

INSTALLATION

This section describes how to interface the PE-1000 Paging Encoder to a transmitter. All connections are made to the 10 position terminal block, TB-1 inside the unit. Use shielded wire for all audio signals. After all connections are completed, proceed to JUMPER CONFIGURATIONS and then to ALIGNMENT PROCEDURE. Installation should be done by a qualified technician.

Open the PE-1000 enclosure by first removing the 4 screws on the bottom of the unit. The circuit board has to be removed by first removing the 3 mounting screws from the top cover ONLY if the configuration jumpers need to be changed. All other adjustments can be made from the solder side of the circuit board through the adjustment holes without removing the circuit board.

INSTALLATION PROCEDURE

Pin Number	Description
1	DC POWER +V — Connect continuous +11.0vdc to +16.0vdc to this pin. Use the wall power supply included. The positive line on the power supply has the white stripe. External DC power from the base station power supply can also be used if available.
2	DC POWER GROUND — Use this pin as the DC return for the power supply ground line. This is the other black wire from the wall power supply, or a ground wire from the base station DC power supply.
3	PTT OUTPUT — Connect this pin to the transmitter's main PTT line. This pin normally keys to ground for transmit when the transmit LED illuminates on the PE-1000 front panel. If +V (+12vdc) is required to key the transmitter, then move jumper JP-1A to JP-1B. JP-1 is located near the PTT Relay.
4	MIC INPUT — Connect the base station microphone audio line to this pin. This will route the mic audio through the PE-1000 and back out on pin 6. This will switch the mic out of the circuit when the PE-1000 is in the page cycle.
5	GROUND — Use this pin as a ground for all audio lines and use it as the main ground line back to the transmitter. Note that pins 2, 5 and 10 are common.
6	TX AUDIO — Connect this pin using shielded cable to the audio or microphone input on the paging transmitter. Under normal conditions, the mic audio will be routed through the PE-1000 and will come out on this pin. During the page sequence, the mic will be switched out of the circuit, and the PE-1000 output will be switched into the circuit. This will eliminate any loading effects.
7	RX AUDIO INPUT — Not used in PE-1000
8	RX AUDIO INPUT — Not used in PE-1000

- 9 **PRINTER OUTPUT** — This output can be used to keep a record of all paging activity that accumulates. The Printer Output sends data to the printer each time a page is processed. Connect this pin to the serial input line on the printer, pin 4. Use Radio Shack Model TP-10 (26-1261).
- 10 **GROUND** — Use this pin as a common ground line to the printer, pin 3.

JUMPER CONFIGURATIONS

JP1 — PTT POLARITY

See the **INSTALLATION PROCEDURE**, pin #3.

JP2 — DTMF JUMPER

This jumper is not used in the PE-1000

JP3 — AUDIO DE-EMPHASIS

The PE-1000 normally provides a flat tone output (JP3 OUT). This is to provide the proper interface levels to a typical FM transmitter. If the transmitter used has a pre-emphasis circuit, then add JP3 to provide a de-emphasized tone output which rolls off at -6db/oct (JP3 IN). The output of the transmitter as viewed on a service monitor should be flat to within 1 Khz. deviation across the range.

ALIGNMENT

Hold down the **PAGE** key, and apply power to the PE-1000. When the **PAGE** key is held down during power up, the PE-1000 will go into the **PROGRAM MODE**. This is confirmed by dashes (- - -) across the LED display.

Now press the the digit "2" and then the **PAGE (ENTER)** key and the PE-1000 will go into the transmit mode, and generate a 600 hz. audio tone into the transmitter. Now adjust R7 for 3.0 Khz. to 4.0 Khz deviation as seen on a service monitor set to the transmitter's RF frequency. When the adjustment is complete, press the **CLEAR** key to unkey the transmitter and reset the PE-1000.

If you should encounter any problems in making this adjustment, it may be because of an impedance mismatch. This can be corrected by inserting a 100K resistor in the place of R8, near the PTT relay, and then re-adjusting R7.

This completes the alignment procedure. The PE-1000 enclosure can now be re-assembled. Now proceed to the **PROGRAMMING SECTION** for programming the paging system operating parameters.