



### MODEL 522 BASE-STATION MICROPHONE

The Model 522 is a dynamic base-station microphone for radio communications, paging, and dispatching systems. Its cardioid (unidirectional) pickup pattern suppresses unwanted background noise from nearby dispatchers, ventilating equipment, or office machines. It also can reduce feedback in public address paging applications. The 522 can be converted to Monitor/Transmit switching with the Shure RK199S Split-Bar Conversion Kit.

#### Features

- Dual impedance (19 to 300 ohms or High)
- Impedance change switch for convenient change-over
- Finger-tip control bar (locking or non-locking action) to actuate microphone circuit and an external relay or control circuit
- Long-life switch to satisfy rigorous requirements of communications and paging systems
- Sturdy, high impact ARMO-DUR®, base and microphone case
- Adjustable microphone height
- Dependable under most operating conditions
- Conversion kit available for Monitor/Transmit switching

#### PRESS-TO-TALK SWITCH OPERATION

Press and hold the bar switch to talk. To lock the switch, press and pull it forward. To unlock the switch, move the bar back and release.

#### IMPEDANCE SELECTION

Use the switch located under the microphone base, near the cable entry, to select high ("HI") or low ("LO") impedance.

Use the low-impedance position for long cable lengths under conditions of severe hum disturbance. Use Shure Model A95 Series Line Matching Transformers when using a low-impedance microphone line with a high-impedance amplifier input.

#### LOGIC CONNECTIONS

The RED and BLACK leads may be used to control an external relay or switching circuit.

#### AUDIO CONNECTIONS

##### Unbalanced high-impedance operation:

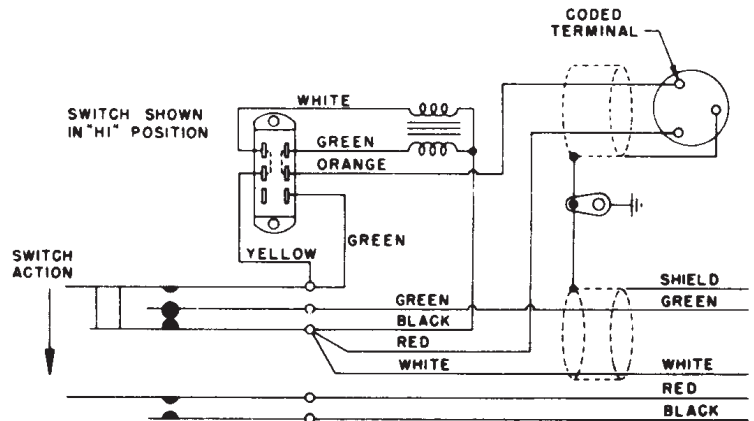
Set the impedance switch to the "HI" position (as shipped). Connect the GREEN cable lead and the shield to the amplifier or chassis ground. The WHITE cable lead is the "hot" conductor.

##### Balanced-line low-impedance operation:

Set the impedance switch to the "LO" position. Connect the shield to the amplifier or chassis ground. The WHITE and GREEN cable leads are the "hot" conductors.

Table 1. Cable-to-Connector Wiring

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



#### OPTIONAL CONVERSION

Use the optional monitor split-bar with receivers that have a squelch circuit. Depressing the monitor bar disables the squelch so the operator can verify there are no other transmissions below the squelch threshold before transmitting.

The Transmit/Monitor Switch Kit is Shure Model RK199S. General microphone wiring instructions are supplied with the kit, but specific transceiver wiring details must be obtained from the transceiver schematic and/or the manufacturer of the unit.



# SPECIFICATIONS

## Type

Dynamic

## Frequency Response

60 to 11,000 Hz

## Polar Pattern

Cardioid

## Impedance

Dual. Microphone rating impedance is 150 ohms (260 ohms actual) for connection to microphone inputs rated at 19 to 300 ohms and "High" for connection to high-impedance microphone inputs. Switch is in high-impedance position as supplied.

<b>SENSITIVITY (at 1,000 Hz):</b>	<b>LOW</b>	<b>HIGH</b>
Open Circuit Voltage*	-57.5 dB	-38.5 dB
(Ref. 1V/Pascal	(1.3 mV)	(12 mV)
*(1 Pa = 94 dB SPL)		

## Switch

Press-to-Talk Switch: lockable, for microphone and an external relay or control circuit. Microphone circuit normally shorted in both high and low impedance.

Impedance Selection Switch: provides either high- or low-impedance operation.

