General Description

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.

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

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.

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 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 chassis ground. The WHITE and GREEN cable leads are the "hot" conductors.

<table>
<thead>
<tr>
<th>Input Type</th>
<th>Wire Color</th>
<th>Function</th>
<th>XLR Connector</th>
<th>1/4 in. Phone Plug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unbalanced</td>
<td>White</td>
<td>Audio</td>
<td>Pin 2</td>
<td>Tip</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Audio Ground</td>
<td>Pin 3</td>
<td>Sleeve</td>
</tr>
<tr>
<td></td>
<td>Shield</td>
<td>Chassis Ground</td>
<td>Pin 1</td>
<td>Sleeve</td>
</tr>
</tbody>
</table>
### Specifications

**Type**  
Dynamic (moving coil)

**Frequency Response**  
60 to 11,000 Hz

**Polar Pattern**  
Cardioid

**Impedance**  
150 Ω (260 Ω actual)

**Sensitivity**  
at 1kHz, open circuit voltage

<table>
<thead>
<tr>
<th></th>
<th>LOW</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-57.5 dB (1.3 mV)</td>
<td>-38.5 dB (12 mV)</td>
</tr>
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</table>
Switch

<table>
<thead>
<tr>
<th>Switch</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press-to-Talk Switch</td>
<td>lockable, for microphone and an external relay or control circuit. Microphone circuit normally shorted in both high and low impedance.</td>
</tr>
<tr>
<td>Impedance Selection Switch</td>
<td>provides either high- or low-impedance operation.</td>
</tr>
</tbody>
</table>

Cartridge Shock Mount

Internal rubber vibration isolator

Cable

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

Housing

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

Net Weight

736 g (1 lb 10 oz.)

Shipping Weight

1020 g (2 lb 4 oz.)

0° 180° 150° 120° 150° 120° 90° 60° 30° 0° 30° 90° 60°

250 HZ 500 HZ 1000 HZ

2500 HZ 6300 HZ 10000 HZ

Typical Polar Pattern

Typical Frequency Response

0 [1] 1 Pa = 94 dB SPL
Accessories

Replacement Parts

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable</td>
<td>C31C</td>
</tr>
<tr>
<td>On-Off Switch</td>
<td>K141S</td>
</tr>
</tbody>
</table>

Certifications

This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking.

The CE Declaration of Conformity can be obtained from:
www.shure.com/europe/compliance

Authorized European representative:
Shure Europe GmbH
Headquarters Europe, Middle East & Africa
Department: EMEA Approval
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