A3875	R133	—	—	RK242WS* ③	PS1A, RK240SB ③
<b>839W</b>	90A4015	90DT2600	—	—	RK242WS* ③	RK240SB ③
<b>849</b>	①	R138	—	A25C*	A3WS	PS1A, A53M, A53HM
<b>869</b>	①	R137	RK256G	A25C*	A58WS ②	PS1A, A53M, A53HM
<b>AMS22</b>	90CH2600	90CJ2600 ⑤	—	—	—	—
<b>AMS24</b>	—	—	90BZ2600	—	49C55*	90RW1371*
<b>AMS26</b>	C25E	90CK2600 ⑤	90CS2600	A57E*	RK229WS*	A26X
<b>AMS28</b>	—	90CL2600 ⑥	—	—	—	A57L
<b>SM2</b>	C108	R93 (Microphone) R135 (Receiver)	—	—	RK184WS*	—
<b>SM7</b>	C25E	99A673	90A3004B	—	90A2089	—
<b>SM10A</b>	—	R93	—	—	RK184WS*	A120S
<b>SM11</b>	C91	R99	—	—	—	A120S
<b>SM12A</b>	—	R93 (Microphone) R94 (Receiver)	—	—	RK184WS*	A120S
<b>SM18B</b>	90B3111	99C669	—	—	RK204F	—
<b>SM48</b>	①	R136	RK248G	A25B*	A58WS ②	A26M, A55M, A55HM
<b>SM57</b>	①	R57	RK244G	A25B*	A2WS	A26M, A55M, A55HM

① See Cable Selection Guide on Page 19.

② A58WS Windscreens are available in an assortment of colors.

③ Kit contains four.

④ See Accessories on Pages 17, 18 and 19.

⑤ Includes transducer and amplifier.

⑥ Includes transducer, amplifier and cable.

— Indicates accessory cannot be used with product.  
\* Furnished accessory.



Microphone Model Number	Cable	Cartridge	Screen & Grille Assembly	Swivel Adapter	Windscreen	Misc. Accessories ④
<b>SM58</b>	①	R59	RK143G	A25B*	A58WS ②	A26M, A55M, A55HM
<b>SM59</b>	①	90A2418	90CD2600	A57D*	A59WS-BR	A53M, A53HM
<b>SM62</b>	①	90A3007	—	A57D*	A58WS ②	A53M, A53HM
<b>SM63</b>	C25F	90A2902	90DK2600	A57D*	RK229WS*	A53M, A53HM
<b>SM63L</b>	C25F	90B2902	90DK2600	A57D*	RK229WS*	A53M, A53HM
<b>SM77</b>	C25E	R140	RK244G	A25B*	A2WS	A26M, A55M, A55HM
<b>SM78</b>	C25E	R141	RK210G	A25B*	A58WS ②	A26M, A55M, A55HM
<b>SM81</b>	C25F	R104	90BU2600	A57D*	90CC2600	50AC, PS1A
<b>SM83</b>	C106	R127	—	—	RK242WS* ③	PS1A, RK240SB ③, RK241DB ③
<b>SM84</b>	C109	R146	—	—	RK261WS* ③	PS1A, RK240SB ③, RK241DB ③
<b>SM85</b>	C25E	R112	RK214G	A57E*	A85WS	A53M, A53HM, PS1A
<b>SM87</b>	C25E	R128	RK243G	A57E*	A85WS	A53M, PS1A
<b>SM89</b>	C25E	R144	—	A57E	RK257WS*	A89SM, PS1A
<b>SM90A</b>	C107	R130	—	—	—	PS1A
<b>SM91A</b>	C107	R129	—	—	—	PS1A
<b>SM94</b>	①	R138	RK249G	A25C*	A3WS	A53HM, PS1A
<b>SM96</b>	①	R137	RK243G	A25C*	A3WS	A53HM, PS1A
<b>SM98A</b>	C107	R134	—	RK245*	49A66A*	A98MK, A98G-18, A98PF, A98KC, A98SKCS, A98GM, PS1A
<b>SM99</b>	—	99A878	—	—	90B4016*	A25C, A57E, PS1A
<b>SM102B</b>	—	90GM2600	—	—	49A102*	80B489, PS1A
<b>SM102W</b>	—	90GN2600	—	—	49B102*	80A489, PS1A
<b>VP64</b>	C25E	99A911	90GH2600	A57E*	49C55*	A53M, A53HM
<b>VP88</b>	90A4148*	—	90B1424A	90B4046*	90A4163*	80A463**
<b>WL83</b>	90A4015	90CG2600	—	—	RK242WS* ③	RK240SB* ③
<b>WL84</b>	90A4015	90DM2600	—	—	RK261WS* ③	RK240SB* ③
<b>WM98</b>	90A4039	R134	—	RK245*	49A66A*	A98PF, A98KC Series, A98SPM

