

# professional products

FOR BROADCASTING • RECORDING • MOTION PICTURES • PROFESSIONAL SOUND REINFORCEMENT



MICROPHONES • COMPONENTS • CARTRIDGES • ACCESSORIES



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**ALPHA AUDIO RICHMOND, VIRGINIA**

When you own and operate the first 16-track professional recording studio in your entire state, you want to make sure that your sound equipment is of the highest quality, reliability, and versatility.

To the owners of Alpha Audio in Richmond, Virginia, this means that Shure products will be an integral part of the studio's electronic equipment. Nearly two-thirds of Alpha Audio's microphones are Shure products.

Even though Alpha Audio has four brands of microphones for performers to choose from, the Shure models are used the most, according to Nick Colleran, president of Alpha Audio.

"We have two SM50's that we use on bass drums," Colleran reports. "We have two SM53's for vocals, electric bass, flutes, and cello. We also have two SM56's and two SM57's for drums, electric guitars, and Leslie organ speakers, two SM76's for French horns and acoustical guitars, and an SM61 for snare drums, an SM5B below the piano and for singers with bad 'S' problems, plus two SM58's for when control of high frequency is necessary."

Alpha Audio also has four SM60's in their echo chamber, a Shure SE20 Transcription Preamp, and a Shure V-15 Type II cartridge in their turntable tone arm.



In this unusual — in fact, extraordinary — quiet scene in one of Alpha Audio's studios, a Shure SM56 and SM53 Microphone await their next assignment, whether it be recording an intricate string ensemble or a thunderous rock group.

**CAMPAIGN '72 ... AND SHURE IS THERE**

In what turned out to be the biggest display of audio and visual electronics ever put into one hall, both U.S. political parties attempted to make their preludes to the 1972 political elections in Miami's Convention Hall unforgettably spectacular. And Shure products played a significant role in helping the convention planners achieve their objectives.

At both conventions, Shure M67 Microphone Mixers and M675 Broadcast Production Masters saw strenuous duty in the varied activities of the Broadcast Audio Pool during coverage of press conferences and committee hearings.

During the Democratic Convention, Shure SM61 Professional Microphones were visible in the hands of NBC floor reporters in the convention hall.

When the Republicans convened in August, special Shure Unidynes were on prominent and continuous display from their important position on the speaker's rostrum. Shure SM61's were used by floor commentators for both NBC and the Mutual Broadcasting Network.

Delegation microphones at the Republican Convention were also Shure SM61's with special stand mountings. And behind the scenes, additional Shure units — 572G Goose-neck Models — were used by CBS in its internal communications network.



Exceptional "pop-proof" design and superb mechanical noise isolation were some of the reasons for the Shure SM61 Microphones (above) being used in all the state delegation areas. Hand-held SM61's were used by NBC and Mutual Broadcasting System floor reporters.



President Richard M. Nixon addressing the American Legion National Convention in Chicago shortly after his nomination. On the rostrum are Shure Model SM56 Microphones.



Challenger Senator George McGovern speaking to the national convention of the American Federation of Teachers in St. Paul, using Shure Model 545S and SM56 Microphones with windscreens.



President Nixon accepting his party's nomination for re-election. His acceptance speech was carried to the nationwide audience by the special Shure Unidyne Microphones shown in the insert.

**THE WOLFMAN ... A HOWLING SUCCESS STORY.**


The hottest radio happening since multiplex! He's Wolfman Jack, a personality extraordinaire and an independent production company. From his home/studio in Beverly Hills, California, Wolfman Jack pre-records his widely syndicated daily radio show almost entirely with Shure audio componentry. For vocal pickup, the Wolfman uses two of the finest Shure studio microphones: the "workhorse" SM53 unidirectional dynamic and the smoother-than-silk SM33 unidirectional ribbon. (His "outrigger" production console is a Shure M675 Broadcast Production Master used in conjunction with a Shure M67 Mixer.) A Shure M688 Stereo Mixer is used for stereo recording. Even in disc playback, Shure plays a vital role with a precision-engineered Shure-M232 professional tone arm and SC35C Cartridge. Shure professional products doing their thing help the Wolfman do his thing.



**STAGE COVERAGE IN LAS VEGAS  
CAESARS PALACE**



The multiple exposure (above top) is illustrative of the many Shure microphones used in Caesars Palace, one of the newest and most sumptuous hotels in Las Vegas. It shows a Shure Model SM56 on stage in the lush theater-restaurant, Circus Maximus. Identical SM56's are shown (above) on duty in Nero's Nook, another of the hotel's several show-places. This, and other complex sound systems in Caesars Palace, are maintained and operated under the capable direction of the hotel's sound engineer shown here (below) at the Circus Maximus sound system control console. In all, 35 SM56's, as well as other Shure models are used throughout Caesars Palace.



**SAHARA HOTEL**



In the popular Congo Room of the renowned Sahara Hotel, the large stage is covered by no less than seven Model SM58's (above top). They are positioned in this manner to provide coverage of performers who stand from 10 to 30 feet away from the microphones during each performance of an elaborate stage show. Out of sight of our camera are four additional SM58's, positioned two each on raised platforms located at both ends of the stage. In the Sahara's Don The Beachcomber Restaurant (above), additional Shure microphones are on-stage.

**RECORDING IN ONE OF  
THE WORLD'S FINEST STUDIOS**



Welcome to glamorous Hollywood, California, and to what many experts believe to be one of the finest, most luxurious, and most technically up-to-date recording studios — Herb Alpert and Jerry Moss' A & M Records. Shown here (bottom, left) is A & M's hyper-active "Studio B," where almost 90% of all A & M recording activity is centered. Standing ready are the Shure Microphones assigned to this studio's microphone bank. They include Shure SM57 unidirectional dynamics and Shure SM33 unidirectional ribbons, along with numerous other Shure "Professional" microphones (not shown).

**IN THE HANDS OF TWO  
RECORDING MASTERS**



When two of the most influential names in recording want to talk about recording microphones, we listen! Shown (above top) is Bones Howe, producer of the magnificent recordings featuring The 5th Dimension. Bones told us that he often uses the Shure SM53 without equalization. On the SM53, he added, "It has a much warmer quality on guitars and other stringed instruments . . . I noticed no handling noise from the SM53 when it was handheld . . . I recommend it for better sound quality in studio use, and as a great high-quality general purpose microphone for remote recordings."

Wally Heider (above bottom), master of the art of location recording, prefers the Shure SM54. He told us, "The loudest guys in the world, screaming into them, won't break them up . . . They sound good on any assignment . . . The front-to-back characteristics are excellent . . . Whenever I'm not locked into a performer's own pet microphone, I prefer to use the SM54."



## ABOUT SHURE PROFESSIONAL PRODUCTS

The Shure products shown in this catalog were designed specifically for professional use in broadcasting, recording, motion pictures, and highest quality sound reinforcement applications. You'll find a complete line of microphones, audio control circuitry products, record playing components and accessories — each designed to help you do your job faster, easier, and with complete certainty of performance.

## SHURE SPECIFICATIONS

The specifications given for every Shure product are consistently and exactly accurate, and are checked repeatedly for accuracy through the Shure Master Quality Control Program — one of the most demanding and rigorous programs in the sound industry. The result is that the specifications listed for every product are precisely the specifications you can expect to be working with!

## INDIVIDUAL PERFORMANCE PROFILES

An individual microphone "Performance Profile" is listed for every microphone shown. It considers the specifications, performance characteristics, and applications of each microphone to give you a quick "performance read-out" on the features you need. These profiles were compiled by Shure engineers and can be used with the same confidence as the Shure specifications.

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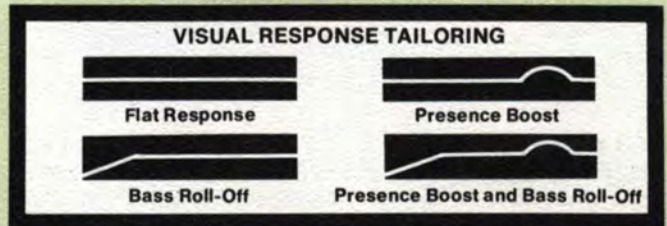
## SM7 UNIDIRECTIONAL DYNAMIC

Designed in the field over a seven-year period to be the finest professional unidirectional dynamic microphone ever—field-proved in pre-market performance tests in major recording studios and scoring stages.

The SM7 features a wide-range, very smooth frequency response, with graphic response-tailoring switches that allow the user to select four different microphone response curves: (1) extremely flat response; (2) low-frequency roll-off; (3) mid-frequency boost; and (4) a combination of both low-frequency roll-off and mid-frequency boost (see below). The polar pattern of the SM7 is an example of the classical cardioid pattern. It is uniform with frequency and symmetrical about the axis to provide maximum rejection and minimum coloration of off-axis sound.

Outstanding noise reduction systems cut mechanical noises, breath "pop," wind, and electro-magnetic hum to insignificance. The SM7 uses a revolutionary "air suspension" integral shock mount that isolates mechanical and shock noise so effectively that mechanical noise pickup is reduced to negligible levels. "Add-on" filter devices are unnecessary—the SM7's integral foam wind/"pop" filter sharply reduces explosive breath sounds, even under the most difficult close-up conditions of vocals and narration.

The SM7 is gimballed-mounted with a captive stand nut for trouble-free mounting and precise microphone positioning. Its integral swivel adapter fits a standard 5/8"-27 thread. Ruggedly constructed aluminum and steel case affords excellent cartridge protection. Textured Dark Gray enamel finish with Dark Gray foam windscreen. A heavy gauge storage and carrying case is provided.



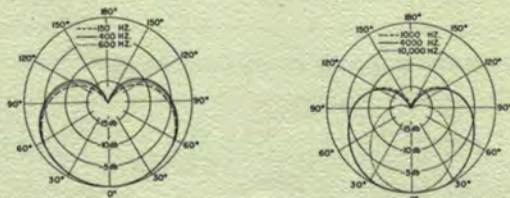
The SM7 features a unique response tailoring system that allows you to choose any of four response curves for optimum performance: (1) remarkably flat response from 40 to 16,000 Hz; (2) response boosted in mid-range frequencies for additional presence to emphasize voices or certain musical instruments; (3) response cut at low frequencies to produce a bass roll-off; and (4) combination response with both presence boost and bass roll-off. Dual slide switches control not only the response tailoring, but also provide a visual frequency response curve readout (see small illustrations above) which graphically shows the response setting of the microphone. (A switch cover plate that guards against accidental switching is supplied.)

**SPECIFICATIONS** Frequency Response: 40 to 16,000 Hz.  
Polar Pattern: Cardioid  
Microphone Rating Impedance: Suitable for any input from 25 to 250 ohms.

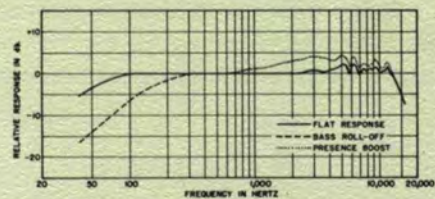
Output Level: -57 dB (0 dB = 1 milliwatt per 10 microbars)

Net Weight: 1 lb., 11 ounces (764 grams).

