



CDM option connector
 Top of Radio
 Connector outline
 RIM board outline

Slot for OEM connector lock

****NOTE****
 If using a Maxtrac/GM300 family radio, the interface can only be inserted one way due to physical design.
 If using a M1225 or SM series radio, the radio's option connector is inverted from that shown. Thus the crystal, USB connector and CM119 will face "down".

SJ1 enables internal speaker on Maxtrac style radios.
 If used with a CDM style radio, SJ1 should be removed.

Mods for 9600 (VARA FM)
 Remove D2, D3, R14, & C14
 Tack solder a 22-100pF capacitor between Pin 5 and ground (pin 7) on the radio connector. (RF bypass)

Notes for use with a CDM series radio:
 Under Radio Configuration > Accessory Pins:
 Change Pin 3 to "Data PTT (input)" instead of the default setting "External Mic PTT (input)"
 Change RX audio type to "Flat Audio"

Repeater Maker (-RM)
 Cut traces on pins 8 & 11 at radio connector
 Rx audio, COS, and Ground lines from "Remote" (RX) radio connect to marked bare pads on "main" (TX) PCB.

Option Connector Programming Notes:

Option #1 - For DTMF selectable COS / CTCSS selection via AllStar:
 Program pin 12 as COS - active HIGH and pin 8 as CTCSS - active HIGH;
 set 'carrierfrom = usb' and 'ctcssfrom = usb'

Option #2 - For Radio Programming of COS/CTCSS selection:
 Program pin 8 to COS&PL active HIGH;
 set 'carrierfrom = no' and 'ctcssfrom = usb'

NOTE: If using the -RM model with receiver daughter board; use option #2 above on receiver radio.

Channel Steering:

Pin 6 - Channel Select 1
 Pin 8 - Channel Select 2*
 Pin 14 - Channel Select 3
 Pin 12 - Channel Select 4*

Pins 8 and 12 are also used for COS / CTCSS. Consider using DSP COS & CTCSS decode, or steer only 8 channels. (Using pins 6, 8, & 14) leaving pin 12 free for COS/CTCSS (program pin 12 COS/CTCSS - active HIGH; set 'carrierfrom = usb' and 'ctcssfrom = no')

Audio Configuration Notes:

Set the Following:
 rxboost = 1
 txmixa = voice
 txmixb = tone ; Only if using USBRadio
 txboost = 0
 invertptt = 0

LoopBack Test Plug

6 & 8 to 3
 12 to 14
 2 & 5 to 11

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