- ① See Cable Selection Guide on Page 19.  
 ② A58WS Windscreens are available in an assortment of colors.  
 ③ Kit contains four.  
 ④ See Accessories on Pages 17, 18 and 19.

- Indicates accessory cannot be used with product.  
 \* Furnished accessory.  
 \*\* See page 8 for complete line of VP88 Accessories.

## NEED MORE INFORMATION?

Technical data sheets are available for most Shure products. They provide 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 that recommend the most appropriate Shure microphones for various applications are also available. These include:

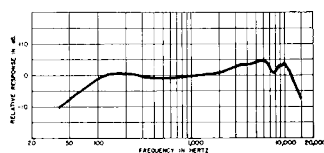
- AL693** Microphone Selection Guide — Broadcast Applications  
**AL702** Microphone Selection Guide — Sound Reinforcement and Recording Applications  
**AL707** Microphone Techniques For Music  
**AL969** Guide to Better Audio

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, (708) 866-2560. When ordering please indicate the product model number(s) for data sheets and the "AL" number for selection guides.

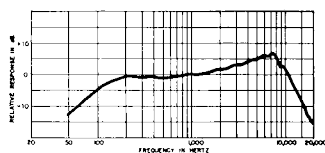


**SM58**

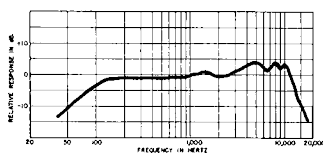
**Type:** Dynamic  
**Frequency Response:** 50 to 15,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (310 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -75.5 dB (0.17 mV)  
 Power Level<sup>2</sup> -56.0 dB

**SM48**

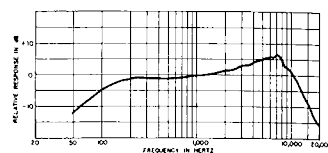
**Type:** Dynamic  
**Frequency Response:** 55 to 14,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (270 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -77.5 dB (0.13 mV)  
 Power Level<sup>2</sup> -59 dB

**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<sup>2</sup> -77.5 dB (0.13 mV)  
 Power Level<sup>2</sup> -57.5 dB

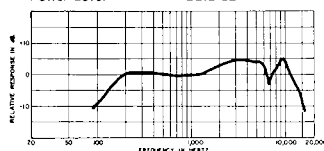
**587SB**

**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<sup>2</sup> -77.5 dB (0.13 mV)  
 Power Level<sup>2</sup> -59 dB

**588SD**

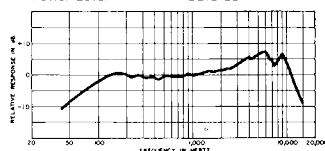
**Type:** Dynamic  
**Frequency Response:** 80 to 13,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** Lo-Z: 150 ohms (180 ohms actual)  
 Hi-Z: "High"  
**Output Level:** (at 1,000 Hz)

	Lo-Z	Hi-Z
Open Circuit Voltage <sup>2</sup>	-82.0 dB (0.08 mV)	-59.5 dB (1.1 mV)
Power Level <sup>2</sup>	-60.5 dB	

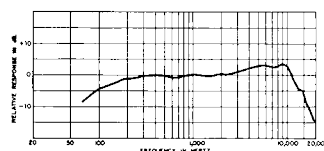
**565D and 565SD**

**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)

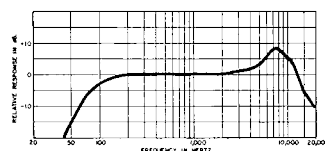
	Lo-Z	Hi-Z
Open Circuit Voltage <sup>2</sup>	-76.0 dB (0.16 mV)	-54.0 dB (2.0 mV)
Power Level <sup>2</sup>	-56.0 dB	

**869**

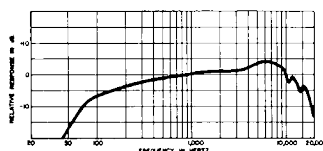
**Type:** Condenser  
**Frequency Response:** 70 to 16,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 600 ohms  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -78 dB (0.13 mV)

