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DH5
DuraPlex™ Omnidirectional Headset

General Description

The DuraPlex DH5 omnidirectional headset microphone is ideal for both speech and performance applications that require durability and minimal visibility. The bendable lightweight headset features switchable boom mounting placement and a neutral clear design to be used with any DH5 color variant. The certified IP57 rated headset can withstand challenging conditions involving sweat and dust for use in theater, corporate events, and TV broadcast applications. Each microphone is supplied with a storage pouch, single tie clip, vocal presence frequency response cap, snap fit windscreen, foam windscreen, and TA4F threaded adapter.

Features

- IP57 Certified dust resistant and waterproof/sweatproof headset
- 5mm omnidirectional subminiature design for discrete placement and improved gain before feedback
- 1.6mm PLEX Cable technology, paintable cable, and no memory effect
- Professional sound quality for speech and performance applications
- High RF immunity, compatible with digital wireless systems without RF interference
- Attachable Presence Cap included for tailored frequency response in speech applications
- Included furnished accessories for storage, mounting options, and wind protection
- TA4F and LEMO terminations for variable wireless system connectivity
- Universal clear headset frame with switchable boom mount placement
- Available in Black, Tan, Cocoa finishes
Care and Maintenance

The DuraPlex omnidirectional microphone has been IP57 dust-protected, waterproof rated by extensive internal tests, so you can clean it using distilled water and a mild detergent when necessary.

Adjusting the Headband and Microphone

1. Adjust headband width.

2. Adjust the earhooks, slide the boom arm in the boom pivot, and twist the pivot to adjust height and length.
➂ Bend boom arm into place. Adjust position.

➃ Use presence cap or leave off.

Important:
Use slide-fit windscreen with the presence cap
Use snap-fit windscreen without the presence cap

Reversing the Boom
The microphone boom can be positioned on the left or right side of the head.
1. Squeeze the earpiece towards the headband.
2. Push out the boom arm and boom pivot.
3. On the other side, repeat the steps to remove the boom pivot.
4. Move the boom arm to the preferred side, ensuring that the boom arm is placed in the slot in the boom pivot.
5. Squeeze each earpiece towards the headband to push boom pivots back into place.

Presence Cap

Frequency Response

Attaching the Windscreen

There are two windscreens for use with the DuraPlex microphone:

1. A slide-fit windscreen for use with the presence cap
2. A snap-fit windscreen for use without the presence cap

*Note: Do not use the snap-fit windscreen with the presence cap—the presence cap can become caught inside the snap-fit windscreen.*

---

**Using the Collar Clip**

1. 
2. 
3. 
**Accessories**

**Furnished Accessories**

<table>
<thead>
<tr>
<th>Furnished Accessories</th>
<th>DH5 Black</th>
<th>DH5 Tan</th>
<th>DH5 Cocoa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Tie Clip</td>
<td>95A43715</td>
<td>95A43715</td>
<td>95A43715</td>
</tr>
<tr>
<td>Presence Cap</td>
<td>65A44182</td>
<td>65B44182</td>
<td>65C44182</td>
</tr>
<tr>
<td>Snap-Fit Windscreen</td>
<td>95A16167</td>
<td>95B16167</td>
<td>95C16167</td>
</tr>
<tr>
<td>Foam Windscreen</td>
<td>95A43438</td>
<td>95B43438</td>
<td>95C43438</td>
</tr>
<tr>
<td>Sticky Mount</td>
<td>66A44183</td>
<td>66A44183</td>
<td>66A44183</td>
</tr>
<tr>
<td>Case</td>
<td>95A44075</td>
<td>95A44075</td>
<td>95A44075</td>
</tr>
<tr>
<td>Threaded TA4F Adapter</td>
<td>95A29490</td>
<td>95A29490</td>
<td>95A29490</td>
</tr>
</tbody>
</table>

Accessories are available in Black (B), Tan (T), AND Cocoa (C) color varieties. Please consult your Shure representative for available options.

