TwinPlex™ TL45 Subminiature Lavalier Microphones

Overview

Expressively natural sound, low sensitivity, high max SPL, and interchangeable sweat-resistant frequency caps all make the TwinPlex™ TL45 the perfect companion for professional theater applications. The thin, durable 1.1 mm diameter paintable cable is terminated with a professional LEMO connector and is easily concealed in a costume or wig.

Features

- The TL45 is ideal for use in theater settings
- 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 prevent sweat-outs due to an invisible superhydrophobic nanoscopic coating
- Paintable 1.1 mm cable that is immune to memory effect and kinks
- A single medical-grade spiraling conductor in the cable delivers increased flexibility while built-in reinforcing fibers offer additional cable strength for longevity
- Sound signature: Natural
- Sensitivity: Low
- Colors: Black, Cocoa, Tan, White
- Connectors: LEMO
- Accessories: Available separately

TwinPlex™ TL45
Subminiature Lavalier
Microphone

Specifications

Microphone Capsule	Dual-Diaphragm, Prepolarized Condenser
Polar Pattern	Omnidirectional
Frequency Response	20 Hz to 20 kHz
Sensitivity *at 1 kHz*	-45.0 dBV (5.62 mV)
Self-Noise, *A-Weighted, Equivalent Acoustical*	24.5 dB SPL-A
Signal-To-Noise Ratio	69.5 dB
Output Clipping Level	3.0 dBV,1 kHz *at 1% THD, typical*
Maximum SPL	142.0 dB SPL *1 kHz at 1% THD, typical*
Dynamic Range	117.5 dB *typical*
Microphone Current Draw	120 to 240 µA, typical
Bias Voltage *Recommended Operating Voltage*	5 VDC
Housing	Molded ABS
Polarity	Positive pressure at diaphragm leads to negative voltage with respect to ground
Cable Diameter	1.1 mm
Cable Length	66 in. (1.67 m)
Microphone Length	13.5 mm
Microphone Diameter	5.6 mm
Net Weight *with Cable*	12.0 g (0.42 oz.)

Available Models

TL45B/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.1 mm Cable with LEMO Connector, Black
TL45C/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.1 mm Cable with LEMO Connector, Cocoa
TL45T/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.1 mm Cable with LEMO Connector, Tan
TL45W/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.1 mm Cable with LEMO Connector, White

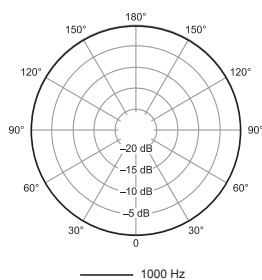# TwinPlex™ TL45 Subminiature Lavalier Microphones

Furnished Accessories

- Frequency Caps, Flat Response, Qty. 3
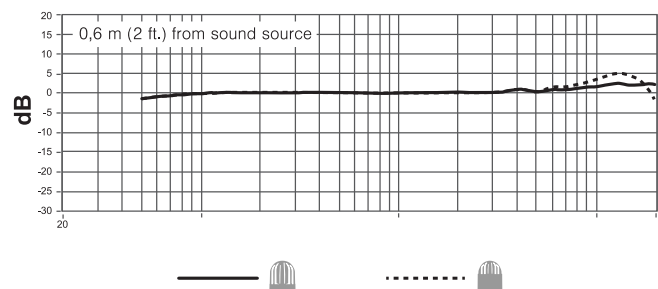- Frequency Caps, Presence Response, Qty. 2

