

## Setting up the LMR/G2 Interface

**Only use a straight thru cable with your MSAT G2. Do not use a cross over cable.**

1. Verify the MSAT equipment is connected to a talk group and functioning properly
2. Connect the MSAT handset to the RJ-45 jack, labeled HANDSET, on the C-AT interface
3. Connect one end of the provided CAT5 cable (*C-AT PN 179.0045*) to the RJ-45 jack, labeled MSAT G2, on the C-AT interface. Connect the other end of the CAT5 cable to the RJ-45 jack, labeled HANDSET, on the G2 (**Only use straight thru cable**)
4. Using the MSAT handset keypad, place the G2 in CROSS-BAND Mode (*See page 2 for instructions*)
5. Connect the C-AT interface cable with DB-9 connector to the MSAT G2 Serial Port (**Verify that DB-9 internal wiring is present**)
6. Connect the radio to be cross-banded to the C-AT interface panel mounted DIN connector and to the radio
7. To create a patch, place the switch on the C-AT interface in the ON position. *The BYPASS position disables the patch and returns the MSAT G2 to normal operation.*
8. Transmit and Receive through a radio operating on the same channel as the radio connected to the MSAT/G2 interface.

### LED Indicators

MSAT PTT – indicates that G2 is being “keyed” by radio audio

RADIO PTT – indicates that radio is being keyed by G2

MSAT INPUT LEVEL – indicates that audio from radio is being received by the MSAT

The LED should flash as each word is spoken by portable radio user. If the LED remains lit between spoken words, the volume control of the LMR connected to the C-AT interface should be lowered until the LED flashes with each spoken word. If LED does not flash with each spoken word, the volume control of the radio connected to the C-AT interface should be raised until the LED flashes with each spoken word.

Trouble-shooting – no audio from G2 to LMR:

If the G2 has an external speaker, it may need to be disconnected or audio at the RJ-45 may be blocked

## Switching the G2 into Crossband Mode

Using the G2 Handset, perform the following:

1. Go to Menu and find ADMIN bar and press select
2. Go to SERIAL PORT bar and press select
3. Go to CROSSBAND bar and press select
4. At message—"Enable CROSSBAND ON" press YES

On the Radio Interface

1. Toggle Switch to ON position from BYPASS

*When pushing PTT on radio you will not hear any tone as you would on the G2 handset. Key up and start talking using proper MSAT Phone protocol.*

Switch the G2 out of Crossband Mode:

***Before turning off the G2, turn off CROSSBAND Mode and turn on the GPS. Failure to disable CROSSBAND will lock up the talk group the next time unit is turned on***

Using the G2 Handset, perform the following:

1. Go to Menu and find ADMIN bar and press select
2. Go to SERIAL PORT bar and press select
3. Go to GPS and Select
4. At Message – "Turn On GPS" press Yes