

# Application Note

**AN #: 530**

DATE: 11-Apr-02

Page 1 of 1

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

**RADIO MODEL:** Midland 70-382B

**ENGINEER:** W. Carlin

**APPROVAL INITIALS**

ENGINEER

DEPT. HEAD

Connections:	Pyramid	Function	Radio
	Black/Shield	Ground	Chassis Ground
	White	Tx Audio Out	J386 pin 1 (front panel to mic conn.)
	Blue	On Air Detect	N/C
	Green	PTT Out	J386 pin 3 (front panel to mic conn.)
	Red	Switched B+	J381 pin 3 (front panel)
	Yellow	Rx Audio In	IC3 pin 20 (MX325 on CTCSS PCB)
	Violet	COR	J359 pin 2 (main logic PCB <i>not populated</i> )
{ Optional }	Brown	Audio Mute	J381 pin 5 (front panel) * See Note 1
	Grey	Mic Mute / Chan Chng	N/C

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

**Pyramid Program:** Mobile COR Polarity: High  
Mobile Type: Conv  
On-Air Polarity: Low  
I/O Pin 9 Mute

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

## Additional Modifications (2012/2016/Merlin):

To increase the MSK encode output level perform the following:

**2012:** Change R34 to 1.0K Ohms

**2016/2017:** Change R54 to 1.0K Ohms

Adjust the COR threshold for 2.0VDC.

## Additional Modifications (Radio):

1. Cut a ¼" hole in the side of the front escutcheon to route the MDT cable into the radio. Secure with a strain relief.

**Note 1:** Install **Brown** wire as indicated if tone stripping is desired (Rx mute during MSK receive).

Revision Number

Date

Approval Initials