Optional Accessories

Replacement Connectors		Clips and Mounts		Preamps	
WA411	Replacement LEMO3, 1.1 mm connector	**RPM40STC/B**	Single Tie Clip, Black, Qty. 3	**RPM400LEMO**	Wired LEMO3 to XLR Preamplifier with Beltclip
Windscreens		**RPM40STC/C**	Single Tie Clip, Cocoa, Qty. 3	**Other**	
RPM40WS/B	Windscreens,Black, Qty. 5	**RPM40STC/T**	Single Tie Clip, Tan, Qty. 3	**RPM40PREMNT**	Preamplifier Mounting Kit
RPM40WS/T	Windscreens,Tan, Qty. 5	**RPM40STC/W**	Single Tie Clip, White, Qty. 3	**RPM40PRECLIP**	Beltclip for RPM400 Preamplifiers
RPM40WS/C	Windscreens,Cocoa, Qty. 5	**RPM40TC/B**	Dual Tie Clip, Black, Qty. 3	**RPM40KIT**	Full Accessory Kit for TL Lavaliers
RPM40WS/W	Windscreens,White, Qty. 5	**RPM40TC/C**	Dual Tie Clip, Cocoa, Qty. 3	**RPM40CASE**	Storage Case for TL Lavalier
RPM40WS/M	Windscreens (2 of each color), Qty. 8	**RPM40TC/T**	Dual Tie Clip, Tan, Qty. 3		
RPM40MWJ	Rycote MiniWindjammer, Gray, Qty 2	**RPM40TC/W**	Dual Tie Clip, White, Qty. 3		
Frequency Caps		**RPM40TC/M**	Single Tie Clip Mix Pack (1 of each color)		
RPM40FC/B	Flat cap, Black, Qty. 10	**RPM40VM/B**	Black Vampire Clip, Qty. 3		
RPM40FC/C	Flat cap, Cocoa, Qty. 10	**RPM40VM/W**	White Vampire Clip, Qty. 3		
RPM40FC/T	Flat cap, Tan, Qty. 10	**RPM40SM**	Clear Sticky Mount Qty. 3		
RPM40FC/W	Flat cap, White, Qty. 10	**RPM40MM/B**	Black Magnet Mount, Qty. 2		
RPM40PC/B	Presence cap, Black, Qty. 10	**RPM40MM/W**	White Magnet Mount, Qty. 2		
RPM40PC/C	Presence cap, Cocoa, Qty. 10	**RPM40SVM/B**	Vampire Sticky Mount, Qty. 3		
RPM40PC/T	Presence cap, Tan, Qty. 10	**RPM40TS**	Adhesives for Sticky Mount. Qty. 15		
RPM40PC/W	Presence cap, White, Qty. 10	**RPM40TS/50**	Adhesives for Sticky Mount. Qty. 50		
		RPM40SO/B	Black Standoff for TL accessories, Qty. 10		
		RPM40SO/C	Cocoa Standoff for TL accessories, Qty. 10		
		RPM40SO/T	Tan Standoff for TL accessories, Qty. 10		
		RPM40SO/W	White Standoff for TL accessories, Qty. 10		

Polar Patterns

1000 Hz

Frequency Response

0,6 m (2 ft.) from sound source

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TwinPlex™ TL46 Subminiature Lavalier Microphones

Overview

TwinPlex™ TL46 offers unmatched signal-to-noise, superior natural sound quality, and a high sensitivity output. Perfect for dialogue and medium SPL applications, the TL46 also features an ultra-durable 1.6 mm paintable cable, interchangeable moisture-resistant frequency caps with LEMO or TA4F connectors. It's the premium choice when the message needs to rise above the noise.

Features

- The TL46 is ideal for a variety of theater, film, broadcast, and live TV applications when additional output (8-10dB) is required
- 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 prevent 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: High
- Colors: Black, Cocoa, Tan, White
- Connectors: LEMO, MTQG/TA4F
- Accessories: Available separately

TwinPlex™ TL46
Subminiature Lavalier
Microphone

Specifications

Microphone Capsule	Dual-Diaphragm, Prepolarized Condenser
Polar Pattern	Omnidirectional
Frequency Response	20 Hz to 20 kHz
Sensitivity	-37.0 dBV(14.1 mV) at 1 kHz
Self-Noise, *A-Weighted, Equivalent Acoustical*	24.0 dB SPL-A
Signal-To-Noise Ratio	70.0 dB
Output Clipping Level	3.0 dBV,1 kHz *at 1% THD, typical*
Maximum SPL	134.0 dB SPL *1 kHz at 1% THD, typical*
Dynamic Range	110.0 dB *typical*
Microphone Current Draw	120 to 240 µA, typical
Bias Voltage *Recommended Operating Voltage*	5 VDC
Housing	Molded ABS
Polarity	LEMO: Positive pressure at diaphragm leads to negative voltage with respect to ground MTQG: Positive pressure at diaphragm leads to positive voltage with respect to ground
Cable Diameter	1.6 mm
Cable Length	66 in. (1.67 m)
Microphone Length	13.5 mm
Microphone Diameter	5.6 mm
Net Weight *with Cable*	12.0 g (0.42 oz.)

