

# Application Note

AN #: 517D

DATE: 21-Jun-06

Page 1 of 1

**PYRAMID MODEL #:** 2012 / 3012 / 2017 Merlin / 2016

**RADIO MODEL:** Motorola CDM1550

**ENGINEER:** C. Carbjal

**APPROVAL INITIALS**

ENGINEER \_\_\_\_\_

DEPT. HEAD \_\_\_\_\_

**Order the Pyramid 2012 CDM interface cable Part # 7500-06-1014**

**Order the Pyramid 2017/3012 CDM interface cable Part # 7521-10-1093**

**Order the Pyramid 2016 CDM interface cable Part # 7531-10-1093**

Connections:	Pyramid	Function	Radio
	Black/Shield	Ground	Accessory Connector Pin 7
	White	Tx Audio Out	Accessory Connector Pin 5
	Blue	On Air Detect	Accessory Connector Pin 8
	Green	PTT Out	Accessory Connector Pin 3
	Red	Switched B+	Accessory Connector Pin 13
	Yellow	Rx Audio In	Accessory Connector Pin 11
	Violet	COR	Accessory Connector Pin 4
(Optional)	Brown	Audio Mute	Accessory Connector Pin 12
(Optional)	Grey	Mic Mute/Ch Chng	Accessory Connector Pin 6

**2012/Merlin Jumpers:** J1 [Out] TX audio level  
J2 [Out] PTT loop back

**2016 Jumpers:** J1 [Out] PTT loop back  
J2 [Out] TX audio level

**Pyramid Program:** Mobile COR Polarity: Low  
Mobile Type: Conv.  
On-Air Polarity: Low  
I/O Pin 9 Channel Change Cont.

**Additional Modifications (2012/2016/Merlin):** None.

## Additional Modifications (Radio):

1. From the Motorola Professional Radio CPS --> **Feature** pull down menu --> **Radio Configuration**, program the **Accessory Pins** as follows:

Pin #3 - External Mic. PTT (input) *Active Low*

Pin #4 - PL and CSQ Detect/Talkgroup Detect (output) *Active Low*

Pin #8 - Clear To Send (output) *Active Low*

The following connections are optional:

Pin #12 - RX Audio Mute (input) *Active Low*

Pin #6 - Channel Select 1 (input) *Active Low* (will switch radio to channel 1 for data use)

2. From the Motorola Professional Radio CPS --> **Feature** pull down menu --> **Radio Configuration**, program the **Accessory Configuration** menu as follows:

1) Set **RX Audio Type** to **Flat Audio**

2) Set **External PTT Audio Source** to **Flat TX Audio**

3) Keep **Data PTT Overrides Voice** and **Headset** unchecked.