

RE97-2Tx
Low Profile, Head-worn,
Condenser Microphone
with TA4F Connector



RE97-2Tx Key Features:

- o Superior Sound Quality
- o Omni-directional Polar Pattern
- o Lightweight, Low Profile, and Rugged
- o Adjustable Head-Band and Boom
- o Swivel Earloops Allow for Left or Right Side Use

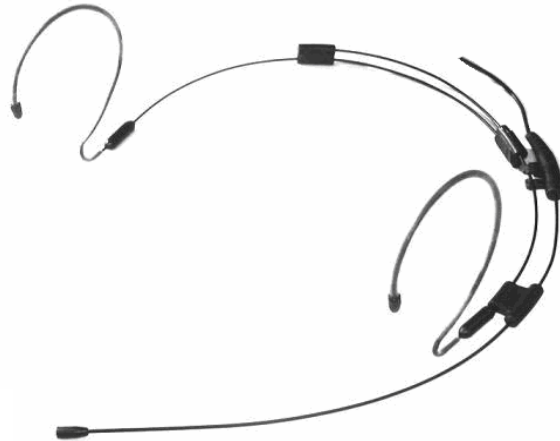
Product Description:

The Electro-Voice® RE97-2Tx is a low profile, omni-directional, condenser microphone designed for demanding applications where a hands-free microphone is required. The RE97-2Tx is intended for spoken-word use in theatrical performance, corporate AV presentations, fixed installations, houses of worship, or any venue where a full-range, natural, and well-balanced sound is required from an inconspicuous, lightweight, head-worn microphone.

The output of the RE97-2Tx is clean and accurate, while the omni-directional polar pattern ensures uniform output regardless of the microphone's angle relative to the sound source. The RE97-2Tx head-band is easily adjusted to fit virtually any head size, is light in weight, and provides a stable base for the microphone boom.

The microphone boom can be easily adjusted for optimum placement near the user's mouth by sliding the boom forward and backward along the headband. The microphone boom is made of special, malleable stainless steel that may be shaped to better match facial contours. The earloops are designed for full 360° rotation, allowing for microphone usage on either side of the head, as well as convenient flat storage when not in use.

The supplied windscreen can be utilized in windy environments and to reduce breath noise. The RE97-2Tx has a shielded 4ft cable terminated in a genuine Switchcraft® TA4F connector and is ready for use with standard EV and Telex body-pack transmitters including the EV REV-BP, BPU-2/CSB-1000 and Telex WT-500/WT-1000. The wire to the body-pack may be conveniently routed behind the user and attached to a shirt collar with the included clothing clip.



Technical Specifications:

Transducer:	Condenser, back-electret
Frequency Response:	50 – 15 kHz
Polar Pattern:	Omni-directional
Sensitivity, 1 kHz:	-48 dBV, 4.0 mV/Pascal
Maximum SPL:	>125 dB SPL
Equivalent Noise:	32 dBA
Dynamic Range:	93 dB
Output Impedance, 1 kHz:	3000 Ohms
Power Requirements:	+5 VDC
Current Consumption:	310 µA
Polarity:	Positive Pressure on Diaphragm Produces a Positive Voltage on pin 2
Dimensions:	See diagram
Cable:	4 ft (1.22 m) long; 0.052 in (1.30 mm) diameter
TA4F Connector Wiring:	Pin 1 – Ground Pin 2 – Audio Pin 3 – Bias Voltage Pin 4 – Unused
Accessories Furnished:	Windscreen Clothing Clip Gig Bag
Colors Available:	Beige, Brown, Black
Net Weight:	0.6 oz (17 g) Mic and headset only: 0.33 oz (9.4 g)
Optional Accessories:	TXA Phantom Power Adapter



Application Notes:

Using your RE97-2Tx

Earloops:

The RE97-2Tx arrives with the earloops in the flat storage position. To change the position of the earloops, first pull the base of the earloop straight away from the headband while gripping the cylindrical connector (Figure 1).