Available Models

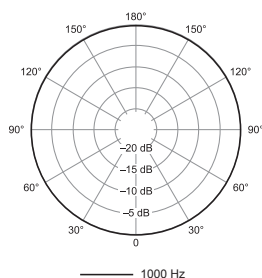|	
TL46B/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, High Sensitivity, 1.6 mm Cable with LEMO Connector, Black
TL46B/O-MTQG	TwinPlex™ Subminiature Omnidirectional Lavalier, High Sensitivity, 1.6 mm Cable with MTQG Connector, Black
TL46C/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, High Sensitivity, 1.6 mm Cable with LEMO Connector, Cocoa
TL46C/O-MTQG	TwinPlex™ Subminiature Omnidirectional Lavalier, High Sensitivity, 1.6 mm Cable with MTQG Connector, Cocoa
TL46T/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, High Sensitivity, 1.6 mm Cable with LEMO Connector, Tan
TL46T/O-MTQG	TwinPlex™ Subminiature Omnidirectional Lavalier, High Sensitivity, 1.6 mm Cable with MTQG Connector, Tan
TL46W/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, High Sensitivity, 1.6 mm Cable with LEMO Connector, White
TL46W/O-MTQG	TwinPlex™ Subminiature Omnidirectional Lavalier, High Sensitivity, 1.6 mm Cable with MTQG Connector, White

TwinPlex™ TL46 Subminiature Lavalier Microphones

Furnished Accessories

- Frequency Caps, Flat Response, Qty. 3
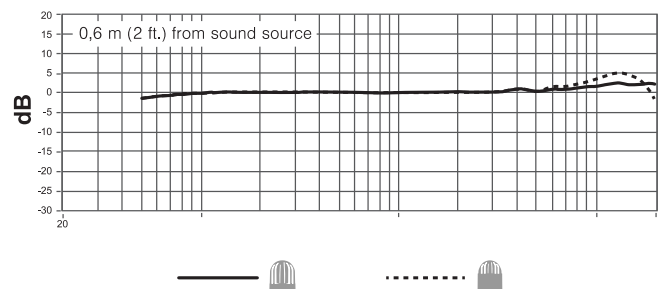- Frequency Caps, Presence Response, Qty. 2

Optional AccessoriesOptional Accessories

Replacement Connectors		Clips and Mounts		Preamps	
WA430	Replacement Neutrik mTQG connector kit, TA4F	**RPM40STC/B**	Single Tie Clip, Black, Qty. 3	**RPM400TQG**	Wired TQG to XLR Preamplifier with Beltclip
WA435	Replacement Neutrik mTQG connector kit, TA5F	**RPM40STC/C**	Single Tie Clip, Cocoa, Qty. 3	**RPM400LEMO**	Wired LEMO3 to XLR Preamplifier with Beltclip
WA445	Neutrik threaded collar shell for WA430/WA435	**RPM40STC/T**	Single Tie Clip, Tan, Qty. 3	**Other**	
WA416	Replacement LEMO3, 1.6 mm connector	**RPM40STC/W**	Single Tie Clip, White, Qty. 3	**RPM40PREMNT**	Preamplifier Mounting Kit
Windscreens		**RPM40TC/B**	Dual Tie Clip, Black, Qty. 3	**RPM40PRECLIP**	Beltclip for RPM400 Preamplifiers
RPM40WS/B	Windscreens,Black, Qty. 5	**RPM40TC/C**	Dual Tie Clip, Cocoa, Qty. 3	**RPM40KIT**	Full Accessory Kit for TL Lavaliers
RPM40WS/T	Windscreens,Tan, Qty. 5	**RPM40TC/T**	Dual Tie Clip, Tan, Qty. 3	**RPM40CASE**	Storage Case for TL Lavalier
RPM40WS/C	Windscreens,Cocoa, Qty. 5	**RPM40TC/W**	Dual Tie Clip, White, Qty. 3		
RPM40WS/W	Windscreens,White, Qty. 5	**RPM40TC/M**	Single Tie Clip Mix Pack (1 of each color)		
RPM40WS/M	Windscreens (2 of each color), Qty. 8	**RPM40VM/B**	Black Vampire Clip, Qty. 3		
RPM40MWJ	Rycote MiniWindjammer, Gray, Qty 2	**RPM40VM/W**	White Vampire Clip, Qty. 3		
Frequency Caps		**RPM40SM**	Clear Sticky Mount Qty. 3		
RPM40FC/B	Flat cap, Black, Qty. 10	**RPM40MM/B**	Black Magnet Mount, Qty. 2		
RPM40FC/C	Flat cap, Cocoa, Qty. 10	**RPM40MM/W**	White Magnet Mount, Qty. 2		
RPM40FC/T	Flat cap, Tan, Qty. 10	**RPM40SVM/B**	Vampire Sticky Mount, Qty. 3		
RPM40FC/W	Flat cap, White, Qty. 10	**RPM40TS**	Adhesives for Sticky Mount. Qty. 15		
RPM40PC/B	Presence cap, Black, Qty. 10	**RPM40TS/50**	Adhesives for Sticky Mount. Qty. 50		
RPM40PC/C	Presence cap, Cocoa, Qty. 10	**RPM40SO/B**	Black Standoff for TL accessories, Qty. 10		
RPM40PC/T	Presence cap, Tan, Qty. 10	**RPM40SO/C**	Cocoa Standoff for TL accessories, Qty. 10		
RPM40PC/W	Presence cap, White, Qty. 10	**RPM40SO/T**	Tan Standoff for TL accessories, Qty. 10		
		RPM40SO/W	White Standoff for TL accessories, Qty. 10		