### POLAR PATTERNS



### FREQUENCY RESPONSE CURVE



### SM7 PERFORMANCE PROFILE

**BEST APPLICATIONS:** Vocal and instrumental pickup in recording studios and broadcasting operations, location recording, motion picture and television scoring, television talk shows and news desks, radio announcing and production, narration, and wide-range equalized sound systems.

#### SM7 PERFORMANCE PROFILE

Pickup Pattern	Sound Quality	Mech. Noise Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection	Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality
Cardioid	Very Wide Range, Flat Presence Boost and Low-End Cut Switches	Excellent	Excellent	Excellent	Excellent	Moderate	Excellent	Excellent	Excellent	Excellent





## SM53 & SM54 UNIDIRECTIONAL DYNAMICS



The two most versatile studio-quality microphones in the Shure Professional Products line, combining superb response, excellent noise rejection, and outstanding adaptability to a wide variety of assignments in recording, broadcasting, and high quality sound reinforcement.

### SM53

The original functionally engineered studio microphone that handles more assignments in today's across-the-board programming. Delivers a smooth, wide-range, flat frequency response without strident peaks or false coloration. Its extremely broad front working angle holds tonal quality constant despite user movement—eliminates audio "holes" and "hot spots" when using multiple microphones. True cardioid polar pattern is uniform at all frequencies and in all planes, so off-axis reflections, reverberation and background noises can be controlled.

A very effective built-in shock mount effectively isolates cable, stand and handling noises normally associated with unidirectional microphones. The SM53 also features a built-in hum rejection system that cuts magnetic hum susceptibility by as much as 20 dB over other units—enables you to use it in distant-pickup applications and in high magnetic fields without hum pickup. Proximity effect has been minimized for uniform tonal quality without low frequency build-up. A built-in low-end roll-off switch allows the user to tailor low frequency response.

The SM53 is extremely rugged, and can even be dropped on its nose without cartridge damage. It is fully field-serviceable—cartridge, connector, front screen and roll-off switch can be replaced in

minutes. Soft, neutral matte metallic finish is glare-free and ideally suited for on-camera use. Supplied with 20-foot, two-conductor, shielded broadcast-type cable with FEMALE professional three-pin audio connector\* at microphone end, and Model A57SL Locking Swivel Adapter.

\*Designed to mate with Cannon XL series, Switchcraft A3 (O. G.) series, or equivalent connector.

### SM54

The twin of the Shure SM53! It delivers all the natural response, noise control and extraordinary ruggedness of the SM53—but with an ultra-effective built-in "pop" and wind-blast filter that provides truly exceptional suppression of breath and wind noises.

The SM54 differs from the SM53 only in its slightly larger grille assembly—its look, performance and "feel" are identical. The grille assembly (Model A53G) is available separately to give the SM53 microphone the pop and wind protection of the SM54 (see page 19). It has no effect on microphone level and creates only minimal changes in response (in the 4 kHz region) and in directivity.

The SM54 can be used with all the custom accessories designed especially for increasing the versatility of the SM53—even the complete Boom Assembly. It has been extensively field-tested and proved effective in solving difficult pickup problems in studio and broadcast applications.

**SM53/SM54 SYSTEM ACCESSORIES** See the complete line of custom accessories for the SM53 and SM54 microphones on page 19 of this catalog.

## SM53 & SM54 SPECIFICATIONS

Frequency Response: 70-16,000 Hz  
Polar Pattern: Cardioid  
Impedance: Suitable for any input from 25 to 250 ohms  
Output Level: -58.5 dB (0 dB = 1 milliwatt per 10 microbars)

Dimensions and Weight: 7-3/16"x1 1/2" diam. (max.), 8.5 oz. (less cable).  
Finish: Non-glare matte metallic.  
Stand Thread: 5/8" - 27

## SM53/SM54 PERFORMANCE PROFILE

**BEST APPLICATIONS:** Broadcast and recording studio and location, overall orchestral, tight instrumental and vocal pickup, boom and fish pole use, and high quality sound reinforcement. Model SM54 is particularly well-suited to outdoor and close-talking assignments in which wind and breath noises must be controlled.

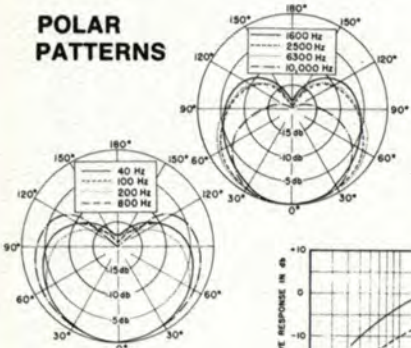
Model	Pickup Pattern	Sound Quality	Handling/ Mech. Noise Isolation	"Pop" Rejection	Wind Noise Rejection
SM53	Cardioid	Excellent, Wide-Range	Excellent*	Good	Good
SM54	Cardioid	Excellent, Wide-Range	Excellent*	Excellent	Good

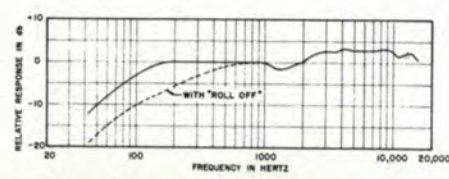
Background Noise Rejection	Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality
Good - Excellent	Minimal	Excellent	Excellent	Excellent	Excellent
Good - Excellent	Minimal	Excellent	Excellent	Excellent	Excellent

\*With A53M Isolation Mount; Good without

### POLAR PATTERNS



### FREQUENCY RESPONSE CURVE





## SM5B & SM5C UNIDIRECTIONAL DYNAMIC BOOM MICROPHONES



Specifically designed to minimize boom microphone problems in television and motion-picture sound stage and location recording. Painstakingly developed to provide extremely high reproduction quality and great flexibility of application.

The SM5 features a wide-range, smooth, natural response, especially tailored for dialogue and vocal pickup with excellent presence, yet well-suited to scoring assignments. Its pickup pattern is cardioid—symmetrical about the axis, and exceptionally uniform with frequency (even at the extreme low end). These characteristics afford outstanding rejection of unwanted sound, such as reverberation noise, floor or scenery reflections, performers accidentally "off-mike," and background noises such as air conditioner rumble. Also minimizes off-axis coloration.

A highly effective integral windscreen completely surrounds the SM5's suspension elements to prevent wind noise generated by the suspension assembly, and provide maximum wind noise suppression in outdoor locations and with fast boom swings.

Minimum electrical noise pickup—a hum-balancing circuit for all

cartridge elements (including filter) and an absence of transformers and response-correcting inductors gives the SM5 virtual immunity to electrical noise, even in extreme hum fields.

**SM5C ONLY:** The SM5C was designed especially for motion-picture work. It incorporates a 100 Hz low cut filter in the cartridge assembly that eliminates low frequency transients resulting from rapid boom movement and wind. (While these transients frequently occur at sub-audible frequencies, they can overload the input stage of some recording channels and recorders to create momentary blocking or distortion.)

The SM5 is perfectly balanced and relatively light in weight for fast pans and fishpole use with maximum stability and minimum over-swing. Exceptionally rugged—cartridge assembly and isolation assembly are protected by outer foam windscreens and steel reinforcing rods.

May be used on accessory desk stands (such as Model S33P) for a wide variety of studio applications, outdoor sports, narration, and other problem applications.

**SPECIFICATIONS** Frequency Response: 50–15,000 Hz  
Polar Pattern: Cardioid

Impedance: Model SM5B—150 ohms Model SM5C—50 ohms

Output Level: –57 dB (0 dB = 1 milliwatt with 10 microbars)

Connector: Male receptacle on microphone designed to mate with Cannon XL series, Switchcraft A3 series, or equivalent connector.

Dimensions and Weight: 9-29/32" long x 5-1/32" diam. x 5-23/32" yoke (to center of microphone): 1 lb. 15 oz.

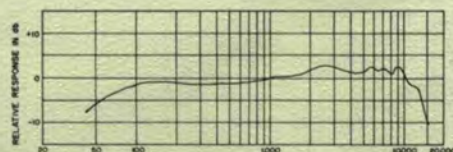
Finish: Textured non-glare gray; light/dark gray windscreens

Stand Thread: 5/8" –27 with adapter included

### POLAR PATTERNS



### FREQUENCY RESPONSE CURVE



### SM5 PERFORMANCE PROFILE

**BEST APPLICATIONS:** Boom or stand use in television, motion-picture sound stages, narration, scoring and broadcast announcing.

Pickup Pattern	Sound Quality	Handling/Mech. Noise/Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Cardioid	Very Wide Range	Excellent	Excellent	Excellent	Excellent
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis	
Moderate	Excellent	Good	Excellent	Excellent	



## SM56-57 UNIDIRECTIONAL DYNAMICS



U.S. Patent D-190,864

Models SM56 and SM57 feature unusually effective cardioid pickup patterns that are uniform at all frequencies and in all planes! The effects of studio acoustics and background noise are minimized and the bright, clean sound is ideal for announcing, dialogue and vocal music. Unusually effective for rhythm pickups because they do not overemphasize low frequencies — resulting in clean, beautifully defined sound from percussion instruments, piano and string basses. In addition, "boominess" associated with close-up pickup is well controlled.

### SM56 — STAND MOUNTED MODEL

Permanently mounted on positive-action swivel-shock mount that permits tilting of head through 135°. Includes accessory switch adapter to serve in applications where on-off switch is necessary at the microphone.

**SPECIFICATIONS** Frequency Response: 40 - 15,000 Hz  
Polar Pattern: Cardioid

Impedance: Dual: 50 and 150 ohms. SM56 is selected by impedance switch; SM57 is selected by changing pins at base of microphone.

Output Level: —56 db (0 db = 1 milliwatt with 10 microbars)

Dimensions and Weight: SM56 — 4 3/4" x 1 1/4" diam.; 3/4" base height; 1 lb. 3 oz.

SM57 — 15-25/32" long, 1 1/4" diam.; 10 oz.

Finish: Textured non-glare dark gray Stand Thread: 5/8" - 27

### SM57 — HAND OR STAND MODEL

Hand-held variation of SM56 (above). Includes slip-in stand adapter for instant attachment to stand.

**Polar Patterns and Frequency Response: Same as Model SM58 at right.**

### SM56/SM57 PERFORMANCE PROFILE

**BEST APPLICATIONS:** Broadcast studio and control room, recording studio, (particularly suited for rhythm and percussion instrumental recording) high quality sound reinforcement, high noise situations.

Pickup Pattern	Sound Quality	Handling/ Mech. Noise/ Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Cardioid	Bright, Articulate	Excellent*	Good**	Good**	Excellent
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
Moderate	Excellent	Excellent	Good	Excellent	

\* With A55M Shock Mount; Good without  
\*\* With A2WS Windscreen; Poor without

## SM58 SELF-WINDSCREENED UNIDIRECTIONAL DYNAMIC



U.S. Patents 3,132,713 and 3,240,883

Ideal for remote news, sports, interviews, and vocal recording, for studio work requiring bright, articulate sound with minimum background noise, or wherever the announcer or performer may need to work close to the microphone. Built-in spherical windscreen minimizes or eliminates explosive breath "pop." Wide response with slight presence rise for clean, bright, and natural sound. Unusually effective cardioid pickup pattern (uniform with frequency, symmetrical about axis) provides excellent control of unwanted sound. Minimizes "boominess" that is usually accented by close-up microphone use. Windscreen assembly readily removable in the field for cleaning or replacement. Cartridge suspended in rubber shock mount. Convenient size and weight for comfortable hand-held use. Slip-in stand adapter included.

