



MODEL 515SDX UNIDIRECTIONAL DYNAMIC MICROPHONE

The Shure Model 515SDX is a dual-impedance, cardioid (unidirectional) dynamic microphone that is suitable for speech pickup in schools, churches, and meeting rooms. Its unidirectional polar pattern greatly reduces feedback.

The 515SDX includes a locking ON/OFF switch and an internal impedance selection socket mounted on the XLR connector for switching between high and low impedance. A slip-in swivel adapter is supplied for stand-mounted use.

Features

- *Rolled-off low-frequency response combined with a smooth high-frequency rise for clear and intelligible voice pickup*
- *Symmetrical cardioid pickup pattern minimizes feedback*
- *Neodymium magnet for high signal-to-noise ratio*
- *Shock-mounted cartridge that minimizes handling noise*
- *Lockable ON/OFF switch*
- *Dual impedance selectable by internal socket*
- *Slip-in swivel adapter for stand-mounted use*
- *Three-pin professional audio connector, the industry standard, for maximum interchangeability of cables*
- *Tough, die-cast grille resists wear from constant use and handling*
- *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. When extra bass response is desirable, work close to the microphone. During closeup use, the low frequency output will increase. This increase is called "proximity effect." Refer to the frequency response curve (Figure 1).

3. Locate the microphone as close as practical to the desired sound source to get the most gain before feedback.
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 number of microphones possible.
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 closeup vocal use, for example).
8. Avoid excessive handling of the microphone; doing so will minimize mechanical noise pickup.
9. Keep the grille unobstructed; doing so will preserve the microphone's directional characteristics.

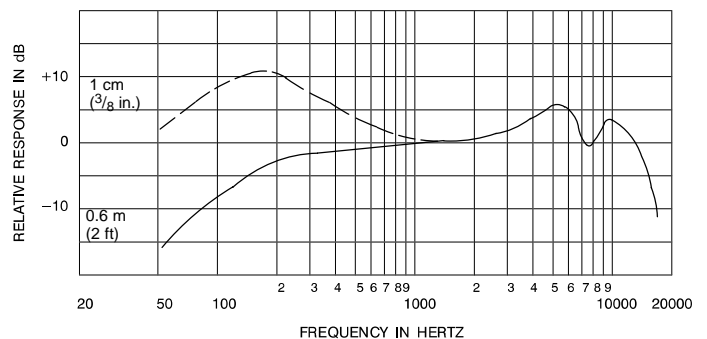
SPECIFICATIONS

Type

Dynamic

Frequency Response (Figure 1)

80 to 15,000 Hz

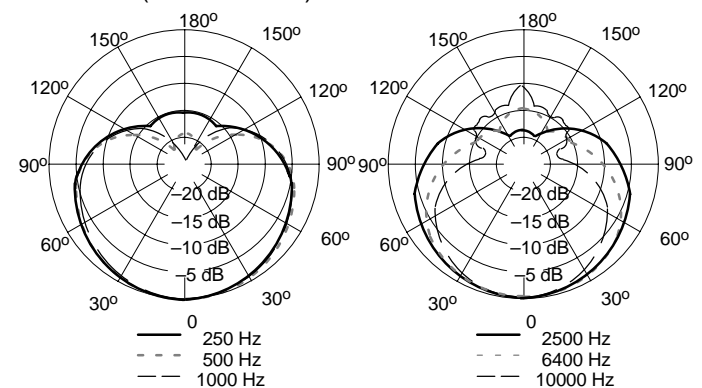


TYPICAL FREQUENCY RESPONSE

FIGURE 1

Polar Pattern (Figure 2)

Cardioid (unidirectional)



TYPICAL POLAR PATTERNS

FIGURE 2

Impedance

LO Z: Microphone rating impedance is 150 Ω (270 Ω actual) for connection to inputs rated low impedance
 HI Z: Microphone impedance is “High” for connections to high-impedance microphone inputs.

Output Level (at 1,000 Hz)

	<u>LO Z</u>	<u>HI Z</u>
Open Circuit Voltage:*	-56.0 dBV/Pa (1.6 mV)	-37.5 dBV/Pa (14 mV)
	*1 Pa = 94 dB SPL	

Phasing

Positive pressure on 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

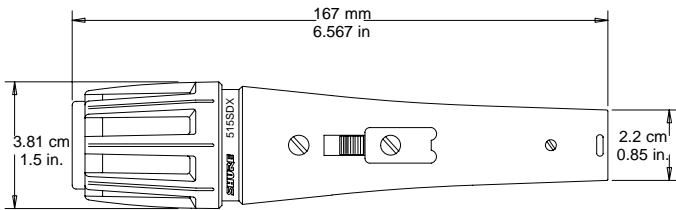
Swivel Adapter

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 die-cast grille and stainless steel screen

Dimensions



OVERALL DIMENSIONS
FIGURE 3

Net Weight

315 grams (11.1 oz)

Certification

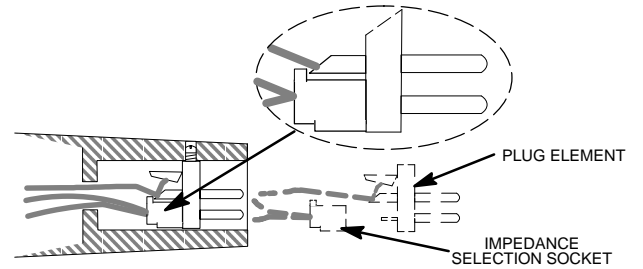
Conforms to European Union directives, eligible to bear CE marking; meets European Union EMC Immunity Requirements (EN 50082-1: 1992).

IMPEDANCE SELECTION

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

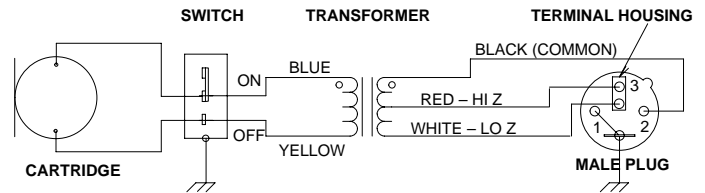
1. Remove plug element by turning slotted setscrew in (counterclockwise). Use long-nose pliers to pull plug element from case, but be careful not to stretch or break wires.

2. Disconnect 2-terminal impedance selection socket from rear of plug element by prying it off pin 3.



IMPEDANCE SELECTION CONNECTOR END OF MICROPHONE
FIGURE 4

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 set-screw by turning it clockwise.



INTERNAL CONNECTIONS
FIGURE 5

FURNISHED ACCESSORY

Swivel Adapter A25D

OPTIONAL ACCESSORIES

Shock Stopper™ Isolation Mount A55M
 Windscreen A85WS
 Desk Stand S37A
 Vibration-Isolation Stand S39A
 Cable, 4.6 m (15 ft) or 6.1 m (20 ft), 1-conductor, with phone plug (Hi Z) C20HZ
 Cable, 7.6 m (25 ft), 2-conductor, with 3-pin XLR connectors (Lo Z) C25J, C25F

REPLACEMENT PARTS

Cartridge R180
 ON/OFF switch RK57S
 Screen and Grille Assembly RK333G

For additional service or parts information, please contact Shure’s Service department at 1-800-516-2525. Outside the United States, please contact your authorized Shure Service Center.