



# DH5

## DuraPlex™ Omnidirectional Headset

The Shure Omnidirectional DuraPlex Headset user guide.  
Version: 1.1 (2022-D)

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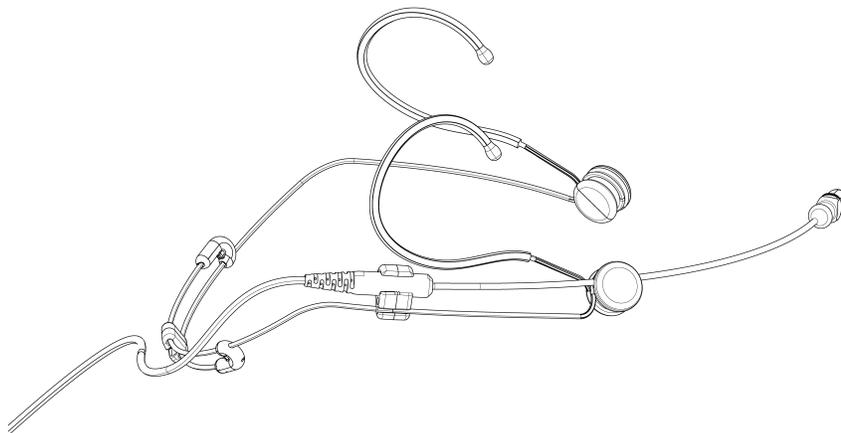
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# DH5 DuraPlex™ Omnidirectional Headset

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## 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

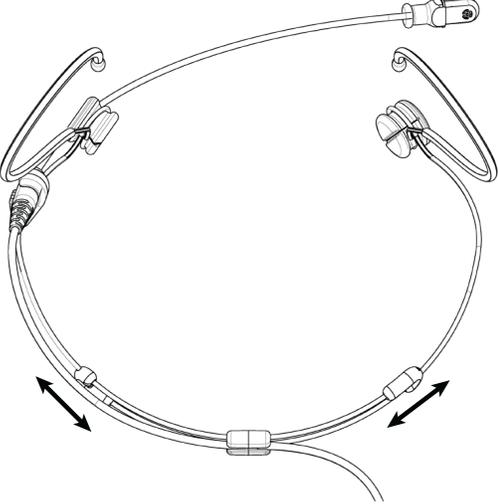
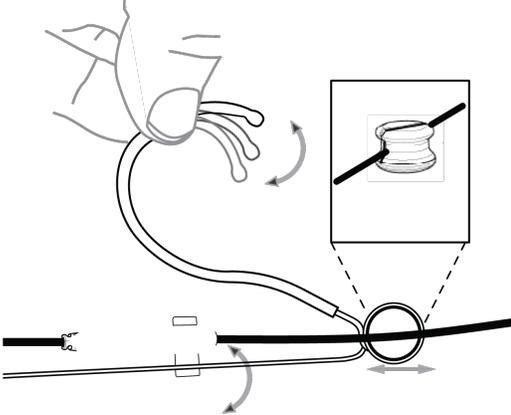
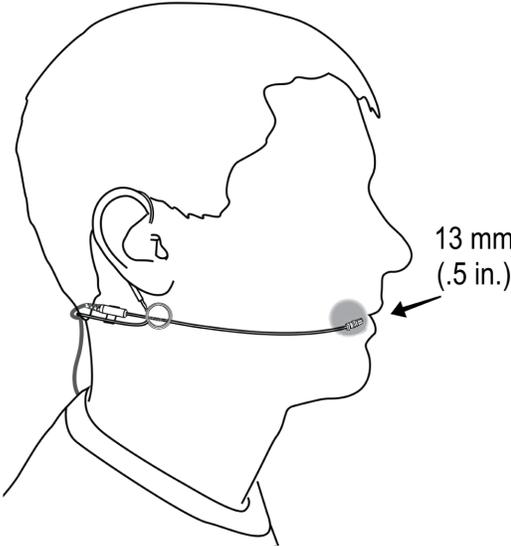
- IP57 Certified dust resistant and waterproof/sweatproof headset
- 5mm omnidirectional subminiature design for discrete placement and improved gain before feedback
- 1.6mm PLEX Cable technology, paintable cable, and no memory effect
- Professional sound quality for speech and performance applications
- 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

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## 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.

