MODEL 588SDX

UNIDIRECTIONAL DYNAMIC MICROPHONE

The Model 588SDX is a ball-type, dual-impedance, cardioid (unidirectional) dynamic microphone that provides excellent voice reproduction. Its spherical grille is a very effective wind and pop filter which is especially good when used for closeup vocal miking. This microphone is highly suited for speech or music pickup in schools, churches, and meeting rooms. Its unidirectional polar pattern greatly reduces feedback problems, permitting operation closer than usual to loudspeakers without the annoying squeal or howl caused by feedback.

The microphone is equipped with a lockable ON/OFF switch and an internal impedance selection socket located on the XLR connector for switching between high and low impedance. A slip-in swivel adapter is supplied for the convenience of stand-mounted use.

Features

- *Controlled low-frequency response combined with a smooth high-frequency rise for clear and intelligible voice pickup*
- *Symmetrical cardioid pickup pattern minimizes feedback*
- *Spherical grille provides effective filtering out of breath noise and popping when used for closeup vocals, and of wind noise when used outdoors*
- *Neodymium magnet for high signal-to-noise ratio*
- *Shock-mounted cartridge for quiet operation and low stand/ handling noise*
- *Lockable ON/OFF switch*
- *Dual impedance selectable by internal socket*
- *Break-resistant, slip-in swivel adapter for stand-mounted use*
- *Three-pin professional audio (XLR) connector*
- *Tough, steel-mesh grille resists wear from constant use and handling; die-cast handle*
- *Field serviceable and backed by the Shure 2-year warranty*

BASIC RULES FOR MICROPHONE USE

1. Aim a directional microphone toward the desired sound source (for instance, a talker or singer) and away from undesired sources (such as loudspeakers).
2. Locate the microphone as close as practical to the desired sound source for the best gain before feedback.
3. When extra bass response is desirable, work close to the microphone. See Figure 1 for the close-up increase in low frequency output called “proximity effect”.
4. Do not pick up the same sound source with more than one microphone. Keep the distance between multiple microphones at least three times the distance from each source to its intended microphone.
5. Use the fewest microphones practical for the particular application.
6. Locate microphones as far as possible from acoustically reflective (hard or smooth) surfaces.
7. Add an external windscreen when additional pop protection is needed: outdoors in windy conditions or for closeup vocal use.
8. Avoid excessively handling the microphone to minimize mechanical noise pickup.
9. To preserve directional characteristics, do not obstruct the grille with your hand.

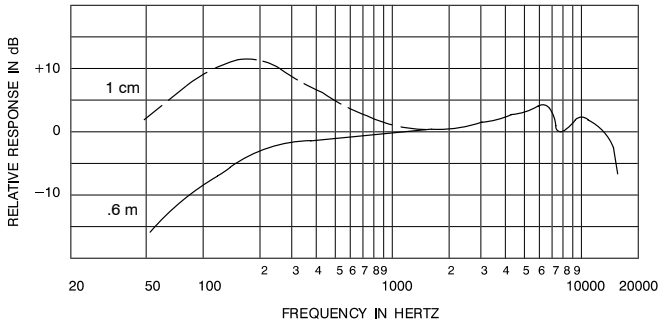
SPECIFICATIONS

Type

Dynamic (moving coil)

Frequency Response

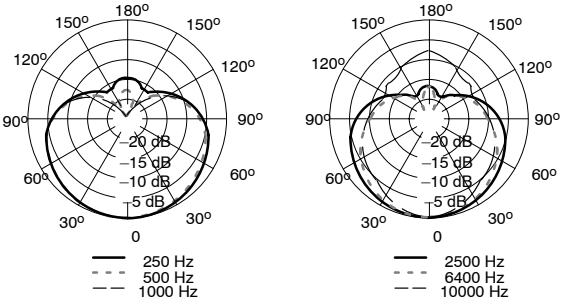
80 to 15,000 Hz (see Figure 1)



TYPICAL FREQUENCY RESPONSE
FIGURE 1

Polar Pattern

Cardioid (unidirectional) symmetrical about axis (see Figure 2)



TYPICAL POLAR PATTERNS
FIGURE 2

27C2837 (Rev. 4)

Printed in U.S.A.

