



**GENERAL**

The Shure Model SM10 Professional Head-Worn Microphone is a low-impedance, unidirectional, dynamic microphone. Designed for sports and news announcing, interviewing and intercommunications systems, and for special-events remote broadcasting, the SM10 offers convenient, hands-free operation without user fatigue. A close-talking unit, the SM10 may be used under noisy conditions without loss or masking of voice signals. The SM10 is a small, lightweight, rugged and reliable unit, with provisions for mounting to a supplied cushioned headband. A pivot housing permits the microphone boom to be moved 20° in any direction, and the distance between the microphone and pivot to be changed by up to 89 mm (3½ in.). A miniature wind-screen to protect against wind noise and explosive breath sounds, an adapter plate for boom-mounting on stereo headphones, and a connector belt clip are also supplied.

**Model SM10 Features:**

- Close-talk operation and unidirectional polar pattern for effective noise reduction
- Smooth natural voice frequency response
- Locking adjustment knob permits boom to pivot 20° in any direction
- Boom length adjustment through 89 mm (3½ in.) range
- Light weight plus padded headband eliminate user fatigue
- Does not interfere with eyeglasses
- Ruggedly constructed of stainless steel, aluminum and high-impact thermoplastic
- Convenient, secure clip attaches connector to belt or clothing
- Adapter plate provides for boom-mounting to stereo headphones

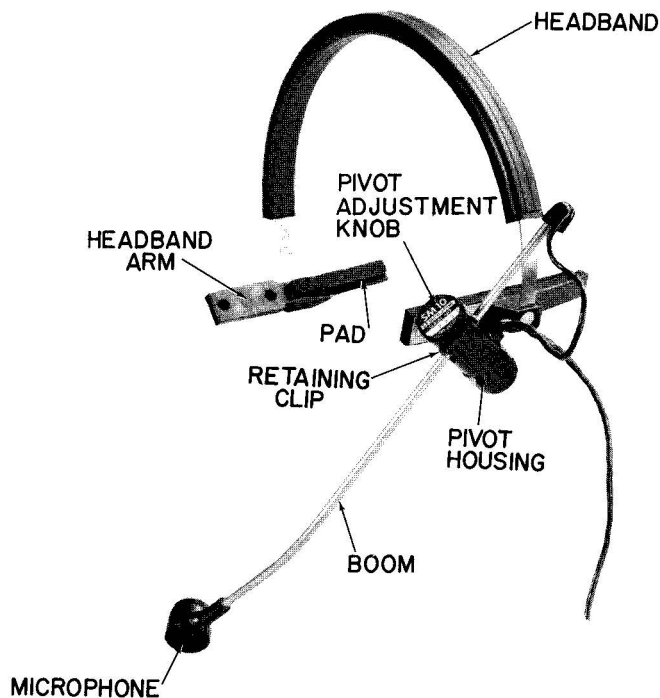
**ASSEMBLY**

Assemble the SM10 for use as follows:

1. Twist the lower headband arms 90° so they are perpendicular to the headband. The headband pads must be located toward the rear of the user's head.

For left side usage, the retaining clip will be on the left side of the user's head; for right side usage, the clip will be on the right (see photo and Figure 1). Swivel the retaining clip forward (top of clip away from the headband) until it snaps into position.

2. Snap the microphone pivot housing into the retaining clip with the pivot adjustment knob upward and the microphone toward the front. (Note that the microphone position—left or right side—may be reversed by twisting the headband arms 180°, swiveling the retaining clip 90°, and repositioning the pivot housing.) Loosen the pivot adjustment knob, position the boom so that the microphone is near where the side of the mouth will be, and tighten the pivot adjustment knob.
3. Place the assembled microphone on the user's head and pull the headband arms downward until they rest against the head just over the ears.
4. Loosen the pivot adjustment knob and position the microphone as close as possible to the corner of the mouth. For optimum close-talking operation, the microphone should be less than 25 mm (1 in.) from the corner of the mouth. Be sure to position the microphone at the corner (not the center) of the mouth to eliminate explosive breath sounds ("pop"). Tighten the adjustment knob.
5. Snap the connector belt clip over the groove in the 3-pin male audio connector. The clip can now be fastened to the user's belt or other clothing. Attach the 3-pin audio connector to the microphone cable.