Polar Patterns

1000 Hz

Frequency Response

0,6 m (2 ft.) from sound source

TwinPlex™ TL47 Subminiature Lavalier Microphones

Overview

The expressively natural sounding TwinPlex™ TL47 is available with color options and mounting choices for all professional applications. The low sensitivity can handle critical acoustic environments without distortion and the 1.6 mm paintable cable stands up to the most demanding and challenging situations. The TL47 is the go-to subminiature lavlier line for flexibility.

Features

- With a variety of colors, mounting options, and accessories, the TL47 is ideal for nearly any lavalier application
- 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 prevent 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: Black, Cocoa, Tan, White
- Connectors: LEMO, MTQG/TA4F, MicroDot, XLR/Preamp, NC (bare wire)
- Accessories: Available with or without accessories

TwinPlex™ TL47
Subminiature Lavalier
Microphone

Specifications

Microphone Capsule	Dual-Diaphragm, Prepolarized Condenser
Polar Pattern	Omnidirectional
Frequency Response	20 Hz to 20 kHz
Sensitivity *at 1 kHz*	-45.0 dBV (5.62 mV)
Self-Noise, *A-Weighted, Equivalent Acoustical*	24.5 dB SPL-A
Signal-To-Noise Ratio	69.5 dB
Output Clipping Level	3.0 dBV,1 kHz *at 1% THD, typical*
Maximum SPL	142.0 dB SPL *1 kHz at 1% THD, typical*
Dynamic Range	117.5 dB *typical*
Microphone Current Draw	120 to 240 µA, typical
Bias Voltage *Recommended Operating Voltage*	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	66 in. (1.67 m)
Microphone Length	13.5 mm
Microphone Diameter	5.6 mm
Net Weight *with Cable*	12.0 g (0.42 oz.)

Available Models

TL47B/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with LEMO Connector, Black
TL47B/O-LEMO-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with LEMO Connector, Black with Accessories
TL47B/O-MDOT-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MicroDot Connector, Black with Accessories
TL47B/O-MTQG	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MTQG Connector, Black
TL47B/O-MTQG-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MTQG Connector, Black with Accessories
TL47B/O-NC-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with bare wire terminal, Black
TL47B/O-XLR-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with XLR Connector, Black with Accessories
TL47C/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with LEMO Connector, Cocoa
TL47C/O-LEMO-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with LEMO Connector, Cocoa with Accessories
TL47C/O-MDOT-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MicroDot Connector, Cocoa with Accessories
TL47C/O-MTQG	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MTQG Connector, Cocoa
TL47C/O-MTQG-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MTQG Connector, Cocoa with Accessories
TL47C/O-NC-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with bare wire terminal, Cocoa with Accessories
TL47T/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with LEMO Connector, Tan
TL47T/O-LEMO-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with LEMO Connector, Tan with Accessories
TL47T/O-MDOT-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MicroDot Connector, Tan with Accessories
TL47T/O-MTQG	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MTQG Connector, Tan
TL47T/O-MTQG-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MTQG Connector, Tan with Accessories
TL47T/O-NC-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with bare wire terminal, Tan with Accessories
TL47W/O-LEMO	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with LEMO Connector, White
TL47W/O-LEMO-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with LEMO Connector, White with Accessories
TL47W/O-MDOT-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MicroDot Connector, White with Accessories
TL47W/O-MTQG	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MTQG Connector, White
TL47W/O-MTQG-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with MTQG Connector, White with Accessories
TL47W/O-NC-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, 1.6 mm Cable with bare wire terminal, White with Accessories

