

The Tenna-Tune 2: SWR tuning indicator for IC706/7000 and FT-857/897 transceivers  
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This updates the Tenna-Tune (December 2004 QST Hints & Kinks) with a 4PDT slide switch to simultaneously put your supported transceiver in the “tune” mode when the SWR bridge is in-line, and uses a LED as both an SWR indicator and RF detector (eliminates a diode and capacitor). Scrape paint away from where the power resistors mount if you use a painted box. Figure 1 is the schematic for IC-706/703/7000 transceivers. Figure 1a shows the interface for FT-857/897 transceivers, which puts the FT-857/897 in a low power (20W) TUNE mode.

For screwdriver tuning, start with the antenna in its minimum-length position. Push the slide-switch to “Tune”, and then run the screwdriver antenna motor until the SWR LED dims noticeably or goes out. Now flip the slide switch to “BYPASS” and you’re ready to go. A good SWR indication occurs with just 2-5 watts of power. Don’t exceed more than about 20-25 watts during tune-up.

Parts List

<u>Qty</u>	<u>Description</u>	<u>Mouser Part Numbers</u>
3	50 Ω 15-watt resistor	684-MP915-50
1	4PDT Slide Switch	629-GF6426010
1	Mini-box (2.25x1.5x1.38”)	537-M00-PLN
1	0.01 uf 500V capacitor	75-5HKSS10
1	10K ¼-watt resistor	71-CCF5010K0FKE36
1	20K ¼-watt resistor	71-CCF0720K0JKE36
1	Ultrabright Red LED	638-MV8114
1	4-pin Molex plug/pins x4	538-03-09-2042/ 538-02-09-2103 (4)
2	SO-239 RF connectors	601-25-7350
1	5.1V zener diode	512-1N4733ATR
Miscl	#2 & #4 screws/nuts/lockwashers	

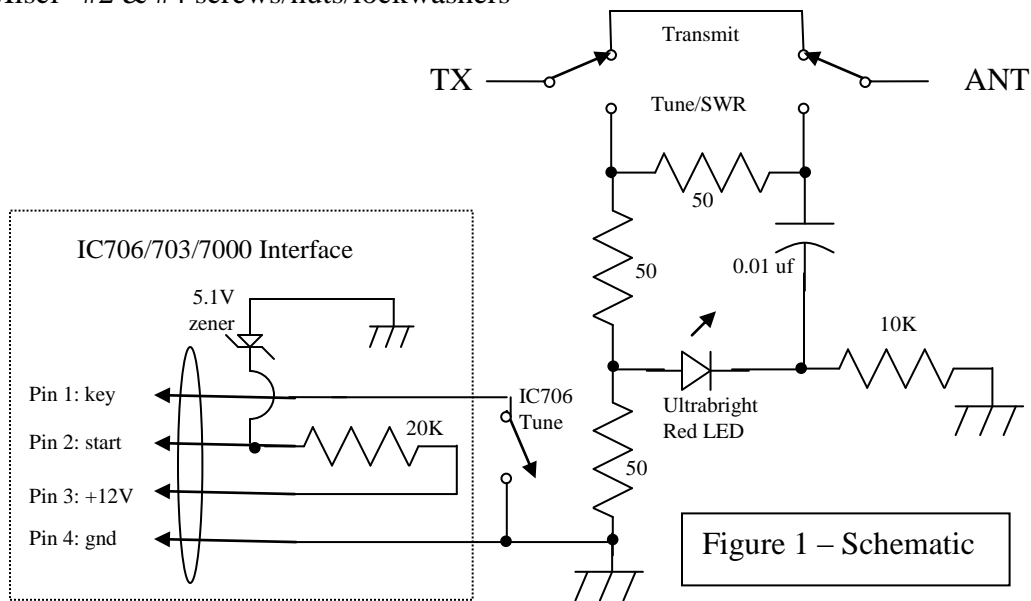
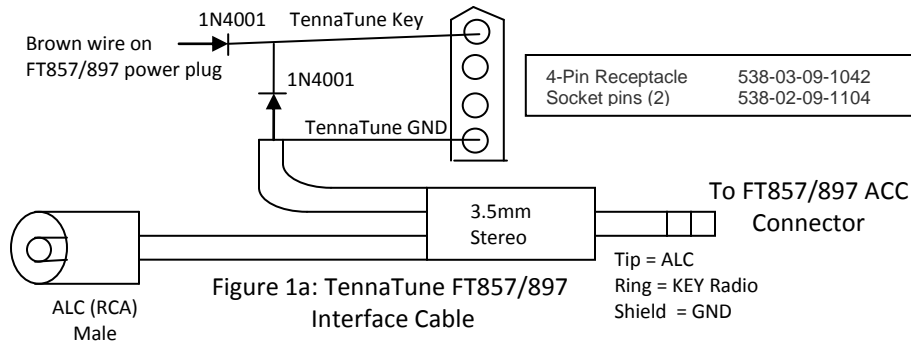


Figure 1 – Schematic



You can attach the FT-857/897 Key/Gnd wires directly to the XCVR Intfc on Figure 2, or you can build an adapter cable so the TennaTune2 can be used with either the IC-706 or the Yaesu FT-857/897 using the socket header and pins shown in Figure 1a.

