MODEL SM7
UNIDIRECTIONAL DYNAMIC RECORDING MICROPHONE

The Model SM7 is a dynamic microphone with a very smooth, flat, wide-range frequency response. It is meticulously designed for the most exacting music and speech requirements in professional audio applications.

Microphone Features:
- Flat, wide-range frequency response for exceptionally clean and natural reproduction of both music and speech
- Classic cardioid polar pattern, uniform with frequency and symmetrical about axis, to provide maximum rejection and minimum coloration of off-axis sound
- Internal “air suspension” shock isolation virtually eliminates mechanical noise transmission
- Highly effective pop filter eliminates need for any add-on protection against explosive breath sounds, even for close-up vocals or narration
- Extremely good rejection of electromagnetic hum due to built-in hum rejection system
- Bass rolloff and mid-range emphasis (presence boost) controls with graphic display of response setting. (See Figure 1)
- Yoke mounting with captive stand nut for easy mounting and dismounting provides precise control of microphone position
- Rugged construction and excellent cartridge protection for outstanding reliability

APPLICATIONS
The Model SM7 was field-designed in major recording studios and scoring stages to be the finest dynamic microphone available for music recording and reproduction. Exacting laboratory development programs augmented the field-derived specifications and features to extend the advantages of the SM7 to a wide variety of critical professional audio applications.

SPECIFICATIONS
Type
Dynamic

Frequency Response
40 to 16,000 Hz (see Figure 1)

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

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

Output Level (at 1,000 Hz)
Open Circuit Voltage* 

- 79.0 dB (.11 mV) **0 dB = 1 volt per µbar

PowerLevel**

- 57.0 dB **0 dB = 1 milliwatt per 10 µbars
Hum Sensitivity (maximum)
13 dB equivalent SPL/millioersted
(1 mV/10 oersted)

Switches
Bass Rolloff and Mid-Range Emphasis: Slotted response selector switches. See Figure 1 for bass rolloff and mid-range emphasis (presence boost) response. See Figure 3 for location of switches.

Response Selector Switch Cover
Cover plate (supplied) can be used to prevent accidental change of response setting.

Cartridge Shock Mount
Internal air-suspension shock- and vibration- isolator

Microphone Connector
Three-pin professional audio connector designed to mate with Cannon XL series, Switchcraft A3 (Q-G) series or equivalent connector.

Swivel Assembly
Integral part of microphone with captive nut for ease of attachment to stand, suitable for mounting on stand with 5/8 in–27 thread.

Case
Dark gray enamel aluminum and steel case with dark gray foam windscreen

Dimensions
See Figure 3

OVERALL DIMENSIONS
FIGURE 3

Net Weight
764 grams (1 lb, 11 oz)

FURNISHED ACCESSORY
Switch Cover Plate .......................... 53A1884

OPTIONAL ACCESSORIES
DeskStand .................................... S37A, S39A
Cable and Plug Assembly (7.6m – 25 ft) ........ C20F

For additional service or parts information, please contact Shure’s Service department at 1-800-516-2525. Outside the United States, please contact your authorized Shure Service Center.

ARCHITECTS’ SPECIFICATIONS
The microphone shall be a moving coil (dynamic) type with a frequency response of 40 to 16,000 Hz. The unit shall have a cardioid polar characteristic. The cancellation at the sides shall be approximately 6 dB and 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 –57.0 dB where 0 dB = 1 milliwatt per 10 microbars.

The microphone shall have two switches for controlling the frequency response. The first switch is a Bass Rolloff selector switch. One position of this switch provides a flat low frequency response and the second position provides a gradual–low frequency rolloff. The second switch is the Mid–Range Emphasis (presence boost) switch. One position of this switch provides a flat mid–range frequency response and the second position raises the level of the mid–range frequency response. The microphone shall be equipped with an integral swivel assembly suitable for mounting on a stand with a 5/8 in–27 thread.

The overall dimensions shall be 191 mm (7–17/32 in.) in length, 148 mm (5–13/16 in.) in height, and 96 mm (3–25/32 in.) in width.

The microphone shall be the Shure Model SM7 or equivalent.