

Application Note

AN #: 531

DATE: 11-Apr-02

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PYRAMID MODEL #: 2012 / 2016 / Merlin

RADIO MODEL: Midland 70-1342

ENGINEER: W. Carlin

APPROVAL INITIALS

ENGINEER

DEPT. HEAD

Connections:	Pyramid	Function	Radio
	Black/Shield	Ground	Chassis Ground
	White	Tx Audio Out	Front panel mic connector "Mic"
	Blue	On Air Detect	N/C
	Green	PTT Out	Front panel mic connector "PTT"
	Red	Switched B+	J303 pin 14 (front panel)
	Yellow	Rx Audio In	J408 pin 12 (main PCB)
	Violet	COR	J408 pin 7 (main (PCB)
{ Optional }	Brown	Audio Mute	J408 pin 7 (main (PCB) See Note 1
	Grey	Mic Mute / Chan Chng	N/C

2012/Merlin	J1	[Out]	TX audio level	Pyramid	Mobile COR Polarity:	High
Jumpers:	J2	[In]	PTT loop back	Program:	Mobile Type:	Conv
					On-Air Polarity:	Low
2016	J1	[In]	PTT loop back		I/O Pin 9	Mute
Jumpers:	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 2.5VDC.

Ensure "Validate data with COR" is **disabled**.

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).

Ensure "Validate data with COR" is **disabled** in the MDT programming software.

Revision Number

Date

Approval Initials