Next, rotate the earloop 90 degrees, and release. The earloop will “lock” into place when positioned correctly. To replace the RE97-2Tx in the gig bag, repeat this procedure to flatten the earloops.

Note: You may wear the mic boom on either side of the face. To change sides, simply rotate both earloops 180 degrees.

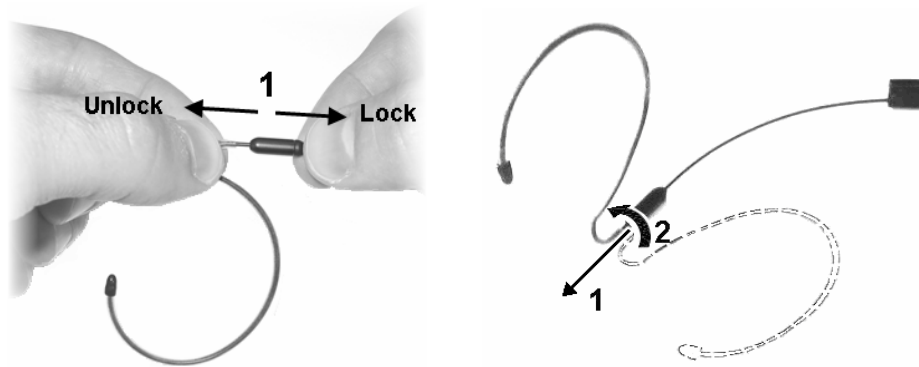


Figure 1. Unlocking and Rotating the Earloops

Headband and Microphone Placement:

Before placing on the user's head, expand the headband to the largest position by moving the sliders toward each other until they almost touch (Figure 2).

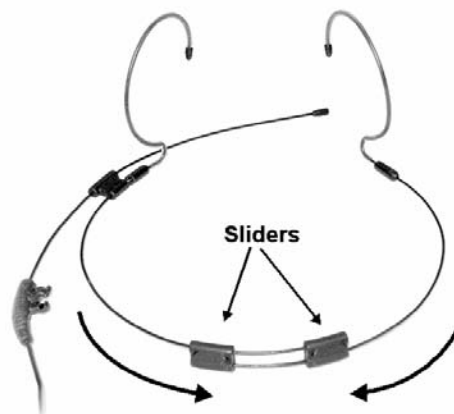


Figure 2. Headband in the Largest Position



Application Notes (continued):

Headband and Microphone Placement (continued):

Place the earloops on the user's ears and then pull the sliders apart, towards the ears, tightening until the headband fits firmly yet comfortably (Figure 3). Adjustments may be made for additional comfort or stability by gently bending the earloops (Figure 4).



Figure 3. Adjusting the Headband

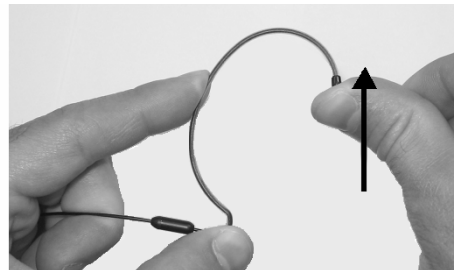
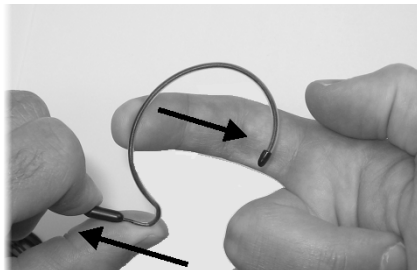


Figure 4. Changing the Earloop Shape

Microphone Positioning:

The ideal placement of the microphone is $\frac{1}{2}$ inch behind the corner of the mouth and $\frac{1}{2}$ to 1 inch away from the face. The signal-to-noise ratio is optimized and breath noise is minimized in this configuration (Figure 5).



Figure 5. Suggested Placement



Application Notes (Continued):

Adjusting the Microphone Boom:

The three-pronged snap on the strain relief at the back end of the microphone boom can be placed anywhere along the headband. Simply pull the strain relief off of the headband, move the boom and microphone to the desired position, and snap the strain relief back on to the headband (Figure 6).

