GENERAL

The SM5B has been specifically designed to minimize boom microphone problems in television and motion picture sound stage and location recording. It was painstakingly developed to provide extremely high reproduction quality and great flexibility of application. A hum-bucking 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 windscreens prevent wind noise generation in suspension assembly; external shock assembly prevents transmission of boom or stand noise to microphone.
- Integral windscreens — 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 the accessory S33P 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) windscreens. The two speed nuts on the windscreens should align with two holes on the microphone frame. As the windscreens is being mounted, inspect the red and white wire leads to make sure they do not touch the windscreens.

3. 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 windscreens. The two speed nuts on the windscreens 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 %‘-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](figure1)

Polar Pattern
Cardioid (unidirectional) — uniform with frequency, symmetrical about axis (see Figure 2)

![Typical Polar Pattern](figure2)

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 milivolt

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 windscreen

Dimensions
See Figure 3

![Overall Dimensions](figure3)

Net Weight
964 grams (2 lbs, 2 oz)

Packaged Weight
1.98 kilograms (4 lbs, 6 oz)

Furnished Accessories
Stand Adapter ........................................... 90A1071
Boom Adapter ........................................... 31A936

Optional Accessory
S33P

Replacement Parts
99B347
Suspension Vibration-Isolator ............. 66A94
Front Windscreen (Light Gray) ........... 90A2019
Rear Windscreen (Dark Gray) ............. 90B2019
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 two years 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. (The finish and foam windscreen are excluded from this two year policy.)

Shipping Instructions
Carefully repack the unit and return it prepaid to:
Shure Brothers Incorporated
Attention: Service Department
1501 West Shure Drive
Arlington, 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.