## Cartridge Shock Mount

Internal rubber vibration-isolator

## Cable

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

## Case

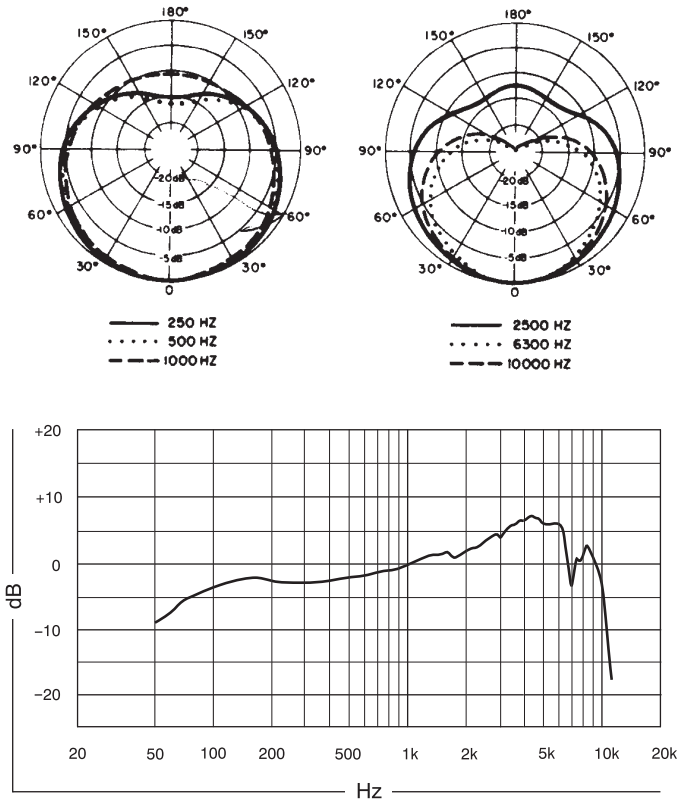
Two-tone gray ARMO-DUR, with dull-chrome-plated steel screen

## Net Weight

736 grams (1 lb 10 oz)

## Shipping Weight

1020 grams (2 lb 4 oz)



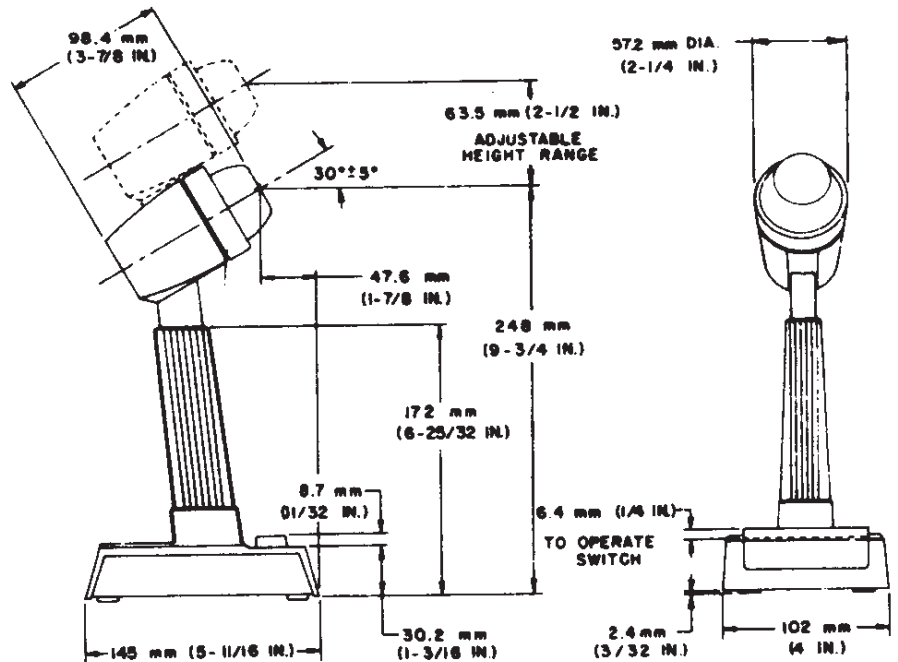
## REPLACEMENT PARTS

- Cable .....C31C
- On-Off Switch .....K141S

## OPTIONAL CONVERSION PART

- Transmit/Monitor Split-Bar Switch Kit .....RK199S

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.



**United States:**  
Shure Incorporated  
5800 West Touhy Avenue  
Niles, IL 60714-4608 USA

Phone: 847-600-2000  
Fax: 847-600-1212  
Email: info@shure.com

**Europe, Middle East, Africa:**  
Shure Europe GmbH  
Wannenäckerstr. 28,  
74078 Heilbronn, Germany

Phone: 49-7131-72140  
Fax: 49-7131-721414  
Email: info@shure.de

**Asia, Pacific:**  
Shure Asia Limited  
Unit 301, 3rd Floor  
Citicorp Centre  
18, Whitfield Road  
Causeway Bay, Hong Kong

Phone: 852-2893-4290  
Fax: 852-2893-4055  
Email: info@shure.com.hk

**Canada, Latin America, Caribbean:**  
Shure Incorporated  
5800 West Touhy Avenue  
Niles, IL 60714-4608 USA

Phone: 847-600-2000  
Fax: 847-600-6446  
Email: international@shure.com