

Application Note

AN #: 530

DATE: 11-Apr-02

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

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

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 1/4" 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 _____