**SM85**

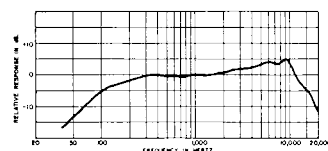
**Type:** Condenser  
**Frequency Response:** 50 to 15,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (85 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -74 dB (0.2 mV)

**SM87**

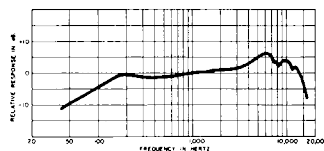
**Type:** Condenser  
**Frequency Response:** 50 to 18,000 Hz  
**Polar Pattern:** Supercardioid (unidirectional)  
**Impedance:** 150 ohms (85 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -74 dB (0.2 mV)

**SM96**

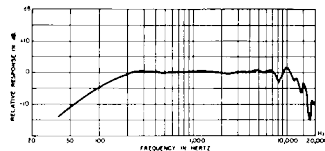
**Type:** Condenser  
**Frequency Response:** 70 to 16,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (200 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -74 dB (0.2 mV) (phantom)  
 -75 dB (0.18 mV) (battery)

**SM57**

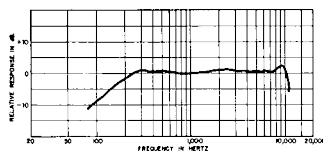
**Type:** Dynamic  
**Frequency Response:** 40 to 15,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (310 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -75.5 dB (0.17 mV)  
 Power Level<sup>2</sup> -56.0 dB

**SM59**

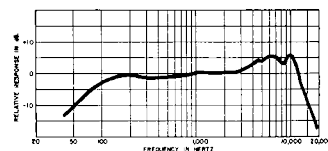
**Type:** Dynamic  
**Frequency Response:** 50 to 15,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (160 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -83 dB (0.07 mV)  
 Power Level<sup>2</sup> -61.0 dB

**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<sup>2</sup> -81.5 dB (0.08 mV)  
 Power Level<sup>2</sup> -60.0 dB

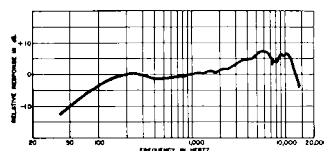
**SM77**

**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<sup>2</sup> -77.5 dB (0.13 mV)  
 Power Level<sup>2</sup> -57.5 dB

**545D and 545SD**

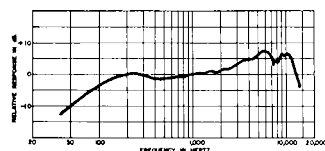
**Type:** Dynamic  
**Frequency Response:** 50 to 15,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** Lo-Z: 150 ohms (275 ohms actual)  
 Hi-Z: "High"  
**Output Level:** (at 1,000 Hz)

	Lo-Z	Hi-Z
Open Circuit Voltage <sup>2</sup>	-78.0 dB (0.13 mV)	-55.0 dB (1.76 mV)
Power Level <sup>2</sup>	-58.5 dB	

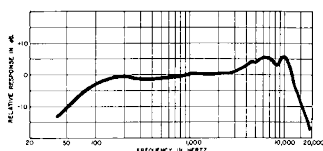
**545SH**

**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)

	Lo-Z	Hi-Z
Open Circuit Voltage <sup>2</sup>	-76.0 dB (0.16 mV)	-54.0 dB (2.0 mV)
Power Level <sup>2</sup>	-56.0 dB	

**545L**

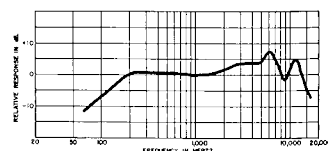
**Type:** Dynamic  
**Frequency Response:** 50 to 15,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (250 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -77.5 dB (0.13 mV)  
 Power Level<sup>2</sup> -57.5 dB

**515SB and 515SD**

**Type:** Dynamic  
**Frequency Response:** 80 to 13,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**515SB**  
**Impedance:** 150 ohms (170 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage<sup>2</sup> -82.5 dB (0.074 mV)  
 Power Level<sup>2</sup> -61.0 dB

