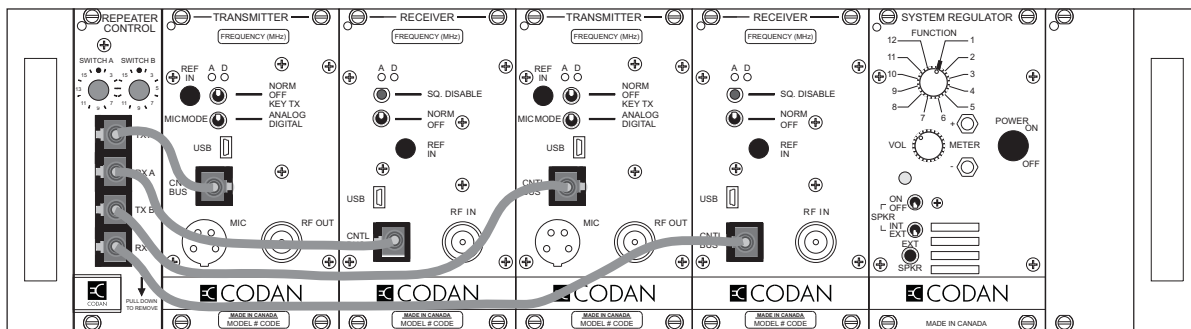


TN650 CI-RC-4L Repeater Control Card

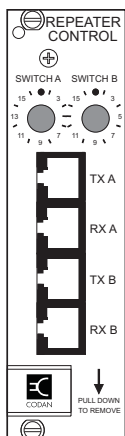
The CI-RC-4L repeater control card is a plug-in module which provides LVDS Serial Data routing, COR-PTT routing, and receiver priority settings for an MT-4 repeater radio system. The repeater control card includes the following features:

- jumper selectable LVDS Serial Data and COR-PTT routing (repeater configuration).
- receiver priority setting jumpers for certain configurations (where required).
- jumpers for disabling LVDS Serial Data and COR-PTT routing on simplex links.
- optional CTCSS interface board for 1 of 10 CTCSS tone decode selection (used for custom systems only).

The MT-4 receiver and transmitter modules all plug into the CI-RC-4L repeater controller via cables that plug in to the RJ45 jacks on the front panel of all the modules. The CI-RC-4L comes with four different cable lengths to plug into the four repeater receiver and repeater transmitter modules. If the system only uses two of the cables, the other cables can be kept for future system expansion or as spare cables.



Optional frequency select rotary switches can also be mounted on the front panel of the repeater control card, giving easy access to 16 pre-programmed receiver and transmitter operating frequencies. The CI-RC-4L has no external audio or serial data and is used only for controlling repeater configurations. The repeater control card module circuitry consists of three main jumper functions:



- (1) Repeater Configuration jumpers used to determine which receiver keys and routes data to which transmitter.
- (2) Receiver priority settings used to set receiver priority for certain repeater configurations.
- (3) Additional jumpers for the CTCSS interface board and other miscellaneous functions.

TN650 CI-RC-4L Repeater Control Card
Repeater Configuration Jumpers

Repeater Configuration	Keying	JU1	JU2	JU3
Repeater in A side of subrack	RXA -> TXA	Out	Out	Out
Repeater in B side of subrack	RXB -> TXB	In	Out	Out
Two independant repeaters in each side of subrack	RXA -> TXA RXB -> TXB	Out	In	Out
* Drop-Link on A side (Repeater A side with Link B side) Set RXA priority for Simplex Links	RXA -> TXA RXA -> TXB RXB -> TXA	In	In	Out
* Drop-Link on B side (Repeater B side with Link A side) Set RXB priority for Simplex Links	RXA -> TXB RXB -> TXA RXB -> TXB	Out	Out	In
Crossband System (No Simplex)	RXA -> TXB RXB -> TXA	In	Out	In
Crossband System with Simplex frequencies on A or B side (First receiver has priority always)	RXA -> TXB RXB -> TXA	In	In	In
* Drop-Repeating Link (Repeater in A or B side with repeating link in A or B side)	RXA -> TXA RXA -> TXB RXB -> TXA RXB -> TXB	Out	In	In

Receiver Priority Jumper Settings

These jumpers are only used for the Drop-Link configurations noted with an * above. For Drop-Links with Simplex links, set the receiver priority to the local repeater receiver.

Receiver Priority	JU9	JU10	JU11
First receiver active has priority	Out	Out	Out
RXA priority	In	Out	Out
RXB priority	Out	In	Out