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TwinPlex™ TL47 Subminiature Lavalier Microphones

Furnished Accessories

- Frequency Caps, Flat Response, Qty. 3
- Frequency Caps, Presence Response, Qty. 2

-A SKUs add:
- Single Tie Clip. Qty. 1
- Dual Tie Clip, Qty. 1
- Standoff for Tie Clip, Qty. 5
- Vampire Mount, Qty. 1
- Sticky Vampire Mount, Qty. 1
- Foam Windscreen, Qty. 2
- Clear Sticky Mount, Qty. 1
- Sticky Mount Adhesives, Qty. 10
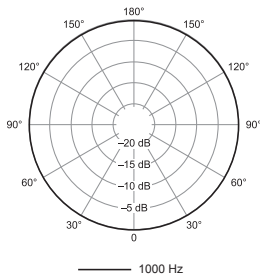- Storage Case for TL Lavalier, Qty. 1
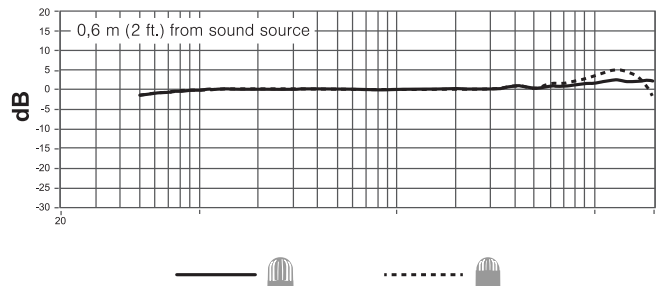
-A Included Accessories Shown

Optional Accessories

Replacement Connectors		Clips and Mounts		Preamps	
WA430	Replacement Neutrik mTQG connector kit, TA4F	RPM40STC/B	Single Tie Clip, Black, Qty. 3	RPM400TQG	Wired TQG to XLR Preamplifier with Beltclip
WA435	Replacement Neutrik mTQG connector kit, TA5F	RPM40STC/C	Single Tie Clip, Cocoa, Qty. 3	RPM400LEMO	Wired LEMO3 to XLR Preamplifier with Beltclip
WA445	Neutrik threaded collar shell for WA430/WA435	RPM40STC/T	Single Tie Clip, Tan, Qty. 3	**MicroDot Adapters**	
WA416	Replacement LEMO3, 1.6 mm connector	RPM40STC/W	Single Tie Clip, White, Qty. 3	MD40LEMO	MicroDot-to-LEMO3 Adapter
Windscreens		RPM40TC/B	Dual Tie Clip, Black, Qty. 3	MD40TA4F	MicroDot-to-TA4F Adapter
RPM40WS/B	Windscreens,Black, Qty. 5	RPM40TC/C	Dual Tie Clip, Cocoa, Qty. 3	MD40TA5F	MicroDot-to-TA5F Adapter
RPM40WS/T	Windscreens,Tan, Qty. 5	RPM40TC/T	Dual Tie Clip, Tan, Qty. 3	**Other**	
RPM40WS/C	Windscreens,Cocoa, Qty. 5	RPM40TC/W	Dual Tie Clip, White, Qty. 3	RPM40PREMNT	Preamplifier Mounting Kit
RPM40WS/W	Windscreens,White, Qty. 5	RPM40TC/M	Single Tie Clip Mix Pack (1 of each color)	RPM40PRECLIP	Beltclip for RPM400 Preamplifiers
RPM40WS/M	Windscreens (2 of each color), Qty. 8	RPM40VM/B	Black Vampire Clip, Qty. 3	RPM40KIT	Full Accessory Kit for TL Lavaliers
RPM40MWJ	Rycote MiniWindjammer, Gray, Qty 2	RPM40VM/W	White Vampire Clip, Qty. 3	RPM40CASE	Storage Case for TL Lavalier
Frequency Caps		RPM40SM	Clear Sticky Mount Qty. 3		
RPM40FC/B	Flat cap, Black, Qty. 10	RPM40MM/B	Black Magnet Mount, Qty. 2		
RPM40FC/C	Flat cap, Cocoa, Qty. 10	RPM40MM/W	White Magnet Mount, Qty. 2		
RPM40FC/T	Flat cap, Tan, Qty. 10	RPM40SVM/B	Vampire Sticky Mount, Qty. 3		
RPM40FC/W	Flat cap, White, Qty. 10	RPM40TS	Adhesives for Sticky Mount. Qty. 15		
RPM40PC/B	Presence cap, Black, Qty. 10	RPM40TS/50	Adhesives for Sticky Mount. Qty. 50		
RPM40PC/C	Presence cap, Cocoa, Qty. 10	RPM40SO/B	Black Standoff for TL accessories, Qty. 10		
RPM40PC/T	Presence cap, Tan, Qty. 10	RPM40SO/C	Cocoa Standoff for TL accessories, Qty. 10		
RPM40PC/W	Presence cap, White, Qty. 10	RPM40SO/T	Tan Standoff for TL accessories, Qty. 10		
		RPM40SO/W	White Standoff for TL accessories, Qty. 10		

