

OMNIDIRECTIONAL DYNAMIC MICROPHONE

GENERAL

The Shure Model 578S is a slender, dynamic microphone designed to provide wide-range reproduction of music and voice. This omnidirectional microphone is ideal for high quality public address, theater-stage sound systems, and recording applications. It is also recommended for interview type use where "hand-ability" of the microphone is important.

Microphone Features:

- Uniform frequency response from 50 to 15,000 Hz
- A slender modern design, light weight
- A built-in On-Off switch—an integral part of the connector assembly
- Selection of either high or low impedance
- Versatility—for use on a floor or desk stand—indoors or outdoors
- Dependability under all operating conditions
- Ruggedness—will operate for years without deviation from original standards
- Detachable cable with professional three-pin female audio connector attached on the microphone end of cable

ARCHITECTS' SPECIFICATIONS

The microphone shall be the Shure Model 578S or equivalent. The microphone shall be a moving coil (dynamic) type with a frequency response of 50 to 15,000 Hz. The unit shall have an omnidirectional polar characteristic. The microphone shall be a dual-impedance unit with a rated impedance of 150 ohms for connection to microphone inputs rated at 25 to 200 ohms and "High" for connection to high-impedance microphone inputs.

The microphone output shall be:

- Low -61 dB
(0 dB = 1 milliwatt with 10 microbars)
- High -61 dB
(0 dB = 1 volt per microbar)

The microphone shall be equipped with a swivel, adjustable through 180° from horizontal to horizontal, and a built-in On-Off switch. The microphone shall be suitable for mounting on a stand with a 5/8"-27 thread. The microphone shall be provided with a detachable 4.6m (15 ft) two-conductor shielded cable with a professional three-pin female audio connector* at the microphone end.

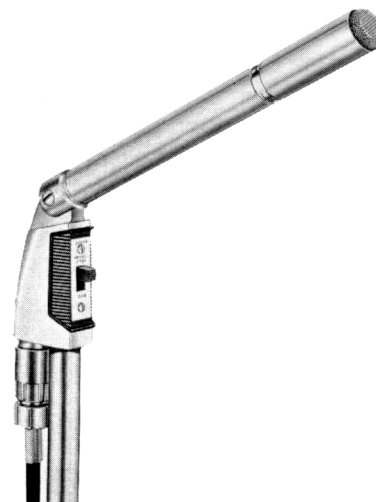
The overall dimensions of the microphone shall be 233 mm (9-3/16 in.) in length, 23.8 mm (15/16 in.) in width, and 82.6 mm (3-1/4 in.) in height.

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

IMPEDANCE SELECTION

Model 578S is supplied connected for high-impedance operation. To change to low impedance, proceed as follows (see Figures B and C):

1. Remove the two 2-56 screws holding the switch to the connector and switch housing.
2. Remove the nameplate and gently withdraw the switch from the switch housing.



3. Unsolder the ORANGE lead from its terminal and solder this ORANGE lead to the switch terminal that has the WHITE lead connected to it.
4. Reassemble the switch and nameplate to the switch housing. Tighten the screws securely.

CONNECTIONS

For high-impedance operation (as supplied), the WHITE cable lead is the "hot" conductor; the BLACK cable lead and the SHIELD are connected to the amplifier or chassis ground.

For balanced-line low-impedance operation (after changing impedance as instructed above), the BLACK and WHITE cable leads are the "hot" conductors; the SHIELD is connected to the amplifier or chassis ground. The low-impedance 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 25-200 ohm microphone line and a high-impedance input, and are available with various input and output connectors.

IMPORTANT

Shure Microphone Cables are selected after exhaustive tests to insure superior performance in microphones because of low capacities, superior shielding properties and unusually long life under severe use.

Cables with plastic insulation should not be subjected to excessive soldering-iron heat. Carefully clean and tin the conductors and the connections to which the conductors are to be soldered. The soldering operation can then be done with a minimum of heat, thereby avoiding any possibility of damage to the cable.

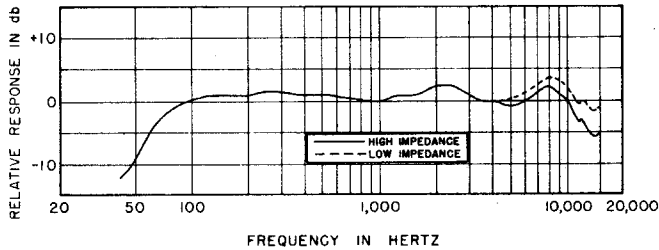
SPECIFICATIONS

Type

Dynamic

Frequency Response

50 to 15,000 Hz (See Figure A)



TYPICAL FREQUENCY RESPONSE
FIGURE A

Polar Pattern

Omnidirectional

Impedance

Dual. Microphone rating impedance is 150 ohms (250 ohms actual) for connection to microphone inputs rated at 25 to 200 ohms and "High" for connection to high-impedance microphone inputs. Wired for high impedance as supplied. To change impedance, see sections on Impedance Selection and Connections.

Output Level (at 1,000 Hz)

	Impedance	
	LOW	HIGH
Open Circuit Voltage*	-82 dB (.079 mV)	-61 dB (.89 mV)
Power Level**	-61 dB	

*0 dB = 1 volt per microbar

**0 dB = 1 milliwatt with 10 microbars

Switch

Built-in On-Off switch

Cable

4.6m (15 ft) two-conductor shielded, detachable, with female three-pin professional audio connector* on microphone end

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

Swivel Assembly

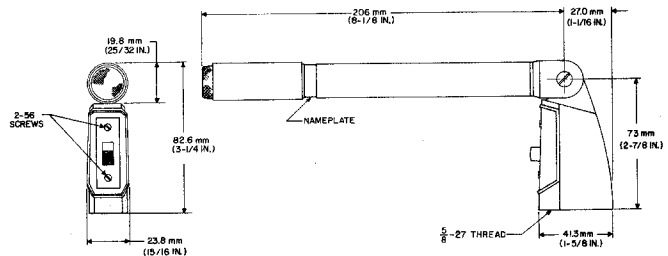
Positive action, permits tilting head through 180°, suitable for mounting on stand with 5/8"-27 thread

Case

Steel and die casting, satin-chrome plated, with stainless steel screen

Dimensions

See Figure B



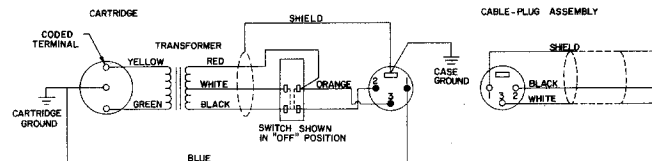
OVERALL DIMENSIONS
FIGURE B

Net Weight (less cable)

369 grams (13 oz)

Shipping Weight

1021 grams (2¼ lb)



POSITIVE PRESSURE PRODUCES
POSITIVE VOLTAGE ON PIN 2,
HIGH AND LOW IMPEDANCE

INTERNAL CONNECTIONS
FIGURE C

OPTIONAL ACCESSORIES

Line Matching Transformer	A95 Series
Desk Stand	S33B, S37A, S38B or S40A
Quick Disconnect Adapter	A47
Windscreen	A2WS
Carrying Case	AC57

REPLACEMENT PARTS

Cartridge	R78
Cable	C81
Screen and Grille Assembly	RK127G
On-Off Switch	RK32S
Connector Assembly	RK124CA
Case Assembly	RK126C
Plug Element	RK40P
Cable Connector	RK120P

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.