### SPECIFICATIONS

Frequency Response: 50-15,000 Hz

Polar Pattern: Cardioid

Impedance: Dual: 50 and 150 ohms

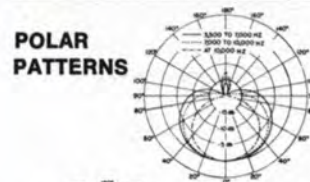
Output Level: —56 db (0 db = 1 milliwatt with 10 microbars)

Dimensions and Weight: 6 3/8" x 2" diam. (max.); 15 oz.

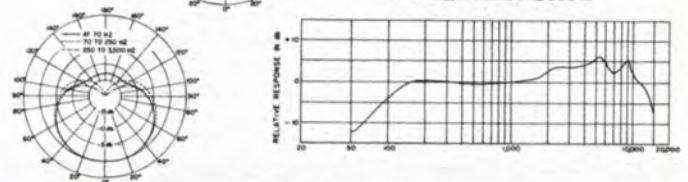
Finish: Textured non-glare dark gray

Stand Thread: 5/8" - 27

### POLAR PATTERNS



### FREQ. RESPONSE



### SM58 PERFORMANCE PROFILE

**BEST APPLICATIONS:** Remote news, sports, and interviews, vocal music, high quality sound reinforcement, and broadcast control room and studio.

Pickup Pattern	Sound Quality	Handling/ Mech. Noise/ Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Cardioid	Bright, Articulate	Excellent*	Excellent	Good	Excellent
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
Moderate	Excellent	Excellent	Excellent	Excellent	

\* With A55M Shock Mount; Good without



**MODEL SM33 SUPER CARDIOID RIBBON MICROPHONE**

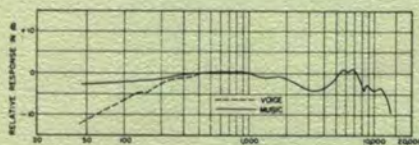


U.S. Patent D-178,018

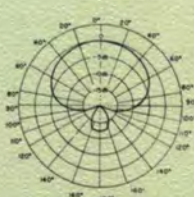
The ribbon element of the SM33 imparts a pleasantly warm characteristic to the speaking voice, a feature which is especially desirable for announcing and narration applications. The same warmth is also imparted to instrumental or vocal recordings. Because its polar pattern is somewhat more directional than a conventional cardioid, the SM33 provides superior separation in studio recording as well as control of unwanted surrounding noise. Smooth, wide range response. Unusually rugged. Two-position Selector Switch tailors bass frequency response. Self-adjusting lifetime swivel-shock mount permits tilting head 45° forward, 90° backward. The SM33 is very immune to mechanical noise, making it ideal for desk top or talk show applications. Cable entry from underside keeps the cable from protruding toward the TV cameras, and protects it against bumps and jolts.

**SPECIFICATIONS**

- Frequency Response: 40 - 15,000 Hz
- Polar Pattern: Super-Cardioid
- Impedance: Dual: 50 and 150 ohms
- Output Level: -58 db (0 db = 1 milliwatt with 10 microbars)
- Dimensions and Weight: 4-1/16" long, x 1 1/4" wide x 1 7/8" deep; 1 lb. 10 oz.
- Finish: Textured non-glare dark gray
- Stand Thread: 5/8" - 27



FREQ. RESPONSE



POLAR PATTERN

**SM33 PERFORMANCE PROFILE**

**BEST APPLICATIONS:** Warm, rich, mellow sound in broadcast announcing and narration, and vocal or instrumental recording. Excellent desk microphone for talk shows.

Pickup Pattern	Sound Quality	Handling/ Mech. Noise/ Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Super-Cardioid	Warm mellow	Excellent	Fair	Fair	Good-Excellent
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
Pronounced	Excellent	Good	Fair	Good	

**MODEL 300 BIDIRECTIONAL RIBBON MICROPHONE**

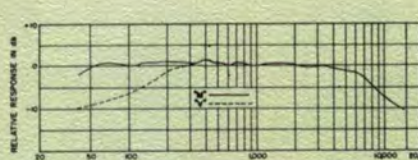


U.S. Patent D-171,055

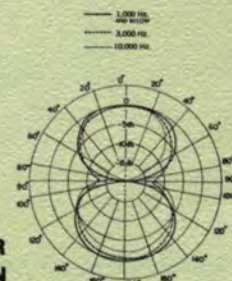
Combines wide range response and a bidirectional (cosine) pickup pattern: symmetrical front and rear pickup with greatly reduced side and overhead pickup provides same control of overall surrounding noise as an equivalent cardioid microphone. Warm, smooth sound. Ideal for applications such as across-the-table interviews or dialogue, combined pickup of facing instrumental groups, and stages with overhead loudspeakers. Two-position, low frequency, Response Selector Switch. Self-adjusting lifetime swivel-shock mount.

**SPECIFICATIONS**

- Frequency Response: 40-15,000 Hz
- Polar Pattern: Cosine
- Impedance: Multi-Impedance: Switch gives choice of 50 ohms, 150 ohms or high impedance.
- Output Level: -59 db (0 db = 1 milliwatt with 10 microbars)
- Dimensions and Weight: 9 1/4" long overall x 1 1/2" wide x 1-3/32" deep. Head is 6" long; 1 lb.
- Finish: Textured non-glare dark gray
- Stand Thread: 5/8" - 27



FREQ. RESPONSE



POLAR PATTERN

**300 PERFORMANCE PROFILE**

**BEST APPLICATIONS:** Warm, mellow sound in "across the table" interview and talk show applications, or for studio vocal or musical recording in which a single microphone must pick up two facing sources.

Pickup Pattern	Sound Quality	Handling/ Mech. Noise/ Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Bidirectional (cosine)	Warm, mellow	Excellent	Fair	Fair	Good
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
Pronounced	Good	Good	Fair	Fair	



**SHURE**

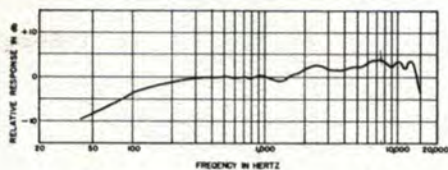
## omnidirectional dynamic microphones

**SM60 OMNIDIRECTIONAL DYNAMIC**

This unusually versatile microphone is a unique combination of beauty, strength, performance and economy. It has smooth, natural, wide-range response for both voice and music. The SM60 is equally at home in the studio or for remote pickups, and is in wide use in situations as diverse as outdoor sporting events and studio production numbers. Built-in breath and pop filter minimizes breath and wind noise. Lustrous, non-glare finish and tailored-to-the-hand dimensions provide handsome on-camera appearance and superior handability. Specially reinforced machined-steel case front for exceptional ruggedness — can actually be dropped on its nose without damage to internal structure! Windscreens and front end quickly and easily removable for cleaning. Can be used on stand (stand adapter included) or instantly removed from stand for in-the-hand use.

**SPECIFICATIONS**

Frequency Response: 45-15,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: Matches any input from 50 to 250 ohms  
 Output Level: -60.5 dB (0 dB = 1 milliwatt with 10 microbars)  
 Dimensions and Weight: 6-7/32" x 1/4" diam. (max.); 6 oz.  
 Finish: Non-glare matte metallic  
 Stand Thread: 5/8" - 27

**FREQ. RESPONSE****SM60 PERFORMANCE PROFILE**

**BEST APPLICATIONS:** Broadcast, news, sports, interviews and remotes. Vocal and instrumental recording. Performers' hand microphone.

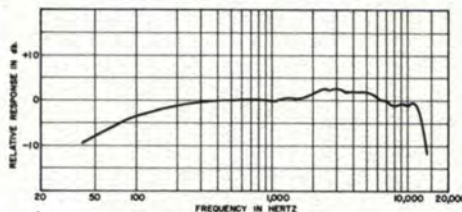
Pickup Pattern	Sound Quality	Handling/Mech. Noise/Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Omnidirectional	Excellent; Wide-Range Natural	Good	Good	Good	Not Applicable
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
None	Fair	Excellent	Excellent	Excellent	

**MODEL SM61 LOW-NOISE HAND-HELD OMNIDIRECTIONAL DYNAMIC**

Combines outstanding noise isolation with a small, lightweight, handsome design especially for hand-held applications in which mechanical shock, wind and cable noises must be controlled. A built-in shock mount reduces cable handling and mechanically induced noises to a negligible minimum. A super-effective "Blast Barrier" cuts wind, "pop" and other breath noises to extremely low levels. Smooth, wide-range frequency response (40 to 15,000 Hz), extremely natural, coloration-free sound. Very rugged — dropping the microphone directly on its nose will not affect performance. Remarkably versatile — an excellent choice for hand-held, "on-camera" TV applications, and such "traveling applications" as location recording, sports coverage and remote broadcasts, and for vocal and instrumental pickup assignments in the studio. Matte metallic finish for great on-camera appearance. Model A57SL Locking Swivel Adapter included.

**SPECIFICATIONS**

Frequency Response: 40-15,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: Suitable for any impedance from 25 to 250 ohms  
 Output Level: -61.0 dB (0 dB = 1 milliwatt with 10 microbars)  
 Dimensions and Weight: 7-1/8" x 1-17/32" diam. (Max.); 5.6 oz.  
 Finish: Non-glare matte metallic  
 Stand Adapter: 5/8" - 27

**FREQ. RESPONSE****SM61 PERFORMANCE PROFILE**

**BEST APPLICATIONS:** Demanding broadcast and recording applications requiring a hand-held microphone with wide-range response and very low handling, cable and wind noise. It can also be used in sound reinforcement installations in which feedback is not a consideration.

Pickup Pattern	Sound Quality	Cable Noise Handling/Mech. Noise Isolation	"Pop" Rejection	Wind Noise Rejection	
Omnidirectional	Extremely Smooth Wide Range	Exceptional	Excellent	Excellent	
Proximity Effect	Size	Humidity and Heat Resistance	Ruggedness	Field Serviceability	Off-Axis Quality
None	Small	Excellent	Excellent	Good	Excellent



# omnidirectional dynamic microphones SHURE

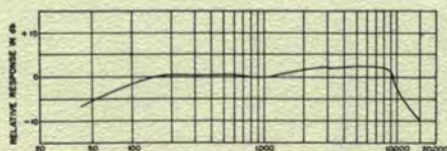
## SM50 SELF-WINDSCREENED OMNIDIRECTIONAL DYNAMIC



Strikingly immune to and extremely effective in suppressing wind-noise and explosive breath sounds ("pop"), making it an ideal "work horse" microphone for remote interviews, news, sports, and a variety of field and studio applications. Five-element built-in windscreen unscrews from microphone as a self-contained unit for easy cleaning or replacement. Response tailored for full-bodied, smooth, natural, and pleasing reproduction of speech and vocal music. Extremely rugged, yet surprisingly light. Compact and perfectly balanced for unusually comfortable handling. Shock-mounted cartridge. Supplied with slip-in stand adapter.