**Optional Accessories**

- **TA4F/TQG XLR Preamplifier**
  - RPM400TQG
- **Lemo XLR Preamplifier**
  - RPM400LEMO

**Replacement Parts**

<table>
<thead>
<tr>
<th>Description</th>
<th>Black</th>
<th>Tan</th>
<th>Cocoa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Presence Cap, qty. 5</td>
<td>RPMDL4FC/B</td>
<td>RPMDL4FC/T</td>
<td>RPMDL4FC/C</td>
</tr>
<tr>
<td>2 Foam Windscreen, qty. 3</td>
<td>RPMDL4WS/B</td>
<td>RPMDL4WS/T</td>
<td>RPMDL4WS/C</td>
</tr>
<tr>
<td>3 Snap-fit Windscreen, qty. 3</td>
<td>RPMDL4SFWS/B</td>
<td>RPMDL4SFWS/T</td>
<td>RPMDL4SFWS/C</td>
</tr>
<tr>
<td>Description</td>
<td>Black</td>
<td>Tan</td>
<td>Cocoa</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>Microphone Boom Arm and Cable Assembly, Lemo Connector</strong></td>
<td>RPMDH5B/O-LM3</td>
<td>RPMDH5T/O-LM3</td>
<td>RPMDH5C/O-LM3</td>
</tr>
<tr>
<td><strong>Microphone Boom Arm and Cable Assembly, MTQG Connector</strong></td>
<td>RPMDH5B/O-MTQG</td>
<td>RPMDH5T/O-MTQG</td>
<td>RPMDH5C/O-MTQG</td>
</tr>
<tr>
<td><strong>Boom Pivot, qty. 4</strong></td>
<td>RPMDH5PIVOT</td>
<td>RPMDH5PIVOT</td>
<td>RPMDH5PIVOT</td>
</tr>
<tr>
<td><strong>Boom Mount, qty. 4</strong></td>
<td>RPMDH5BM</td>
<td>RPMDH5BM</td>
<td>RPMDH5BM</td>
</tr>
<tr>
<td><strong>Headset Frame, qty. 1</strong></td>
<td>RPMDHSF</td>
<td>RPMDHSF</td>
<td>RPMDHSF</td>
</tr>
<tr>
<td><strong>Single Tie Clip, qty. 3</strong></td>
<td>RPMDL4STC/B</td>
<td>RPMDL4STC/T</td>
<td>RPMDL4STC/C</td>
</tr>
<tr>
<td><strong>Dual Tie Clip, qty. 3</strong></td>
<td>RPMDL4DTC/B</td>
<td>RPMDL4DTC/T</td>
<td>RPMDL4DTC/C</td>
</tr>
<tr>
<td><strong>DL4 Sticky Mount, qty. 3</strong></td>
<td>RPMDL4SM</td>
<td>RPMDL4SM</td>
<td>RPMDL4SM</td>
</tr>
<tr>
<td><strong>DH5 Case, Headset</strong></td>
<td>RPMDH5CASE</td>
<td>RPMDH5CASE</td>
<td>RPMDH5CASE</td>
</tr>
<tr>
<td><strong>TA4F XLR Preamp</strong></td>
<td>RPM400TQG</td>
<td>RPM400TQG</td>
<td>RPM400TQG</td>
</tr>
<tr>
<td><strong>LEMO XLR Preamp</strong></td>
<td>RPM400LEMO</td>
<td>RPM400LEMO</td>
<td>RPM400LEMO</td>
</tr>
</tbody>
</table>

**Threaded Mount Instructions**

1. Insert the threaded mount into the desired connection point.
2. Secure the mount by tightening the locking mechanism.
4. Test the assembly for stability and functionality.
# Wiring and Termination