**515SD**  
**Impedance:** Lo-Z: 150 ohms (170 ohms actual)  
 Hi-Z: "High"  
**Output Level:** (at 1,000 Hz)

	Lo-Z	Hi-Z
Open Circuit Voltage <sup>2</sup>	-82.5 dB (0.074 mV)	-59.0 dB (1.1 mV)
Power Level <sup>2</sup>	-61.0 dB	



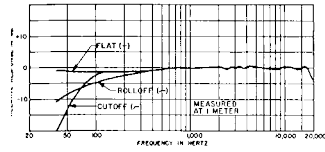
°0 dB = 1 V/μbar

°0 dB = 1 mW/10 μbar

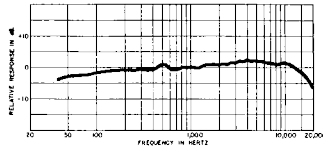


**SM81**

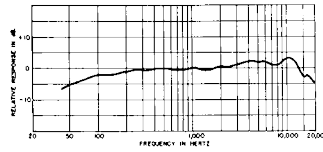
**Type:** Condenser  
**Frequency Response:** 20 to 20,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (85 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage\* -65 dB (0.56 mV)  
 Power Level<sup>†</sup> -40.5 dB

**SM94**

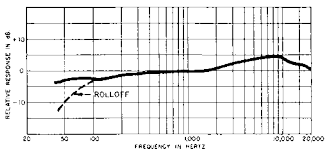
**Type:** Condenser  
**Frequency Response:** 40 to 16,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (200 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage\* -69 dB (0.35 mV) (phantom)  
 -70 dB (0.32 mV) (battery)

**849**

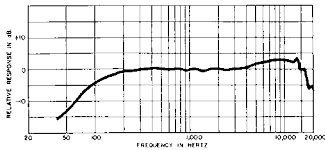
**Type:** Condenser  
**Frequency Response:** 40 to 16,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 600 ohms  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage\* -71 dB (0.28 mV)

**SM98A**

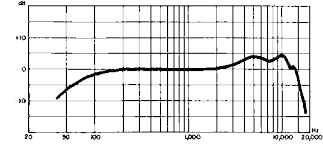
**Type:** Condenser  
**Frequency Response:** 40 to 20,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Impedance:** 150 ohms (90 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage\* -80.0 dB (0.10 mV)

**SM99**

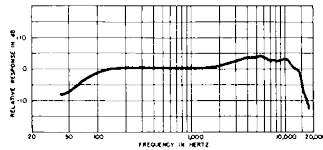
**Type:** Condenser  
**Frequency Response:** 80 to 20,000 Hz  
**Polar Pattern:** Supercardioid (unidirectional)  
**Impedance:** 150 ohms (90 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage\* -73.0 dB (0.22 mV)

**BETA 58®**

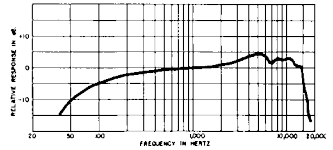
**Type:** Dynamic  
**Frequency Response:** 50 to 16,000 Hz  
**Polar Pattern:** Supercardioid (unidirectional)  
**Impedance:** 150 ohms (290 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage\* -71.0 dB (0.28 mV)  
 Power Level<sup>†</sup> -51.5 dB

**BETA 57®**

**Type:** Dynamic  
**Frequency Response:** 50 to 16,000 Hz  
**Polar Pattern:** Supercardioid (unidirectional)  
**Impedance:** 150 ohms (290 ohms actual)  
**Output Level:** (at 1,000 Hz)  
 Open Circuit Voltage\* -71.5 dB (0.27 mV)  
 Power Level<sup>†</sup> -52 dB

**L2/BETA 58®**

**Type:** Dynamic  
**Audio Frequency Response:** 50 to 15,000 Hz  
**Polar Pattern:** Supercardioid (unidirectional)  
**Maximum Sound Pressure Level:**  
 138 dB SPL (LO gain)  
 123 dB SPL (HI gain)  
**Battery:** Standard 9-volt alkaline; 12-14 hours typical life

**L SERIES SYSTEM SPECIFICATIONS**

**RF Carrier Frequency Range:** 169 to 216 MHz  
**Working Range:**  
 30 m (100 ft) with > 90 dB dynamic range under average conditions; 90 m (300 ft) with > 60 dB dynamic range; 300 m (1000 ft) at 60 dB  
**Distortion:** (ref.  $\pm 15$  kHz deviation, 1 kHz modulation) 0.3% THD typical  
**Dynamic Range:** >102 dB, A-weighted  
**Audio Frequency Response:** 50 to 15,000 Hz,  $\pm 2$  dB (for microphone frequency response specifications, see individual models)

