

TwinPlex™ TH53 Subminiature Headworn Microphone

Overview

The TwinPlex™ TH53 offers the natural sound of the new TwinPlex element combined with the ease of an ultra-light and fully adjustable headset frame. With an innovative clutch system, the TH53 headset allows for quick adjustment in boom arm length and pitch—all with a simple turn of a knob. Plus, switchable sides and a durable 1.6 mm cable with redundant ground round out this professional headset that overachieves in reliability, audio quality, and comfort.

Features

- Comfortable, lightweight, and fully adjustable headset for use in theater, broadcast, and speech applications
- Innovative clutch system allows for fast boom arm length and pitch adjustment
- Twice the surface area of other subminiature microphones for pristine, natural response and robust low-frequency response due to the patent pending dual-diaphragm design
- Improved off-axis consistency yields accurate reproduction regardless of vocal source position or movement
- Best-in-class low self-noise and dynamic range for cleaner audio production
- Interchangeable sweat- and moisture-resistant frequency caps prevents sweat-outs due to an invisible superhydrophobic nanoscopic coating
- Paintable 1.6 mm cable that is immune to memory effect and kinks
- Dual redundant ground in cable serves as secondary shield for longevity
- Sound signature: Natural
- Sensitivity: Low
- Colors: Tan, Cocoa, Black
- Connectors: LEMO, MTQG/TA4F, MicroDot, NC (bare wire)
- Accessories: Ships with accessories and storage case



TwinPlex™ TH53
Subminiature Headset
Microphone

Specifications

Microphone Capsule	Dual-Diaphragm, Prepolarized Condenser
Polar Pattern	Omnidirectional
Frequency Response	20 Hz to 20 kHz
Sensitivity <i>at 1 kHz</i>	-45.0 dBV (5.62 mV)
Self-Noise, <i>A-Weighted, Equivalent Acoustical</i>	24.5 dB SPL-A
Signal-To-Noise Ratio	69.5 dB
Output Clipping Level	3.0 dBV, 1 kHz <i>at 1% THD, typical</i>
Maximum SPL	142.0 dB SPL <i>1 kHz at 1% THD, typical</i>
Dynamic Range	117.5 dB <i>typical</i>
Microphone Current Draw	120 to 240 µA, typical
Bias Voltage <i>Recommended Operating Voltage</i>	5 VDC
Housing	Molded ABS
Polarity	LEMO, NC, MDOT: Positive pressure at diaphragm leads to negative voltage with respect to ground MTQG, XLR connector: Positive pressure at diaphragm leads to positive voltage with respect to ground
Cable Diameter	1.6 mm
Cable Length	MTQG, LEMO, MDOT: 66 in. (1.67 m) NC: 96 in. (2.43 m)
Microphone Length	13.5 mm
Microphone Diameter	5.6 mm
Net Weight <i>with Cable</i>	Boom arm, with cable: 12.0 g (0.42 oz.) Headset frame: 6.0 g (0.21 oz.)

Available Models

TH53B/O-LEMO	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with LEMO Connector, Black
TH53B/O-MDOT	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with MicroDot Connector, Black
TH53B/O-MTQG	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with MTQG Connector, Black
TH53B/O-NC	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with bare wire terminal, Black
TH53C/O-LEMO	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with LEMO Connector, Cocoa
TH53C/O-MDOT	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with MicroDot Connector, Cocoa
TH53C/O-MTQG	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with MTQG Connector, Cocoa
TH53T/O-LEMO	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with LEMO Connector, Tan
TH53T/O-MDOT	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with MicroDot Connector, Tan
TH53T/O-MTQG	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with MTQG Connector, Tan
TH53T/O-NC	TwinPlex™ Subminiature Omnidirectional Headset Microphone Low Sensitivity, 1.6 mm Cable with bare wire terminal, Tan

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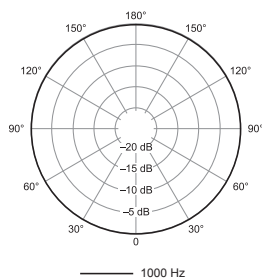
Furnished Accessories

