

# SHURE®

## MODEL SM17 INSTRUMENT DYNAMIC MICROPHONE



The Shure Model SM17 is a miniature dynamic microphone designed specifically for use with acoustic stringed instruments and other acoustic musical instruments. The SM17 has an omnidirectional pickup pattern and a frequency response well suited for instrument use. The microphone is supplied with an attached 3m (10 ft) cable, shock mount, clip, expansion mount, additional bushings (for the expansion mount), cloth mounting adapter, and two cable clips

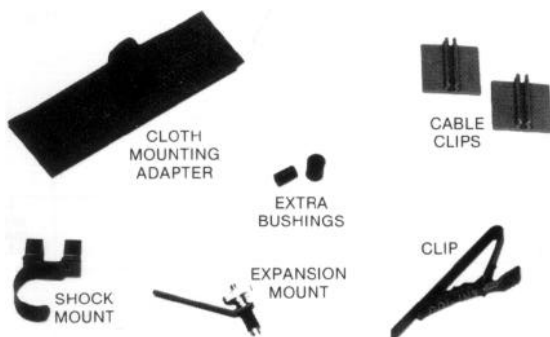
### Model SM17 Features:

- Excellent frequency response for acoustic instrument use. Will not overload or distort at high sound levels
- Small and lightweight for unobtrusive, virtually unseen operation
- Smooth exterior and recessed grille screen minimize accidental rubbing noise
- Rugged aluminum case construction
- Extremely flexible lightweight cable
- Three mounting options -expansion mount for string hole mounting, cloth mounting adapter for string mounting, or clip for sound hole or other edge mounting

### INSTALLATION

#### VIOLINS, VIOLAS AND CELLOS

To mount the SM17 on a violin, viola or cello, remove the shock mount from the clip and slide it on the expansion mount blade. Unscrew the knurled nut on the expansion mount (see Figure 1) until tension is removed



SUPPLIED ACCESSORIES  
FIGURE 1

from the rubber bushing below the nut. Insert the screw head and bushing end of the expansion mount in one of the string holes of the tailpiece. [Note that a total of three different bushing sizes-4, 4.37 and 6 mm (0.16, 0.17 and 0.24 in.) diameter- are supplied. If the 4 mm bushing installed on the expansion mount is too small, unscrew the knurled nut and replace the bushing with one of a larger diameter.] Swivel the expansion mount to the approximate desired position and tighten the knurled nut to expand the rubber bushing in the string hole. Snap the microphone into the shock mount (see Figure 2). Note that the microphone can be swiveled in the shock mount after installation.

The SM17 can also be mounted on a violin, viola or cello using the cloth mounting adapter by pulling the "loop" strip away from the "hook" strip. Fasten the adapter (with the elastic microphone band upward) around the instrument strings between the bridge and tailpiece by pressing the "loop" and "hook" strips together. Insert the SM17 in the elastic band with the microphone grille toward the bridge (see Figure 3).

To hold the microphone cable in place, remove the paper backing from the supplied cable clips, affix the clips to a suitable flat surface, and insert the cable in the clip slot.



VIOLIN MOUNTING-EXPANSION MOUNT  
FIGURE 2

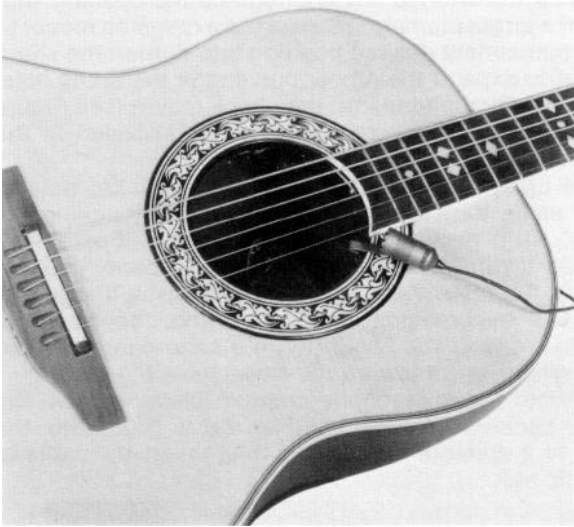


VIOLIN MOUNTING-CLOTH MOUNTING ADAPTER  
FIGURE 3

SHURE  
MODEL SM17  
INSTRUMENT DYNAMIC MICROPHONE

## ACOUSTIC GUITARS AND OTHER INSTRUMENTS

To mount the SM17 on an acoustic guitar (or similar instrument with a wide sound hole), insert the clip blade (see Figure 1) in the slots of the shock mount. Squeeze the clip to open it, and affix the clip to the edge of the guitar sound hole (below the strings). NOTE: The clip teeth are cushioned to avoid marring the instrument finish. Snap the SM17 into the shock mount and swivel the microphone to the desired position (see Figure 4). Note that the microphone can be positioned on the top surface of the guitar as shown, or placed within the guitar body. Make sure the location of the microphone does not interfere with playing. The cable clips can be used to fasten the microphone cable along any flat surface.