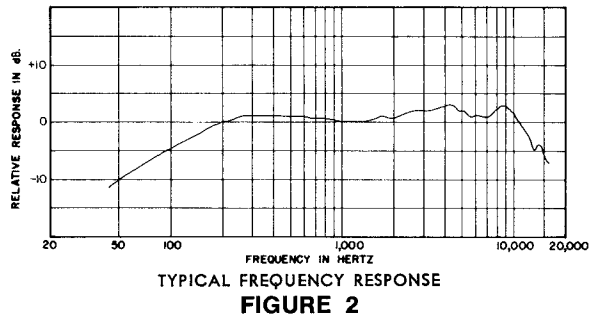
**FIGURE 1**  
SM10 POSITIONED FOR LEFT SIDE OPERATION

## SPECIFICATIONS

### Type

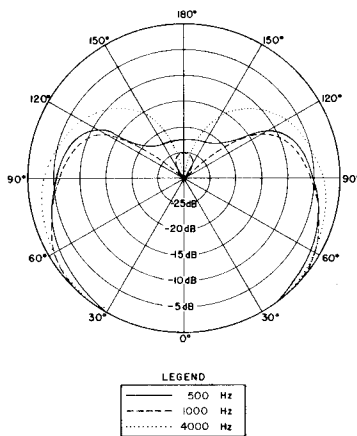
Dynamic, Close-Talking

**Frequency Response** (at 8 mm [5/16 in.])  
50 to 15,000 Hz (see Figure 2)



### Polar Pattern

Cardioid (unidirectional) response—uniform with frequency, symmetrical about axis (see Figure 3)



### Impedance

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

### Output Level

 (close-talked at 1,000 Hz)

Open Circuit Voltage . . . . . -47.0 dB (4.5 mV)  
(0 dB = 1 volt per 100 microbars)  
Power Level . . . . . -66.0 dB  
(0 dB = 1 milliwatt per 10 microbars)

### Hum Sensitivity

 (typical)

38.4 dB equivalent SPL in a 1 millioersted field

### Phasing

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

### Connector

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

### Cable

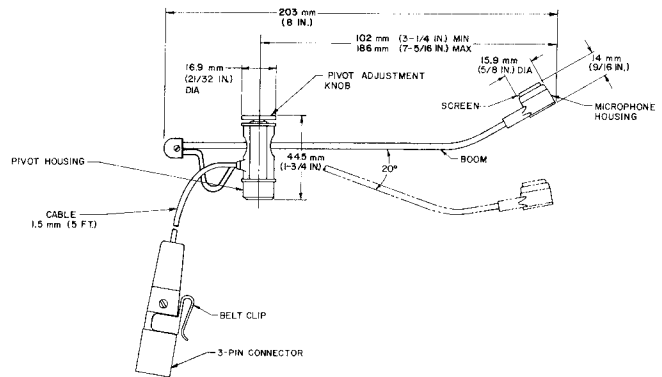
Non-detachable, 1.5m (5 ft), two-conductor, shielded, plastic-jacketed

### Case

Black thermoplastic microphone and pivot housing, anodized aluminum end caps, stainless steel grille and boom

### Dimensions

See Figure 4

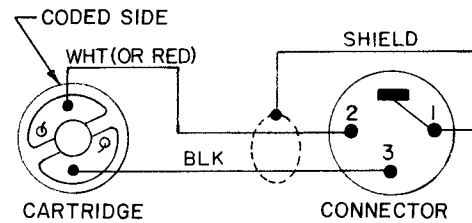


### Net Weight

78 grams (2.7 ounces) less cable and connector

### Packaged Weight

745 grams (1 lb, 10 oz)



### STEREO HEADPHONE USE

The SM10 microphone may be used as a boom microphone with stereophonic headphones having provisions for mounting boom microphones. These headphones are identified by a removable knurled knob or screw on the left headphone cup.

To mount the SM10 on a stereo headphone, remove the retaining clip from the SM10 headband arm by removing two retaining clip screws (No. 3-48 x 3/16") and hex nuts. Mount the retaining clip on the headphone adapter plate supplied using the retaining clip screws and hex nuts. Unscrew the removable knob or screw from the stereo headphone cup. Position the headphone adapter plate with the retaining clip downward, and replace the knob or screw on the headphone cup (see Figure 6). Snap the SM10 pivot housing into the retaining clip, pivot adjustment knob upward, and place the headphone-microphone assembly on the user's head. Adjust the microphone position as described in step 4 of the *Assembly* procedure.



STEREO HEADPHONE BOOM MOUNTING  
**FIGURE 6**

**ARCHITECTS' SPECIFICATIONS**

The microphone shall be the Shure Model SM10 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 a cardioid polar characteristic. The cancellation at the rear shall be 15 to 20 dB. 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  $-66.0$  dB where  $0$  dB = 1 milliwatt per 10 microbars.

The microphone shall be a head-worn type, and shall be provided with a 1.5m (5 ft), non-detachable, two-conductor, shielded cable with a professional, three-pin, male audio connector designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series or equivalent connectors. The microphone shall also be

provided with a headband, connector belt clip, and foam windscreen.

The overall dimensions of the microphone shall be 203 mm (8 in.) in length and 44.5 mm (1-3/4 in.) in maximum height (pivot housing). The microphone housing shall be 15.9 mm (5/8 in.) in diameter and 14 mm (9/16 in.) in height.

**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.

Connector Belt Clip .....	RK200BC
Windscreen .....	RK184WS
Carrying Case .....	90A2255
Cartridge .....	R93
Headband Assembly .....	90A2260
Retaining Clip .....	90A2275
Headphone Adapter Plate .....	53A1528A

**OPTIONAL ACCESSORY**

Cough Button .....	A10CH
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**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 and return it prepaid to:  
 Shure Brothers Incorporated  
 Attention: Service Department  
 1501 West Shure Drive  
 Arlington Heights, Illinois 60004

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.