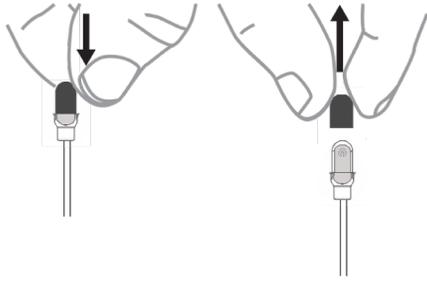
## Adjusting the Headband and Microphone

<p>① Adjust headband width.</p>	 A line drawing of the headband with two earhooks. Two double-headed arrows point outwards from the bottom of the headband, indicating where to adjust the width.
<p>② Adjust the earhooks, slide the boom arm in the boom pivot, and twist the pivot to adjust height and length.</p>	 A diagram showing a hand adjusting an earhook. Below it, a boom arm is shown being inserted into a pivot. An inset shows a close-up of the pivot being twisted. Arrows indicate the direction of adjustment for height and length.
<p>③ Bend boom arm into place. Adjust position.</p>	 A profile view of a person's head wearing the headset. The boom arm is bent into place near the mouth. An arrow points to the tip of the boom arm with the text "13 mm (.5 in.)".

④ Use presence cap or leave off.

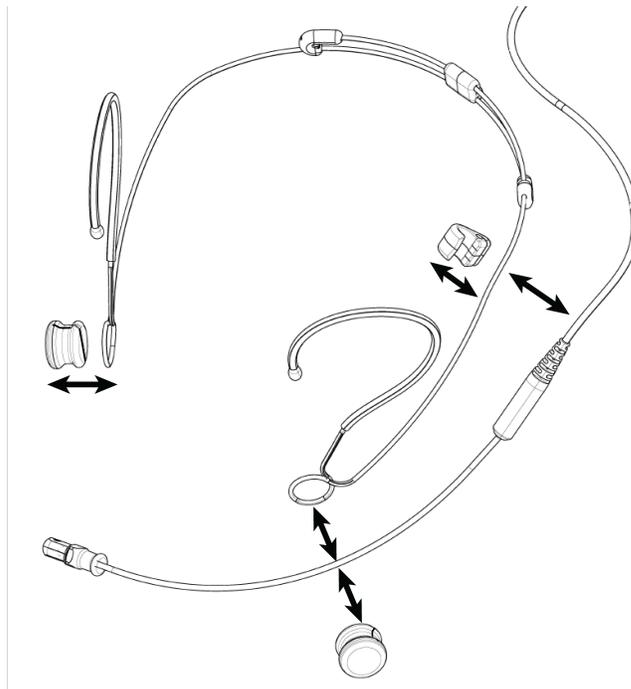
**Important:**

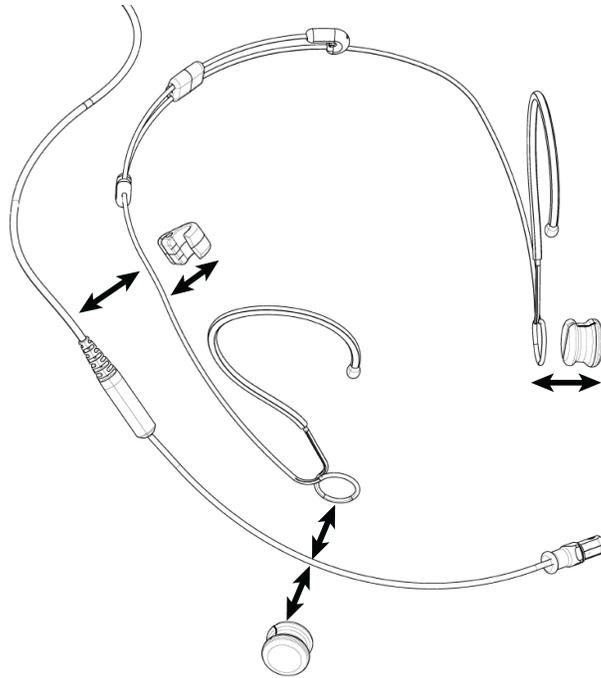
Use slide-fit windscreen with the presence cap  
Use snap-fit windscreen without the presence cap



