

SHURE®

GENERAL

The Shure Model 578 is a slender, dynamic microphone designed to provide wide-range reproduction of music and voice. This omnidirectional dual-impedance 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-a-bility" of the microphone is important.

The Model 578 is dual impedance for connection to microphone inputs rated at 19 to 300 ohms or to high-impedance microphone inputs. The microphone is supplied with an adjustable swivel adapter, permitting it to be tilted through 90° from vertical to horizontal.

Microphone Features:

- Uniform frequency response from 50 to 15,000 Hz
- Slender design, lightweight
- Built-in On-Off switch
- Convenient impedance selection
- Versatility — for use in the hand or on a stand — for use indoors or outdoors
- Dependability under all operating conditions
- Ruggedness — will operate for years without deviation from original standards

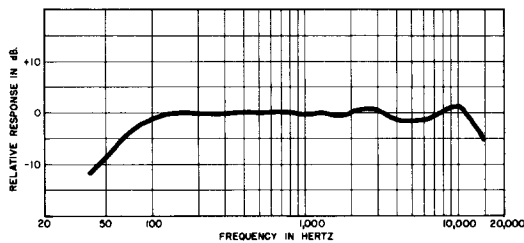
SPECIFICATIONS

Type

Dynamic

Frequency Response

50 to 15,000 Hz (see Figure 1)



TYPICAL FREQUENCY RESPONSE
FIGURE 1

Polar Pattern

Omnidirectional

Impedance

Dual. Microphone rating impedance is 150 ohms (250 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms, and High for connection to high-impedance microphone inputs. See *Impedance Selection*.

MODEL 578 OMNIDYNE OMNIDIRECTIONAL DYNAMIC MICROPHONE



Output Level (at 1,000 Hz)

Low Impedance

Open Circuit Voltage - 80.0 dB* (.1 mV)

Power level - 60.0 dB**

High Impedance

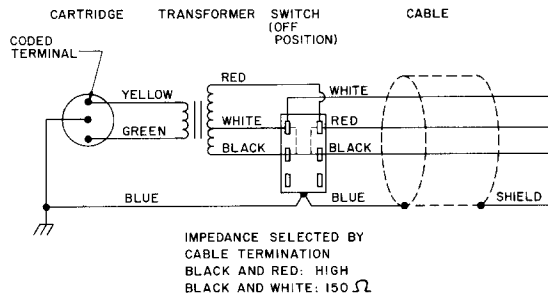
Open Circuit Voltage - 59.0 dB (1.12 mV)

*0 dB = 1 volt per microbar

**0 dB = 1 milliwatt per 10 microbars

Phase

Positive pressure on the diaphragm produces positive voltage on the BLACK lead



INTERNAL CONNECTIONS
FIGURE 2

Switch

Built-in On-Off switch with lockplate installed. To lock switch in On position, loosen screw on lockplate and turn lockplate 180°. Retighten screw.

Cable

Non-detachable, 4.6 meter (15 ft), three-conductor, shielded

Case

Satin-chrome-plated steel with stainless steel grille

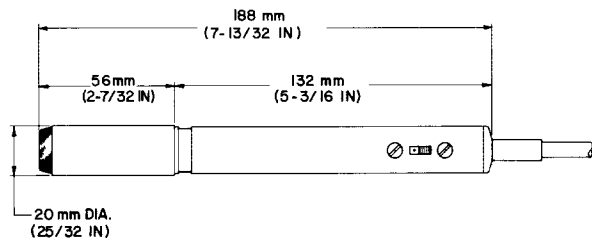
Swivel Adapter

Positive action swivel adjustable through 90° from vertical to horizontal, to fit 5/8"-27 stand thread

SHURE®
MODEL 578 OMNIDYNE
 OMNIDIRECTIONAL DYNAMIC MICROPHONE

Dimensions

See Figure 3



OVERALL DIMENSIONS
FIGURE 3

Net Weight

454 grams (1 pound)

Packaged Weight

768 grams (1 pound 11 ounces)

IMPEDANCE SELECTION

Selection of either high or low impedance is accomplished by the choice of leads connected at the equipment end of the cable.

Low impedance—The BLACK and WHITE cable leads are the “hot” conductors for balanced line connections; the shield is connected to the amplifier or chassis ground (see Figure 2).

High impedance—The RED cable lead is the “hot” conductor for unbalanced line connections; the BLACK cable lead and the shield are connected to the amplifier or chassis ground (see Figure 2).

The low-impedance connection is recommended where long cables are required or under conditions of severe hum disturbance. The permissible cable length is practically unlimited, since neither response nor level is appreciably affected by long cables. 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 to 300 ohm microphone line and a high-impedance input, and are available with various input and output connectors.

PHASING

To test two microphones for proper phasing, connect them to an amplifier and talk or sing into them while holding them three or four inches apart. The sound from the speakers should be the same when talking into either microphone or directly between them if they are in phase with each other. If the sound drops drastically, or if a dead spot is found when talking between the two microphones, the microphones are out of phase. All microphones should be tested in this manner to insure that they are in phase with each other.

To change the phase of the Model 578 microphone at the equipment end of the cable, interchange the BLACK and WHITE leads (low impedance) or the BLACK and RED leads (high impedance) where they are connected to the sound system. To change the phase in the

microphone, the microphone cartridge leads must be interchanged (see Figure 2). This should be performed by your dealer, the Shure Factory Service Department, or other qualified service personnel.

ARCHITECTS' SPECIFICATIONS

The microphone shall be Shure Model 578 or equivalent. The microphone shall be a moving-coil (dynamic type microphone 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 rated impedance of 150 ohms for connection to microphone inputs rated at 19 to 300 ohms and High for connection to high-impedance microphone inputs. The microphone output shall be:

Low Impedance –60.0 dB
(0 dB = 1 milliwatt per 10 microbars)
High Impedance –59.0 dB
(0 dB = 1 volt per microbar)

The microphone shall have a built-in On-Off switch with a locking plate provided to lock switch permanently. The microphone shall be provided with a swivel adapter adjustable through 90° from vertical to horizontal. The swivel adapter will mount on a stand having a 5/8”-27 thread. The microphone shall be provided with a 4.6m (15 ft), three-conductor shielded cable. The overall dimensions shall be 188 mm (7-13/32 in.) in length and 20 mm (25/32 in.) in diameter.

FURNISHED ACCESSORY

Swivel Adapter A57D

OPTIONAL ACCESSORIES

Line Matching Transformer A95 Series
Desk Stand S37A, S39A
Quick Disconnect Isolation Unit A45

REPLACEMENT PARTS

Dynamic Cartridge R78
Cable C80
Screen and Grille Assembly RK127G
Case Assembly 90E905

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, have it insured, and return it prepaid to:

Shure Brothers Incorporated
Attention: Service Department
222 Hartrey Avenue
Evanston, Illinois 60204

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.