

UNIDIRECTIONAL DYNAMIC MICROPHONE

GENERAL

Combining a highly effective unidirectional pattern and wide useful frequency range, the Shure Model 556S has become one of the world's most widely used microphones. The performance characteristics and unique construction make it ideal for both outdoor and indoor use in broadcasting, recording, public address and theatre-stage applications.

Microphone Features:

- Cardioid directional characteristic especially adapted for optimum performance in adverse acoustic environments
- Cartridge and microphone body separately shock-mounted for quiet operation
- Convenient impedance selection
- Very rugged mechanical design for reliable operation under severe conditions of use

The self-tensioning swivel permits tilting through 45° forward and 80° backward.

ARCHITECTS' SPECIFICATIONS

The microphone shall be a moving coil (dynamic) type with a frequency response of 40 to 15,000 Hz. This unit shall have a cardioid polar characteristic. The cancellation at the sides shall be approximately 6 dB, and the cancellation at the rear shall be 15 to 20 dB. The microphone shall be equipped with a three-position impedance change switch with rated impedances of: 38 ohms for connection to microphone inputs rated at 19 to 75 ohms, 150 ohms for connection to microphone inputs rated at 75 to 300 ohms, and "High" for connection to high-impedance microphone inputs. The microphone output shall be:

- L switch position (19 to 75 ohms) -54 dB*
- M switch position (75 to 300 ohms) . . -55 dB*
- H switch position (high impedance) . . -56 dB**

*0 dB = 1 milliwatt per 10 microbars

**0 dB = 1 volt per microbar

The microphone shall be provided with a swivel adjustable from 45° forward to 80° backward, and suitable for mounting on a stand having a 5/8"-27 thread. The microphone shall be equipped with a vibration-isolator in combination with the stand connector, and it shall have a detachable 6.1m (20 ft), two-conductor shielded cable equipped with a professional three-pin female audio connector on the microphone end (designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent male connector). The overall dimensions of the microphone shall be 197 mm (7-3/4 in.) in length, 55.6 mm (2-3/16 in.) in width, and 77.8 mm (3-1/16 in.) in depth.

The microphone shall be Shure Model 556S or equivalent.

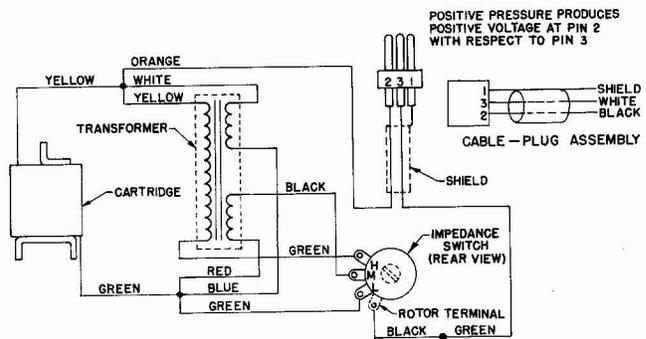


IMPEDANCE SELECTION AND CONNECTIONS

The Model 556S is equipped with a convenient switch for instant change of impedance. The switch is located at the bottom rear of the microphone case (see Figure 4). The switch offers a choice of three impedances: "L" - 19 to 75 ohms, "M" - 75 to 300 ohms, and "H" - high impedance.

For connection to an amplifier with an input rated from 19 to 300 ohms (L or M position of the impedance switch), the BLACK and WHITE leads are the "hot" conductors for balanced-line connections; the shield is connected to the chassis or amplifier ground. This connection is recommended where long cable lengths are required or under conditions of severe hum disturbance. The permissible cable length is practically unlimited, since neither response nor level is appreciably affected. Shure Model A95 Series Line Matching Transformers are available for use in those cases where a low-impedance microphone line is desirable but the associated amplifier has a high-impedance input. These transformers provide a proper impedance match between a 19-300 ohm microphone line and a high-impedance input, and are available with various input and output connectors.

For connection to a high-impedance amplifier input (H position of the impedance switch), the WHITE lead is the "hot" conductor; the BLACK lead and the shield are connected to the chassis or amplifier ground.