**L4 RECEIVER**

**Output:** -2 dBV unbalanced aux output, 1 kilohm output impedance; -18 dBV balanced mic output, 150 ohms output impedance (volume full clockwise, full deviation, unloaded)  
**Antenna Type:**  $\frac{1}{4}$  wavelength omnidirectional vertical; optional  $\frac{1}{2}$  wavelength antennas available  
**Power:** 12.5-18 Vdc nominal (negative ground); 165 mA; 120 Vac external ac adapter supplied; 240 Vac adapter available

**L3 RECEIVER**

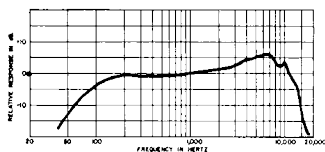
**Output:** -2 dBV across 3.3 kilohms (volume full clockwise, full deviation, unloaded)  
**Antenna Type:**  $\frac{1}{4}$  wavelength omnidirectional vertical; optional  $\frac{1}{2}$  wavelength antenna available  
**Power:** 12-18 Vdc nominal (negative ground); 85 mA; 120 Vac external ac adapter supplied; 240 Vac adapter available

**L11 TRANSMITTER**

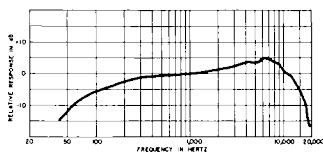
**RF Power Output:** 50 mW maximum  
**Input Impedance:** Actual: 16k, pin 4 wired to pin 3 for 839V microphone; 100k, pin 4 open for microphone or instrument pickup  
**Antenna:** Attached, 386 mm (15 in.), omnidirectional, flexible wire  
**Battery:** Standard 9-volt alkaline; 8-10 hours typical life

**L2/58 HANDHELD TRANSMITTER**

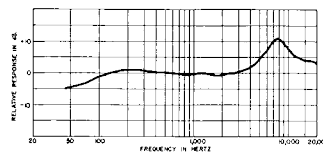
**Type:** Dynamic  
**Audio Frequency Response:** 50 to 15,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Maximum Sound Pressure Level:**  
 138 dB SPL (LO gain)  
 123 dB SPL (HI gain)  
**Battery:** Standard 9-volt alkaline; 12-14 hours typical life

**L2/96 HANDHELD TRANSMITTER**

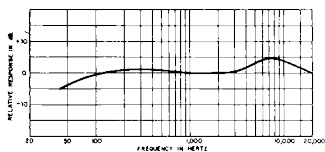
**Type:** Condenser  
**Audio Frequency Response:** 50 to 15,000 Hz  
**Polar Pattern:** Cardioid (unidirectional)  
**Maximum Sound Pressure Level:**  
 138 dB SPL (LO gain)  
 123 dB SPL (HI gain)  
**Battery:** Standard 9-volt alkaline; 12-14 hours typical life

**839W**

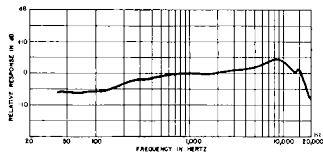
**Type:** Condenser  
**Frequency Response:** 50 to 16,000 Hz  
**Polar Pattern:** Omnidirectional  
**Output Impedance:** 1,200 ohms  
**Output Level:**  
 Open Circuit Voltage\* -64.5 dB (0.6 mV)  
**Maximum Sound Pressure Level:** 136 dB

**WL83**

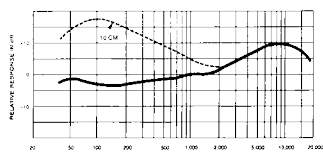
**Type:** Condenser  
**Frequency Response:** 50 to 16,000 Hz  
**Polar Pattern:** Supercardioid (unidirectional)  
**Output Impedance:** 1,200 ohms  
**Output Level:**  
 Open Circuit Voltage\* -65.5 dB (0.53 mV)  
**Maximum Sound Pressure Level:** 136 dB

**WL84**

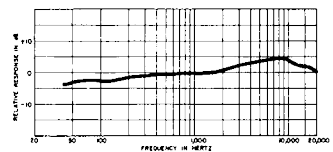
**Type:** Condenser  
**Frequency Response:** 50 to 16,000 Hz  
**Polar Pattern:** Supercardioid (unidirectional)  
**Output Impedance:** 1,200 ohms  
**Output Level:**  
 Open Circuit Voltage\* -66 dB (0.5 mV)  
**Maximum Sound Pressure Level:** 136 dB