### SPECIFICATIONS

Frequency Response: 40-15,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: Dual: 50 and 150 ohms  
 Output Level: -57 db (0 db = 1 milliwatt with 10 microbars)  
 Dimensions and Weight: 6-9/16" x 1 1/2" diam. (max.); 8 oz.  
 Finish: Textured non-glare dark gray  
 Stand Thread: 5/8" - 27



FREQ. RESPONSE

### SM50 PERFORMANCE PROFILE

**BEST APPLICATIONS:** Studio and remote broadcast, news, sports or special events. Any application in which wind or breath noise may be troublesome.

Pickup Pattern	Sound Quality	Handling/ Mech. Noise/ Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Omnidirectional	Excellent; Smooth and Natural	Fair	Excellent	Excellent	Not Applicable
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
None	Fair	Excellent	Excellent	Good	

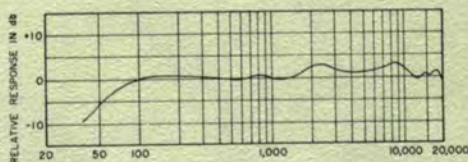
## MODEL SM76 3/4" DIAMETER OMNIDIRECTIONAL DYNAMIC



Extremely wide, peak-free, smooth response (45-20kHz) together with slim styling makes this a microphone of unusual capability. It is recommended for exacting applications in which a very flat, wide-range microphone is required. Ideal for applications as divergent as delicate acoustic guitar and full-throated pipe organ—even instrumentation applications. Inconspicuous, slender steel case may be hand-held or used on a stand, indoors or out (includes slip-in stand adapter). Dependable and extraordinarily rugged—will withstand severe use without deviation from original standards.

### SPECIFICATIONS

Frequency Response: 45-20,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: Dual - 50 and 150 ohms  
 Output Level: -60 dB (0 dB = 1 milliwatt with 10 microbars)  
 Dimensions and Weight: 8 1/4" long x 3/4" diam.; 7 oz.  
 Finish: Textured non-glare dark gray  
 Stand Thread: 5/8"-27



FREQ. RESPONSE

### SM76 PERFORMANCE PROFILE

**BEST APPLICATIONS:** Critical broadcast and recording applications (particularly liked for acoustic guitar, organ, piano and other difficult instruments), speech and vocal where minimum coloration is required.

### SM76 PERFORMANCE PROFILE

Pickup Pattern	Sound Quality	Handling/ Mech. Noise/ Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Omnidirectional	Extremely Smooth Wide Range	Good	Excellent*	Excellent*	Not Applicable
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
None	Good	Excellent	Good	Excellent	

\*Excellent with A2WS windscreen; Good without.



FOR CONTROL ROOMS, CUING, TALKBACK, INTERCOM, AND NEWSROOM APPLICATIONS IN WHICH THE MICROPHONE IS PERMANENTLY MOUNTED.



A complete selection of general purpose microphones for mounting on goosenecks or other flexible or fixed mountings. Recommended for use in control rooms, cuing, talkback, intercom, newsroom, and other applications where a hands-free, permanently, or semi-permanently located microphone is called for. Models 545L and 561 available as head alone, while Models 515SB-G18 and 572G are complete with gooseneck and mounting flange. (Goosenecks available with side cable opening on special request.)

**UNIDIRECTIONAL — MODEL 545L**

Superb cardioid pickup and excellent voice response for on-the-air and production use, or wherever suppression of background noise is desired, such as in news rooms, control rooms, and other noisy locations. Low frequency response characteristics minimize boominess. Designed primarily for lavalier use (with lavalier cord included), but can also be mounted on a flexible gooseneck. Low impedance: matches any input from 50 to 250 ohms. With attached 20-foot, two-conductor shielded cable. Thread is 5/8" -27 to fit conventional goosenecks.

**UNIDIRECTIONAL — MODEL 515SB-G18**

Versatile, economical unidirectional microphone for virtually any fixed-mount installation. True cardioid pickup characteristics, symmetrical about axis for ambient noise suppression. Frequency response from 80 to 13,000 Hz. Shock-mounted cartridge to cut mechanical and vibration noise. Permanently attached 18" gooseneck. Grip-to-talk switch controls both microphone circuit and a relay or control circuit. Low impedance: matches any input from 50 to 250 ohms. With 51" four-conductor cable, (two conductors under shield).

**MINIATURE — MODEL 572G**

Omnidirectional dynamic head with same performance characteristics as 3/4" diameter Model 571 miniature dynamic microphone (Page 13). The head is about the same diameter as the gooseneck itself, creating a strikingly trim appearance. With special, slim, and quiet, flexible 12-inch gooseneck, and mounting flange. With non-detachable, 5-foot, 2-conductor shielded cable. Low impedance: matches any input from 50 to 250 ohms.

**STANDARD — MODEL 561**

Rugged, low-cost, omnidirectional dynamic microphone for permanent mounting. "Tamper-proof" head with set-screw provision for locking head to gooseneck or fitting. 40-10,000 Hz with rising response characteristic for crisp, intelligible speech. Low impedance: matches any input from 50 to 250 ohms. —56 db output. 5/8" -27 thread connects to standard goosenecks or other flexible or fixed mountings. Head measures 2-9/16" x 1-3/8" diam. With 4-foot, 2-conductor shielded cable.

**UNIDIRECTIONAL — MODELS 515SBG and 515BG**

Model 515SBG is identical to Model 515SB-G18 above, except that gooseneck is not included. Model 515BG is identical to Model 515SB-G18 also, except gooseneck and switch are not included, and cable is two-conductor shielded.



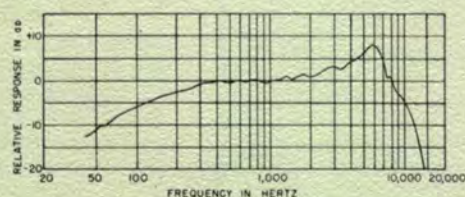
## MODEL SM51 DYNAMIC LAVALIER MICROPHONE



Especially designed for radio, TV, motion-picture or applications calling for a small wearable microphone; frequency response optimized for lavalier use — will match well, in sound, with stand or desk mounted units. Smooth exterior and recessed grille minimize clothing noise. Versatile, "Positive-Lock" lavalier holder goes on in an instant; provides simple, noiseless adjustment of microphone position. Non-detachable 30-ft. two-conductor rubber cable is easily field replaceable without disturbing cartridge. Magnetic shielded steel case.

### SPECIFICATIONS

Frequency Response: 70-12,000 Hz with rising characteristic to 6,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: Matches any input from 50 to 250 ohms  
 Output Level: -60.5 (0 db = 1 milliwatt with 10 microbars)  
 Dimensions and Weight: 2½" long x 13/16" diam.; 2 oz.  
 Finish: Non-glare dark gray



FREQ. RESPONSE

### SM51 PERFORMANCE PROFILE

BEST APPLICATIONS: Inconspicuous lavalier for use in TV, motion pictures, radio, and sound reinforcement.

Pickup Pattern	Sound Quality	Handling/Mech. Noise/Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Omnidirectional	Natural*	Good	Not Applicable	Good	Not Applicable
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
Not Applicable	Good	Excellent	Good	Not Applicable	

\* When used in lavalier position

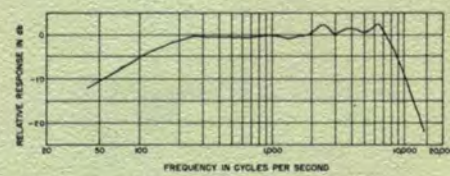
## MODEL 571 MINIATURE DYNAMIC



A lavalier-size omnidirectional microphone with stand microphone response that is well suited to applications requiring a very small microphone. Excellent voice characteristics — smooth and peak-free. For inconspicuous stand or hand-held use, concealment in a studio or shooting location, hanging over stage, documentaries, etc. Steel case for magnetic shielding. With non-detachable 30-foot, 2-conductor shielded broadcast type cable. Includes stand adapter.

### SPECIFICATIONS

Frequency Response: 50-10,000 Hz  
 Polar Pattern: Omnidirectional  
 Impedance: Matches any input from 50 to 250 ohms.  
 Output Level: -60.5 db (0 db = 1 milliwatt with 10 microbars)  
 Dimensions and Weight: 2¾" x ¾" diam.; 2 oz.  
 Finish: Textured non-glare dark gray  
 Stand Thread: ⅝" - 27



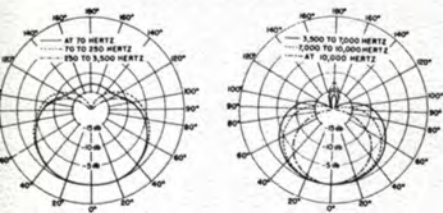
FREQ. RESPONSE

### MODEL 571 PERFORMANCE PROFILE

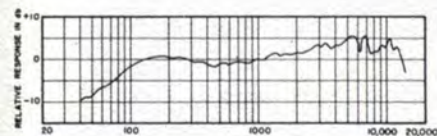
BEST APPLICATIONS: Inconspicuous hand-held or mounted use for broadcast interview or talk shows, and concealment uses in location studio, film and TV recording.

Pickup Pattern	Sound Quality	Handling/Mech. Noise/Isolation	"Pop" Rejection	Wind Noise Rejection	Background Noise Rejection
Omnidirectional	Smooth, Peak-Free	Good	Good	Good	Not Applicable
Proximity Effect	Gain Before Feedback	Humidity and Heat Resistance	Field Serviceability	Off-Axis Quality	
None	Good	Excellent	Good	Excellent	

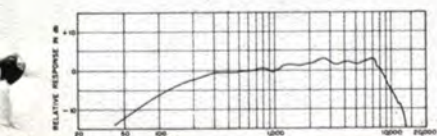
## MODEL 545L POLAR PATTERNS



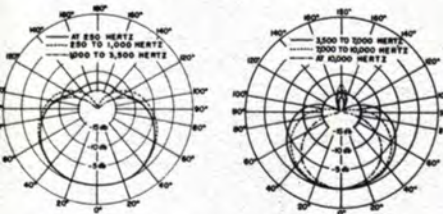
FREQ. RESPONSE



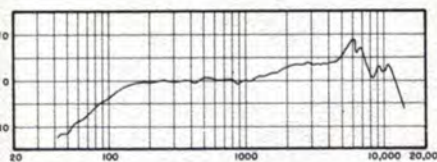
## MODEL 572G FREQ. RESPONSE



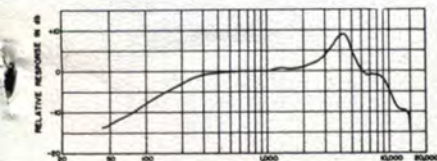
## MODEL 515SB-G18 POLAR PATTERNS



FREQ. RESPONSE



## MODEL 561 FREQ. RESPONSE





**SE30  
GATED COMPRESSOR/MIXER**



The totally new SE30 Gated Compressor/Mixer is the first and only component for professional users that combines a mixer with 600 ohm line output (for remote or studio applications) with a high-quality, "hands-free" gain riding compressor in a single, portable unit. Makes output control in remote pickups, talk shows, recording, program line compression and professional sound reinforcement smoother, surer and more trouble-free than it's ever been before.

