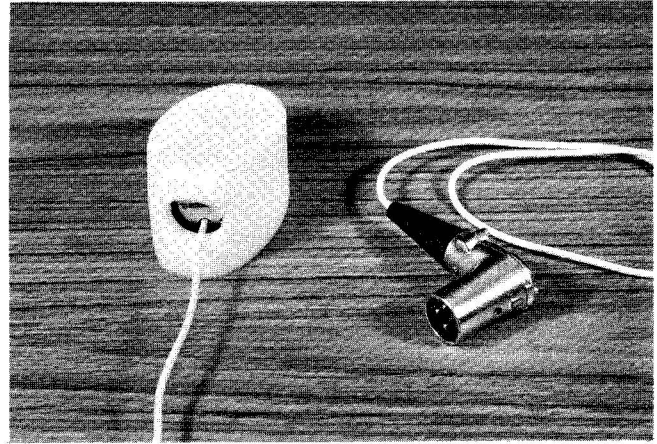


**SM18B (Front View)**



**SM18W (Rear View)**

**GENERAL**

The Shure Models SM18B and SM18W are inconspicuous, low-profile, foam-encased microphones designed for optimum speech pickup when mounted on an altar, tabletop, podium, or lectern. The SM18B has a dark brown foam enclosure and cable; the SM18W has a white foam enclosure and cable. The microphones have cardioid (unidirectional) polar characteristics; they are angled at 10° inside their foam housings to place the cartridge approximately one-eighth inch from the supporting surface. This low-profile design eliminates the hollow sound associated with tabletop pickup and maximizes the output by using the reflected sound from the tabletop to effectively double the output. Because surface-reflected sound waves reach the microphones at practically the same time as direct sound waves, cancellation owing to phase differences between the direct and reflected waves is significantly reduced, and the two sound waves combine to increase the output by 6 dB.

The physical and acoustic characteristics of the SM18B and the SM18W make them ideal for use on altars in front of standing clergy or on conference tables where ordinary stand-mounted microphones would be visually distracting. The colors chosen for the foam and cables are designed for maximum unobtrusiveness; the white SM18W will be inconspicuous on a white marble or cloth covered altar; while the brown SM18B will blend with a brown wood-finished conference table.

**Microphone Features:**

- Microphone angled inside foam so cartridge is approximately an eighth inch from supporting surface
- Low-profile design eliminates hollow sound caused by phase cancellation in ordinary tabletop pickup situations
- Available with either brown or white foam and matching colored cable to blend with typical surfaces
- Designed for altar, conference table, or podium pickup

- Cardioid polar pattern and 150 Hz to 10 kHz frequency response for optimum speech pickup
- Supplied with right-angle three-pin professional audio connector (male) for ease of hookup

**APPLICATIONS**

Place the microphone on a table, altar, or lectern. Note that, when viewed from the rear, the circular opening should be nearest the "TOP" of the foam enclosure (see Figure 4). This position ensures that the cartridge is in the optimum position for maximizing speech pickup and minimizing cancellation caused by surface reflections. Aim the front of the foam (the end away from the cable, see Figure 4) toward the speaker or lecturer. A seated or standing speaker will then be within the 15° to 45° angle of maximum pickup sensitivity. Position the microphone so that it is approximately 0.9m (3 ft.) from the mouth of the speaker or lecturer at any angle up to 45°.

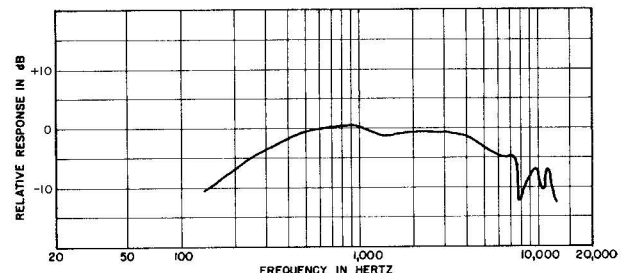
**SPECIFICATIONS**

**Type**

Dynamic

**Frequency Response**

150 to 10,000 Hz, at 25°, 1m (39.4 in.) from sound source, microphone on flat surface (see Figure 1)

