MODELS 588SA, 588SB, AND 588SBE UNISPHERE B

UNIDIRECTIONAL DYNAMIC MICROPHONES

General: The Model 588SA, 588SB, and 588SBE Microphones are unidirectional dynamic microphones with a very effective filter that provides excellent protection from wind and “pop” (explosive breath sounds). They feature a natural, life-like reproduction of music and voice, and are ideal for use with good quality sound systems and tape recorders.

These microphones are particularly suitable for use in theatres, night clubs, auditoriums, schools, churches, indoors or outdoors, and any place where omnidirectional microphones may not operate properly because of feedback problems. These microphones will, in almost every instance, eliminate the annoying loudspeaker “squeal” caused by feedback and can be used closer to loudspeakers than usual, without feedback. This suppression of feedback, combined with their smooth sound, makes these microphones ideal for use with orchestras, small combos, and vocalists.

The microphones feature:

- A built-in wire-mesh screen with a special filter that provides protection from wind “pop” (explosive breath sounds). This filter also enables singers and speakers to perform close to the microphone.

- A true cardioid pattern: symmetrical about axis and uniform at all frequencies. This means that voice and music tonal quality remain the same, even if the artist or speaker moves about while performing or speaking—and that feedback and boominess are eliminated or effectively suppressed.

- Cartridge shock mounted for quiet operation.

- A built-in “ON-OFF” switch with provision for locking switch in its “ON” position.

- Versatility—for use in the hand or on a stand—indoors or outdoors.

- An adjustable swivel adapter that enables you to aim the microphone where you want it. Swivel, also, allows for quick removal for use as a hand microphone.
The Model 588SA is high impedance and may be used with any high gain amplifier with an input of 100,000 ohms or more.

The Model 588SB and 588SBE are low impedance and designed for connection to a 25 to 200 ohm line or input. This is recommended where long cable lengths are required or where there are conditions of severe hum disturbance. To use the Model 588SB or 588SBE with a high impedance amplifier, use a Shure Model A95A or A95P Line Matching Transformer. The 588SB has 15 feet of cable, the 588SBE has 30 feet.

Important: Shure Microphone Cables are selected after exhaustive tests to insure superior performance in microphones because of low capacities, superior shielding properties and unusually long life under severe use.

Cables with plastic insulation should not be subjected to excessive soldering-iron heat. Carefully clean and tin the conductors and the connections to which the conductors are to be soldered. The soldering operation can then be done with a minimum of heat, thereby avoiding any possibility of damage to the cable.

Guarantee: Each microphone is guaranteed to be free from electrical and mechanical defects for a period of one year from date of shipment from factory, provided all instructions are complied with fully. In case of damage, return the microphone to the factory for repairs. Our guarantee is voided if the microphone is subjected to accident or abuse.

**FURNISHED ACCESSORY**

Swivel Adapter .......................................................... A25B

**OPTIONAL ACCESSORIES**

<table>
<thead>
<tr>
<th>Line Matching Transformer</th>
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**REPLACEMENT COMPONENTS**

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<th>A25B</th>
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<td>Dynamic Cartridge</td>
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<td>90A1504 (for Model 588SA)</td>
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<td></td>
<td></td>
<td>C59 (for Model 588SB)</td>
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<td>C59E (for Model 588SBE)</td>
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OVERALL DIMENSIONS

**FIGURE A**
ARCHITECT'S SPECIFICATIONS

The microphone shall be Shure Model 588SA (588SB, 588SBE) or equivalent. The microphone shall be a moving-coil dynamic type microphone with a shaped frequency range of 80 to 13,000 Hz. This 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 588SA—The microphone shall be high impedance for connection into a high impedance input.

The microphone output shall be $-59.0$ db where $0$ db $= 1$ volt per microbar.

The microphone rating impedance shall be 40,000 ohms and the Gm (sensitivity) at 1,000 Hz. shall be within $\pm 3$ db of $-155.0$ db referenced to EIA Standard SE-105, August 1949.

Model 588SB, 588SBE—The microphone shall be low impedance for connection into a 25 to 200 ohm line.

The microphone output shall be $-60.0$ db where $0$ db $= 1$ milliwatt with 10 microbars.

The microphone rating impedance shall be 150 ohm and the Gm (sensitivity) at 1,000 Hz. shall be within $\pm 3$ db of $-153.0$ referenced to EIA Standard SE-105, August 1949.

The Model 588SA (588SB, 588SBE) shall be provided with a swivel adapter adjustable through 90° from vertical to horizontal. The microphone is equipped with a built-in “ON-OFF” switch and a one conductor (588SA) or a two conductor (588SB, 588SBE) shielded cable having Cannon XLR-3-11C connector on microphone end. The microphone swivel adapter will mount on a stand having a %\textdegree-27 thread. The overall dimensions shall be $6\frac{1}{2}$“ (164.3 mm) in length and $2\frac{1}{8}$” (54.0 mm) in diameter.

Figure B

**FREQUENCY RESPONSE**

![Frequency Response Graph](image-url)
SPECIFICATIONS

Type: Dynamic
Frequency Response: 80 to 13,000 Hz. (cps) (See Figure C)
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 D.
Impedance: Model 588SB and Model 588SBE .................................................. 25 to 200 ohms
Model 588SA .......................................................... High Impedance
Output Level: 1,000 Hz. (cps) response
Model 588SB and Model 588SBE ........................................ Low Impedance
Open circuit voltage .................................................. 31.5 db * (.085 mv)
Power Level .................................................. 60.0 db **
EIA Microphone Rating
Gm (Sensitivity) .................................................. -153.0 db ***
Model 588SA .......................................................... High Impedance
Open circuit voltage .................................................. 59.0 db * (1.11 mv)
EIA Microphone Rating
Gm (Sensitivity) .................................................. -155.0 db ***
* 0 db = 1 volt per microbar
** 0 db = 1 Milli watt with 10 microbars
*** 0 db = EIA Standard SE-105, August 1949
Switch: Built-in “ON-OFF” switch with lockplate furnished. Microphone is shipped with lockplate installed. To lock switch in “ON” position, loosen screw on lockplate and turn lockplate 180°. Tighten screw.
Shock Mount: Internal vibration-isolation of rubber construction.
Cable: Highly durable cable with exceptionally effective hum shielding and with Cannon XLR-9-11C connector on microphone end.
Model 588SB ............... 15 foot, two-conductor shielded, rubber jacketed
Model 588SBE ............. 30 foot, two-conductor shielded, rubber jacketed
Model 588SA ............... 15 foot, one-conductor shielded, plastic jacketed
Case: Chrome plated die cast with chrome plated steel screens.
Dimensions: See Figure A.
Net Weight: 12 ounces, 340 grams (less cable)

[Diagram of Typical Directional Patterns]

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