Impedance

LO Z: Microphone rated impedance is 150 Ω (270 Ω actual) for connection to microphone inputs rated low impedance

HI Z: Microphone impedance is "High" for connection to high-impedance microphone inputs

Sensitivity (at 1,000 Hz)

	LO Z	HI Z
Open Circuit Voltage*	– 55.5 dBV/Pa (1.7 mV)	– 37.0 dBV/Pa* (14.1 mV)

*1 Pascal=94 dB SPL

Polarity

Positive pressure on the diaphragm produces positive voltage on pin 2 relative to pin 3 in both HI Z and LO Z modes

Switch

Built-in ON/OFF switch, lockplate to lock switch ON

Connector

Three-pin professional (male XLR) type

Cartridge Shock Mount

Internal rubber vibration-isolator

Swivel Adapter

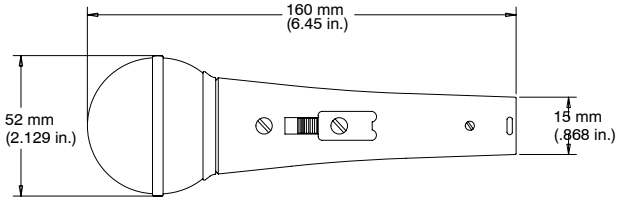
Positive action, break-resistant, adjustable through 180°, slip-out removal for handheld use, designed for mounting on stand with $^5/_8$-in.–27 thread

Case

Platinum beige enamel die casting with platinum beige steel grille

Dimensions

See Figure 3



OVERALL DIMENSIONS
FIGURE 3

Net Weight

315 grams (11.1 oz)

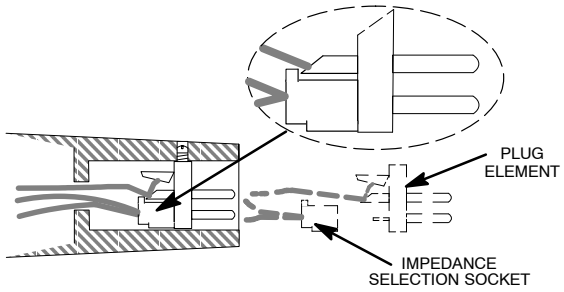
Certification

Conforms to European Union directives, eligible to bear CE marking; meets European Union EMC Immunity Requirements (EN 50 082–1, 1992); RF radiated (IEC 801–3); ESD (IEC 801–2); EFT (IEC 801–4).

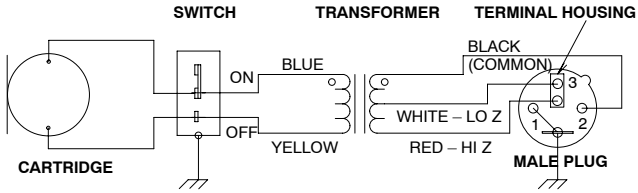
IMPEDANCE SELECTION

The microphone is shipped connected for low impedance operation. To change to high impedance, refer to Figure 4 and proceed as follows:

1. Remove plug element by turning slotted setscrew in (counterclockwise). Use long-nose pliers to pull plug element from case, but be careful not to stretch or break wires.
2. Disconnect 2-terminal impedance selection socket from rear of plug element by pulling it off pin 3.
3. Reconnect impedance selection socket so that pin 3 of plug element is now connected to RED (high-impedance) lead.
4. Swivel socket so that it does not extend beyond edge of connector (see inset in Figure 4).
5. Reinsert plug element into microphone; then tighten setscrew by turning it clockwise.



IMPEDANCE SELECTION
CONNECTOR END OF MICROPHONE
FIGURE 4



INTERNAL CONNECTIONS
FIGURE 5

FURNISHED ACCESSORY

Break-Resistant Swivel Adapter A25D

OPTIONAL ACCESSORIES

Desk Stand S37A, S39A
Shock Stopper™ Isolation Mount A55M
Windscreen (7 colors available) . . . . . A58WS Series
Cable:
4.6 m (15 ft) or 6.1 m (20 ft) 1-conductor with phone plug (High Impedance) C15HZ, C20HZ
7.6 m (25 ft) 2-conductor with 3-pin XLR connectors (Low Impedance) C25J

REPLACEMENT PARTS

Cartridge R180
Screen and Grille Assembly RK332G