**WCM16**

**Type:** Condenser  
**Frequency Response:** 50 to 18,000 Hz  
**Polar Pattern:** Hypercardioid  
**Output Impedance:** 1,200 ohms  
**Output Level:** (close talked at 1,000 Hz)  
 Open Circuit Voltage\* -75.0 dB (0.18 mV)  
**Maximum Sound Pressure Level:** 150 dB

**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



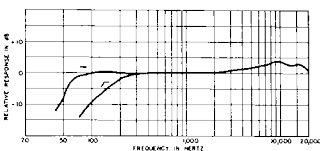
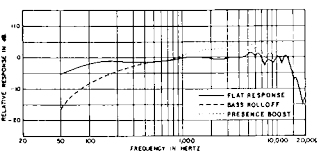
RF frequency range on all wireless units is 169-216 MHz, VHF-FM.

\*0 dB = 1 V/ $\mu$ bar    †0 dB = 1 mW/10  $\mu$ bar

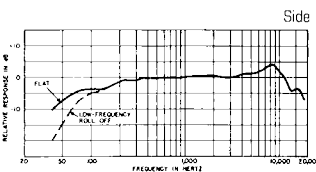


**SM89****Type:** Condenser**Frequency Response:** 60 to 20,000 Hz**Polar Pattern:** Hypercardioid at low

frequencies; lobar at frequencies above 1 kHz

**Impedance:** 150 ohms (100 ohms actual)**Output Level:** (at 1,000 Hz)  
Open Circuit Voltage<sup>2</sup> -53 dB (2.2 mV)**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<sup>2</sup> -79.0 dB (1.1 mV)  
Power Level<sup>2,2</sup> -57.0 dB**VP88****Type:** Stereo Condenser (MS configuration)**Frequency Response:** 40 to 20,000 Hz**Polar Pattern:** Mid: Cardioid (unidirectional);

Side: Bidirectional

**Impedance:** 150 ohms (100 ohms actual)**Output Level:** (at 1,000 Hz, MS mode)Open Circuit Voltage (Mid)<sup>2</sup>

-66 dB (0.5 mV)

Side Level (Stereo mode, relative to Mid

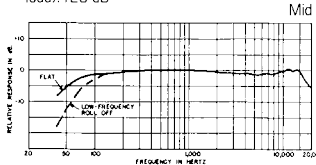
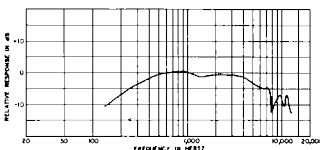
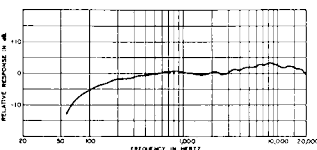
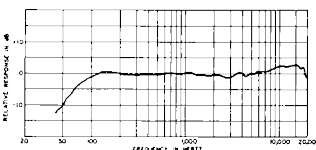
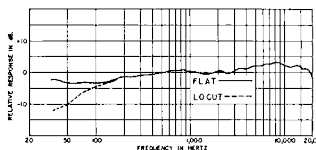
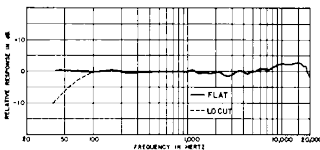
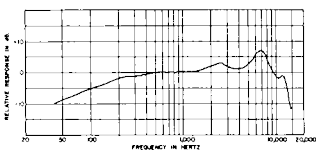
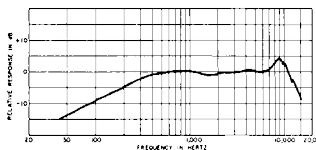
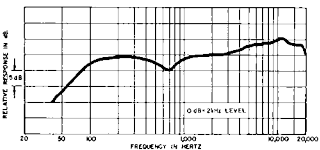
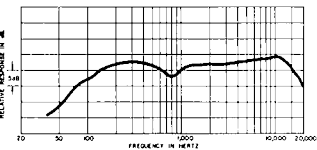
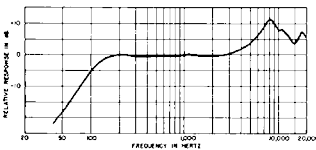
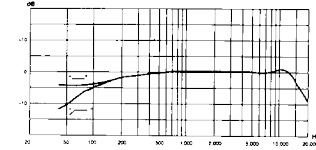
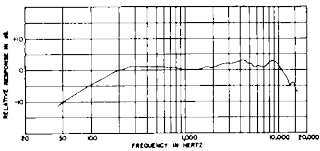
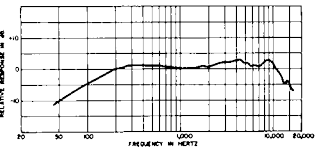
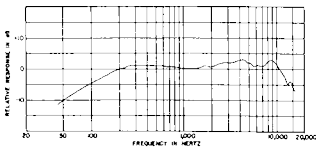
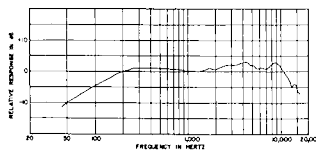
Level): Low: -6.0 dB