A slight bend can be put into the boom for ideal placement of the microphone near the corner of the mouth. **Note: Although the microphone boom is designed to be malleable, permanent damage to the microphone may result if bent at an angle exceeding 45 degrees.** To adjust, gently bend the boom a small amount at multiple locations or around a curved object rather than bending it sharply at one point (Figure 7a and Figure 7b).

Figure 6. Adjusting the Microphone Boom



Figure 7a. Do Not Bend Mic Boom Sharply

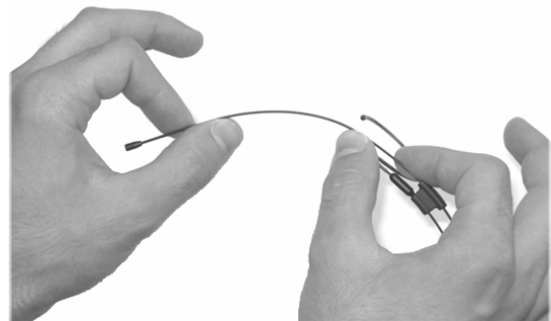


Figure 7b. Shaping the Mic Boom Gently

Using the Clothing Clip:

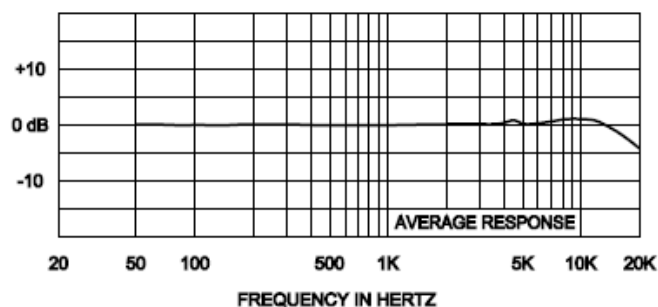
The microphone cable should be routed behind the neck of the user and secured in place with the supplied clothing clip. Allow some slack in the cable to enable the user's head complete range of motion in both directions without pulling the cable from the clothing clip (Figure 8).



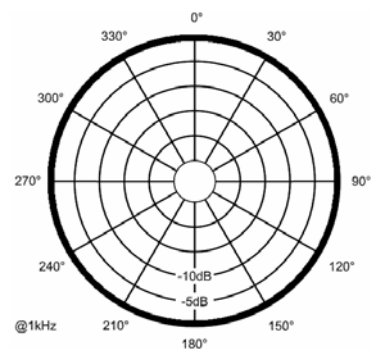
Figure 8. Using the Clothing Clip



Frequency Response:



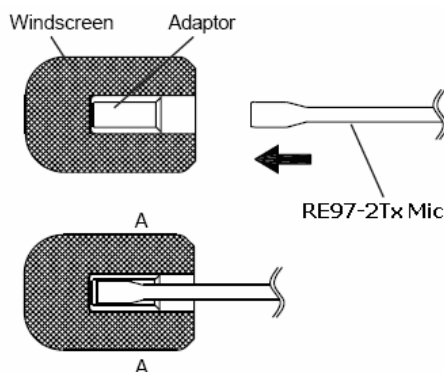
Polar Response:



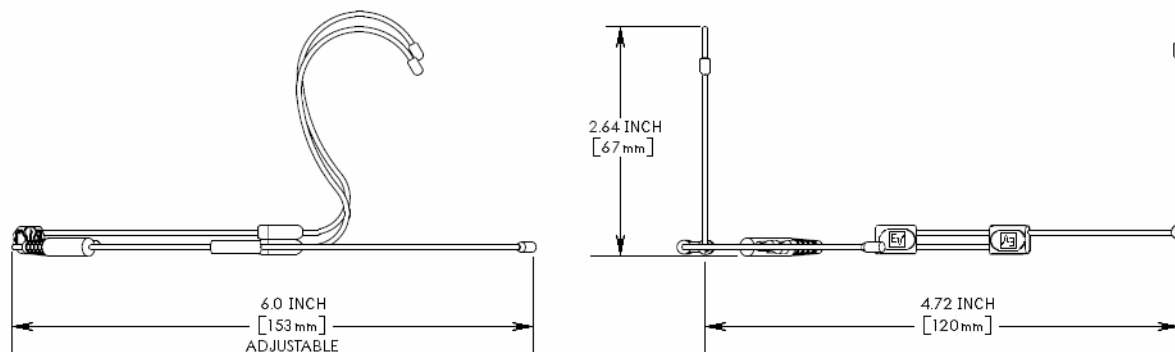
Windscreen Assembly:

The windscreen assembly is supplied with a plastic adaptor to improve stability.

