MX153 -- Earset Headworn Microphone

General Description

The Shure Microflex® MX153 is a professional subminiature earset microphone ideal for speech and other applications requiring low-profile discreet placement where improved gain before feedback over lavalier microphones is desired. Delivering exceptional speech clarity, the MX153 is ideal for corporate presentations, houses of worship, A/V conferencing and live sound reinforcement. Additionally, CommShield® Technology offers superior RF immunity from cellular devices and digital bodypack transmitters. Available in three color options and direct TA4F connectivity to Shure bodypacks, the MX153 provides outstanding clarity in an extremely comfortable, over the ear design.

Features

• Subminiature, omnidirectional cartridge offers superior speech clarity and enhanced plosive protection with no proximity effect
• Terminated with TQG/TA4F connector for direct connectivity to Shure wireless bodypack transmitters
• Ultra-lightweight, comfortable, flexible design is stable and easy to place over either ear
• CommShield® Technology guards against interference from cellular RF devices and digital bodypack transmitters
• Kevlar® reinforced, soft flex cable
• Matte black, tan, and cocoa color options available
• Includes protective storage pouch, 3 windscreens, and collar clip

Model Variations

<table>
<thead>
<tr>
<th>Model</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX153B/O-TQG</td>
<td>Black</td>
</tr>
<tr>
<td>MX153T/O-TQG</td>
<td>Tan</td>
</tr>
<tr>
<td>MX153C/O-TQG</td>
<td>Cocoa</td>
</tr>
</tbody>
</table>

Windscreen

The furnished windscreen provides plosive and wind protection.

• Fit windscreen over cartridge.
• To remove, simply lift windscreen over capsule.
Using With Other Bodypack Transmitters

When connecting the microphone to anything other than a Shure wireless bodypack, make sure the device provides a regulated +5 V DC (130 µA minimum).

Optional XLR Compatibility

To connect the MX153 earset to an XLR microphone input, use the RK100PK preamplifier (see Optional Accessories).

Phantom Power

The RK100PK preamplifier requires phantom power and performs best with a 48 Vdc supply (IEC-61938). However, it will operate with slightly decreased headroom and sensitivity with supplies as low as 11 Vdc.

Most modern mixers provide phantom power. You must use a balanced microphone cable: XLR-to-XLR or XLR-to-TRS.

RFI Filtering

This microphone features CommShield® Technology for superior RF filtering. For best results in hostile RF environments, always use the RK100PK preamp (see Optional Accessories).

Wearing the Earset

Fit the earset over the ear with the ear support piece placed behind the earlobe. The wire extends over the ear to the tip of the mouth. Adjust the earset with small bends. Do not bend the boom arm beyond 20°.
Specifications

Transducer Type
Electret Condenser

Polar Pattern
Omnidirectional

Frequency Response
20 to 20,000 Hz

Output Impedance
N/A

Sensitivity
open circuit voltage, @ 1 kHz, typical
-41 dBV/Pa \(^1\) (9 mV/Pa)

Maximum SPL
1 kHz at 1% THD \(^2\)

<table>
<thead>
<tr>
<th>Load</th>
<th>SPL (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2500 Ω</td>
<td>107</td>
</tr>
<tr>
<td>1000 Ω</td>
<td>107</td>
</tr>
</tbody>
</table>

Signal-To-Noise Ratio \(^3\)
60 dB

Dynamic Range
@ 1 kHz

<table>
<thead>
<tr>
<th>Load</th>
<th>Dynamic Range (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2500 Ω</td>
<td>73</td>
</tr>
</tbody>
</table>
1000 Ω load | 73 dB

Self Noise

Equivalent SPL, A-weighted, typical

34 dB

Common Mode Rejection

20 to 20,000 Hz

N/A

Operating Temperature Range

-18°C (0°F) to 57°C (135°F)

Polarity

Positive pressure on diaphragm produces negative voltage on pin 3 with respect to pin 1.

Power Requirements

+1–5 V DC (500 µA max.)

Weight

19.76 g

1 Pa=94 dB SPL

THD of microphone preamplifier when applied input signal level is equivalent to cartridge output at specified SPL

S/N ratio is the difference between 94 dB SPL and equivalent SPL of self noise, A-weighted
## Accessories

### Furnished Accessories

<table>
<thead>
<tr>
<th>Accessory Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX153 accessory kit (3 windscreens, 1 collar clip) Black</td>
<td>RPM153B</td>
</tr>
<tr>
<td>MX153 accessory kit (3 windscreens, 1 collar clip) Tan</td>
<td>RPM153T</td>
</tr>
<tr>
<td>MX153 accessory kit (3 windscreens, 1 collar clip) Cocoa</td>
<td>RPM153C</td>
</tr>
<tr>
<td>Storage pouch</td>
<td>WA153</td>
</tr>
</tbody>
</table>

### Optional Accessories

<table>
<thead>
<tr>
<th>Accessory Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLR Preamplifier</td>
<td>RK100PK</td>
</tr>
</tbody>
</table>

### Replacement Accessories

<table>
<thead>
<tr>
<th>Accessory Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Pin Mini Connector (TA4F/TQG)</td>
<td>WA330</td>
</tr>
</tbody>
</table>
Certifications


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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