

THE SOUND OF THE PROFESSIONALS®

# 222 HARTREY AVE., EVANSTON, IL 60202-3696 U.S.A. AREA CODE 312/866-2200 • CABLE: SHUREMICRO

## PROFESSIONAL PRODUCTS

#### **GENERAL**

The SM5B has been specifically designed to minimize boom microphone problems in television and motion picture sound stage and location recording. It was pain-stakingly developed to provide extremely high reproduction quality and great flexibility of application. A humbucking coil assures very low susceptibility to electrical hum and allows the SM5B to be used in extreme hum fields.

## Microphone Features

- Mechanical suspension-two-stage mechanical isolation for any boom application. Suspension elements internal to windscreen prevent wind noise generation in suspension assembly; external shock assembly prevents transmission of boom or stand noise to microphone.
- Integral windscreen-very effective in outdoor locations and for fast boom swings.
- Frequency response-wide range, smooth and natural, especially tailored for dialogue and vocal pickup with excellent presence, yet well-suited to scoring assignments.
- Hum-bucking coil-assures low susceptibility to electrical hum, permits use in extreme hum fields.
- Directivity-cardioid, symmetrical about axis and exceptionally uniform with frequency. Minimizes sound coloration due to off-axis pickup. Provides effective rejection of background noise and excellent reach.
- Rugged and dependable-under all operating conditions. Cartridge and isolation assembly protected by outer windscreens and steel reinforcing rods.

Because of the unusual mechanical construction and performance characteristics, the SM5B may be used to advantage in many applications where boom operation is not practical: for example, with an accessory desk stand for outdoor sports and other difficult remote pickups (See below).





#### **ASSEMBLY**

- 1. Remove the SM5B from its packaging as follows: Remove the top tray containing the bag of binding head screws and two windscreens. Remove the bottom cardboard insert containing the microphone body, and unscrew the wing nut, boom adapter, and stand adapter from each other (these items are used in shipping to hold the insert together). Slide both sides of the bottom insert off the protruding steel rods of the microphone frame. Remove the inner cardboard insert from the protruding steel rods.
- 2. At the rear end of the microphone (opposite direction from arrow on nameplate), position the four protruding steel rods in the four notches of the charcoal (dark gray) windscreen. The two speed nuts on the windscreen should align with two holes on the microphone frame. As the windscreen is being mounted, inspect the red and white wire leads to make sure they do not touch the windscreen.
- At the front end of the microphone (indicated by arrow on nameplate), position the four protruding steel rods in the four notches of the metal ring of the light gray windscreen. The two speed nuts on the windscreen should align with the two unused holes on the microphone frame.
- 4. Insert binding head screws through the four mounting holes on the microphone frame and turn them fully clockwise to anchor the windscreens.

## **BOOM OR STAND MOUNTING**

To mount the SM5B on a boom, screw the hexagonal boom adapter to the boom head attachment screw. Insert the boom adapter screw through the 8.3 mm (21/64 in.) hole in the External Shock Assembly. Secure the adapter screw with the supplied wing nut. Position the SM5B as desired.

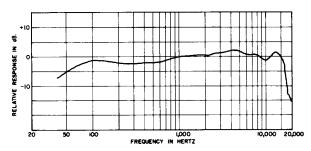
To mount the SM5B on a stand, insert the screw of the 5/8"-27 stand adapter through the 8.3 mm (21/64 in.) hole in the External Shock Assembly. Secure the adapter screw with the supplied wing nut. Mount the assembled microphone and adapter on the stand. Position the SM5B as desired.

## **SPECIFICATIONS**

Type Dynamic

## Frequency Response

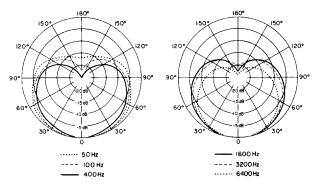
50 to 15,000 Hz (see Figure 1)



TYPICAL FREQUENCY RESPONSE FIGURE 1

#### Polar Pattern

Cardioid (unidirectional)- uniform with frequency, symmetrical about axis (see Figure 2)



TYPICAL POLAR PAT-TERNS FIGURE 2

#### Impedance

Microphone rating impedance is 150 ohms (160 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms.

## Output Level (at 1,000 Hz)

Open Circuit Voltage\* . . . . . -78.0 dB (.13 mV) Power Level\*\* . . . . . . . . . . -56.0 dB

\*0 dB = 1 volt per microbar

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

## Hum Pickup (typical)

24 dB equivalent SPL per millioersted

## Cartridge Shock Mount

Internal silicone-rubber-suspension shock- and vibration-isolator

## Swivel and External Shock Assembly

Integral part of microphone, with rubber vibration-isolator

## Mounting Adapters

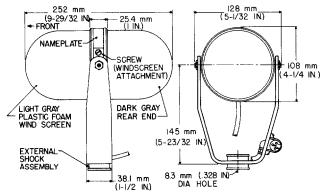
Two provided: suitable for mounting on stand with 5/8"-27 thread, or for mounting on boom with 5/16"-18 thread

## Case

Dark gray enamel with light and dark gray foam windscreens

### **Dimensions**

See Figure 3



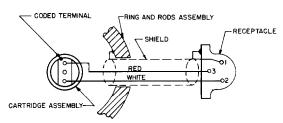
OVERALL DIMENSIONS FIGURE 3

## **Net Weight**

964 grams (2 lbs, 2 oz)

## Packaged Weight

1.98 kilograms (4 lbs, 6 oz)



POSITIVE PRESSURE PRODUCES POSITIVE VOLTAGE AT PIN 2 WITH RESPECT TO PIN 3

## INTERNAL CONNECTIONS FIGURE 4

## **FURNISHED ACCESSORIES**

OPTIONAL ACCESSORIES		
Wing Nut, 5/16"-18UNC		
Boom Adapter		
Stand Adapter		

#### OPTIONAL ACCESSORIES

Desk Stand	S37A, S39A
Cable (7.6m25.ft)	C25F

## REPLACEMENT PARTS

Cartridge	99B347
Suspension Vibration-Isolator	66A94
Front Windscreen (Light Gray)	90A2019
Rear Windscreen (Dark Gray)	90B2019
Cartridge-Connector Cable	70A2001
Microphone Connector	90J2600

### **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.