Polar Patterns

1000 Hz

Frequency Response

0,6 m (2 ft.) from sound source

dB

Updated:03/19

Whilst every effort has been made to ensure that the information in this document is correct, we accept no liability in respect of errors or omissions. All specifications within this document are subject to change without notice.

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TwinPlex™ TL48 Subminiature Lavalier Microphones

Overview

The TwinPlex™ TL48 offers a tailored response with a mid-range rise that's ideal for speech and dialogue applications, such as film and TV. Designed with leading audio professionals' input, the TL48 is easily concealed in a costume or directly against the skin under wardrobe, and offers extensive accessories to ensure quick, easy, and secure mounting—all with no impact on sound quality.

Features

- With a fixed frequency cap and mid-band boost that accentuates dialogue, the TL48 is ideal for film and TV applications
- Improved off-axis consistency, due to the patent pending dual-diaphragm design, yields accurate reproduction regardless of vocal source position or movement
- Best-in-class low self-noise and dynamic range for cleaner audio production
- Fixed frequency cap with internal hydrophobic woven lining resists sweat and moisture
- 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: Tailored for dialogue (6dB mid-band boost at about 7kHz)
- Sensitivity: Low
- Colors: Black, Tan, White
- Connectors: LEMO, MTQG/TA4F, MicroDot, XLR/Preamp, NC (bare wire)
- Accessories: Available with accessories

TwinPlex™ TL48
Subminiature Lavalier
Microphone

Specifications

Microphone Capsule	Dual-Diaphragm, Prepolarized Condenser
Polar Pattern	Omnidirectional
Frequency Response	20 Hz to 20 kHz
Sensitivity *at 1 kHz*	-45.0 dBV (5.62 mV)
Self-Noise, *A-Weighted, Equivalent Acoustical*	24.5 dB SPL-A
Signal-To-Noise Ratio	69.5 dB
Output Clipping Level	3.0 dBV,1 kHz *at 1% THD, typical*
Maximum SPL	142.0 dB SPL *1 kHz at 1% THD, typical*
Dynamic Range	117.5 dB *typical*
Microphone Current Draw	120 to 240 µA, typical
Bias Voltage *Recommended Operating Voltage*	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, XLR connector: 96 in. (2.43 m)
Microphone Length	19 mm
Microphone Diameter	5.3 mm
Net Weight *with Cable*	12.0 g (0.42 oz.)

Available Models

TL48B/O-LEMO-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with LEMO Connector, Black with Accessories
TL48B/O-MDOT-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with MicroDot Connector, Black with Accessories
TL48B/O-MTQG-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with MTQG Connector, Black with Accessories
TL48B/O-NC-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with bare wire terminal, Black with Accessories
TL48B/O-XLR-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with XLR Preamp, Black with Accessories
TL48T/O-LEMO-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with LEMO Connector, Tan with Accessories
TL48T/O-MDOT-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with MicroDot Connector, Tan with Accessories
TL48T/O-MTQG-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with LEMO Connector, Tan with Accessories
TL48T/O-NC-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with bare wire terminal, Tan with Accessories
TL48W/O-LEMO-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with LEMO Connector, White with Accessories
TL48W/O-MDOT-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with MicroDot Connector, White with Accessories
TL48W/O-MTQG-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with MTQG Connector, White with Accessories
TL48W/O-NC-A	TwinPlex™ Subminiature Omnidirectional Lavalier, Low Sensitivity, Tailored Response, 1.6 mm Cable with bare wire terminal, White with Accessories

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TwinPlex™ TL48 Subminiature Lavalier Microphones