**"HANDS-FREE" GAIN RIDING**

The SE30 provides a 40 dB compression range—adjustable to varying input requirements, with a compression ratio of approximately 15 to 1. Once set, the SE30 rides gain automatically, increasing or decreasing the system gain to maintain a constant output level. It gives the engineer in the studio or field freedom from tedious and sometimes erratic "gain riding." And, because compression is properly achieved in the mixer itself, the signal-to-noise ratio is optimized for better telephone line transmission on remotes. In studio applications, it allows maximum modulation level without overloading other components, which in turn means a cleaner signal and higher program quality. The SE30's variable response rate control allows the proper time constant to be selected for the type of program material involved: fast for voice applications such as sporting events; medium to slow for musical program sources.

**GATED MEMORY MINIMIZES "PUMPING"**

A unique *Gated Memory circuit* solves the "pumping" problem normally associated with an audio compressor by noting when the desired signal (such as voice or music) is not present, and putting a "hold" on the compression level at that point. This eliminates the crowd noise build-up when the announcer stops talking during a

sporting event, or the rush of record noise immediately following the finish of the recorded material. However, as soon as the desired program material returns, the "hold" is released and the compressor goes back into action.

**ENGINEERED FOR MAXIMUM EFFICIENCY AND EASE OF USE**

The SE30 offers maximum compatibility with all types of associated professional equipment, especially field equipment widely used in news, sports and special events remote coverage (such as sound film cameras, and tape and cassette recorders).

Rugged—modular construction and tough, epoxy-glass P.C. boards give it stamina to survive the roughing-up encountered in frequent remote assignments.

Wide range of input and output options (microphone, line and high level auxiliary) equip it for almost any professional application.

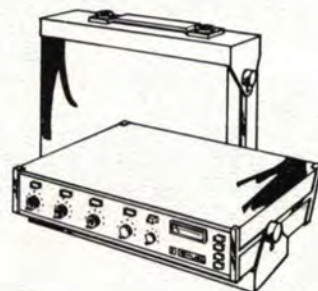
Loaded with useful features, such as: feedback-type gain controls that automatically increase the input clipping level as the individual gain controls are turned down; a built-in low-distortion 1 KHz tone oscillator; three-function VU meter; stereo parallel jack; human-engineered, "tactile-design" control knobs; self-contained battery and AC power supply, with automatic switchover to battery in case of AC failure; auxiliary meter light source for battery operation; removable AC line cord; disable switches for compressor and Gated Memory that convert the SE30 to a high quality linear mixer; and impressive performance specifications, with extremely low distortion, noise and RF susceptibility.

WRITE TO "SHURE MARKETING SERVICES" FOR COMPLETE TECHNICAL DESCRIPTION AND SPECIFICATIONS.

**SE30 CUSTOM ACCESSORIES**

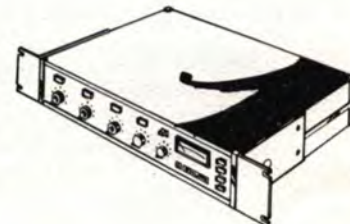
**MODEL A100A  
CARRYING HANDLE  
ASSEMBLY**

Dual-function assembly serves as a convenient carrying handle (when positioned over the front panel of the SE30) or as a tilt stand that gives greater visibility and easier operation (when positioned under the SE30). Locking knurled knobs on each end give fast, positive positioning. Rubber feet provide an extra cushion and non-slip grip on smooth surfaces when the A100A is used in tilt stand position.



**MODEL A100B  
RACK PANEL**

Equips the SE30 for mounting in a standard audio rack panel. Brackets mount securely on each side of the SE30 to extend overall width to 19" for mounting. With brackets in place, overall height is only 3½". The front panel of the SE30 is flush with the front of the rack when mounting is complete.





**M67  
PROFESSIONAL MICROPHONE MIXER**



A compact, lightweight and economical microphone mixer/remote amplifier specifically designed for studio and remote broadcasting, recording and sound reinforcement. Provides four low-impedance balanced microphone inputs, one input convertible to a line input. The excellent performance and versatility of the M67 makes it ideal for use as a complete, compact console for studio, remote, or original installation use—and as an "add-on" mixer for expanding existing facilities and providing additional microphone inputs with tape recorders and VTR's. Can be combined with Model M675 (page 15) to provide a complete, small size, professional quality broadcast console—with cueable magnetic phono and line inputs. Built-in tone oscillator provides calibration signal.

The M67 features line and microphone level outputs; an illuminated VU meter calibrated for +4 and +10 dbm out; extremely low noise and RF susceptibility; wide, flat frequency response; two-level headphone monitor jack. AC or battery operation (see accessory battery pack on page 17). Noiseless automatic switchover to battery if AC line fails.

Model M67. For 108-132 Volts AC, 50/60 Hz.

Model M67-2E. For 216-264 Volts AC, 50/60 Hz with Three-Conductor Cable.

**SPECIFICATIONS**

Frequency Response:  $\pm 2$  db from 30 to 20,000 Hz.

Gain: 90 db max., 150 ohm microphone into 600 ohm line output.

Noise: -129 dbv maximum equivalent input noise, 300 to 20,000 Hz., at full gain.

Hum and Noise: -125 dbv maximum equivalent input hum and noise, 20 to 20,000 Hz., at full gain.

Distortion: Under 1% from 20 to 20,000 Hz. at +10 dbm output, 0.5% typical.

Inputs: Four low-impedance microphone; one convertible to line, bridging or 600 ohms.

Outputs and Levels: +18 dbm max., 600 ohm line; -44 dbv max., microphone; 2 level headphone jack, suitable for 600-2000 ohm phones.

Size and Weight: 11 $\frac{3}{8}$ " x 7 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ "; 4 lbs., 3 oz.

Operating Temperature: 0° to 135° F.

**MODEL M675  
BROADCAST PRODUCTION MASTER**



A totally new approach to broadcast systems flexibility. The M675 was designed for use with the Shure M67 Series Microphone Mixers or the Shure M63 Series Audio Control Centers to provide a complete, small size, professional quality broadcast console—with cueable magnetic phono and line inputs.

Use the M675 with a Shure M67 as a production studio console with four microphone inputs, plus four line inputs (two switchable for magnetic phono), cueing and monitoring; as a complete audio console for both in-studio and remote assignments; as a complete CATV or CCTV (audio) console; or as a stand-by console. With the Shure M63 Audio Control Center (right), the M675 may be used for high level, equalized tape duplication and transfer.

Extremely low in noise and RF susceptibility, with wide frequency response. Four inputs, each with its own individual gain control and its own switchable "Cue" mode; two line inputs are convertible to magnetic phono inputs (RIAA equalization) through front-panel slide switches, and the other two line inputs are switchable between high impedance bridging and 600 ohm terminating line inputs. Four monitoring facilities: (1) an internal speaker built into the front panel for cue and program monitor (automatic program ducking when any channel is placed in the "Cue" position); (2) a rear-panel eight-ohm speaker output jack with the same material as the internal speaker, and with provision for external muting; (3) a front-panel headphone jack that provides an automatic muting of the internal (or external) speaker output for headphone cueing and monitoring; and (4) a rear-panel headphone jack which monitors program material *only*.

Brackets for stacking with either the M67 or M63 are included.

WRITE TO "SHURE MARKETING SERVICES" FOR COMPLETE TECHNICAL DESCRIPTION AND SPECIFICATIONS





## MODEL M63 AUDIO CONTROL CENTER



A new concept in economical total control of audio response. Can be used in production and transfer studios to equalize sound systems, correct room acoustics, produce special sound effects, reduce stand or stage noise, and for tape recording and duplication. Has two high-level inputs and five output provisions for the greatest response control and flexibility available.

Effective, continuously variable high-pass and low-pass 6 db-per-octave filters, plus separate bass and treble (boost and cut) controls, can be combined for virtually unlimited response characteristics.

Output VU meter. Five outputs: high impedance, high level, high impedance mic level, low impedance mic level, 600-ohm balanced line, and headphone. Two high-level high impedance inputs controlled by single input attenuator accept signal from virtually any high level source.

Model M63 Audio Control Center. For 108-132 Volts A.C., 50-60 Hz.

Model M63-2E Audio Control Center. For 216-264 Volts A.C., 50-60 Hz.

### SPECIFICATIONS

Frequency Response:  $\pm 2$  db 20-20,000 Hz (controls flat)

Gain: Line out. 38.5 db (600 ohm load)

Aux. out. 39.0 db (47 Kohm load)

High Impedance Mic out.  $-1.0$  db (33 Kohm load)

Low Impedance Mic out.  $-21.0$  db (150 ohm load)

Tone Controls: Bass  $+14$ ,  $-19$  db at 100 Hz

Treble  $+16$ ,  $-19$  db at 10 KHz

Filters: High Cut and Low Cut 6 db per octave, continuously variable  $-3$  db points

Noise Output (Line with 600 ohm load): 68 db below  $+8$  dbm 20 Hz - 20,000 Hz

Distortion: Under 1% THD at  $+8$  dbm output (600 ohm line)

Output:  $+18$  dbm max. 600 ohm line

Size and Weight: Only  $11\frac{3}{8}$ " x 6" x  $2\frac{1}{2}$ "; weight 3 lbs., 2 oz.

## MODEL M610 FEEDBACK CONTROLLER



The Shure M610 Feedback Controller marks the beginning of a new era in sound reinforcement. When the M610 is included in the sound system, its special set of filters and roll-off switches are used to smooth out the peaks and valleys in the system's frequency response, so that the system gain may be increased to significantly higher levels before reaching the feedback threshold! The user is able to "tune" the sound system according to the special acoustics of the room to maximize output and minimize feedback. The M610 gives you the basic advantages of room/system equalization—but without the high costs involved in elaborate, complex, highly specialized equalization equipment.

The M610 Feedback Controller uses eight resonant dip filters, each controlled by a linear-motion potentiometer. Each of these filters, unlike highly selective "notch" or single-frequency filters, acts on a band of frequencies around its center frequency, so that attenuation is smooth and complete. These filters function in the most critical portion of the audio spectrum, with center frequencies of 63, 125, 250, 500, 1,000, 2,000, 4,000 and 8,000 Hz. Each is infinitely variable from "0 attenuation" (flat) to a maximum cut of 12 dB. The M610 also features "high end" (above 8 kHz) and "low end" (below 63 Hz) roll-off switches to control response outside the range of these filters.

Front-panel volume control allows the user to conveniently increase the overall gain of the system to a level even higher than original level. The M610 may be used to improve sound quality and increase intelligibility by filtering out "problem frequencies" that cause oscillating ("ringing"), boominess and other disruptive resonances in acoustically difficult rooms, and to equalize program material and monitor speakers in studio and broadcast operations.

WRITE TO "SHURE MARKETING SERVICES" FOR COMPLETE TECHNICAL DESCRIPTION AND SPECIFICATIONS.



## M64 SERIES UNIVERSAL STEREO PREAMPLIFIERS



Low-cost, versatile, compact, low distortion and low noise stereo preamplifiers that provide gain, equalization, and choice of output impedances and levels. Can be used in a broad variety of preamplification and equalization applications: as a high-quality, low-cost magnetic phono preamplifier in broadcast applications; to provide 7½ IPS NAB equalization for tape decks containing no electronics; to give nonequalized amplification wherever a boost in microphone output level is required. When used in conjunction with the A95 Series In-Line Transformers, an output of approximately -20 dbm is available.