Medium: -1.9 dB

High: +1.6 dB

**Maximum Sound Pressure Level:** (800 ohm

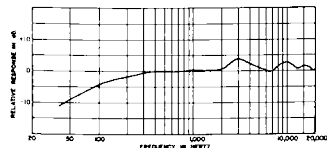
load): 129 dB

**SM18****Type:** Dynamic**Frequency Response:** 150 to 10,000 Hz, at 25° incidence to infinite surface, 1 m (39.4 in.) from sound source**Polar Pattern:** Cardioid (unidirectional), at 1 m (39.4 in.) from horizontal sound source, microphone on flat surface**Impedance:** 150 ohms (180 ohms actual)**Output Level:** (at 1,000 Hz, measured with sound source at 25° incidence to infinite surface)  
Open Circuit Voltage<sup>2</sup> -73.0 dB (0.22 mV)  
Power Level<sup>2,2</sup> -52.0 dB**819****Type:** Condenser**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<sup>2</sup> -71.0 dB (0.28 mV)**809****Type:** Condenser**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 infinite surface)Open Circuit Voltage<sup>2</sup> -68.0 dB (0.4 mV)**SM91A****Type:** Condenser**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<sup>2</sup> -69.0 dB (0.35 mV)**SM90A****Type:** Condenser**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 infinite surface)Open Circuit Voltage<sup>2</sup> -66.0 dB (0.5 mV)**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<sup>2</sup> -81.5 dB (0.08 mV)  
Power Level<sup>2,2</sup> -60.0 dB**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<sup>2</sup> -85 dB (0.06 mV)  
Power Level<sup>2,2</sup> -64 dB**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<sup>2</sup> -69 dB (0.35 mV)**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<sup>2</sup> -73 dB (0.22 mV)**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<sup>2</sup> -70 dB (0.32 mV)**SM102****Type:** Condenser**Frequency Response:** 50 to 18,000 Hz**Polar Pattern:** Cardioid (unidirectional)**Impedance:** 150 ohms (90 ohms actual)**Output Level:** (at 1,000 Hz)  
Open Circuit Voltage<sup>2</sup> -69.0 dB (0.35 mV)**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<sup>2</sup> -47.0 dB (4.5 mV)  
Power Level<sup>2,2</sup> -66.0 dB**RECEIVERS****Type:** Dynamic**Frequency Response:** 100 to 8,000 Hz**Impedance:** 2,000 ohms at 1,000 Hz**Output Level:** (at each ear) 104.0 dB SPL with 1.4 V at 1,000 Hz**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<sup>2</sup> -47.0 dB (4.5 mV)  
Power Level<sup>2,2</sup> -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**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<sup>2</sup> -47.0 dB (4.5 mV)  
Power Level<sup>2,2</sup> -66.0 dB**SM12A****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<sup>2</sup> -47.0 dB (4.5 mV)  
Power Level<sup>2,2</sup> -66.0 dB**RECEIVER****Type:** Dynamic**Frequency Response:** 70 to 12,000 Hz**Impedance:** 2,000 ohms at 1,000 Hz**Output Level:** 105.0 dB SPL with 1.4 V at 1,000 Hz