## Reversing the Boom

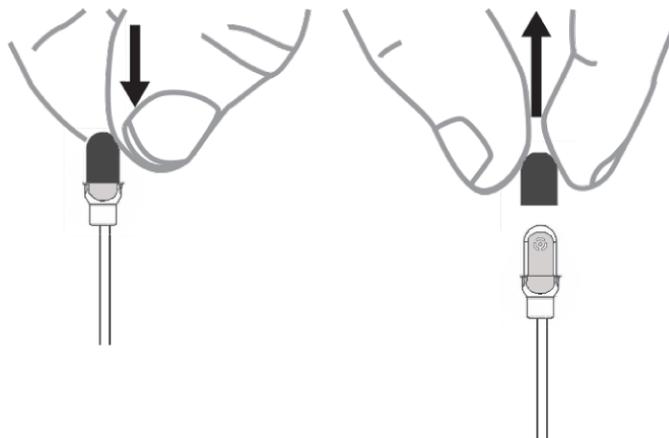
The microphone boom can be positioned on the left or right side of the head.



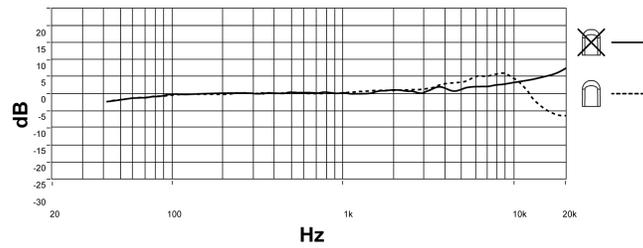


1. Squeeze the earpiece towards the headband.
2. Push out the boom arm and boom pivot.
3. On the other side, repeat the steps to remove the boom pivot.
4. Move the boom arm to the preferred side, ensuring that the boom arm is placed in the slot in the boom pivot.
5. Squeeze each earpiece towards the headband to push boom pivots back into place.

## Presence Cap



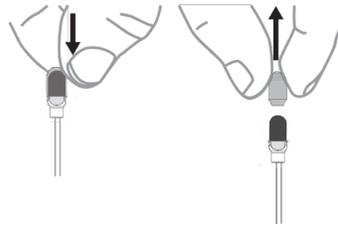
## Frequency Response



## Attaching the Windscreen

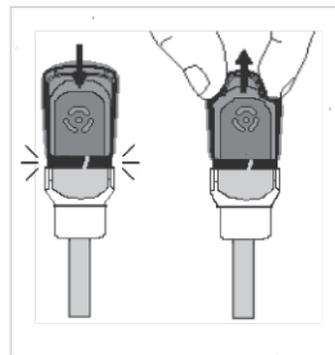
There are two windscreens for use with the DuraPlex microphone:

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



# Accessories

## Furnished Accessories

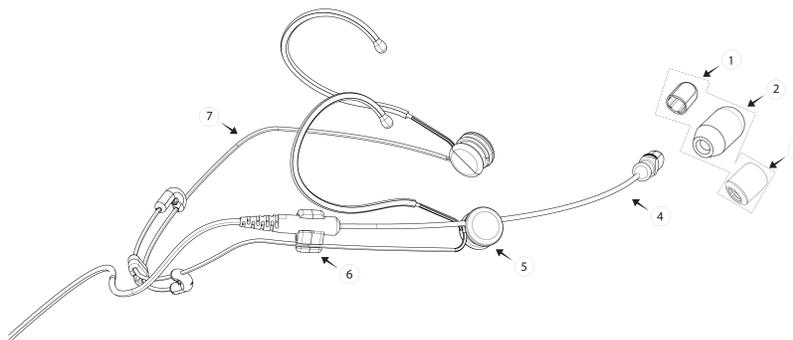
Furnished Accessories	DH5 Black	DH5 Tan	DH5 Cocoa
Single Tie Clip	RPMDL4STC/B (1)	RPMDL4STC/T (1)	RPMDL4STC/C (1)
Presence Cap	RPMDL4FC/B (1)	RPMDL4FC/T (1)	RPMDL4FC/C (1)
Snap-Fit Windscreen	RPMDL4SFWS/B (1)	RPMDL4SFWS/T (1)	RPMDL4SFWS/C (1)
Foam Windscreen	RPMDL4WS/B (1)	RPMDL4WS/T (1)	RPMDL4WS/C (1)
Sticky Mount	RPM40TS (1)	RPM40TS (1)	RPM40TS (1)
Case	RPMDL4CASE	RPMDL4CASE	RPMDL4CASE
Threaded TA4F Adapter	WA445	WA445	WA445

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 Preamp	RPM400TQG
Lemo XLR Preamp	RPM400LEMO

