

GENERAL

The Model SM33 is a compact and rugged unidirectional ribbon microphone combining wide range response and a supercardioid directional pattern. This polar pattern is somewhat more directional than the conventional cardioid, providing excellent control of unwanted surrounding noise and reverberation. The performance characteristics are ideal for studio use in broadcasting and recording and for critical sound reinforcement applications.

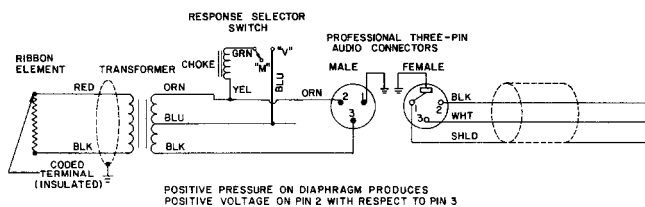
Microphone Features:

- Unusually effective supercardioid pickup pattern minimizes effects of studio acoustics and background noise.
- Warm, 'smooth sound from wide frequency response range.
- Particularly well suited for both voice and music, with Response Selector Switch for adjustment of low-frequency response.
- Built-in shock mount for quiet operation.
- Rugged mechanical design and internal ribbon protection assure reliable performance under rigorous operating conditions.

IMPEDANCE SELECTION

Model SM33 is shipped connected for 150 ohm impedance. To change to 38 ohms, proceed as follows (see Figure 1):

1. Remove the No. 2-56 setscrew at the receptacle end of the microphone.
2. Carefully pull out the 3-pin male insert from the receptacle.
3. Disconnect (unsolder) the BLACK lead from pin 3. Insulate the end of the BLACK lead with tape.
4. Solder the BLUE lead to pin 3.
5. Reassemble the male insert in the receptacle and securely tighten the setscrew.



INTERNAL CONNECTIONS
FIGURE 1

RESPONSE SELECTION

The slotted Response Selector Switch is below the nameplate at the front of the microphone. The Music Position "M" provides a flat low-frequency response; the Voice Position "V" provides a rolled-off low-frequency response. (See Figure 2.)

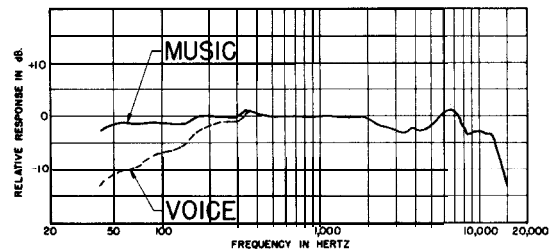
SPECIFICATIONS

Type

Ribbon

Frequency Response

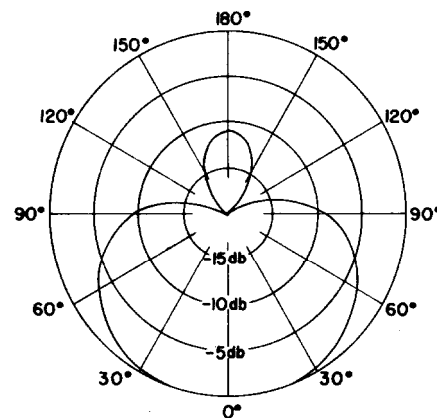
40 to 15,000 Hz (see Figure 2)



TYPICAL FREQUENCY RESPONSE
FIGURE 2

Polar Pattern

Supercardioid (unidirectional). See Figure 3



TYPICAL DIRECTIONAL PATTERN
FIGURE 3

Impedance

Dual. Microphone rating impedance is 38 ohms (50 ohms actual) or 150 ohms (280 ohms actual) for connection to microphone inputs rated at 19 to 75 ohms or 75 to 300 ohms. Wired for 150 ohms as supplied. (See Impedance Selection to change impedance.)

Output Level (at 1,000 Hz)

38 ohms 150 ohms

Open Circuit Voltage* . . . -86.0 dB -78.0 dB
 (.050 mV) (.124 mV)

Power Level** -59.0 dB -58.5 dB

*0 dB = 1 volt per microbar
 **0 dB = 1 milliwatt per 10 microbars

Hum Pickup (typical in 60 Hz field)

39.0 dB equivalent SPL/millioersted (Response Selector Switch in "M" position)

Switch

Slotted, rotary-type, Voice-Music Response Selector Switch (see Figure 2 for rolled-off and flat low-frequency response)

Cable

6.1 m (20 ft) rubber-jacketed, two-conductor shielded cable, with female three-pin professional audio connector* on microphone end

*Designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connector

Swivel and Shock Mount Assembly

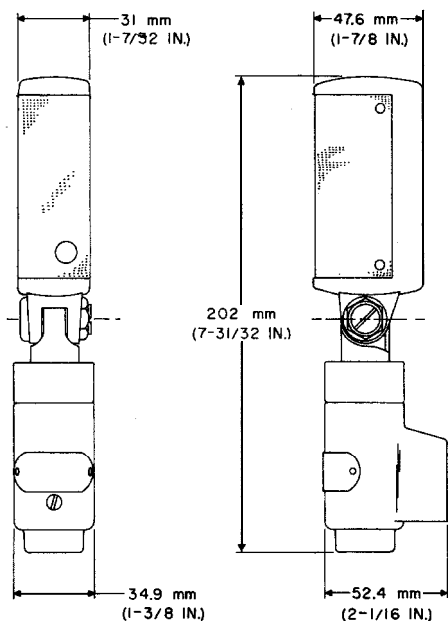
Positive action, permits tilting head through 55° forward and 70° backward; shock-mounted with internal rubber vibration-isolator; suitable for mounting on stand with 5/8"-27 thread

Case

Nonreflecting gray enameled die casting with aluminum grille

Dimensions

See Figure 4



OVERALL DIMENSIONS
FIGURE 4

Net Weight (less cable)

736 grams (1 lb, 10 oz)

Packaged Weight

1.48 kg (3¼ lb)

ARCHITECTS' SPECIFICATIONS

The microphone shall be the Shure Model SM33 or equivalent. The microphone shall be a moving ribbon type with a frequency response of 40 to 15,000 Hz. The unit shall have a supercardioid polar characteristic. The cancellation at the sides shall be approximately 7 dB, and the cancellation at the rear shall be 5 to 13 dB. The microphone shall be a dual-impedance unit with rated impedances of 38 ohms and 150 ohms for connection to microphone inputs rated at 19 to 75 ohms and 75 to 300 ohms. The microphone output shall be:

38 ohms -59.0 dB
 150 ohms -58.5 dB
 (0 dB = 1 milliwatt per 10 microbars)

The microphone shall be equipped with a built-in two-position Response Selector Switch providing either flat or rolled-off low-frequency response. The microphone shall be equipped with a swivel and shock mount assembly with an internal rubber vibration-isolator. The swivel shall be adjustable through 55° forward and 70° backward, and shall be suitable for mounting on a stand having a 5/8"-27 thread. The microphone shall be provided with a 6.1m (20 ft) detachable rubber-jacketed, two-conductor shielded cable with a female three-pin professional audio connector* at the microphone end.

The overall dimensions of the microphone shall be 202 mm (7-1/32 in.) in length, 34.9 mm (1-3/8 in.) in width, and 52.4 mm (2-1/16 in.) in depth.

*Designed to mate with Cannon XL series, Switchcraft A3 (Q.G.) series, or equivalent connector

OPTIONAL ACCESSORIES

Desk Stand S33P
 Quick Disconnect Adapter A45

REPLACEMENT PARTS

Cable C50
 Cable Connector RK120P

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.