Three switch-selected equalization positions: RIAA for magnetic stereo cartridges; FLAT for high-impedance microphones or for use as buffer amplifier; NAB for tape head equalization. Built-in power supply (M64 operates on line voltages of 108-132V, 50/60 Hz; M64-2E operates on 216-264V, 50/60 Hz). M64 and M64-2E may be operated from 24 to 36 V DC battery power supply (such as Shure A67B Power Supply). Minimum of 50 db isolation between channels. All silicon transistor circuit for ultra-quiet operation and complete freedom from microphonics. High level, high impedance outputs; or low level, low impedance unbalanced outputs. Attractive, small case with provisions for permanent installation.

M64 Stereo Preamplifier. For 108-132 Volts A.C., 50-60 Hz.

M64-2E Stereo Preamplifier. For 216-264 Volts A.C., 50-60 Hz.

### SPECIFICATIONS

<b>Input Impedance:</b>	50,000 ohms and 350 pF for all functions
<b>Output Impedance:</b>	High level, high impedance: minimum recommended load 22,000 ohms. Low level, low impedance: 600 ohms unbalanced
<b>Frequency Response:</b>	Flat — $\pm 2$ db from 20 Hz to 20,000 Hz Phono — $\pm 2$ db of the standard RIAA Curve from 40 Hz to 15,000 Hz Tape — $\pm 2$ db of the 7½ IPS NAB Curve from 50 Hz to 15,000 Hz
<b>Gain at 1 kHz:</b>	— To a high level, high impedance output: RIAA 34.5 db Flat 37.0 db NAB 27.5 db — To a low level, low impedance output: 23.5 db lower than high level output
<b>Distortion:</b>	Under 1% total harmonic distortion for an output of 2 volts at 1,000 Hz in phono, flat & tape positions.
<b>Hum and Noise:</b>	Phono — Better than 71 db below 10 mv input, from 20-20,000 Hz Flat — Better than 64 db below 10 mv input, from 20-20,000 Hz
<b>Channel Separation:</b>	50 db or better at 1,000 Hz
<b>Channel Balance:</b>	Channels matched to within 2 db at 1,000 Hz
<b>Dimensions:</b>	5½" wide x 2¾" high x 4½" deep
<b>Weight:</b>	1¾ lbs.

## MODEL SE20 SOLID STATE STEREO TRANSCRIPTION PREAMPLIFIER



A self-contained, high level, equalized stereo preamplifier specifically designed for highest quality disc reproduction in broadcasting and recording studios. Precise RIAA/NAB equalization. Noise and RF susceptibility are extremely low. Full line output capability to +20 dbm. Under 0.5% distortion at +20 dbm! Individual high and low frequency equalization trimmers on each channel. Individual channel level controls. Excellent channel separation permits use as two separate monaural channels.

### SPECIFICATIONS

<b>Frequency Response:</b>	$\pm 1$ db from 30 to 15,000 Hz. (RIAA/NAB disc playback characteristic)
<b>Gain:</b>	53 db, adjustable.
<b>Distortion:</b>	Less than 0.5% THD at +20 dbm from 20 to 20,000 Hz.
<b>Channel Separation:</b>	Greater than 50 db.
<b>Hum and Noise:</b>	At least 60 db below +6 dbm output.
<b>Input Impedance:</b>	47,000 ohms.
<b>Output Impedance:</b>	For 600 or 150 ohm balanced line. Approximately 80 ohms, actual.
<b>Operating Temperature:</b>	Within 0.5 db of all specifications at 20 to 135° F.
<b>Operating Voltage:</b>	120 volts $\pm 10\%$ at 50/60 Hz. 245 volts $\pm 10\%$ at 50/60 Hz.
<b>Dimensions:</b>	Panel Opening 3¾" x 7", 9½" deep.
<b>Weight:</b>	7 lbs., 10 oz.

## SA-1 SERIES SOLO-PHONE® HEADPHONE AMPLIFIERS



An all-transistor preamplifier/amplifier ideal for "custom" monitoring facilities in broadcast and recording applications. Unbalanced input, RIAA or High Level, may be used to drive better quality eight- or 16-ohm headphones. Broad frequency response and exceptionally low distortion, even with difficult low frequencies. Clutched stereo volume controls. Accommodates two sets of headphones if necessary.

Model SA-1 Solo-Phone Amplifier 105-125 Volts A.C., 50-60 Hz. Dimensions: 10¼" x 3½" x 3"; Weight: 2 lbs.

Model SA-2E Same as Model SA-1, but for 120/240V. AC.

Model SA-1F Solo-Phone Amplifier Same as Model SA-1 (above), but designed for panel mounting in 10½" x 4½" panel opening, behind-panel depth of 3½".

Model SA-2FE for 120/240V. AC.



## A15 SERIES "PLUG-IN" MICROPHONE ATTENUATORS, EQUALIZERS AND ADAPTERS



4 1/2" long x 3/4" dia.

Solve sound problems without time-consuming rewiring! Shure "In-Line" microphone attenuators, equalizers and adapters are perfect for quick corrections and modifications in response and performance of microphones and sound systems. They plug in and unplug in seconds to give you instant modifications! The cost of Shure Plug-In Problem Solvers is so low that you can afford to keep them handy for all installations and applications.

### SPECIFICATIONS

**Connectors:** Designed to mate with Cannon XL series, Switchcraft A3 series or equivalent.

**Input:** Female\*

**Output:** Male\*

**Pin Connections:** Balanced, input and output, Pin 2 and 3 "hot," Pin 1 shield and case.

**Impedance Source:** Units are intended to be driven from 150 ohm, low level source except for: A15LA — up to 10,000 ohms and +24 dbm; A15PR — any impedance, any level.

**Termination:** When terminated with impedances other than 150 (25 to 1,000 ohms), the effect on response characteristics is nominal.

**Case Material:** Steel with professional gray finish.

**Dimensions:** 4 1/2" long, 3/4" diameter.

**SPECIAL NOTE:** The use of in-line devices is not recommended with phantom (simplex) powered condenser microphone systems.

\* A15A, A15PR and A15PA are symmetrical and can be used in either direction.

**A15A MICROPHONE ATTENUATOR** (Yellow Nameplate) Prevents input overload. Ideal in applications where very strong signals are applied to a microphone input, as in feeding high level vocal or instrumental signals into microphone mixers, consoles or recorders. The Model A15A has an insertion loss of 15 db and an input and output impedance of 150 ohms. It is symmetrical, so it can be used in either direction.

**A15LA LINE INPUT ADAPTER** (Blue Nameplate) Converts balanced low impedance microphone input to line level input. Provides a simple means of using existing microphone level inputs for high level signals. It has a balanced bridging input (100,000 ohms). Attenuation is 50 db.

**A15HP HIGH PASS FILTER** (Gray Nameplate) Provides a low-frequency cut-off to reduce all types of unwanted low-frequency mechanical noises, such as boom, stand, or floor rumble; or electrical hum; or environmental sounds such as crowd noise, wind sounds, air conditioner rumble. Can also be used as an equalizer to create special effects. Slope is 12 db per octave, down 3 db at 100 Hz with 150 ohm load. One kHz loss is 0.5 db maximum.

**A15LP LOW PASS FILTER** (Green Nameplate) Provides high-frequency cut-off to reduce effects of objectionable high-frequency noises. Useful for suppressing sibilance. Excellent for minimizing difficult "hiss," jingling, crinkling, whistling sounds. Can also be used as an equalizer to create special effects. Slope is 12 db per octave, down 4 db at 8 kHz with 150 ohm load. One kHz loss is approximately 0.5 db.

**A15PA PRESENCE ADAPTER** (Orange Nameplate) Adds controlled vocal or instrumental "presence" in recording and broadcast applications. Adds extra brilliance to sound systems. Improves voice range intelligibility. Provides a moderate response rise of 4 db in the 3 to 5 kHz region. Loss at 500 Hz is 6 db with 150 ohm output load. It is symmetrical, so it can be used in either direction.

**A15RS RESPONSE SHAPER** (Black Nameplate) Provides excellent sibilance filtering in broadcasting and recording applications. It may also be used to flatten response in microphones which exhibit a rising characteristic in the 6 kHz region. It provides a 4 db dip in response in the 6 kHz region. One kHz loss is approximately 2 db (150 ohm output load).

**A15PR PHASE REVERSER** (Red Nameplate) Reverses the phase of a balanced line without modification of the equipment. It is symmetrical and can be used in either direction.

**A15BT BRIDGING TRANSFORMER** (Brown Nameplate) Balanced unit that matches balanced or unbalanced devices of different impedances. (33 K ohm primary, and 600 or 7,500 ohm secondary.)

**A15TG TONE GENERATOR** (White Nameplate) Produces a continuous 700 Hz signal capable of driving low impedance balanced lines, and is extremely useful in setting up and trouble-shooting audio equipment. Plugs into microphone input to enable engineer to check levels, connections, mixer inputs, cables, and speakers. Permits one man to do the work of two. Powered by a miniature mercury battery.

## A95 SERIES LINE TRANSFORMERS



2 1/2" long x 3/4" dia.

High quality transformers which make it possible to connect low impedance (50 to 250 ohm) lines to high impedance, or vice versa, such as connecting a low impedance microphone to a high impedance amplifier input. Solves problems of excessive high frequency loss and objectionable hum when long lengths of cable are used.

### Model A95A:

**Input** — Professional three pin audio connector (male)†  
**Output** — Amphenol MC1M type connector\*



4 1/2" long x 3/4" dia. (Including removable adapter)

### Model A95P:

**Input** — Professional three pin audio connector (male)†  
**Output** — Standard 1/4" phone plug with locking ring



3 1/2" long x 3/4" dia.

### Model A95F:

**Input** — Professional three pin audio connector (female)†  
**Output** — Amphenol MC1M type connector\*



5 1/2" long x 3/4" dia. (Including removable adapter)

### Model A95FP:

**Input** — Professional three pin audio connector (female)†  
**Output** — Standard 1/4" phone plug with locking ring



**A97A LINE MATCHING TRANSFORMER** High quality transformer designed to match 150 ohm-600 ohm microphone outputs to medium impedance (1-10 K ohm) devices, such as those frequently used in cassette recorders. **Input** — professional three-pin audio connector (Male)†. **Output** — MC1M type connector\*.

† Designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connector.

\* Mating connector supplied with unit.



**SM53 SYSTEM ACCESSORIES**



**A53M ISOLATION MOUNT** A breakthrough in noise isolation. Reduces mechanical and vibration noises by more than 20 db. For desk, floor stand and fish pole use.  $\frac{5}{8}$ "-27 female thread with 180° swivel action. Size:  $3\frac{1}{2}$ " H x  $1\frac{1}{2}$ " D x  $1\frac{1}{8}$ " diameter.



**A53WS WINDSCREEN** Front and rear windscreens sharply reduce wind and air gusts outdoors, and permit rapid and abrupt boom movement indoors. Gives extra "pop" protection for ultra close-talking applications.



**A53C ISOLATION CABLE** Isolates and minimizes vibration and mechanical noises induced or transmitted by cable when using A53M Isolation Mount. Assembly is 18" long.