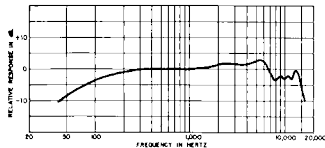
SM63 and SM63L

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



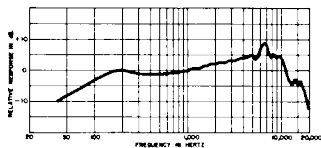
579SB

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



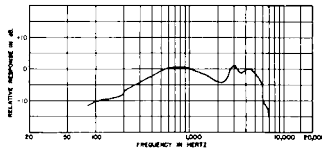
55SH SERIES II

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



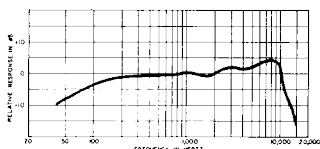
520D

Type: Controlled Magnetic®  
Frequency Response: 100 to 5,000 Hz  
Polar Pattern: Omnidirectional  
Impedance: (at 1,000 Hz) Dual, Microphone impedance rating is 150 ohms (160 ohms actual) and "High"  
Output Level: (at 1,000 Hz)  
Lo-Z -73.0 dB (0.22 mV)  
Hi-Z -56.0 dB (1.6 mV)  
Power Level\*\* -51.0 dB



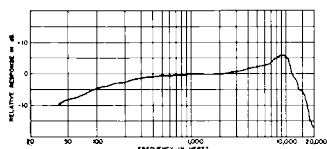
VP64

Type: Dynamic  
Frequency Response: 50 to 12,000 Hz  
Polar Pattern: Omnidirectional  
Impedance: 150 ohms (290 ohms actual)  
Output Level: (at 1,000 Hz)  
Open Circuit Voltage\* -71.0 dB (0.28 mV)  
Power Level\*\* -52.0 dB



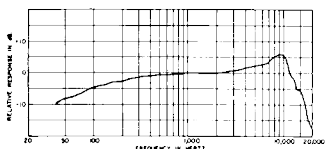
AMS26

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



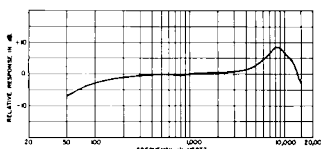
AMS24

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



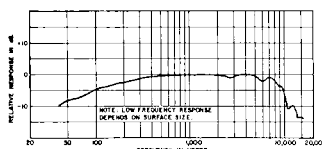
AMS28

Type: Condenser  
Frequency Response: 50 to 16,000 Hz  
Polar Pattern: Cardioid (unidirectional)  
Output Level: (at 1,000 Hz)  
Open Circuit Voltage\* -53 dB



AMS22

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



AMS4000/8000 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 operation

AMS880 VIDEO SWITCHER INTERFACE

Inputs: Eight, plus ground, TTL logic level  
Outputs: Eight, plus common, optically isolated; not connected to input ground  
External Power Transformer: 120 Vac ±10%, 60 Hz, 6W

FP410

Output Clipping Level: Line: +19 dBm  
Equivalent Input Noise: -128.5 dBV  
Phantom Power Voltage: 30 Vdc  
Battery Life:\*\*\* 12 hours

FP42

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

FP51

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

FP31

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

FP32

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

FP16A

Output Clipping Level: Line: +16 dBm  
Equivalent Input Noise: -129 dBV  
Phantom Power Voltage: 30 Vdc  
Battery Life:\*\*\* 20 hours

FP11

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

FP12

Output Clipping Level: 4 ohms: 750 mV; 1 Kilohm: 15 V  
Equivalent Input Noise: -118 dBV  
Battery Life:\*\*\* 25 hours

M267

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

M268

Output Clipping Level: Aux (10 Kilohm): +18 dBV (7.9 V)  
Equivalent Input Noise: -128 dBV  
Phantom Power Voltage: 30 Vdc

M68A/M68FCA

Output Clipping Level: Aux (10 Kilohm): 4 V  
Equivalent Input Noise: -123 dBV

PROLOGUE® 200M MIXER

Output Clipping Level: Aux: +9 dBV  
Equivalent Input Noise: -116 dBV  
Distortion: Less than 1.0%

PROLOGUE® 210A POWER AMPLIFIER

Output Clipping Level: +16 dBV  
Equivalent Input Noise: -127 dBV  
Distortion: Less than 3%  
Voltage Gain: 84 dB

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 2 V output at 1 kHz in all switch positions.  
Phono position only: Less than 1% at 30 Hz with 2 V 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

PS1A

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



THE SOUND OF THE PROFESSIONALS® . . . WORLDWIDE

**SHURE®**



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