**INTERNAL CONNECTIONS
FIGURE 1**

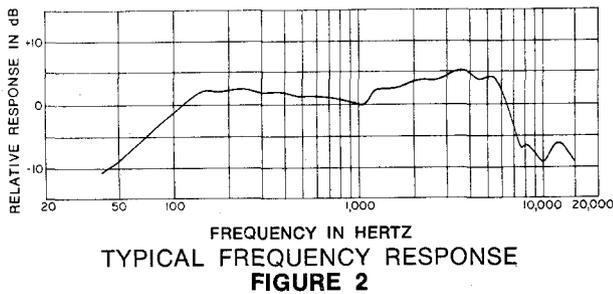
SPECIFICATIONS

Type

Dynamic

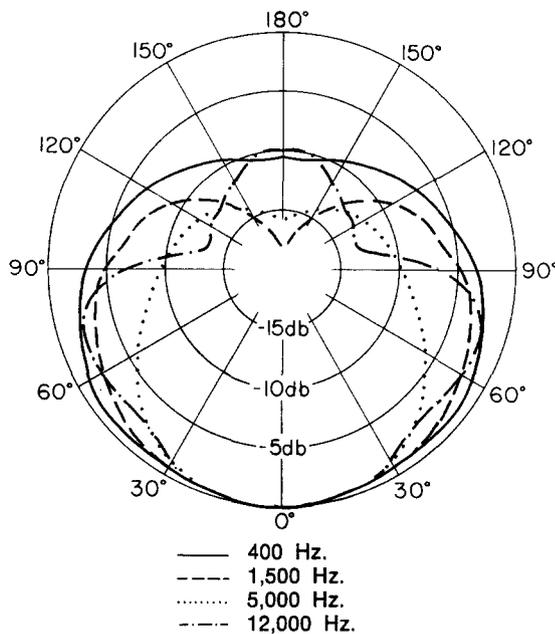
Frequency Response

40 to 15,000 Hz (see Figure 2)



Polar Pattern

Cardioid (unidirectional) pattern—Effective rejection of sound at the rear of the microphone is uniform at all frequencies, while front pickup characteristics are symmetrical about the axis (see Figure 3)



— 400 Hz.
- - - 1,500 Hz.
..... 5,000 Hz.
- · - · 12,000 Hz.

Impedance

Multiple. "L": Microphone rating impedance is 38 ohms (35 ohms actual) for connection to microphone inputs rated at 19 to 75 ohms. "M": Microphone rating impedance is 150 ohms (170 ohms actual) for connection to microphone inputs rated at 75 to 300 ohms. "H": Microphone impedance is "High" for connection to high-impedance microphone inputs.

Output Level (at 1,000 Hz)

	L	M	H
Open Circuit Voltage*	-84 dB	-78 dB	-56 dB
	.067 mV	.13 mV	1.58 mV
Power Level**	-54 dB	-55 dB	_____

*0 dB = 1 volt per microbar

**0 dB = 1 milliwatt per 10 microbars

Connector

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

Cable

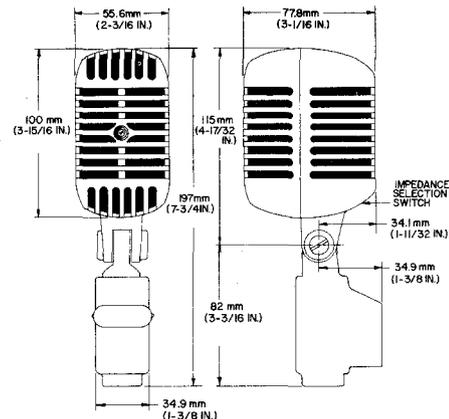
6.1m (20 ft) two-conductor shielded with a professional three-pin female audio connector on the microphone end

Case

Satin-chrome plated die casting

Dimensions

See Figure 4



DIMENSIONS
FIGURE 4

Net Weight (less cable)

822 grams (1 lb 13 oz)

Shipping Weight

1475 grams (3 lb 4 oz)

OPTIONAL ACCESSORIES

Line Matching Transformer Model A95 Series
Desk Stand Model S33B, S37A, S39A or S40A
Quick Disconnect Adapter Model A47
Extension Cable - 6.1m (20 ft) Model C50CN

REPLACEMENT PARTS

Cartridge 99A137
Cable and Plug Assembly C65
Connector Assembly RK104CA
Case Assembly RK37C
Cable Connector RK120P
Impedance Switch RK34IS

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.