**A53B BOOM MOUNT ASSEMBLY** A complete assembly that provides excellent support, control and noise isolation. Small size minimizes shadows, makes it ideal for either large or small booms. Mounts easily on booms, and permits quick microphone removal. Includes Model A53M Isolation Mount and Model A53C Isolation Cable. (Model A53WS Windscreen should be used when very fast boom movements or outdoor applications are expected.) Length: 8 $\frac{3}{4}$ ".



**A53E BOOM EXTENSION PIPE** Rugged 20" boom extension pipe with A53C Isolation Cable pre-installed. Provides the same noise isolation as the A53C Cable, while it lowers the microphone 20" below boom to reduce shadows and lighting problems.



**A53G "POP"/"WIND FILTER** Adapts the SM53 for close-talking and outdoor assignments by adding outstanding "pop" and wind filtering. Mounts in seconds—unscrew the grille assembly of the SM53 and screw on the A53G. Identical in finish and appearance to SM53 grille assembly, except slightly larger. Does not affect microphone level, creates only minimal change in response (in 4 kHz region) and in directivity. It is also the replacement grille for SM54.



**S53P LOW-PROFILE MICROPHONE STAND** A breakthrough in distance miking technique. The S53P holds the SM53 microphone just a fraction of an inch above the floor for better sound quality in "footlight" type distant pick-up recording or sound reinforcement of choral, orchestral or ensemble musical events or dramatic presentations. Minimizes the "hollow sound" by eliminating phase cancellation caused by floor reflections. Provides very effective mechanical noise isolation. Height: 4-25/32".

**MICROPHONE ACCESSORIES**



**C50CN EXTENSION CABLE**

A 20-foot, 2-conductor shielded microphone cable pre-wired with male and female professional three pin audio connectors, designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent.



**A55M ISOLATION MOUNT**

Reduces mechanical and vibration noises by more than 20 dB. For use with SM50, SM57 and SM58 microphones. Size:  $3\frac{3}{4}$ " H x  $1\frac{1}{2}$ " D x 2" Diam.



**A2WS WINDSCREEN**

A high performance, rugged windscreen with exclusive lock-on provision that prevents accidental removal or loss. Effectively controls wind noise and explosive breath sounds ("pop"). Neutral gray. Handsome, finished appearance. Fits Shure models SM56, SM57, 544, SM76, 571 and 572G professional microphones.

**A61WS WINDSCREEN**

Effective control of wind and breath noises for all Shure "ball-type" microphones, such as Model SM58. Easy, "slip-on" attachment.



**MICROPHONE STANDS,  
LAVALIERS &  
OTHER ACCESSORIES**



**S33 SERIES STANDS**

Low silhouette ideal for TV use. Heavy (2½ lbs.) for rock-steady support of any microphone having standard 5/8"-27 thread. Unique quick microphone removal provisions. Model S33B has black satin finish; Model S33P has textured non-glare dark gray finish to match Shure "SM" series microphones. Base size: 1-5/16" H x 5-3/8" W x 6" D.



**S39A VIBRATION ISOLATION STAND**

Isolates microphone from even extreme mechanical vibration. For tables, desks, podiums, etc. Designed for use with any Shure microphone or swivel adapter assembly. Heavy duty "non-fatigue" foam rubber internal isolation element. Low-silhouette, black high-impact non-glare plastic housing. Base size: 1¾" H x 5¼" W x 7¼" D.



**S55P LOW-PROFILE MICROPHONE STAND  
FOR DISTANT MICROPHONE PICKUP.**

A breakthrough in microphone placement technique. Minimizes the "hollow sound" caused by floor reflections usually associated with distant microphone pick-up techniques. Holds the microphone just a fraction of an inch above the floor for better sound quality in "footlight" type placement for recording or sound reinforcement of choral, orchestral or ensemble musical events and dramatic presentations. Effectively isolates mechanical noises. For Shure SM57 and other Shure tapered-handle microphones. (Not recommended for microphones with "on-off" switches in the handle.) Height: 4-25/32".

**MICROPHONE MOUNTS  
& ADAPTERS**



**QUICK-DISCONNECT ISOLATION UNITS**

Designed for use with microphones normally mounted on desk or floor stands but which are periodically removed from stand for hand-held or carry-around use. The molded rubber insert isolates the microphone from mechanical vibration.

**Model A45** Designed both for microphones incorporating an isolation assembly such as Model SM56 and for microphones using an A25B Swivel Adapter such as model SM50, SM57 and SM58. For use with standard 5/8"-27 microphone stands. Satin Aluminum finish.

**Model A45B** Same as A45, but Black finish.



**SWIVEL ADAPTER**

**Model A25B (Shown)** To be used with Models SM50, SM57, and SM58 microphones. For use with standard 5/8"-27 desk or floor stand.

**Model A57C** Slip-in Swivel Adapter for 3/4" diameter microphones, such as the SM76 and SM60. For use with standard 5/8"-27 desk or floor stand.



**SWIVEL ADAPTER**

**A57SL Locking Swivel Adapter** Snap-in Swivel Adapter for Model SM53 and other 3/4" diameter microphones. Provides snap-in operation with a positive locking feature. For use with standard 5/8"-27 desk or floor stand.

**Model A57R** Slip-in Swivel Adapter for Model 571.



**A51L LAVALIER ASSEMBLY**

Designed especially for the Shure SM51 microphone. "Positive-lock" design holds microphone securely, yet allows easy, noiseless adjustment of microphone position.

**A57L LAVALIER ASSEMBLY**

Same as above, but designed for the Shure Model 571 microphone.





## GOOSENECKS & DUAL MOUNTS



### GOOSENECKS

High quality flexible goosenecks in 6", 12" and 18" lengths. "Silent-type" design limits mechanically induced noises. Mounting flange included.

Model G6A 6" flexible gooseneck (side vent).

Model G12A 12" flexible gooseneck (side vent).

Model G18A 18" flexible gooseneck (side vent).

Model G12 12" flexible gooseneck.

Model G18 18" flexible gooseneck.

Model G12-CN 12" flexible gooseneck with Female professional three-pin audio connector\*.

Model G18-CN 18" flexible gooseneck with Female professional three-pin audio connector\*.

\*Designed to mate with Cannon XL series, Switchcraft A3 series, or equivalent connector.



### DUAL MICROPHONE MOUNTS

Designed for mounting two microphones, one above the other. Minimal visual obstruction, minimal disturbance of directional characteristics or frequency response of microphones, feeding the same mixer. Ideal for mounting microphones feeding separate systems, or when one microphone is needed as a spare, such as on speakers' rostrums.

Model A25M Designed for use with Shure Models SM50 and SM57.

Model A26M Designed for use with "ball-type" Model SM58, and for the Model SM57 when used with A2WS Accessory Windscreen.

## SHURE COMPONENT ACCESSORIES



**AC60 ATTACHE CARRYING CASE** Handsome slim-line vinyl leatherette attache case holds mixer, microphones, cables. 3 $\frac{3}{8}$ " x 18 $\frac{3}{8}$ " x 11 $\frac{3}{8}$ ". Fits M63, M610, M67 and M675 Series components.



**A68S STACKING KIT** Brackets for vertical stacking of two or more M63, M67 or M610 series components. Includes A68SC cable below.



**A67H HANDLE/TILT STAND** Serves as a handy carrying handle, or provides a locking tilt for 20° for greater control visibility and ease of operation. Fits M67 Series Mixers, M675 Broadcast Production Master, M63 Audio Master and M610 Feedback Controller.



**A68R RACK PANEL KIT** Standard 3 $\frac{1}{2}$ " x 19" audio equipment rack panel for use with the M63, M67 and M675 series components. Textured non-glare dark gray finish. Also available with aluminum finish (Model A68R-AL), and in black finish (Model A68R-BL).

**A68SC INTERCONNECTING CABLE** Phono plug to phono plug cable for mix bus to mix bus connection when stacking the M67 Series mixers. (Not shown)



**A67B BATTERY POWER SUPPLY** 27 V.D.C. battery designed to power M63 or M67 components. May also be used with the M67 as either the sole power source or as a stand-by power source during AC operation, providing automatic, noiseless switchover in case of AC failure.

**A68M MICROPHONE PRE-AMPLIFIER** Adapts the "Auxiliary Input" of any Shure audio control component to accept high impedance or low impedance microphone signals or balanced line level input.



### MODEL SC35C PROFESSIONAL STUDIO PHONO CARTRIDGE



The first phono cartridge designed specifically for broadcast studio applications—actually improves on-the-air playback quality of all recorded material, including stereo and monaural LP's, 45's, and matrix four-channel. The SC35C uses an entirely new stylus assembly that is rigid enough to withstand the punishment of continuous back-cuing, yet compliant enough to offer excellent mid- and high-frequency reproduction. Engineered for engineers—cutaway stylus grip design and special "band alignment point," a Brilliant Orange dot on the stylus tip that increases tip visibility and makes record band location "missproof." Frequency response is extremely flat ( $\pm 1$  db) up to 15,000 Hz, with a smooth roll-off up to 20,000 Hz to minimize high frequency "splatter" in FM broadcasts caused by high frequency pre-emphasis. Model SS35C Spherical Stylus is the replacement stylus.

#### SPECIFICATIONS

Trackability at 4 grams tracking force using a Shure/SME arm:

14 CM/SEC at 400 Hz; 27 CM/SEC at 1,000 Hz.  
33 CM/SEC at 5,000 Hz; 20 CM/SEC at 10,000 Hz.

Frequency Response: From 20 to 20,000 Hz

Output Voltage: 5.0 mv per channel at 1,000 Hz at 5 CM/SEC

Channel Separation: More than 20 dB at 1,000 Hz

Tracking Force: 4 to 5 grams

### M44 SERIES PHONO CARTRIDGES— A BROADCAST STANDARD



With their unusual combination of excellent performance, ruggedness, and inexpensive price, the Shure Standard Series cartridges are the most widely used pickups in stereo and stereo compatible monophonic broadcasting. They feature exceptionally good sound, unusual uniformity and stand up best under hard usage. Wide choice of models, including spherical or elliptical styli; light or heavy tracking; special 78 RPM stylus is available.

**M44C:** 0.7 mil spherical stylus, 3 to 5 grams tracking. Intended for older, heavier broadcast arms, or to allow a heavier feel with lighter arms. The M44C is ideally suited to "combo" operations, and is the lowest cost cartridge in the Standard Series.

**M44-7:** Similar to the M44C, but with a lower tracking force range of 1½ to 3 grams. The lighter tracking force minimizes record wear, and is recommended for arms permitting less than 3 grams tracking force, and when heaviest feel is not required.

**M44E:** Similar to the other Standard Series cartridges, but features a Biradial (Elliptical) stylus to minimize tracing distortion, especially in inner grooves. The moderate tracking force range of 1¾ to 4 grams permits proper operation in many existing arms.

A range of interchangeable styli is offered, including the N44-3 for 78 rpm recordings. All N44 Series styli may be interchanged in any M44 Standard Series cartridge.