Furnished Accessories

- Single Tie Clip. Qty. 1
- Dual Tie Clip, Qty. 1
- Standoff for Tie Clip, Qty. 5
- Vampire Mount, Qty. 1
- Sticky Vampire Mount, Qty. 1
- Foam Windscreen, Qty. 2
- Clear Sticky Mount, Qty. 1
- Sticky Mount Adhesives, Qty. 10
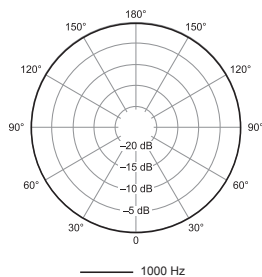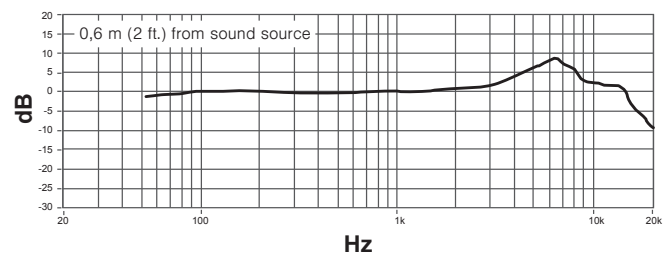- Storage Case for TL Lavalier, Qty. 1

Included Accessories Shown

Optional Accessories

Replacement Connectors		Clips and Mounts		Preamps	
WA430	Replacement Neutrik mTQG connector kit, TA4F	RPM40STC/B	Single Tie Clip, Black, Qty. 3	RPM400TQG	Wired TQG to XLR Preamplifier with Beltclip
WA435	Replacement Neutrik mTQG connector kit, TA5F	RPM40STC/T	Single Tie Clip, Tan, Qty. 3	RPM400LEMO	Wired LEMO3 to XLR Preamplifier with Beltclip
WA445	Neutrik threaded collar shell for WA430/WA435	RPM40STC/W	Single Tie Clip, White, Qty. 3	**MicroDot Adapters**	
WA416	Replacement LEMO3, 1.6 mm connector	RPM40TC/B	Dual Tie Clip, Black, Qty. 3	MD40LEMO	MicroDot-to-LEMO3 Adapter
Windscreens		RPM40TC/T	Dual Tie Clip, Tan, Qty. 3	MD40TA4F	MicroDot-to-TA4F Adapter
RPM40WS/B	Windscreens, Black, Qty. 5	RPM40TC/W	Dual Tie Clip, White, Qty. 3	MD40TA5F	MicroDot-to-TA5F Adapter
RPM40WS/T	Windscreens, Tan, Qty. 5	RPM40TC/M	Single Tie Clip Mix Pack (1 of each color)	**Other**	
RPM40WS/W	Windscreens, White, Qty. 5	RPM40VM/B	Black Vampire Clip, Qty. 3	RPM40PREMNT	Preamplifier Mounting Kit
RPM40WS/M	Windscreens (2 of each color), Qty. 8	RPM40VM/W	White Vampire Clip, Qty. 3	RPM40PRECLIP	Beltclip for RPM400 Preamplifiers
RPM40MWJ	Rycote MiniWindjammer, Gray, Qty 2	RPM40SM	Clear Sticky Mount Qty. 3	RPM40KIT	Full Accessory Kit for TL Lavaliers
		RPM40MM/B	Black Magnet Mount, Qty. 2	RPM40CASE	Storage Case for TL Lavalier
		RPM40MM/W	White Magnet Mount, Qty. 2		
		RPM40SVM/B	Vampire Sticky Mount, Qty. 3		
		RPM40TS	Adhesives for Sticky Mount. Qty. 15		
		RPM40TS/50	Adhesives for Sticky Mount. Qty. 50		
		RPM40SO/B	Black Standoff for TL accessories, Qty. 10		
		RPM40SO/C	Cocoa Standoff for TL accessories, Qty. 10		
		RPM40SO/T	Tan Standoff for TL accessories, Qty. 10		
		RPM40SO/W	White Standoff for TL accessories, Qty. 10		

Polar Patterns

——— 1000 Hz

Frequency Response

0,6 m (2 ft.) from sound source

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 *at 1 kHz*	-45.0 dBV (5.62 mV)
Self-Noise, *A-Weighted, Equivalent Acoustical*	24.5 dB SPL-A
Signal-To-Noise Ratio	69.5 dB
Output Clipping Level	3.0 dBV,1 kHz *at 1% THD, typical*
Maximum SPL	142.0 dB SPL *1 kHz at 1% THD, typical*
Dynamic Range	117.5 dB *typical*
Microphone Current Draw	120 to 240 µA, typical
Bias Voltage *Recommended Operating Voltage*	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 *with Cable*	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