GUITAR MOUNTING  
FIGURE 4

The SM17 can also be used with a number of other musical instruments. For instance, the clip can be affixed to the bell of a saxophone, trumpet or trombone. Other uses depend on the availability of edges or surfaces to which the clip can be fastened. In addition, the SM17 can be used (without mounting accessories) to pick up amplified instruments by suspending the microphone in front of the instrument amp speaker.

### CONNECTOR

The SM17 is supplied with a professional 3-pin audio connector designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connectors. Note that the supplied connector has a special strain relief to accommodate the very small diameter cable.

### IMPEDANCE

The SM17 is supplied wired for low-impedance microphone inputs (rated at 19 to 300 ohms). The low-impedance, balanced line operation is desirable where long cable lengths are required or conditions where severe hum pickup may exist. To connect to high impedance (¼ in. phone jack) instrument amplifier or microphone inputs, connect the SM17 cable connector to the low-impedance side of a Shure Line Matching Transformer and plug the high-impedance side (¼ in. phone plug) into the input.

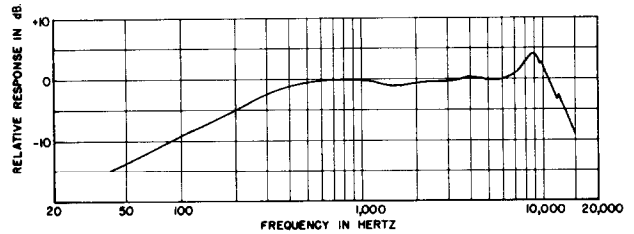
## SPECIFICATIONS

### Type

Dynamic

### Frequency Response

50 to 15,000 Hz (see Figure 5)



TYPICAL FREQUENCY RESPONSE  
FIGURE 5

### Polar Pattern

Omnidirectional

### Impedance

Microphone rating impedance is 150 ohms (200 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms

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

Open Circuit Voltage. . . . . -84.5 dB (.06 mV)  
(0 dB = 1 volt per microbar)

Power Level . . . . . -63.5 dB  
(0 dB = 1 milliwatt per 10 microbars)

### Phasing

Positive pressure on diaphragm produces positive voltage on pin 2 of microphone connector

### Hum Pickup

35.3 dB equivalent SPL in a 1 millioersted field

### Cable

Non-detachable, 3m (10 ft), two-conductor, shielded, plastic-covered

### Connector

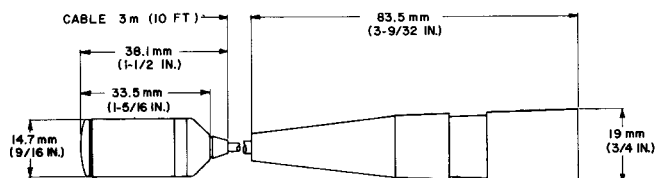
Professional three-pin audio connector designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connectors

### Case

Aluminum with gray enamel finish

### Dimensions

See Figure 6



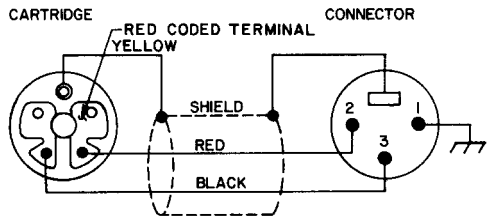
OVERALL DIMENSIONS  
FIGURE 6

## Net Weight

7.8 grams (0.28 oz) less cable

## Packaged Weight

352 grams (12½ oz)



INTERNAL CONNECTIONS  
**FIGURE 7**

## ARCHITECTS' SPECIFICATIONS

The microphone shall be a moving-coil (dynamic) type with a frequency response of 50 to 15,000 Hz. The microphone shall have an omnidirectional polar characteristic. The microphone shall be low impedance with a rated impedance of 150 ohms for connection to microphone inputs rated at 19 to 300 ohms.

The microphone output shall be -63.5 dB where 0 dB = 1 milliwatt per 10 microbars.

The microphone shall be an instrument type, and shall be provided with a 3m (10 ft) non-detachable, two-conductor, shielded cable with a professional, three-pin audio connector designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connectors. The microphone shall also be provided with an expansion mount, cloth mounting adapter, shock mount, clip, two additional bushings for the expansion mount, and two plastic cable clips.

The overall dimensions of the microphone shall be 33.5 mm (1-15/16 in.) in length and 14.7 mm (9/16 in.) in diameter.

The microphone shall be the Shure Model SM17 or equivalent.

## ACCESSORIES AND REPLACEMENT PARTS

The following furnished accessories and replacement parts may be ordered through your Authorized Shure Professional Products Dealer or from Shure Brothers Inc.

Expansion Mount . . . . .	90B2739
Cloth Mounting Adapter . . . . .	95A961
Shock Mount and Clip . . . . .	90A3645
Rubber Bushing, 4 mm . . . . .	66A161
Rubber Bushing, 4.37 mm . . . . .	66C161
Rubber Bushing, 6 mm . . . . .	66B161
Cable Clip . . . . .	80A291
Cartridge . . . . .	R99
Cable . . . . .	90B2505

## 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 60202-3696

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.