222 HARTREY AVE., EVANSTON, IL, 60204 U.S.A.

AREA CODE 312/866-2200 ● CABLE: SHUREMICRO

TWX: 910-231-0048 TELEX: 72-4349

MICROPHONES AND ELECTRONIC COMPONENTS

DATA SHEET

MODEL 560

# DYNAMIC LAVALIER MICROPHONE

# **GENERAL**

The Shure Model 560 Dynamic Lavalier Microphone is a dual impedance unit designed specifically for those applications requiring a small wearable microphone. It is equipped with a specially designed lavalier

cord and clip assembly which permits the user freedom of movement and full use of both hands.

The microphone is ideal for performers, public speakers, lecturers, teachers, instructors, demonstrative and all continuous c tors and all applications requiring a wearable microphone. The Model 560 may also be used as a handheld microphone or on a floor or desk stand with the Shure A25B Swivel Adapter. (For such applications, the microphone should be positioned so that the voice carries across its face.)

Impedance changes are conveniently made by changing a pinjack-terminal arrangement inside the case. (See Figure 2 and the paragraph on Impedance Selection.) No soldering is necessary.

The microphone is equipped with a very flexible two conductor, small diameter shielded cable, designed specifically for lavalier use.

**ARCHITECTS' SPECIFICATIONS**The microphone shall be a moving coil (dynamic) type with a frequency response of 40 to 10,000 Hz. The unit shall have an omnidirectional polar characteristic. The microphone shall be dual impedance with a 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. Impedance change shall be solderless. The microphone output shall be:

The microphone shall be provided with a lavalier cord and clip assembly for use as a wearable micro-phone. The microphone shall be provided with a nondetachable 5.5m (18 ft) two-conductor shielded cable. The overall dimensions of the microphone shall be 99 mm (3-29/32 in.) in length and 35 mm (1% in.) in diameter.

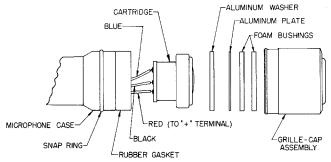
The microphone shall be the Shure Model 560 or equivalent.

# IMPEDANCE SELECTION

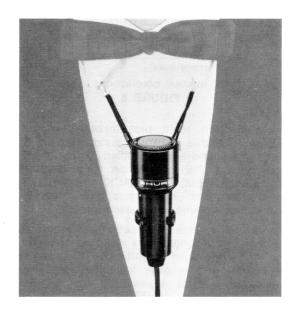
The Model 560 is shipped connected for high impedance operation.

To change to low impedance:

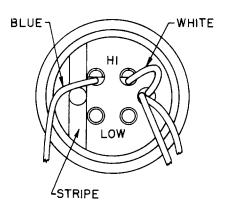
 Hold case of microphone firmly and remove micro-phone cap and grille assembly by pulling hard to separate the cap from the case. (See Figure 1)



ASSEMBLY OF MICROPHONE FIGURE 1



- 2. Remove the aluminum ring, aluminum plate and foam bushings. (These parts may remain in the cap. In this case leave the parts in the cap.) Remove the cartridge from the rubber gasket by peeling back the edge of the rubber gasket. DO NOT remove the rubber gasket. DO NOT UNSOLDER LEADS.
- Reach in with longnose pliers or tweezers and remove the pinjack (BLUE lead) from the HI terminal next to the stripe on the terminal board. Install this pinjack on the LOW terminal next to the stripe. (See Figure 2)



IMPEDANCE CHANGING FIGURE 2

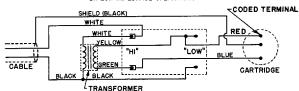
- Also, remove the other pinjack (WHITE lead) from the other HI terminal and install it on the remaining LOW terminal.
- 5. Re-seat cartridge in rubber gasket. Reassemble aluminum ring, aluminum plate, two rubber rings, and the cap and grille assembly to the microphone case. (See Figure 1)

Make sure the cap is securely seated and held by the internal snap ring provided.

### CONNECTIONS

The internal connections of the microphone are shown in Figure 3.

POSITIVE PRESSURE PRODUCES POSITIVE VOLTAGE ON BLACK CONDUCTOR, HIGH OR LOW IMPEDANCE OPERATION.



INTERNAL CONNECTIONS

### FIGURE 3

For connection to a high-impedance input, the WHITE cable lead is the "hot" conductor; the BLACK lead and the shield are connected to the amplifier or chassis ground. For connection to a balanced-line low-impedance input, 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. For use with high-impedance amplifiers, Shure Model A95 Series Line Matching Transformers are available. The Model A95 Series transformers permit coupling a low-impedance line to a high-impedance input and are available with various input and output connectors.

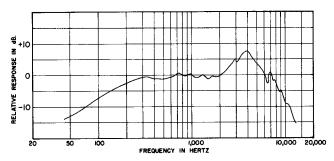
# **SPECIFICATIONS**

## **Type**

Dynamic

# Frequency Response

40 to 10,000 Hz (See Figure 4)



TYPICAL FREQUENCY RESPONSE
FIGURE 4

# Polar Pattern

Omnidirectional

# **Impedance**

Dual. Microphone rating impedance is 150 ohms (200 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms and "High" for connection to high-impedance microphone inputs. Solderless impedance change (see section on Impedance Selection.) Shipped connected for high impedance.

## Output Level (at 1,000 Hz)

Low Impedance

Open Circuit Voltage ..... - 78 dB\* (.125 mV) Power Level ..... - 56 dB\*\*

High Impedance

Open Circuit Voltage ..... -57 dB\* (1.41 mV)

\*0 dB = 1 volt per microbar

\*\*0 dB = 1 milliwatt per 10 microbars

### Cable

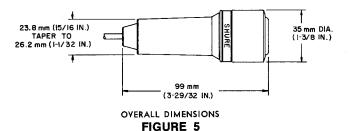
5.5m (18 ft) nondetachable two-conductor shielded

#### Cae

Nonreflecting black enamelled aluminum with stainless steel grille

# **Dimensions**

See Figure 5



# **Net Weight**

284 grams (10 oz)

# Shipping Weight

454 grams (16 oz)

## **FURNISHED ACCESSORY**

## **OPTIONAL ACCESSORIES**

Swivel Adapter	
Line Matching Transformer	
Desk Stand	.S33B, S38B, S39A or S40A
Quick Disconnect Adapter	

# REPLACEMENT PARTS

# **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.