## Typical Wiring Table

<table>
<thead>
<tr>
<th>Series</th>
<th>Cable Construction</th>
<th>Electrical Design</th>
<th>Polarity</th>
<th>Replacement Connector</th>
<th>For Use With</th>
<th>Wiring</th>
<th>Line Art (From Solder Side)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DL4-LEMO</td>
<td>1.6mm cable with single conductor and shield</td>
<td>3 wire with additional bias on pin 3</td>
<td>Positive with respect to ground</td>
<td>WA416</td>
<td>Shure Lemo Bodypacks (AD1/ADX1-Lemo, Shure UR1M-Lemo, ULXD1-Lemo)</td>
<td>Red wire: Audio/Bias(2) Blue wire: Audio(3) Shield: Ground(1)</td>
<td><img src="image" alt="MTQG Connector Assembly Exploded View" /></td>
</tr>
<tr>
<td>DL4-MTQG</td>
<td>1.6mm cable with 2 conductors, 2 shield wires and shield</td>
<td>3-Wire</td>
<td>Positive with respect to ground</td>
<td>WA430</td>
<td>All Shure TA4F Bodypacks</td>
<td>Red wire: Bias(2) Blue wire: Audio(3) Shield wire: Ground(1) Shield: Ground (Shell)</td>
<td><img src="image" alt="MTQG Connector Assembly Exploded View" /></td>
</tr>
</tbody>
</table>

*Note:* The conductors have a black, protective coating that you must remove with isopropyl alcohol to see their actual color.

## MTQG Connector Assembly

![MTQG Connector Assembly Exploded View](image)
Note: Make sure to solder the shield to ground collar.

Specifications

Note:

- All specification values are based on using a typical bodypack with 5 V bias input or the RPM400MTQG preamplifier. When using the RPM400LEMO amplifier, refer to the RPM400LEMO specifications.
- All specifications measured with a 48 Vdc phantom power supply. The microphone operates at lower voltages, but with slightly decreased headroom and sensitivity.

Microphone Capsule
MEMS

Polar Pattern
Omnidirectional

Frequency Response
20 Hz to 20 kHz

Sensitivity
-42.5 dBV at 1 kHz [1]

Self-Noise, A-Weighted, Equivalent Acoustical
31 dB SPL-A

Signal-To-Noise Ratio [2]
63.0 dB

Maximum SPL [3]
132.0 dB SPL, 1 kHz at 1% THD, typical

Dynamic Range
101.0 dB typical

Microphone Current Draw
220 µA, maximum
**Bias Voltage**

*Recommended Operating Voltage*

5 V DC, 2.6 V DC minimum

**Housing**

Molded ABS

**Polarity**

<table>
<thead>
<tr>
<th>MTQG</th>
<th>Positive pressure on diaphragm produces positive voltage on pin 3 with respect to pin 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEMO</td>
<td>Positive pressure on diaphragm produces positive voltage on pin 3 with respect to pin 1</td>
</tr>
</tbody>
</table>

**Cable Diameter**

1.6 mm

**Cable Length**

66 in. (1.67 m)

**Net Weight**

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DL4</td>
<td>15.0 g (0.53 oz.)</td>
</tr>
<tr>
<td>DH5</td>
<td>20.0 g (0.7 oz.)</td>
</tr>
</tbody>
</table>

![Dimensions](image)

[S/N ratio is the difference between 94 dB SPL and equivalent SPL of self noise, A-weighted](#) [3]

THD of microphone preamplifier when applied input signal level is equivalent to cartridge output at specified SPL.
<table>
<thead>
<tr>
<th>DH5-MTQG, DH5-LEMO</th>
<th>Cable Length</th>
<th>Cable Diameter</th>
<th>Microphone Length</th>
<th>Microphone Diameter</th>
<th>Boom Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cable Length</td>
<td>Diameter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>66 in. (1.67M)</td>
<td>1.6MM</td>
<td>14.5MM</td>
<td>5.2MM</td>
<td>13.6CM</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](http://www.shure.com/europe/compliance)

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