

## MODEL 570S DYNAMIC LAVALIER MICROPHONE



### GENERAL

The Model 570S Dynamic Lavalier Microphone is a studio-quality unit designed specifically in size and performance for use in TV and similar critical applications where a small wearable microphone is required.

The 570S is ideal for moderators, panelists, announcers, singers, instrumentalists, public speakers, lecturers, instructors, and all applications requiring an inconspicuous, wearable unit. The microphone is supplied with a lavalier assembly to permit the microphone to be worn around the neck and a belt clip assembly (see Figure 1) for the microphone cable for applications where freedom of both hands is necessary. The exclusive Shure "Flex-Grip" lavalier assembly provided with the 570S is designed to keep the microphone firmly in place during use. Quick and easy engagement, adjustment, and removal of the microphone, clip, and cord is also afforded.

### Features:

- Frequency response optimized for lavalier use. Acoustically matches most desk- or stand-mounted microphones.
- Built-in On-Off switch with lockplate
- Small size, light weight, distinctive appearance
- Low handling and clothing noise
- Rapid attachment and secure adjustment of lavalier assembly
- Ruggedness and dependability under all operating conditions
- Low impedance allows unlimited cable lengths

### OPERATION

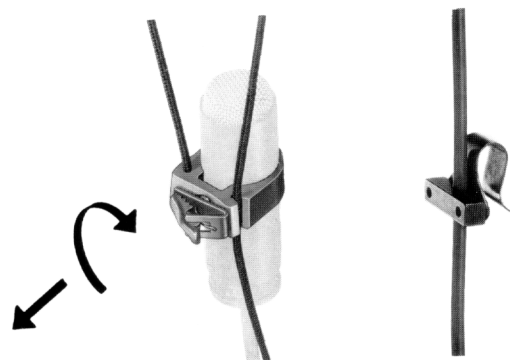
Model 570S is a low-impedance microphone for connection to microphone inputs rated at 19 to 300 ohms. The low-

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 by long cables. Shure Model A95 Series Line Matching Transformers are available for use when 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.

### ALTERNATE MOUNTING METHOD

In certain applications and through lavalier assembly wear, the microphone's weight may permit the cord to slip through the open slot at the side of the lavalier. The following procedure will prevent this slippage.

1. Tie a knot in the cord about 25 mm (1 in.) from the free end.
2. Place the rubber ring over the mic, taking care not to cover the grille or any side slot.
3. Place the mic-lavalier assembly around the talker's neck. Open the spring-loaded alligator clip at the back of the lavalier and slip the cord through the open clip.
4. Adjust for proper length and release the clip. The knot will stop the cord from pulling through the closed clip.



LAVALIER ASSEMBLY AND BELT CLIP

FIGURE 1

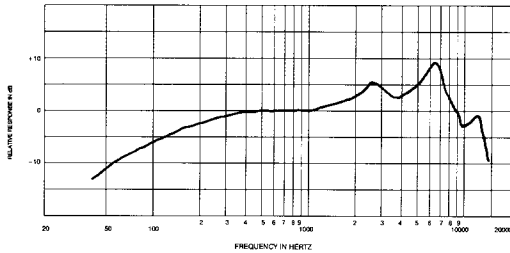
## SPECIFICATIONS

### Type

Dynamic

### Frequency Response

50 to 12,000 Hz. Rising characteristic to 6,000 Hz, specially tailored for lavalier use (see Figure 2)



TYPICAL FREQUENCY RESPONSE  
FIGURE 2

### Polar Pattern

Omnidirectional

### Impedance

Microphone rating impedance is 150 ohms (180  $\Omega$  actual) for connection to microphone inputs rated at 19 to 300  $\Omega$

### Output Level (at 1,000 Hz)

Open Circuit Voltage\* . . . -81.0 dB (0.89 mV)

Power Level\*\* . . . . . -59.5 dB

\*0 dB = 1 volt per microbar

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

### Switch

Built-in On-Off switch with lockplate. To lock switch in on position, remove screw on lockplate and rotate lockplate 180°. Reassemble and tighten screw

### Cable

9.1 m (30 ft.) two-conductor shielded, nondetachable, small diameter

### Lavalier Assembly

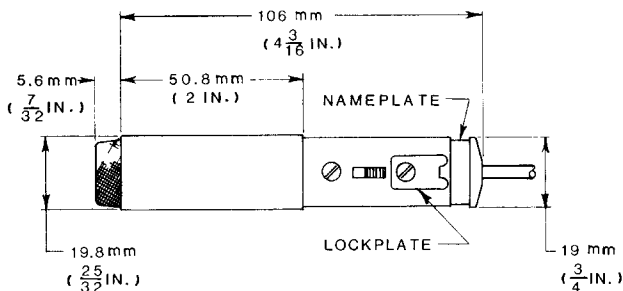
Positive lock, holds microphone securely. allows easy, noiseless adjustment and instant removal

### Case

Dark gray nonreflecting enameled steel with stainless steel grille

### Dimensions

See Figure 3



OVERALL DIMENSIONS  
FIGURE 3

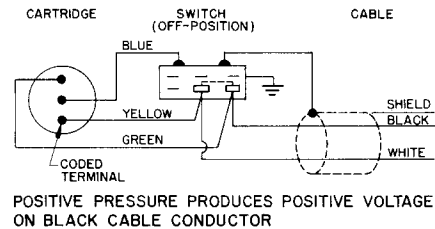
### Net Weight (less cable)

99.2 grams (3 1/2 oz)

## 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 a low-impedance microphone at the equipment end of the cable, interchange the BLACK and WHITE cable leads where they are connected to the sound system. To change the phase in the microphone, the microphone cartridge leads must be interchanged (see Figure 4). This should be performed by your dealer, the Shure Factory Service Department, or other qualified service personnel.



INTERNAL CONNECTIONS  
FIGURE 4

## FURNISHED ACCESSORIES

Lavalier Assembly . . . . . A57L  
Belt Clip . . . . . 94A240

## OPTIONAL ACCESSORIES

Swivel Adapter . . . . . A57E  
Line Matching Transformer . . . . . A95 Series

## REPLACEMENT PARTS

Cartridge . . . . . R70  
Cable-End Cap Assembly . . . . . 70A295  
Screen and Grille Assembly . . . . . RK91G  
On-Off Switch . . . . . 55A53

## ARCHITECTS' SPECIFICATIONS

The microphone shall be a moving-coil (dynamic) type with a frequency response of 50 to 12,000 Hz. The unit shall have an omnidirectional polar characteristic. The microphone shall have a rated impedance of 150 ohms for connection to microphone inputs rated at 19 to 300 ohms. The microphone output shall be -59.5 dB where 0 dB = 1 milliwatt per 10 microbars.

The microphone shall have a built-in On-Off switch with a locking plate. The microphone shall be provided with a lavalier cord and clip assembly for use as a wearable microphone. The microphone shall be equipped with a nondetachable 9.1 m (30 ft) two-conductor shielded cable. The overall dimensions of the microphone shall be 112 mm (4-13/32 in.) in length and 19.8 mm (25/32 in.) in diameter.

The microphone shall be the Shure Model 570S or equivalent.