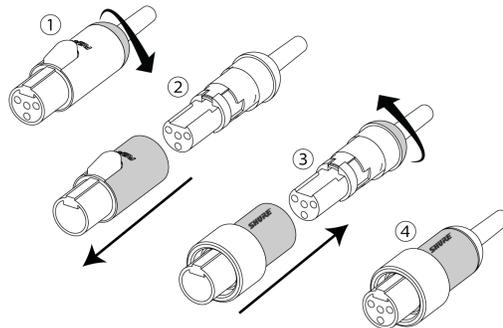
## Replacement Parts



	Description	Black	Tan	Cocoa
1	Presence Cap, qty. 5	RPMDL4FC/B	RPMDL4FC/T	RPMDL4FC/C
2	Foam Windscreen, qty. 3	RPMDL4WS/B	RPMDL4WS/T	RPMDL4WS/C
3	Snap-fit Windscreen, qty. 3	RPMDL4SFWS/B	RPMDL4SFWS/T	RPMDL4SFWS/C

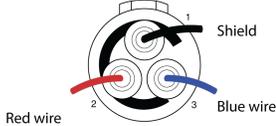
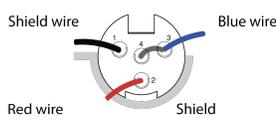
	Description	Black	Tan	Cocoa
4	Microphone Boom Arm and Cable Assembly, <b>Lemo Connector</b>	RPMDH5B/O-LM3	RPMDH5T/O-LM3	RPMDH5C/O-LM3
	Microphone Boom Arm and Cable Assembly, <b>MTQG Connector</b>	RPMDH5B/O-MTQG	RPMDH5T/O-MTQG	RPMDH5C/O-MTQG
5	Boom Pivot, qty. 4	RPMDH5PIVOT	RPMDH5PIVOT	RPMDH5PIVOT
6	Boom Mount, qty. 4	RPMDH5BM	RPMDH5BM	RPMDH5BM
7	Headset Frame, qty. 1	RPMDHSF	RPMDHSF	RPMDHSF
	Single Tie Clip, qty. 3	RPMDL4STC/B	RPMDL4STC/T	RPMDL4STC/C
	Dual Tie Clip, qty. 3	RPMDL4DTC/B	RPMDL4DTC/T	RPMDL4DTC/C
	DL4 Sticky Mount, qty. 3	RPMDL4SM	RPMDL4SM	RPMDL4SM
	DH5 Case, Headset	RPMDH5CASE	RPMDH5CASE	RPMDH5CASE
	TA4F XLR Preamp	RPM400TQG	RPM400TQG	RPM400TQG
	LEMO XLR Preamp	RPM400LEMO	RPM400LEMO	RPM400LEMO

## Threaded Mount Instructions



# Wiring and Termination

## Typical Wiring Table

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

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

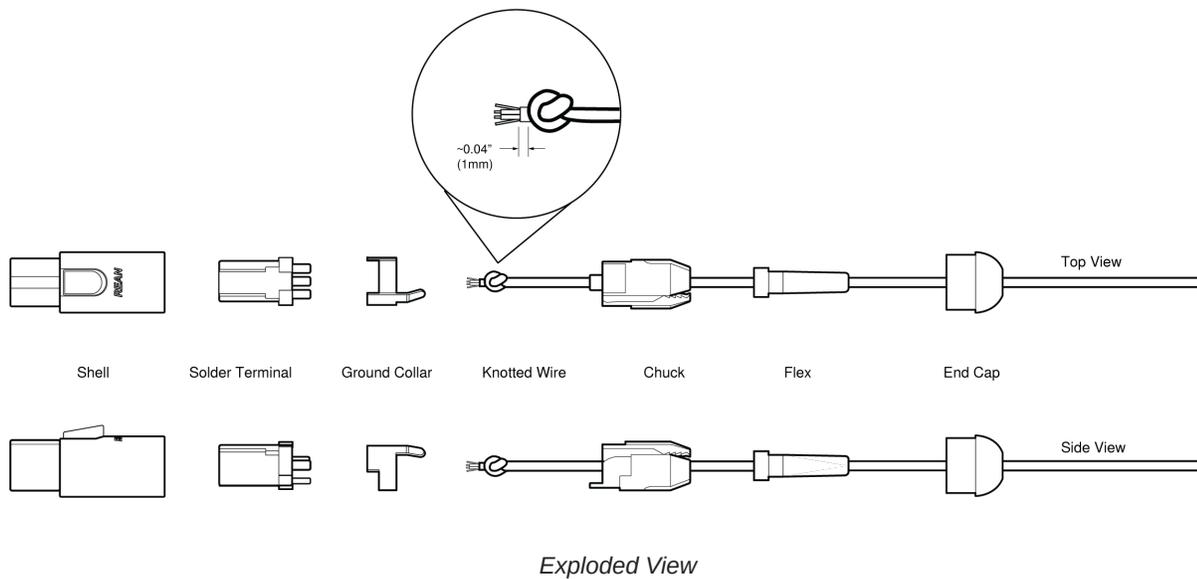
## TA5F Wiring for Lectrosonics Bodypacks (Servo Biased Wiring)

