

**TTL** (Also see RF Shielding, page 7)  
To computer, 5 pin connector (supplied), TTL levels

- Pin 1 - PTT; active low send
- Pin 2 - RTTY input; space low, mark high
- Pin 3 - CW input; active low
- Pin 4 - Ground
- Pin 5 - Demodulator output; space low, mark high

**Note:** This connector is wired with Pin 5 being on the left hand side of the connector viewing the unit from the rear.

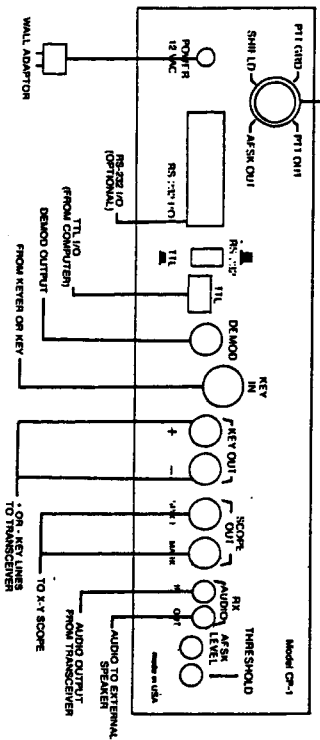
**RS-232 I/O (OPTION)**

Provides RS-232 level demodulator output and RTTY or CW input. Internal jumpers provided for 'terminal' or 'computer' drive. This is strictly an RS-232 level shift, it will not drive a printer or other such devices, as the CP-1 is strictly a modem. It has no software for built-in conversions.

**TRANSCIEVER OUTPUT:**

This connector handles all of the 'interfacing' to your transmitter

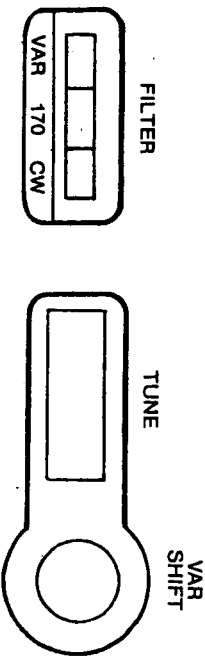
- Pin 1 - AFSK out—Audio Frequency Shift Keying. This line is connected to the (mic) audio input of your transceiver.
- Pin 2 - PTT out. This is connected to the high side of the PTT line of your transceiver. Wiring examples are given in Appendix B for some of the more popular transceivers. If you have a transceiver with negative PTT (such as the Drake TAXC) then follow Appendix C.
- Pin 3 - PTT GND. This is connected to the PTT ground side of your transceiver. Some transceivers require a separate ground and others do not. If yours does, then wire up pin 3 to your PTT ground side. If yours does not, do not wire up pin 3.
- Pin 4 - Shield. This is the shield of the audio lead. Connect to the ground pin of your mic connector. This pin also normally serves as the ground side of your PTT circuit. See above (Pin 3).



**REAR PANEL CONNECTIONS**

**OPERATION**

There are three filter selections available from the front panel. Two are for RTTY teletype use, one is for CW use. The position marked 170 is for use with amateur and commercial 170 Hz shift teletype (either Baudot or ASCII) with the mark tone at 2125 Hz and the space tone at 2295 Hz. In the VAR position, the space tone filter is tunable with the VAR shift control from 2225 Hz to 3125 Hz giving a frequency shift range of 100 Hz to 1000 Hz.



**CW**

Press the front panel filter switch CW position. This selects the 800 Hz CW input filters and the positive and negative transmitter keying circuits.

Set your receiver audio to a comfortable level and tune in a CW signal for maximum closure. What we mean by maximum closure is that you are getting peak closure of the bar graph display. If you set your volume at a particular level and tuned across a signal and the bar graph closes to a maximum of 8 LED's, the peak closure is 8 LED's. If you turn your volume up, the closure may be 10 LED's, however, when driving the CP-1 with a very loud signal, it is possible to over drive the filters with noise. It is best to run just enough audio to get the job done, 6 to 8 LED's is about right. If you see the bar graph flicker with just noise on the frequency, then you probably have the volume up too high.

Some software programs will automatically activate the PTT line when you place the program into transmit. If yours does not, use either the Manual RX/TX Switch on the front of the CP-1 or a foot switch.

**TELETYPE RECEIVE**

Both VAR and 170 switch positions are used for teletype (Baudot or ASCII) operation. Pressing either of these switches selects the teletype filters and disconnects the CW keying lines from the CW keying transistors.

Most amateur teletypes use standard 170 Hz tone spacing (2125 Hz mark, 2295 Hz space tones). Use the 170 position for standard amateur operation.