

SHURE®

MODELS 588SA AND 588SB UNIDIRECTIONAL DYNAMIC MICROPHONES



GENERAL

The UNISPHERE® B Models 588SA and 588SB are unidirectional dynamic microphones with a very effective filter for excellent protection from breath popping and wind noise. The microphones are available either as high impedance (588SA) or low impedance (588SB); they provide natural, lifelike reproduction of vocal and instrumental music; they are ideal for sound reinforcement and tape recording.

These microphones are particularly suitable when unidirectional sound pickup is required because of feedback problems. Because they are unidirectional and pick up sound from the front while suppressing sound from the rear, the 588 Series can be used closer than usual to loudspeakers without the annoying squeal caused by feedback. They also permit higher amplifier gain before feedback. They are very appropriate in locations such as theaters, night clubs, auditoriums, schools and churches; indoors or outdoors.

Microphone Features:

- Ball-type grille filter provides protection from pop and wind; permits closeup microphone use without breath popping; permits outdoor use without wind noise
- True cardioid pickup pattern, symmetrical about axis and uniform at all frequencies, suppresses feedback, retains same tonal quality of voice or music even if performer or speaker moves about
- Shock-mounted cartridge minimizes handling and mechanical noise
- Built-in On-Off switch with provision for locking switch on
- Adjustable swivel adapter supplied—allows aiming microphone and permits quick removal for handheld use

VARIATIONS

588SA: High impedance, supplied with cable* having a 3-socket professional audio connector on microphone end.

588SAC: Same as Model 588SA, but with phone plug on equipment end of cable*.

588SA-LC: Same as Model 588SA, but without cable.

588SB: Low impedance, supplied with cable* having 3-socket professional audio connector on microphone end.

588SB-CN: Same as Model 588SB, but with 3-pin professional audio connector on equipment end of cable*.

588SB-LC: Same as Model 588SB, but without cable.

*See Specifications for detail on cable.

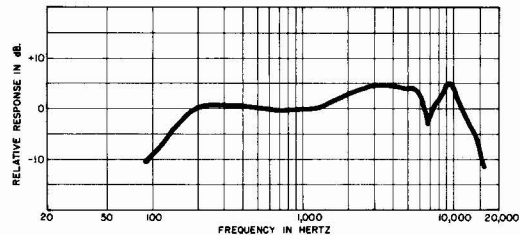
SPECIFICATIONS

Type

Dynamic

Frequency Response

80 to 13,000 Hz (See Figure 1)

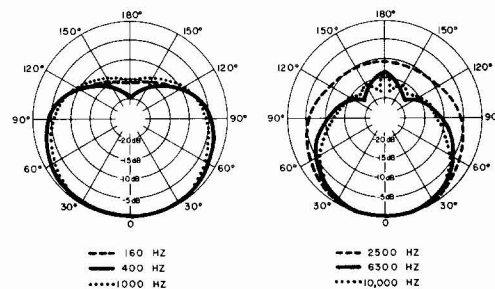


TYPICAL FREQUENCY RESPONSE

FIGURE 1

Polar Pattern

Cardioid (unidirectional) pattern—Effective rejection of sound at rear of the microphone is uniform at all frequencies, while front pickup characteristics are uniform about the axis. See Figure 2



TYPICAL POLAR PATTERNS

FIGURE 2

Impedance

Model 588SA—Microphone impedance is "High" for connection to high-impedance microphone inputs. Model 588SB—Microphone rating impedance is 150 ohms (180 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms

MODELS 588SA AND 588SB
UNIDIRECTIONAL DYNAMIC MICROPHONES

SHURE®

Output Level (at 1,000 Hz)

	<u>588SA</u>	<u>588SB</u>
Open Circuit Voltage*	-59.5 dB (1.1 mV)	-82.0 dB (.08 mV)
Power Level**		-60.5 dB
*0 dB = 1 volt per microbar		
**0 dB = 1 milliwatt with 10 microbars		

Phasing

588SA: Positive pressure on diaphragm produces positive voltage on pin 1 with respect to pin 3.
 588SB: Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3.

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

- 588SA: 4.6m (15 ft) one-conductor shielded with professional 3-socket audio connector* on microphone end
- 588SAC: 4.6m (15 ft) one-conductor shielded with professional 3-socket audio connector* and standard ¼-inch phone plug
- 588SB: 4.6m (15 ft) two-conductor shielded with professional 3-socket audio connector* on microphone end
- 588SB-CN: 6.1m (20 ft) two-conductor shielded with professional 3-socket and 3-pin audio connectors*
- 588SA-LC, 588SB-LC: supplied without cable

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

Swivel Adapter

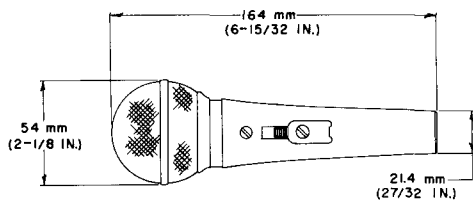
Positive action, adjustable through 90° from vertical to horizontal, permits easy removal for handheld use, suitable for mounting on stand with 5/8"-27 thread

Case

Silver-finish die casting with chrome-plated steel screen

Dimensions

See Figure 3



OVERALL DIMENSIONS
FIGURE 3

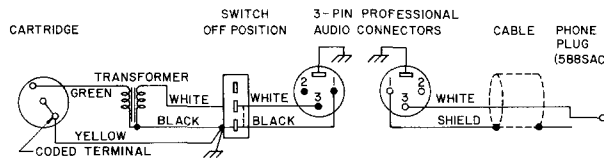
Net Weight (less cable)

340 grams (12 oz)

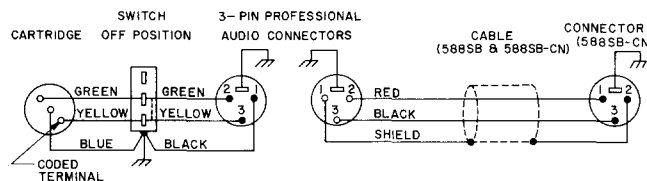
PHASING

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 2 and 3 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.



MODEL 588SA



MODEL 588SB
 INTERNAL CONNECTIONS
FIGURE 4

FURNISHED ACCESSORY

Swivel Adapter A25B

OPTIONAL ACCESSORIES

- Line Matching Transformer A95 Series
- Desk Stand S33B, S37A, S39A
- Isolation Mount A55M
- Dual Mount A26M
- Windscreen A58WS Series
- Cable: 6.1m (20 ft) 1-conductor with phone plug C20A
- 7.6m (25 ft) 2-conductor with 3-pin professional audio connectors . C25B, C25F

REPLACEMENT PARTS

- Cartridge R8
- Screen and Grille RK82G
- Switch RK81S
- Plug Element RK40P
- Cable: 588SA C83
- 588SB C59
- 588SB-CN C20H

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 60204

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.