

INTERNAL CONNECTIONS

FIGURE 1

GENERAL

The Shure 550L is an omnidirectional dynamic base station microphone with a frequency response specially tailored for voice intelligibility. It is equally useful for radio communications, paging and dispatching systems, and its low-impedance connection makes it adaptable to most PA amplifiers. The low-impedance design also makes it useful for long runs of cable, or under severe hum disturbance conditions.

The microphone is not affected by heat or humidity. Its exclusive ARMO-DUR® case is immune to oil, grease, fumes, salt spray, sun, rust, and corrosion—and is outstanding in its ability to resist mechanical shocks and vibration. The “Million-Cycle” leaf-type switch is designed to withstand rigorous operating conditions and constant use.

Features

- *Low-impedance operation*
- *Crisp, natural, high-intelligibility voice response*
- *Fingertip control bar actuates microphone circuit and external relay or control circuit*
- *Long-life switch meets rigorous requirements of communications and paging systems*
- *Sturdy, high-impact ARMO-DUR base and microphone case resists corrosion*
- *Reliability under all operating conditions*
- *Neoprene feet prevent microphone slipping*

PRESS-TO-TALK SWITCH OPERATION

The fingertip control bar is a non-locking switch; simply depress the control bar and release after transmission.

WIRING

Figure 1 shows the internal wiring of the 550L microphone.

The 550L may be wired for balanced or unbalanced operation. For unbalanced operation, the green cable wire is connected to the audio input, the white cable wire is connected to the audio ground, and the shield is connected to the chassis ground. See Table 1.

For balanced operation, the green cable wire is connected to the audio input positive (+), the white wire is connected to the audio negative (-), and the shield is connected to the chassis ground. See Table 1.

Table 1. Cable-to-Connector Wiring

INPUT TYPE	WIRE COLOR	FUNCTION	XLR CONNECTOR	1/4 IN. PHONE PLUG
	GREEN	AUDIO	PIN 2	TIP
UNBALANCED	WHITE	AUDIO GROUND	PIN 3	SLEEVE
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE
	GREEN	AUDIO +	PIN 2	TIP
BALANCED	WHITE	AUDIO -	PIN 3	RING
	SHIELD	CHASSIS GROUND	PIN 1	SLEEVE

NOTE: The red and black wires are not part of the audio circuit. These wires provide a contact closure when the microphone switch is depressed. This closure may be used to control an external relay or transmit/receive circuit.

IMPEDANCE MATCHING

Low-impedance operation is extremely useful 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 A95 Series Line Matching Transformers are available for use in those cases where a low-impedance microphone is to be used with an amplifier with a high-impedance input. These transformers provide a proper impedance match between a 19- to 300-ohm microphone and a high-impedance input, and are available with various input and output connectors.

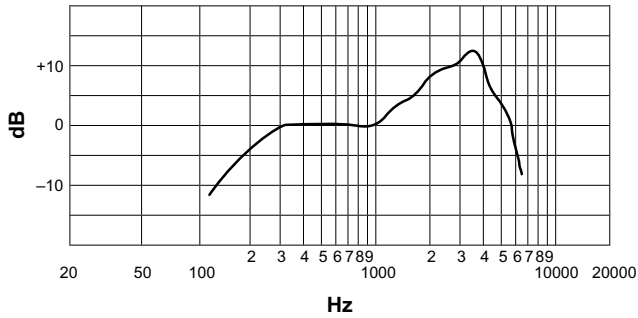
SPECIFICATIONS

Type

Dynamic

Frequency Response

150 to 6,000 Hz (see Figure 2)



TYPICAL FREQUENCY RESPONSE
FIGURE 2

Polar Pattern

Omnidirectional

Impedance (at 1,000 Hz)

Microphone rating impedance is 150 ohms (220 ohms actual) for connection to microphone inputs rated at 75 to 300 ohms

Output Level (at 1,000 Hz)

Open Circuit Voltage* -54.0 dB/Pa (2.0mV)
*(1 Pa = 94 dB SPL)

Switch

Press-to-Talk Switch actuates microphone circuit and external relay or control circuit. Microphone circuit normally open.

Cable

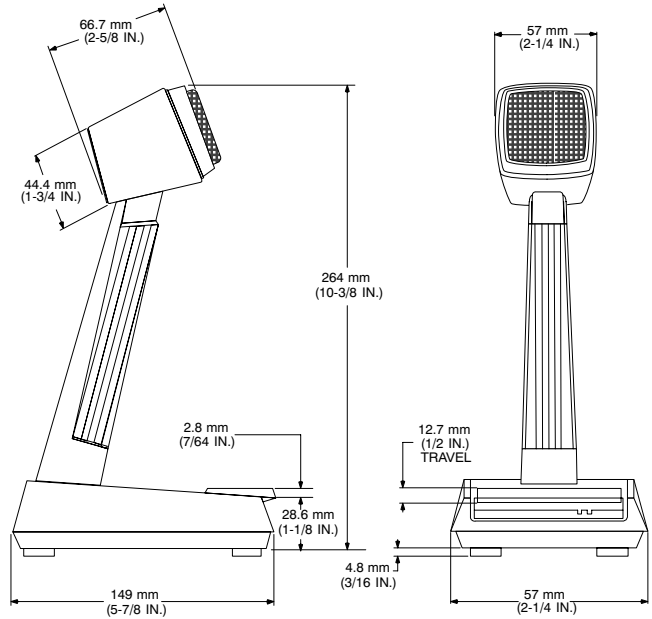
2.1m (7 ft) four-conductor, two-conductor shielded, non-detachable

Case

Brown ARMO-DUR® with dull chrome-plated steel screen

Dimensions

See Figure 3



OVERALL DIMENSIONS
FIGURE 3

Net Weight

836 grams (1 lb, 13-1/2 oz)

Shipping Weight

1.12 kilograms (2 lb, 7-1/2 oz)

Certification

Eligible to bear CE Marking. Conforms to European EMC Directive 89/336/EEC. Meets applicable tests and performance criteria in European Standard EN55103 (1996) parts 1 and 2, for residential (E1) and light industrial (E2) environments.

REPLACEMENT PARTS

- Cartridge R96
- Cable C32C
- Switch RK321S

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



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