

**UNIDIRECTIONAL DYNAMIC MICROPHONES**



**GENERAL**

The Model 585 Series UNISPHERE® A Microphones are dynamic microphones with a very effective filter that provides excellent protection from wind and "pop" (explosive breath sounds). They feature fine reproduction of music and voice, and are ideal for use with high quality sound systems and tape recorders.

These microphones are particularly suitable for use in theaters, night clubs, auditoriums, schools, churches, indoors or outdoors, and any place where omnidirectional microphones may not operate properly because of poor acoustics or where wind creates a problem, such as during outdoor receptions, inaugurations, or sporting events. These microphones will, in almost every instance, eliminate the annoying loudspeaker "squeal" caused by feedback. In addition, they will prevent echoing (boominess) that sometimes occurs in partially-filled halls. These microphones can also be used closer to loudspeakers than usual, without creating feedback problems.

This suppression of feedback, combined with their smooth sound, makes these microphones particularly good for use with orchestras, small combos, and singers.

**Microphone Features:**

- A built-in wire-mesh screen with a special filter that provides protection from wind and "pop" (explosive breath sounds). This filter also enables singers and speakers to perform close to the microphone.
- A strong, detachable cable, especially selected for effective shielding from hum pickup
- A replaceable microphone cartridge that is simple to change in the field
- A cartridge that is protectively shock-mounted internally. Minimizes handling noise
- A built-in On-Off switch with a device to lock the switch in its On position
- An adjustable swivel adapter that enables you to aim the microphone where you want it
- A swivel that makes it easy to quietly pull the microphone out and use it comfortably in the hand

**APPLICATIONS**

The Model 585SA is high impedance for connection to high-impedance microphone inputs.

The Model 585SB is low impedance for connection to microphone inputs rated at 19 to 300 ohms. The low-impedance microphone is recommended where long cable lengths are required or under conditions of severe hum disturbance. The permissible cable length is practically unlimited since neither response nor level is appreciably affected. Shure Model A95 Series Line Matching Transformers are available for use in those cases where a low-impedance microphone line is desirable but the associated amplifier has a high-impedance input. These transformers provide a proper impedance match between a 19 to 300 ohm microphone line and a high-impedance input and are available with various input and output connectors.

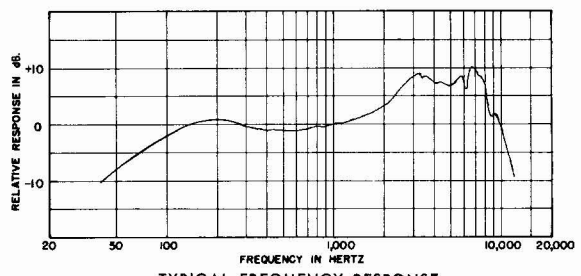
**SPECIFICATIONS**

**Type**

Dynamic

**Frequency Response**

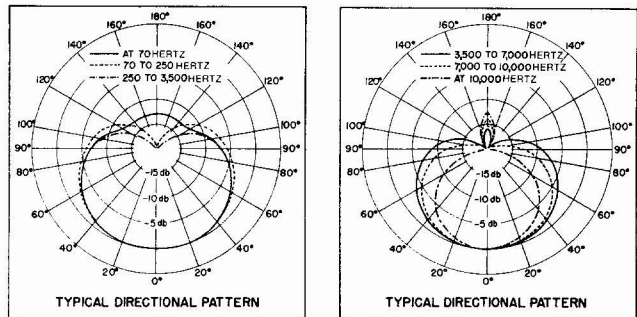
50 to 13,000 Hz (see Figure 1)



**FIGURE 1**

**Polar Pattern**

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



**FIGURE 2**

**Impedance**

Model 585SA—Microphone impedance is "High" for connection to high-impedance microphone inputs.

Model 585SB—Microphone rating impedance is 150 ohms (170 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms.

**Output Level (at 1,000 Hz)**

	585SA	585SB
Open Circuit Voltage* .....	-57.0 dB (1.41 mV)	-80.5 dB (.094 mV)
Power Level** .....		-59.0 dB

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

**Switch**

Built-in On-Off switch with lockplate. To lock switch in On position, remove screw on lockplate and turn lockplate 180°. Reassemble and tighten screw.

