

## MODEL SM77

UNIDIRECTIONAL DYNAMIC MICROPHONE

# **GENERAL**

The Shure SM77 STARMAKER™ microphone is a small, lightweight, extremely rugged dynamic unit with a cardioid (unidirectional) pickup pattern and a smooth, wide frequency response. The microphone is available in ebony vinyl enamel finish.

Because of the feedback rejection of the SM77 cardioid pickup pattern, the microphone is suitable for sound reinforcement applications or other uses where room acoustics or ambient noise is a problem as well as for handheld or stand mounted use in broadcast and recording studios. The microphone can be used for voice or instrument pickup, and for closeup vocals with the pop protection of the accessory windscreen.

The microphone has a tailored low-frequency rolloff and a gentle mid-frequency presence peak to enhance intelligibility of speech and singing.

The SM77 microphone is supplied as Model SM77EB-LC, ebony vinyl enamel finish, without a cable. The unit is supplied with a Model A25B Swivel Adapter.

For superior wind and pop protection, when used outdoors or for closeup vocals, an accessory windscreen is available as Model A2WSA-BK. Also recommended is the Shure C25E, a 7.6m (25 ft) TRIPLE-FLEX® twoconductor shielded cable with 3-pin XLR audio connectors; the microphone connector is finished in black to complement the SM77.

# Microphone Features:

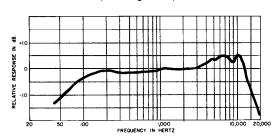
- Uniform cardioid pickup pattern for excellent suppression of feedback and rejection of ambient room noise
- Suitable for recording studio, broadcast, or sound reinforcement use
- Small, lightweight, and extremely rugged with shock mounted cartridge for quiet operation
- Can be handheld or stand mounted-all models supplied with accessory slip-in swivel adapter
- Attractive black vinyl enamel finish is durable and easy to clean
- Accessory windscreen available for pop protection outdoors or in closeup use



Dynamic

# Frequency Response

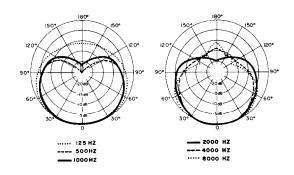
50 to 15,000 Hz (see Figure 1)



TYPICAL FREQUENCY RESPONSE FIGURE 1

# Polar Pattern

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



TYPICAL POLAR PATTERNS FIGURE 2

# **Impedance**

Microphone rating impedance is 150 ohms (250 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms

## Output Level (at 1.000 Hz)

Open Circuit Voltage\* ...... - 77.5 dB (0.13 mV)
Power Level\*\* . . . . . . . -57.5 dB

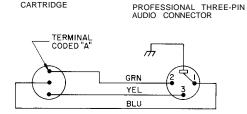
\*0 dB = 1 volt per microbar

CARTRIDGE

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

# **Phasing**

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



INTERNAL CONNECTIONS FIGURE 3

### Connector

Professional three-pin audio connector\* in microphone

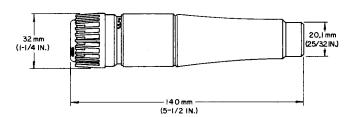
### Swivel Adapter

Positive action, adjustable through 90° from vertical to horizontal, suitable for mounting on stand with 5/8"-27 thread

Aluminum and ARMO-DUR® with steel mesh screen: ebony vinyl enamel finish

## **Dimensions**

See Figure 4



OVERALL DIMENSIONS FIGURE 4

Net Weight (less cable) 168 grams (6 oz)

# Packaged Weight

0.88 kg (1 lb, 15 oz)

### ARCHITECTS SPECIFICATIONS

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 sides shall be approximately 6 dB, and the cancellation at the rear shall be greater than 15 dB. The microphone shall have a rated impedance of 150 ohms for connection to microphone inputs rated at 19 to 300 ohms. The microphone output shall be -57.5 dB where 0 dB equals 1 milliwatt per 10 microbars.

The microphone shall be provided with a swivel adapter adjustable through 90° from vertical to horizontal. The microphone swivel adapter shall mount on a stand having a 5/8"-27 thread. The overall dimensions of the microphone shall be 140 mm (5-1/2 in.) in length and 32 mm (1-1/4 in.) in diameter.

The microphone shall be the Model SM77 or equivalent.

### **FURNISHED ACCESSORY**

Swivel Adapter	3
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## **OPTIONAL ACCESSORIES**

Windscreen
Desk Stand
Isolation Mount
Dual Mount
Cable: 7.6m (25 ft)

### REPLACEMENT PARTS

Cartridge	 	 	 R140
Plug Element	 	 	 .90A1984

## **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.

<sup>\*</sup>Designed to mate with Cannon XL series, Witchcraft A3 (Q.G.) series or equivalent connector.