- Storage Case
- Frequency Caps, Flat Response, Qty. 3
- Frequency Caps, Presence Response, Qty. 2
- Windscreen, Qty. 2
- Cable Clip, Qty. 2
- Cable Flex, Qty. 2
- Collar Clip, Qty. 1

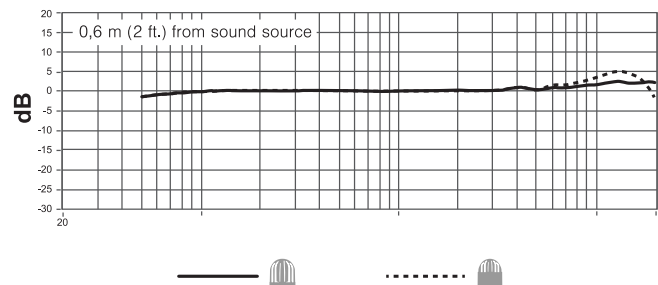
Optional Accessories

Headset Accessories and Replacement Parts		Preamps	Tie Clips
RPM53B/O-MTQG	Replacement Boom Arm, Black, MTQG Connector	RPM400TQG	Wired TQG to XLR Preamplifier with Beltclip
RPM53C/O-MTQG	Replacement Boom Arm, Cocoa, MTQG Connector	RPM400LEMO	Wired LEMO3 to XLR Preamplifier with Beltclip
RPM53T/O-MTQG	Replacement Boom Arm, Tan, MTQG Connector	Replacement Connectors	
RPM53B/O-LEMO	Replacement Boom Arm, Black, LEMO Connector	WA430	Replacement Neutrik mTQG connector kit, TA4F
RPM53C/O-LEMO	Replacement Boom Arm, Cocoa, LEMO Connector	WA435	Replacement Neutrik mTQG connector kit, TA5F
RPM53T/O-LEMO	Replacement Boom Arm, Tan, LEMO Connector	WA445	Neutrik threaded collar shell for WA430/WA435
RPM53B/O-MDOT	Replacement Boom Arm, Black, Microdot Connector	WA416	Replacement LEMO3, 1.6 mm connector
RPM53C/O-MDOT	Replacement Boom Arm, Cocoa, Microdot Connector	Frequency Caps	
RPM53T/O-MDOT	Replacement Boom Arm, Tan, Microdot Connector	RPM40FC/B	Flat cap, Black, Qty. 10
RPM53B/O-NC	Replacement Boom Arm, Black, No Connector	RPM40FC/T	Flat cap, Tan, Qty. 10
RPM53C/O-NC	Replacement Boom Arm, Cocoa, No Connector	RPM40FC/C	Flat cap, Cocoa, Qty. 10
RPM53T/O-NC	Replacement Boom Arm, Tan, No Connector	RPM40PC/B	Presence cap, Black, Qty. 10
RPM53B-HF	Headset Frame for TH53, Black	RPM40PC/C	Presence cap, Cocoa, Qty. 10
RPM53C-HF	Headset Frame for TH53, Cocoa	RPM40PC/T	Presence cap, Tan, Qty. 10
RPM53T-HF	Headset Frame for TH53, Tan	Windscreens	
RPM53B-CC	Headset Cable Clip, Black, Qty. 3	RPM40WS/B	Windscreens, Black, Qty. 5
RPM53C-CC	Headset Cable Clip, Cocoa, Qty. 3	RPM40WS/T	Windscreens, Tan, Qty. 5
RPM53T-CC	Headset Cable Clip, Tan, Qty. 3	RPM40WS/C	Windscreens, Cocoa, Qty. 5
RPM53B-CF	Headset Cable Flex, Black, Qty. 3	RPM40WS/M	Windscreens (2 of each color), Qty. 8
RPM53C-CF	Headset Cable Flex, Cocoa, Qty. 3	RPM40MWJ	Rycote MiniWindjammer, Gray, Qty. 2
RPM53T-CF	Headset Cable Flex, Tan, Qty. 3		
RPM50ES	Earhook Sleeves, Clear, Qty. 4		
RPM50CASE	Storage Case for TH Headset		

Polar Patterns



Frequency Response



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