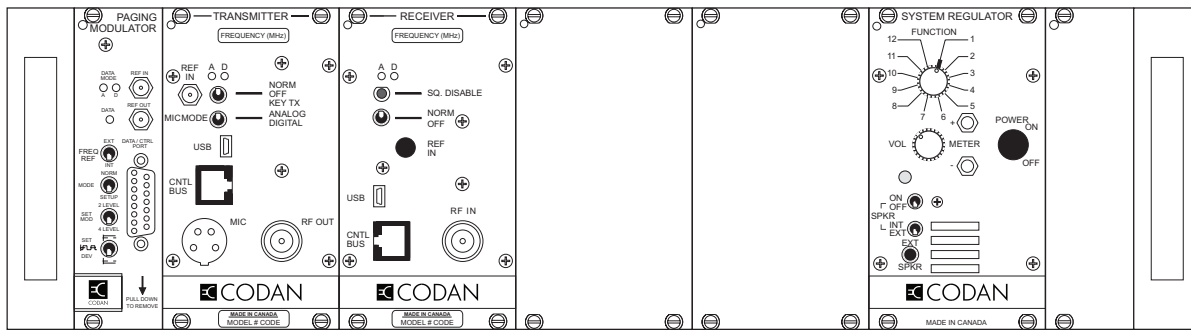


TN640 CI-PM-3 Paging Modulator

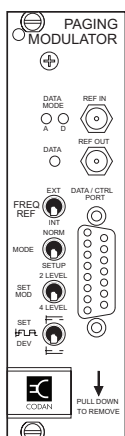
The Paging Modulator is a plug-in module which provides digital and/or analog paging capability, such as base station paging, remote paging or simulcast paging, for MT-3 and MT-4 radio systems. The CI-PM-3 is configured via the front panel switches and internal jumper settings.

The CI-PM-3 paging modulator supports both analog and digital paging formats, and can transmit POCSAG and other 2-level modulation schemes at transfer rates of 512, 1200 and 2400 baud. It can also be configured for use as a data repeater, whereby 2-level paging data is recovered, re-shaped and then re-transmitted to an additional repeater/paging transmitter.

The CI-PM-3 supports 4-level modulation formats at data transfer rates up to 6400 bps. Each of the four modulation deviation levels can be independently set, making the CI-PM-3 suitable for use in such pager signaling schemes as Motorola's FLEX™ paging protocol.



The CI-PM-3 uses an on-board frequency reference source consisting of a 10 MHz OCXO, with a frequency stability of ± 0.35 ppm from -30°C to $+60^{\circ}\text{C}$. For high stability applications (such as Simulcast), the CI-PM-3 paging modulator may be configured to use an external high stability reference source (i.e., rubidium, GPS or WWV) with a standard stability greater than or equal to 0.002 ppm, to discipline the on-board phase-locked loop OCXO oscillator.



The CI-PM-3 Paging Modulator includes the following standard features:

- low power analog and CMOS control circuitry (current draw of less than 250 mA).
- extended operating temperature range.
- jumper selectable repeater/paging transmitter configuration.
- on-board 10 MHz OCXO.
- front panel selection of PLL OCXO using external high stability frequency reference.
- jumper and line selectable analog/digital paging configuration.
- connection for optional CTCSS encoder/decoder.
- balanced $600\ \Omega$ / single-ended microphone input.
- selectable digital delay for simulcast operation.

FLEX™ is a trademark of Motorola, Inc.

TN640 CI-PM-3 Paging Modulator
Installation:

Figure 1 shows a generic connection between the Codan subrack with A-PNL-AUX96-3 auxiliary connector to the Zetron Model 66 for analog and/or digital 2 level paging.

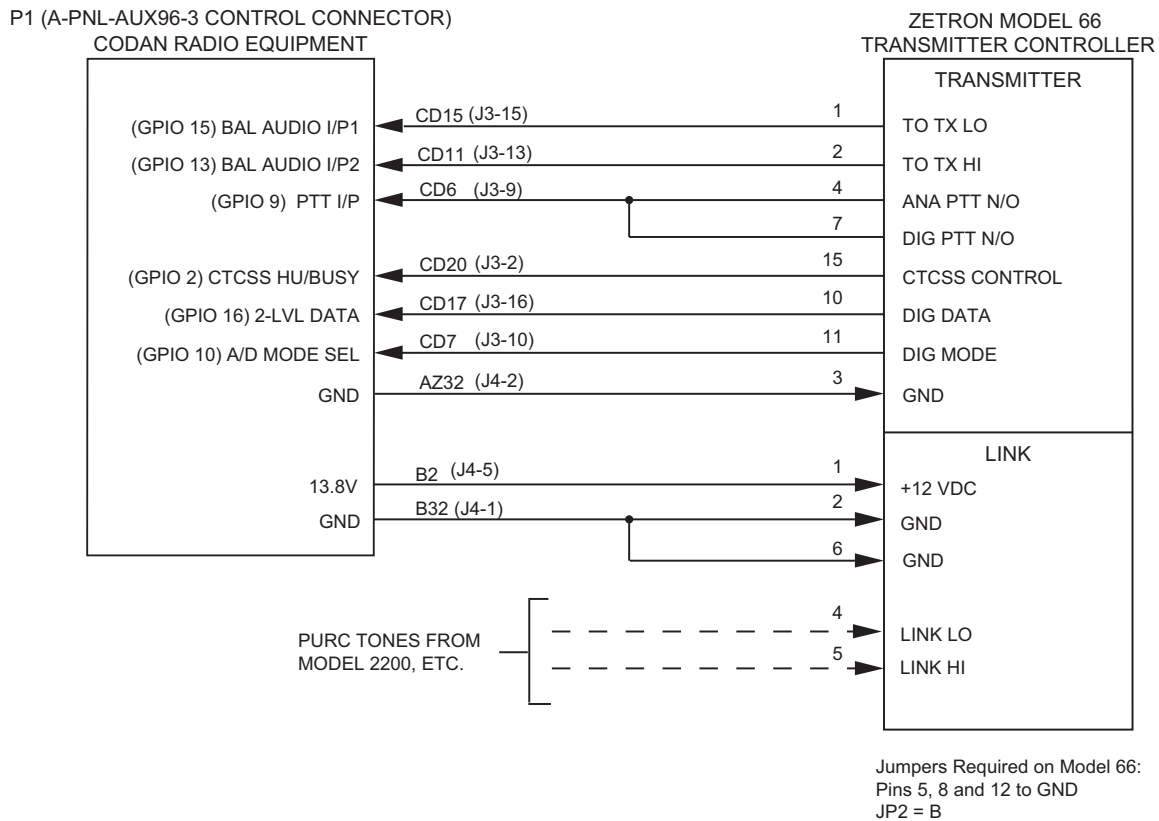


Figure 1: CI-PM-3 Connection Diagram