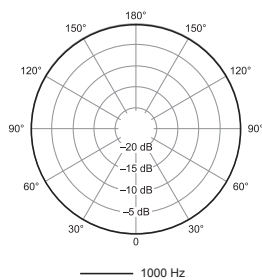# TwinPlex™ TH53 Subminiature Headworn Microphone

Furnished Accessories

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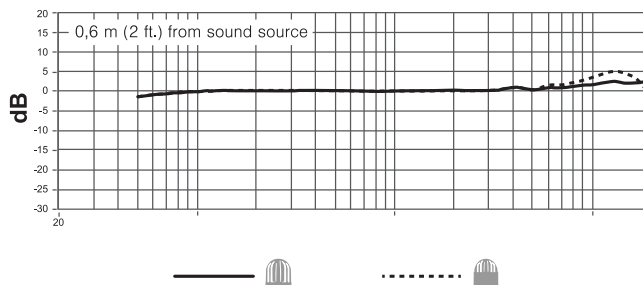- Cable Clip, Qty. 2
- Cable Flex, Qty. 2
- Collar Clip, Qty. 1

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	RPM40STC/B	Single Mount Tie Clip, Black, Qty. 3
RPM53C/O-MTQG	Replacement Boom Arm, Cocoa, MTQG Connector	RPM400LEMO	Wired LEMO3 to XLR Preamplifier with Beltclip	RPM40STC/C	Single Mount Tie Clip, Cocoa, Qty. 3
RPM53T/O-MTQG	Replacement Boom Arm, Tan, MTQG Connector	**Replacement Connectors**		RPM40STC/T	Single Mount Tie Clip, Tan, Qty. 3
RPM53B/O-LEMO	Replacement Boom Arm, Black, LEMO Connector	WA430	Replacement Neutrik mTQG connector kit, TA4F	**Other**	
RPM53C/O-LEMO	Replacement Boom Arm, Cocoa, LEMO Connector	WA435	Replacement Neutrik mTQG connector kit, TA5F	RPM40PREMNT	Preamplifier Mounting Kit
RPM53T/O-LEMO	Replacement Boom Arm, Tan, LEMO Connector	WA445	Neutrik threaded collar shell for WA430/WA435	RPM40PRECLIP	Beltclip for RPM400 Preamplifiers
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				
RPM53T/O-MDOT	Replacement Boom Arm, Tan, Microdot Connector	**Frequency Caps**			
RPM53B/O-NC	Replacement Boom Arm, Black, No Connector	RPM40FC/B	Flat cap, Black, Qty. 10		
RPM53C/O-NC	Replacement Boom Arm, Cocoa, No Connector	RPM40FC/T	Flat cap, Tan, Qty. 10		
RPM53T/O-NC	Replacement Boom Arm, Tan, No Connector	RPM40FC/C	Flat cap, Cocoa, Qty. 10		
RPM53B-HF	Headset Frame for TH53, Black	RPM40PC/B	Presence cap, Black, Qty. 10		
RPM53C-HF	Headset Frame for TH53, Cocoa	RPM40PC/C	Presence cap, Cocoa, Qty. 10		
RPM53T-HF	Headset Frame for TH53, Tan	RPM40PC/T	Presence cap, Tan, Qty. 10		
RPM53B-CC	Headset Cable Clip, Black, Qty. 3	**Windscreens**			
RPM53C-CC	Headset Cable Clip, Cocoa, Qty. 3	RPM40WS/B	Windscreens, Black, Qty. 5		
RPM53T-CC	Headset Cable Clip, Tan, Qty. 3	RPM40WS/T	Windscreens,Tan, Qty. 5		
RPM53B-CF	Headset Cable Flex, Black, Qty. 3	RPM40WS/C	Windscreens,Cocoa, Qty. 5		
RPM53C-CF	Headset Cable Flex, Cocoa, Qty. 3	RPM40WS/M	Windscreens (2 of each color), Qty. 8		
RPM53T-CF	Headset Cable Flex, Tan, Qty. 3	RPM40MWJ	Rycote MiniWindjammer, Gray, Qty 2		
RPM50ES	Earhook Sleeves, Clear, Qty. 4				
RPM50CASE	Storage Case for TH Headset				

Polar Patterns

1000 Hz

Frequency Response

0,6 m (2 ft.) from sound source

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