#### M44 SERIES CARTRIDGES

Cartridge Number	Stylus Number	Tracking Force	Type of Stylus	Stylus Size	Recommended Applications
M44-7	N44-7	Medium 1½-3 grams	Spherical	.0007"	All 33⅓ & 45 RPM Records
M44C	N44C	Heavy 3-5 grams	Spherical	.0007"	All 33⅓ & 45 RPM Records
M44E	N44E	Medium 1¾-4 grams	Biradial (Elliptical)	.0004" x .0007"	All 33⅓ & 45 RPM Records
	N44-3	Medium 1½-3 grams	Spherical	.0025"	78 RPM Records

#### SPECIFICATIONS

Frequency Response: From 20 to 20,000 Hz

Output Voltage: At 1,000 Hz at 5 CM/SEC:

Model M44-7, 11 millivolts per channel.

Model M44C, 9.3 millivolts per channel.

Model M44E, 9.3 millivolts per channel.

Channel Separation: More than 25 db at 1,000 Hz

Output Voltage: 3.5 mv per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity. Output from each channel within 2 dB.



**SUPER-TRACK "PLUS" CARTRIDGES**

•• **THE INCOMPARABLE V-15 TYPE III**



A singular achievement in phono cartridge design—and the worthy successor to the world-acclaimed V-15 Type II Improved. A totally new laminated magnetic core structure and an exquisitely designed stylus assembly which reduces effective stylus tip mass by 25% produced these significantly improved performance characteristics: (1) higher-than-ever trackability at forces that are lower than ever (¾ to 1¼ grams); (2) an astonishingly flat frequency response with no noticeable emphasis or de-emphasis at any frequency; (3) an extended dynamic range even beyond that of our V-15 Type II Improved; and (4) all without a reduction in output level.

The V-15 Type III is painstakingly quality-controlled for a uniformity of response and performance previously unavailable in cartridges at any price. Tracks difficult "hot" passages cut at highest velocities, including harpsicords, cymbals, sibilant vocal sounds, and orchestral bells at a true, ¾ gram to 1¼ grams tracking force.

Eliminates break-up and FM over-modulation due to tracking distortion. Its sound is absolutely neutral and coloration-free. An outstanding playback component for fine quality FM broadcasting and recording studios.

Model V-15 Type III Super-Track "Plus" cartridge. Bi-Radial Elliptical Stylus. Model VN35E Bi-Radial Elliptical Stylus is the replacement stylus.

Model V-15 III-G Super-Track "Plus" cartridge. Spherical stylus.

Model VN3-G Spherical Stylus is the replacement stylus.

Model VN78E Bi-Radial Elliptical Stylus. Designed specifically for playing 78 rpm monaural records with either V-15 Type III or V-15 III-G. 1½ to 3 grams tracking force range.

**SPECIFICATIONS**

Trackability at 1 gram using a Shure/SME arm (Reference—Shure TTR-103 Laboratory Test Record):

26 CM/SEC at 400 Hz; 38CM/SEC at 1,000 Hz  
35 CM/SEC at 5,000 Hz; 26 CM/SEC at 10,000 Hz

Frequency Response: 10 to 25,000 Hz

Output Voltage: 3.5 mv per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity. Output from each channel within 2 dB.

Channel Separation: Nominally 28 dB at 1,000 Hz, nominally 20 dB at 10,000 Hz

Tracking Force: ¾ to 1¼ grams

**NOTE:** To realize the full performance capability of the Shure V-15 Type III, it must be used in tone arms specifically designed for proper tracking at less than 1¼ grams. The Shure SME Series II Improved tone arm is recommended.

**NOTE :**

ALL SHURE CARTRIDGES LISTED ON THESE PAGES ARE COMPATIBLE WITH ALL FOUR-CHANNEL MATRIX SYSTEMS

**DELUXE SERIES**



**MODEL M91ED HI-TRACK CARTRIDGE**

**With Nude-Mounted Diamond Stylus Tip** Optimized design parameters in the stylus assembly give the M91ED superb high frequency trackability, and overall performance second only to the incomparable V-15 Type III Super-Track "Plus." Nude-mounted diamond stylus tip for reduced stylus tip mass. Smooth peak-free response makes a definite improvement in sound quality, particularly in FM and FM Stereo operations. Model N91ED Bi-Radial Elliptical Stylus is the replacement stylus.

**SPECIFICATIONS**

Trackability at 1 gram tracking force using a Shure/SME arm:

22 CM/SEC at 400 Hz; 33 CM/SEC at 1,000 Hz  
28 CM/SEC at 5,000 Hz; 19 CM/SEC at 10,000 Hz

Frequency Response: From 20 to 20,000 Hz

Output Voltage: 5.0 mv per channel at 1,000 Hz at 5 CM/SEC

Channel Separation: Nominally 25 dB at 1,000 Hz

Tracking Force: ¾ to 1½ grams

**CUSTOM SERIES**



**MODELS M91E & M75EJ TYPE 2 HI-TRACK CARTRIDGES**

Excellent trackability in the ¾ to 3 gram tracking force range—yet at relatively modest costs. Both are well-suited for "high fidelity" FM operations, and both feature a retractile-design stylus that helps prevent record damage during back-cuing.

Model M91E trackability at 1 gram: 20 CM/SEC at 400 Hz; 28 CM/SEC at 1,000 Hz; 25 CM/SEC at 5,000 Hz; 18 CM/SEC at 10,000 Hz. Tracking force range: ¾ to 1½ grams.

Model N91E Bi-Radial Elliptical Stylus is the replacement stylus.

Model M75EJ Type 2 trackability at 2 grams: 28 CM/SEC at 400 Hz; 35 CM/SEC at 1,000 Hz; 30 CM/SEC at 5,000 Hz; 20 CM/SEC at 10,000 Hz. Tracking force range: 1½ to 3 grams.

Model N75EJ Type 2 Bi-Radial Elliptical Stylus is the replacement stylus.

**EXTRA-DURABILITY SERIES**



**MODEL M93E HI-TRACK CARTRIDGE**

For moderate trackability in the 1½ to 3 gram tracking force range. Very rugged and well-designed for back-cuing and robust operation. Trackability at 2 grams: 18 CM/SEC at 400 Hz; 25 CM/SEC at 1,000 Hz; 24 CM/SEC at 5,000 Hz; 13 CM/SEC at 10,000 Hz.

Model N93E Bi-Radial Elliptical Stylus is the replacement stylus.

**MODELS M75-6S & M75CS HI-TRACK CARTRIDGES**

Model M75-6S is identical in performance to the Model M93E above, but uses a spherical stylus. Model M75CS also uses a spherical stylus, and reaches the performance levels of Models M93E and M75-6S at a 2 to 4 gram tracking force range.

Model N75-6 Spherical Stylus is the replacement stylus for Model M75-6S.

Model N75C Spherical Stylus is the replacement stylus for Model M75CS.

**STYLI FOR 78 RPM RECORDS**

**MODEL N75-3** Fits any of the M75 Series cartridges, or V-15 Type II Series. Spherical tip with .0025" radius, 1½ to 3 grams tracking.

**MODEL N91-3** Fits any of the M91 and M93 Series cartridges. Spherical tip with .0025" radius, 1½ to 3 grams tracking.



**SME SERIES II IMPROVED  
"THE BEST PICKUP ARM IN THE WORLD"**



The ultimate in independent tone arms—now redesigned for significantly superior performance. The Shure-SME Series II Improved combines the flawless craftsmanship and unmatched precision of its predecessor (the SME Series II) with design improvements that reduce tone arm/cartridge system mass and friction to significantly lower levels.

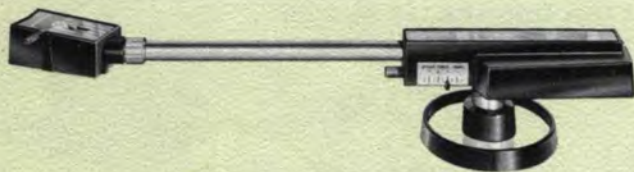
Ultra-low friction pivot points, with high-precision, protected ball and knife-edge bearings; arm deflects either vertically or horizontally with less than .020 gram force applied at stylus tip. Very low overall mass, with heavier elements positioned near the arm fulcrum. Low distortion geometry.

Precisely accurate adjustments for every factor related to perfect tracking, including height, overhang, length, tracking force and bias (anti-skating). Accepts all Shure Cartridges, and other cartridges weighing four to nine grams, and allows positive tracking force adjustment in 1/4-gram increments from 0 to 1 1/2 grams. Deluxe hydraulic cueing control.

Recommended for use with all Shure high trackability cartridges, and when teamed with the super-trackability Shure V-15 Type III, the result is a tone arm/cartridge system that is, quite simply, unsurpassed for precision record playback. Highly recommended for "high fidelity" FM broadcasting applications in which quality requirements are uncompromisingly high. Model 3009 Series II Improved features a non-removable shell for lower mass. For applications in which frequent cartridge changes are expected, the Model 3009/S2 with removable shell is available.

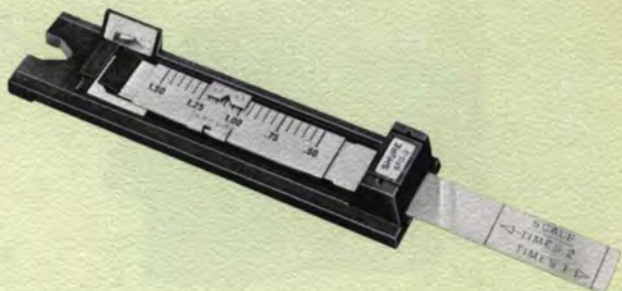
**Note:** SME tone arms are distributed by Shure only in the U.S. and Canada.

**SHURE PROFESSIONAL TONE ARM**



High quality, rugged, simple arm for tracking at 1 1/2 grams or higher. Full range of adjustments for static and dynamic balance, cartridge overhang, arm height, etc. Direct reading tracking force scale. Twist-to-lock head accommodates any stereo or mono cartridge. A real "work-horse" that takes abuse. Simple mounting through a single hole from the top of the table; plug-in cable. Model M232 is for 12" turntables; Model M236 for 16" turntables.

**SFG-2 STYLUS FORCE GAUGE**



Low-cost, precision stylus force gauge permits measurement of tracking force and allows precise resetting of stylus force to maintain optimum trackability and sharply reduce wear on records and stylus tip. Especially valuable when cartridges are replaced. Accuracy to within 1/10th of a gram in 1/2 to 1 1/2 gram primary operating range; extended range to 3 grams. The SFG-2 uses friction-free, stainless steel pivot points and easy-to-read reference bars in a permanently accurate "balance" system — no springs to weaken or wear out. Special tilted mirror reflects reference bar positions for effortless, accurate reading. Force measurement is made with the tone arm in actual playing position.



**TTR-103 CARTRIDGE TEST RECORD**

A technical recording for use with lab instrumentation to measure cartridge trackability at high- (10.8 kHz), mid- (1 kHz) and low-frequency (400 Hz) levels. 45 rpm.

**TTR-107 CARTRIDGE TEST RECORD**

Designed to measure channel separation and level at 1 kHz. Lab instrumentation required. 33-1/3 rpm.

**TTR-110 CARTRIDGE TEST RECORD**

The successor to Shure's internationally famous TTR-101 (the original Audio Obstacle Course recording), revised for even more sensitive trackability tests. Designed for subjective listening appraisal of phono cartridge performance through sound quality and character. Uses individual instruments and orchestral passages cut at increasing recorded velocities. Complete instructions and "listening guidelines" included. 33-1/3 rpm.