To apply: Hold the windscreen firmly at the "A" locations. Firmly press the microphone into the adaptor until it stops.



Product Dimensions:





Interfacing RE97-2:

Your RE97-2Tx is configured for use with standard Electro-Voice and Telex bodypack transmitters. Modifications to your RE97-2 should be performed by a qualified technician only. Using the microphone in a way other than described in this manual may damage the microphone and void your warranty.

The following table is provided for your reference should you desire to utilize the RE97-2 with another manufacturer's wireless transmitter bodypack. Please verify the specifications of your transmitter before attempting any changes to your microphone.

Manufacturer	Wireless Systems	Connector Type	Suggested Wiring
AKG	WMS 40 Pro, WMS 400, and WMS 4000 (Transmitters PT 40, PT400, and PT4000)	TA3F	Pin 1: Shield
			Pin 2: Wire
			Jump Pin 2 to Pin 3
Audio-Technica	AT UniPak-type Transmitters ATW-1127, ATW-1235, ATW-1451, ATW-2110, ATW-3110a, AEW-T1000, ATW-201, ATW-601, ESW-T210, and ESW-T211 for the following systems: 1100, 1200, 1400, 2000, 3000, 4000, 5000 Series Professional; 200 and 600 Series Freeway; NOT for use with the U100 System	Hirose 4-Pin HR10A-7P-4S	Pin 1: Shield
			Jump Pin 1 to Pin 2
			Pin 3: Wire
			Shunt Pins 3-4 with R = 5k Ohms
Electro-Voice	RE-2 (BPU-2); RE-1 (CSB-1000); R100 (BPV)	TA4F	Pin 1: Shield
			Pin 2: Wire
			Shunt Pins 2-3 with R = 10k Ohms
			Pin 4: Not Connected
Sennheiser	Evolution Wireless Systems 100, 300, 500 (Transmitters SK100, SK300, SK500), and G2 Series	3.5 mm (1/8") Stereo or Mono Mini-Plug	Tip: Wire
			Sleeve: Shield
			(Ring: Not Connected)
			5V Zener diode: + to tip, - to sleeve (1N5231 or similar)
Shure	Performance Gear (UT1); PGX1; SLX1; T Series (T1, T11); UC1; UHF (U1); UHF-R (UR1); ULX Professional and ULX Standard (ULX1)	TA4F	Pin 1: Shield
			Shunt Pins 2-3 with R = 10k Ohms
			Pin 3: Wire
			Pin 4: Not Connected
Telex	FMR Series 70, 500, 1000 (Transmitters WT-55, WT-500, WT-1000); SAFE 1000 (SAFE WT)	TA4F	Pin 1: Shield
			Pin 2: Wire
			Shunt Pins 2-3 with R = 10k Ohms
			Pin 4: Not Connected

RE97-2Tx Beige Part Number: PRD000064000
 RE97-2Tx Brown Part Number: PRD000077000
 RE97-2Tx Black Part Number: PRD000078000



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www.electrovoice.com

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 800/392-3497 Fax: 800/955-6831

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 + 49 9421-706 0 Fax: + 49 9421-706 265

Other International locations. For customer orders, contact Customer Service at:
 + 1 952 884-4051 Fax: + 1 952 736-4212

For warranty repair or service information, contact the Service Repair department at:
 800/553-5992 or 402/467-5321

For technical assistance, contact Technical Support at: 800/392-3497 or 952/736-4656

Specifications subject to change without notice.