



General: The Model SM50 is a rugged, omnidirectional microphone built to withstand the severest field use. It provides very natural and intelligible voice reproduction and unusual freedom from annoying wind and breath noises. Very comfortably hand-held, or mounted in the slip-in stand adapter, the SM50 is ideally suited to remote interviews, news and sports pickups, and a variety of field and studio applications.

This Microphone Features:

- Smooth, natural sounding response from 40 to 15,000 Hz—slightly tailored for the utmost in intelligibility with an excellent feeling of presence.
- Highly effective built-in wind and breath filter—virtually eliminates wind noise, “blasting” and “pop”. Easily removed for replacement or cleaning.
- Comfortable size, lightweight, well balanced for handheld use.
- Rugged construction to provide completely dependable operation under all operating conditions.
- Versatility—equally at home in the field or studio—handheld, or on a stand.
- “Veraflex” diaphragm for smoother response and low handling noise.

SPECIFICATIONS

Type:

Dynamic.

Frequency Response:

40 to 15,000 Hz. (See Figure A)

Polar Pattern:

Omnidirectional. (See Figure B)

Microphone Rating Impedance:

Dual. 50 ohms and 150 ohms for connections into microphone inputs rated at 25 to 250 ohms (Connected for 150 ohms when shipped), See paragraph on impedance changing.

Output Level:

1,000 Hz response.

Model SM50 50 ohms

Open circuit voltage -84.5 db* (.059 mv)

Power level -57.0 db**

EIA Microphone Rating

Gm (sensitivity) -149.5 db***

Model SM50 150 ohms

Open circuit voltage -78.5 db* (.118 mv)

Power level -57.5 db**

EIA Microphone Rating

Gm (sensitivity) -150 db***

* 0 db = 1 volt per microbar

** 0 db = 1 milliwatt with 10 microbars

*** 0 db = EIA Standard SE-105, August 1949



Cable:

20 foot (6.1 meter) two-conductor shielded Broadcast type.

Connector:

Professional three-pin male audio connector on microphone designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connector on cable.

Case:

Aluminum and zinc die-cast.

Case Finish:

Textured dark gray enamel.

Swivel Adapter:

Positive action 90° swivel to mount microphone to stand on fixture with 5/8"-27 threads.

Dimensions:

See Figure D.

Net Weight Less Cable:

8 ounces (227 grams)

Shipping Weight:

2 pounds, 5 ounces (1049 grams)

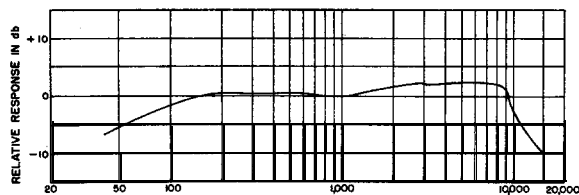
Instructions for changing to 50 ohm impedance:

See Figures C and D.

1. Remove male insert at the receptacle end of the microphone by turning the set screw in (counterclockwise).
2. Disconnect the RED lead from pin #3.
3. Solder the ORANGE lead to pin #3.
4. Insulate end of the RED lead with tape.
5. Re-assemble male insert into receptacle and seat set screw securely in place by turning out (clockwise)

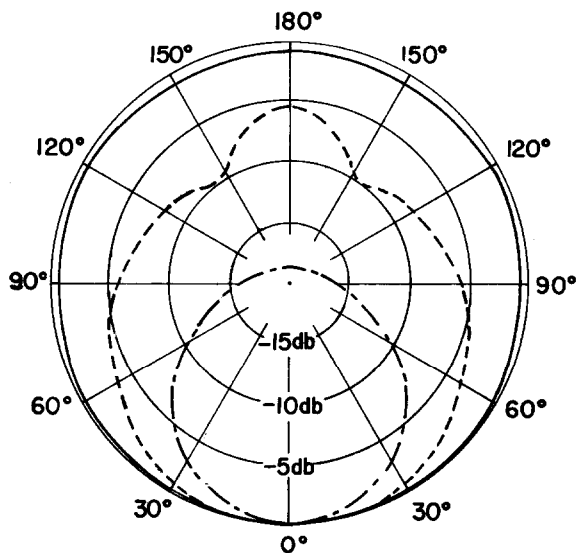
Guarantee: This Shure product is guaranteed in normal use to be free from electrical and mechanical defects for a period of one year from the date of purchase. Please retain proof of purchase date. This guarantee includes all parts and labor.

Shipping instructions: Carefully repack the unit and return it prepaid to the factory. 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.



FREQUENCY RESPONSE

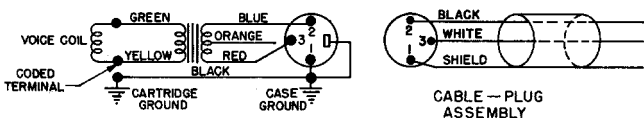
FIGURE A



— 1,000 C.P.S.
 - - - 5,000 C.P.S.
 - · - · 10,000 C.P.S.

POLAR PATTERN

FIGURE B



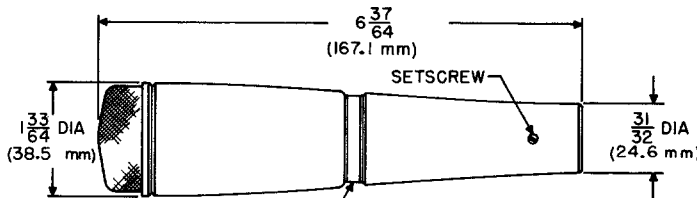
POSITIVE PRESSURE PRODUCES POSITIVE VOLTAGE AT PIN 2 WITH RESPECT TO PIN 3

INTERNAL CONNECTIONS

FIGURE C

NOTE: Windscreen assembly is unitized for ease of cleaning or replacement. To remove, unscrew from microphone body.

To clean, flush with mild detergent, rinse thoroughly and allow to dry before replacing.



OVER-ALL DIMENSIONS

FIGURE D

ARCHITECT'S SPECIFICATION

The microphone shall be Shure Model SM50 or equivalent moving coil (dynamic) microphone with a frequency range of 40 to 15,000 Hz. The unit shall have an omnidirectional polar characteristic. The microphone shall have available impedances of 50 ohms and 150 ohms for connections into microphone inputs rated at 25 to 250 ohms. The microphone output shall be:

- 50 ohm impedance. -57.0 db
 (0 db = 1 milliwatt with 10 microbars)
- 150 ohm impedance. -57.5 db
 (0 db = 1 milliwatt with 10 microbars)

The microphone rating Gm (sensitivity) at 1,000 Hz. shall be within 3 db of the following levels:

- 50 ohms. -149.5 db
 - 150 ohms. -150.0 db
- EIA Standard SE-105 August, 1949

The microphone shall be provided with a swivel adapter adjustable through 90° from vertical to horizontal and capable of being mounted on a stand having a 5/8"-27 thread. The microphone shall have a detachable 20 foot, (6.1 m), two-conductor, shielded cable equipped with a three-pin audio connector designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connector. The over-all dimensions shall be 6-37/64 (167.1 mm) in length, and 1-33/64 (38.5 mm) in diameter.

REPLACEMENT PARTS

The following replacement parts, and accessories may be ordered through your authorized Shure Professional Microphone Distributor or from Shure Brothers Incorporated.

DESCRIPTION	SHURE PART NO.
Windscreen Assembly	RK144G
Cartridge	R12
Case Assembly	RK145C
Cable	C50
Desk Stand	S33P
Swivel Adapter	A25B
Plug Element	RK121P