Series	Cable Construction	Electrical Design	Polarity	Replacement Connector	For Use With	Wiring	Line Art (From Solder Side)
<b>DL4-MTQG</b>	1.6mm cable with 2 conductors, 2 shield wires and shield	3-Wire (Source Follower)	Positive with respect to ground	WA435	Lectrosonics TA5F bodypacks	Red wire: Bias(2) Blue wire: Audio(3) Shield wire: Ground(1) Shield: Ground(Shell) Jumper between 1 and 4	

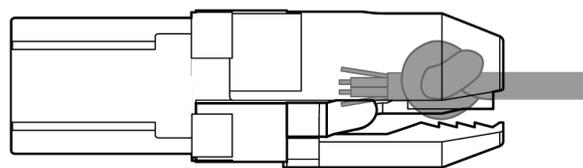
Series	Cable Construction	Electrical Design	Polarity	Replacement Connector	For Use With	Wiring	Line Art (From Solder Side)
<b>DL4-LEMO</b>	1.6mm cable with 2 conductors, 2 shield wires and shield	3-Wire (Source Follower)	Positive with respect to ground	WA435	Lectrosonics TA5F body-packs	Red wire: Bias(2) Blue wire: Audio(3) Shield wire: Ground(1) Shield: Ground(Shell) Jumper between 1 and 4	

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

## MTQG Connector Assembly



**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  $\mu$ A, maximum

## Bias Voltage

*Recommended Operating Voltage*

5 V DC, 2.6 V DC minimum

## Housing

Molded ABS

## Polarity

<b>MTQG</b>	Positive pressure on diaphragm produces positive voltage on pin 3 with respect to pin 1
<b>LEMO</b>	Positive pressure on diaphragm produces positive voltage on pin 3 with respect to pin 1

**Cable Diameter**

1.6 mm

**Cable Length**

66 in. (1.67 m)

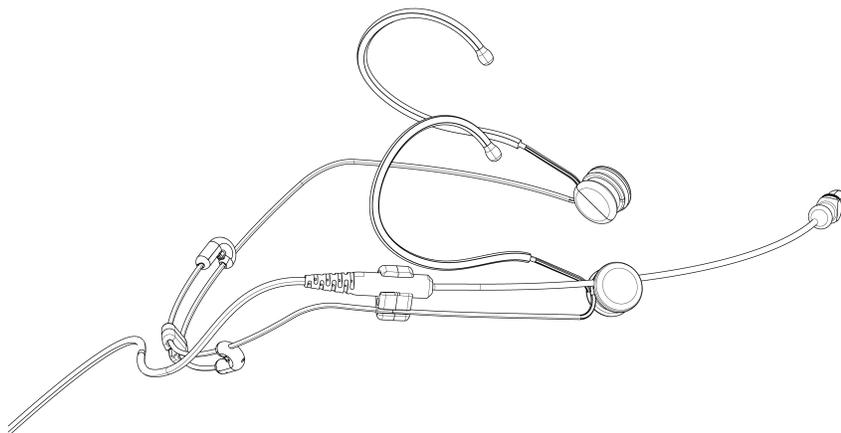
**Net Weight**

<b>DL4</b>	15.0 g (0.53 oz.)
<b>DH5</b>	20.0 g (0.7 oz.)

[1] 1 Pa=94 dB SPL

[2] 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

**Dimensions**

	<b>Cable Length</b>	<b>Cable Diameter</b>	<b>Microphone Length</b>	<b>Microphone Diameter</b>	<b>Boom Length</b>
<b>DH5-MTQG, DH5-LEMO</b>	66 in. (1.67M)	1.6MM	14.5MM	5.2MM	13.6CM

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## 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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