SHURE

PROFESSIONAL PRODUCTS DATA

222 HARTREY AVE., EVANSTON, IL., 60204 U.S.A. • AREA CODE 312/866-2200 • CABLE: SHUREMICRO

GENERAL

The Models SM53 and SM54 are rugged dynamic cardioid microphones expressly designed for professional applications requiring the ultimate in sound quality and control. The performance and appearance of the two models are very similar; however, the SM54 is specifically designed for use in very difficult closetalking and hand-held situations because of its immunity to "pop" and breath blasts.

Microphone Features:

- Broad, smooth frequency response: provides clean, natural reproduction of both voice and music.
- Cardioid directional pattern: the optimum pattern for comfortably wide front working area with excellent side and rear rejection.
- Uniform, symmetrical polar pattern: off-axis rejection is uniform with frequency and completely symmetrical about the axis to prevent sound coloration due to off-axis pickup and to provide maximum control of unwanted sound
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 Integral acoustic "pop" filter on the SM54 virtually eliminates problems of explosive speech and breath sounds.
- Minimal proximity effect: permits the same well balanced sound from close talking to distant pickup.
- Mechanical noise isolation: cartridge shockmounted to minimize stand and handling noise.
- Bass rolloff switch: provides a gradual low frequency rolloff in applications where an overall rising response characteristic is advantageous.
- Extremely low hum sensitivity: permits use in extreme hum fields.
- Rugged construction: assures dependable operation with unchanging performance.

The SM53 and SM54 are designed for both stand and hand-held use. No special precautions are required to avoid obstruction of the rear entries, since normal operation is assured even with only one of the small rear entry holes open.

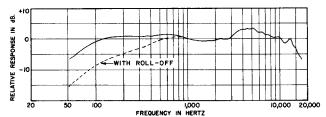
The reliable performance, outstanding features and handsome appearance of the SM53 and SM54 make them extremely versatile and ideally suited for many demanding applications in television, radio, recording, motion pictures and sound reinforcement. They may be intermixed on stage and on camera with near identical appearance and performance.

VARIATIONS

Models SM53-CN and SM54-CN: Same as Models SM53 and SM54, respectively, except supplied with professional three-pin male audio connector on equipment end of cable. (See Specifications for details on cable.)

Type SPECIFICATIONS
Dynamic

Frequency Response 70 to 16,000 Hz (See Figure 1)

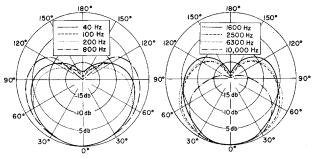


TYPICAL FREQUENCY RESPONSE FIGURE 1



Polar Pattern

Cardioid (Unidirectional) Response-Uniform with frequency, symmetrical about axis (See Figure 2)



POLAR PATTERN
FIGURE 2

Impedance

Microphone rating impedance is 150 ohms (175 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms

Output Level (at 1000 Hz)

Open circuit voltage -81.0 dB (0.09 mV) (0 dB = 1 volt per microbar)

Power level -60.0dB (0 dB = 1 milliwatt per 10 microbars)

Hum Pickup (typical)

13 dB equivalent SPL per millioersted

Bass Rolloff

See Figure 3 for location of response selector switch. See Figure 1 for rolloff response

Cable

6.1m (20 foot) two-conductor shielded broadcast type equipped on microphone end with professional three-pin female audio connector†

Connector

Professional three-pin male audio connector†

Swivel Adapter

Snap-in, positive-action, adjustable from 0° to 90° , with standard 5/8"-27 thread

Case

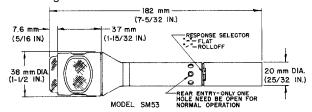
Aluminum and stainless steel

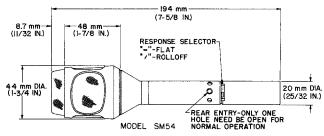
Case Finish

Matte metallic

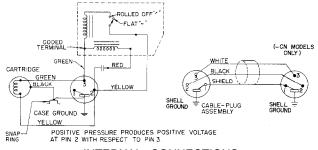
Dimensions

See Figure 3





OVERALL DIMENSIONS FIGURE 3



INTERNAL CONNECTIONS FIGURE 4

Net Weight (less cable) 240 grams (8½ ounces)

Shipping Weight

1.36 kg (3 pounds)

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

ARCHITECTS' SPECIFICATIONS

The microphone shall be a moving-coil (dynamic) type with a frequency response of 70 to 16,000 Hz. It shall have a cardioid directional characteristic, with cancellation at the sides being approximately 6 dB and the cancellation at the rear being 15 to 20 dB. The microphone shall have an impedance of 150 ohms for connection to microphone inputs rated at 19 to 300 ohms. The microphone output shall be -60.0 dB where 0 dB equals one milliwatt per 10 microbars of sound pressure.

The microphone shall have a two-position Response Selector switch. One position provides a flat response and the second position provides gradual low frequency rolloff.

The microphone shall be provided with a swivel adapter and a 6.1m (20 ft), two-conductor, shielded cable equipped with a professional three-pin audio connector designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connector. The microphone swivel adapter shall mount on a stand having 5/8"-27 thread.

The overall dimensions shall be 182 mm (7-5/32 in.) in length and 38 mm ($1\frac{1}{2}$ in.) in diameter for the SM53 and 194 mm (7-5/8 in.) in length and 44 mm ($1\frac{3}{4}$ in.) in diameter for the SM54.

The microphone shall be a Shure Model SM53, SM54, or equivalent.

FURNISHED ACCESSORY

OPTIONAL ACCESSORIES

Windscreen	A53WS	(SM53 only)
Pop Filter Grille Assembly	. A53G	(SM53 only)
Desk Stand S33E	3, S33P,	S39A, S40A
Isolation Mount		A53M
Boom Mount		A53B
Extension Arm		A53E
Isolation Cable		A53C
Extension Cable-6.1 m (20 ft)		C50CN

REPLACEMENT PARTS

Cartridge	R53
Grille Assembly RK101G (SM53), A53G	
Case Assembly	RK159Ć
Switch Assembly 9	0A1464
Cable and Plug Assembly (SM53/54)	C50
Cable and Plug Assembly (SM53/54-CN)	C50CN

NOTE: The addition of the A53WS windscreen increases the flexibility of the SM53 microphone in a variety of field and studio applications, by effectively suppressing wind noise created in outdoor situations, or by a rapidly moving boom or "fish-pole". The A53WS has no effect on the microphone level or frequency response. It can be used only with the SM53 microphone.

The use of the A53G pop-filter grille assembly on an SM53 microphone converts it to an SM54 microphone. This assembly provides protection against "pop" and breath noise even in difficult close-talking and hand-held situations. The use of the A53G pop filter grille assembly has no effect on the microphone level and creates only minimal changes in response (in the 4 kilohertz region) and in directivity.

GUARANTEE

This Shure product is guaranteed in normal use to be free from electrical and mechanical defects for a period of one year from date of purchase. Please retain proof of purchase date. This guarantee includes all parts and labor. This guarantee is in lieu of any and all other guarantees or warranties, express or implied, and there shall be no recovery for any consequential or incidental damages.

SHIPPING INSTRUCTIONS

Carefully repack the unit and return it prepaid to:
Shure Brothers Incorporated
Attention: Service Department
1501 West Shure Drive
Arlington Heights, Illinois 60004

If outside the United States, return the unit to your dealer or Authorized Shure Service Center for repair. The unit will be returned to you prepaid.