Shure Model 512 combines an efficient “open-air” headphone with a close-talking dynamic microphone. The unit is unobtrusive, durable, comfortable, and provides a wide frequency range.

The 512 was designed for sports and news announcing, telecommunications systems, and special events remote broadcasting. It offers convenient hands-free operation, and a lightweight frame to reduce user fatigue. The unidirectional pickup pattern reduces unwanted background noise, permitting its use in noisy environments. The microphone characteristics are tightly controlled resulting in consistent response and output, and the headphone response is tailored to enhance voice intelligibility.

The headband easily adjusts to fit a variety of head sizes and hair styles, and the microphone boom can be adjusted to accurately place the microphone cartridge at the corner of the user’s mouth. The microphone is supplied with a foam windscreen to reduce explosive “popping” sounds, and a cable clip to secure the cable to clothing.

SPECIFICATIONS

MICROPHONE

Type
Dynamic, close-talking

Frequency Response (at 8 mm 5/16 in.)
50 to 15,000 Hz

Polar Pattern
Cardioid (unidirectional) response - uniform with frequency, symmetrical about axis.

Impedance
Microphone rating impedance is 150 Ohms (200 Ohms actual) for connection to microphone inputs rated at 19 to 300 Ohms.

Output Level (closed-talked at 1,000 Hz)
Open-circuit voltage -47.0 dB (4.5 mV)
0 dB=1 volt per 100 microbars
Power Level -66.0 dB
0 dB=1 milliwatt per 10 microbars

Hum Sensitivity (typical)
38.4 dB equivalent SPL in 1 milioersted field

Polarity
Positive pressure on diaphragm produces positive voltage on red lead and pin 2 of connector.

HEADPHONE

Type
Dynamic, open-air, left side only

Frequency Response
100 to 10,000 Hz, tailored for voice intelligibility.

Impedance
300 Ohms at 1,000 Hz
Polarity
Positive voltage on cable conductor produces positive pressure.

Output Level (at 1,000 Hz)
94 dB SPL at ear with 1 mW input

Internal Connections

<table>
<thead>
<tr>
<th>POLARITY</th>
<th>CONNECTOR</th>
<th>TERMINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED CODED TERMINAL</td>
<td>RED</td>
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<tr>
<td>BLACK CODED TERMINAL</td>
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<tr>
<td>SHIELD</td>
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</tbody>
</table>

SHIELD
RED CODED TERMINAL
BLACK CODED TERMINAL
MICROPHONE
RECEIVER
SLEEVE
TIP

MATERIAL

Cable
2.1 m (7 ft.) attached cables: one 2-conductor shielded with black 3-pin XLR connector (microphone) and one single-conductor shielded with 2-circuit phone plug (headphones).

Headset
Stainless steel and thermoplastic with foam earpads.

Dimensions

<table>
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<tr>
<th>MATERIAL</th>
<th>HEADSET</th>
<th>12 mm (1/2 in.)</th>
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Net Weight
186 grams (6.5 oz.) including connectors

USING THE MICROPHONE

Snap the microphone boom into the rotating holder below the left earpiece. Put on the headset and adjust the earpads to the most comfortable position. The headset is designed for use with the microphone mounted on the left side. Slide and twist the microphone boom and rotate its holder until the microphone is located as close as possible to the left corner of the mouth (not directly in front).

REPLACEMENT PARTS

<table>
<thead>
<tr>
<th>REPLACEMENT PARTS</th>
<th>CODE</th>
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<tbody>
<tr>
<td>Microphone Cartridge</td>
<td>R93</td>
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<tr>
<td>Headphone Cartridge</td>
<td>.90FA2600</td>
<td>.90RX1371</td>
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<tr>
<td>Pop Filter</td>
<td>.90RX1371</td>
<td>.49A78A</td>
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<tr>
<td>Foam Earpad</td>
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