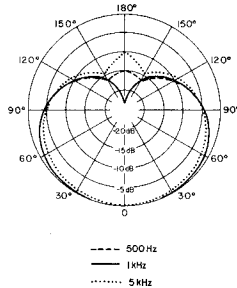


TYPICAL FREQUENCY RESPONSE

**FIGURE 1**

**Polar Pattern**

Cardioid (unidirectional), at 1m (39.4 in.) from horizontal sound source, microphone on flat surface (see Figure 2)



TYPICAL HORIZONTAL POLAR PATTERN  
**FIGURE 2**

**Impedance**

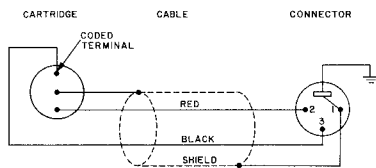
Microphone rating impedance is 150 ohms (160 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms.

**Output Level** [at 1,000 Hz, 25°, 1m (39.4 in.) from sound source, microphone on flat surface]

- Open Circuit Voltage ..... -75.0 dB (.18 mV)
- 0 dB = 1 volt per microbar
- Power Level ..... -53.0 dB
- 0 dB = 1 milliwatt per 10 microbars

**Phasing**

Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3 (see Figure 3).



INTERNAL CONNECTIONS  
**FIGURE 3**

**Cable**

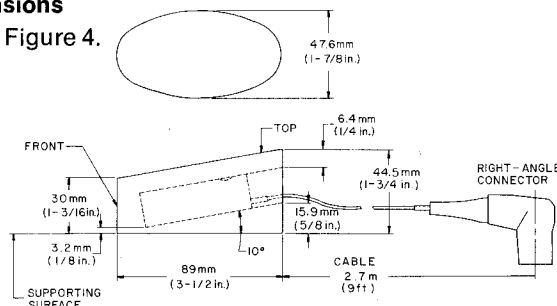
2.7m (9 ft.) two-conductor shielded, small diameter, attached (SM18B cable is brown; SM18W cable is white) with right-angle three-pin professional audio connector (male) designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connector.

**Case**

Elliptical shaped open-cell acoustic foam shock mount enclosure (SM18B foam is brown; SM18W foam is white), holds microphone at 10° angle from horizontal with diaphragm approximately 3.2 mm (1/8 in.) from mounting surface.

**Dimensions**

See Figure 4.



OVERALL DIMENSIONS  
**FIGURE 4**

**Net Weight** (less cable)

110 grams (3.9 oz)

**Packaged Weight**

338 grams (12 oz)

**ARCHITECTS' SPECIFICATIONS**

The microphone shall be a moving coil (dynamic) type with a frequency response of 150 to 10,000 Hz measured at 1m (39.4 in.), 25° from a sound source and mounted on a flat surface. The unit shall have a free field cardioid polar characteristic. The cancellation at the sides shall be 6 dB while the cancellation at the rear shall be 15 to 20 dB. The microphone shall have 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 -53.0 dB where 0 dB = 1 milliwatt per 10 microbars.

The microphone shall be designed for use on a flat surface such as an altar or tabletop. The microphone shall be set at 10° from the horizontal in an open-cell acoustic foam shock mount enclosure that shall be brown or white. The microphone shall be equipped with a 2.7m (9 ft.) two-conductor shielded cable, either brown or white to match the enclosure. The cable shall be terminated with a right-angle, three-pin professional audio connector (male) designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connector.

The overall dimensions of the microphone shall be 44.5 mm (1¾ in.) in height, 47.6 mm (1⅞ in.) in width, and 89 mm (3½ in.) in depth.

The microphone shall be the Shure Model SM18B, SM18W, or equivalent.

**REPLACEMENT PARTS**

	<u>SM18B</u>	<u>SM18W</u>
Foam Enclosure .....	RK204F	RK205F
Cable and Connector .....	C92	C93
Cartridge .....	R105	R105
Cartridge Case, Top .....	65A1271	65A1271
Cartridge Case, Bottom .....	65A1270	65A1270

**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.