**Cartridge Shock Mount**

Internal rubber vibration-isolator

**Cable**

585SA—4.6m (15 ft) one-conductor shielded with Amphenol type MC1F connector on microphone end  
 585SB—4.6m (15 ft) two-conductor shielded with Amphenol type MC2M connector on microphone end

**Swivel Adapter**

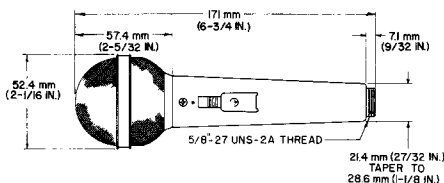
Positive action, adjustable through 90° from vertical to horizontal, permits easy removal for handheld use, suitable for mounting on stand with 5/8"-27 thread

**Case**

Chrome-plated die casting with steel mesh grille

**Dimensions**

See Figure 3



OVERALL DIMENSIONS  
**FIGURE 3**

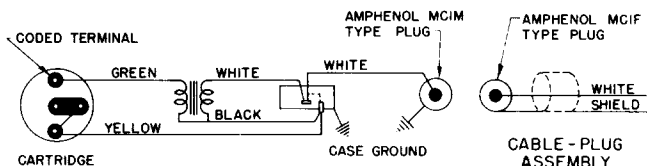
**Net Weight (less cable)**

354 grams (12½ oz)

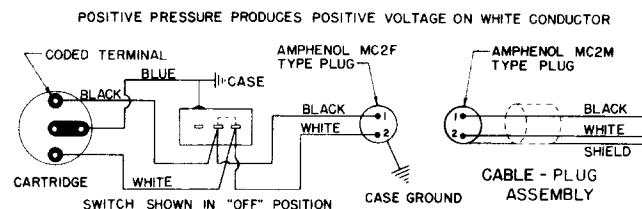
**Packaged Weight**

851 grams (1 lb, 14 oz)

POSITIVE PRESSURE PRODUCES POSITIVE VOLTAGE ON WHITE CONDUCTOR



585SA INTERNAL CONNECTIONS  
**FIGURE 4**



585SB INTERNAL CONNECTIONS  
**FIGURE 5**

**PHASING**

To test two microphones and/or their cables for proper phasing, connect them to an amplifier and talk or sing into them while holding them three or four inches apart. The sound from the speakers should be the same when talking into either microphone or directly between them if they are in phase with each other. If the sound drops drastically, or if a dead spot is found when talking between the two microphones, either the microphones or their cables (low impedance only) are out of phase. All cables and microphones should be tested in this manner to insure that they are in phase with each other.

To change the phase of a low-impedance microphone cable, either use a Shure A15PRS Phase Reverser or interchange the wires connected to pins 1 and 2 of the connector. To change the phase of a microphone, the microphone cartridge leads must be interchanged (see Figure 4). This should be performed by your dealer, the Shure Factory Service Department, or other qualified service personnel.

**FURNISHED ACCESSORY**

Swivel Adapter .....A25B

**OPTIONAL ACCESSORIES**

Line Matching Transformer .....A95 Series  
 Windscreen .....A61WS  
 Desk Stand .....S33B, S37A, S38B, S39A or S40A  
 Disconnect Adapter .....A45

**REPLACEMENT PARTS**

	585SA	585SB
Cartridge .....	R85	R85
Cable .....	C58	C57
On-Off Switch .....	RK48S	RK48S
Case Assembly .....	RK44C	RK45C
Plug Element .....		RK52P
Cable Connector .....	RK114P	RK115P
Screen and Grille Assembly .....	RS85	RS85

**ARCHITECTS' SPECIFICATIONS**

The microphone shall be the Shure Model 585SA, 585SB, or equivalent. The microphone shall be a moving coil (dynamic) type with a frequency response of 50 to 13,000 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.

Model 585SA shall be high impedance for connection to high-impedance microphone inputs.

Model 585SB 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:

585SA ..... -57.0 dB  
 (0 dB = 1 volt per microbar)

585SB ..... -59.0 dB  
 (0 dB = 1 milliwatt per 10 microbars)

The microphone shall be equipped with a built-in On-Off switch. The microphone shall be provided with a swivel adapter, adjustable through 90° from vertical to horizontal, and suitable for mounting on a stand having a 5/8"-27 thread.

Model 585SA shall be provided with a detachable 4.6m (15 ft) one-conductor shielded cable with an Amphenol type MC1F connector at the microphone end.

Model 585SB shall be provided with a detachable 4.6m (15 ft) two-conductor shielded cable with an Amphenol type MC2M connector at the microphone end.

The overall dimensions of the microphone shall be 171 mm (6-3/4 in.) in length and 52.4 mm (2-1/16 in.) in diameter.

**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.