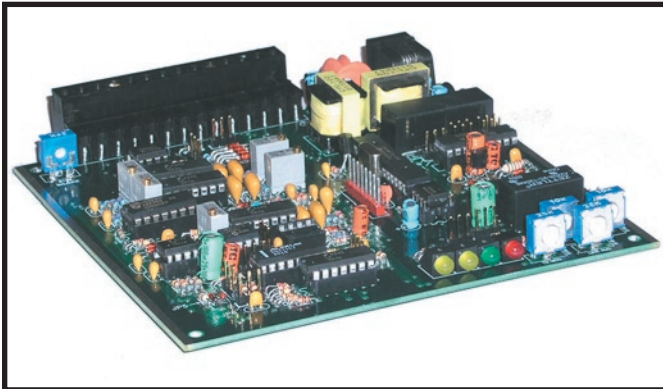




Tone Termination Panels



TTP1(N) The TTP1(N) is an EIA standard tone termination panel that can be interfaced to virtually any radio. Standard features of the TTP1(N) include: tone detection AGC (eliminates line in level adjustments), modular and screw terminal connections, jumper selectable 2 wire, 4 wire, or full duplex, and LED status indicators. The only available option for these units is a case option.

-C/TTP(N) This unit will interchange with the present TTP1 as the connector styles are identical. The TTP1 case option will not interchange as the TTP1(N) has additional circuitry resulting in a larger board size. The **TTP2(N)** is a two frequency version of the TTP1(N). These units are not field programmable. These units come standard with 1950-1850 Hz function tones, 2050 Hz monitor, and 2175 Hz guard and hold tones. Custom microcontrollers are available for different function tones and custom applications.

MR200(N) The MR200(N), MR202(N), and JM200(N) are radio specific modified TTP(N) units that interface through the microphone jack on certain radios. The MR series panel interfaces to most Motorola mobiles that use the 8 pin modular microphone. Maxtrac 100,300, Radius M10, 100, 120, M200, GM300, SM50, SM120, M1225, GTX, MCS2000, and CDM series radios. Two channel selection on the MR202 requires a radio jumper for channel selection. The JM200 interfaces to the Johnson Challenger and 8600 series radios. These units are enclosed and have the same features as the TTP(N) series.



TTP216 The TTP216 is an EIA standard 16 frequency user programmable tone termination panel. Users can program any one of the standard 1950-450 Hz function tones in any position or choose from one of the 14 standard pre-sets. Standard features of the TTP216 include: tone detection AGC (eliminates line in level adjustment), front panel microphone jack, modular and screw terminal connections, jumper selectable 2 wire, 4 wire, or full duplex. No programming software is required for this unit. This unit is ideal for radios that allow channel selection using BCD control.



Tone Panel Specifications

subject to change without notice

Input voltage	+12 to +13.8 VDC @ 150 mA (18mA idle)
Line impedance	600 ohms
Line output to phone line	+10 dBm max. preset to 0 dBm
Line output from phone line	-40 dBm to +10 dBm (function tone referenced)
RX input from radio	70 mVrms or greater
Notch filter	2175 down 50 dB from 1000 Hz reference
Dimensions TTP(N) series TTP(N)-C/MR series TTP216	5.3" wide x 1" high x 5" deep - unenclosed 5.5" wide x 1.5" high x 6.5" deep 5.5" wide x 1.5" high x 7.5" deep
Control Tones:	Guard tone = 2175Hz for 40 mS Function tones F1-F16 = 1950-450 Hz for 40 mS Monitor = 2050 Hz for 40 mS Hold tone = 2175 Hz for duration of PTT
Control function outputs	PTT and monitor selection are form "C" relay contacts. 1 amp @30 VDC F1/F2 are form "C" relay contact or open collector F3-F16 are open collector

Option

Description

-C/TTP(N)	Black, vinyl clad steel and aluminum enclosure for the TTP(N) series
Rack/TTP(N)	Single height 19" rack holds 3 TTP(N), MR, or TTP216 panels
-80 cable	Pre-made cable connects the TTP(N) series to the KCT-19 connector on -80 series mobiles
-90 cable	Pre-made cable connects the TTP(N) series to the DB25 on the -90 series
216-90	Pre-made cable connects the TTP216 series to the DB25 on the -90 series
-MOT/cable	Pre-made cable connects the TTP(N) series to the 16 pin accessory connector on most Motorola mobiles
216-MOT	Pre-made cable connects the TTP216 series to the 16 pin accessory connector on Motorola mobiles. GM300, M1225 4 channel, and CDM series

