

TCR_HHR_02 TACTICAL RADIO
REPEATER/COMMUNICATIONS SYSTEM
QUICK REFERENCE GUIDE

SYSTEM SETUP for Repeater Operation

1. Install two BB_2590 batteries.
2. Connect 120/240 AC or 12/24 VDC power to the appropriate connector on the egress panel (see Figure 2).
3. Unlock the radio mounting bracket by pulling on the locking pin and turning ¼ turn cw or ccw (see Figure 3).
4. Move the radio mounting bracket to the vertical position.
5. Move the radio support brackets to the appropriate position (see Figure 5 and Figure 6, brackets should cover the radio type label).
6. Install RAD1 first and connect one end of the retransmission cable (see Figure 4).
7. Install RAD2 and connect the other end of the retransmission cable.
8. Turn ON the system by pressing the POWER ON button (see Figure 5, LEDs will flash sequentially and fans will turn ON for 5 seconds).
9. Move the radio mounting bracket to the horizontal position.
10. Connect the RF and audio cables to the appropriate radio.
11. Connect the RX antenna to RAD1.
12. Connect the TX antenna to RAD2 LOS or RAD2 SAT.
13. If the system is going to be operated with the lid closed, open the vents on the egress panel and on the fan enclosure assembly (see Figure 8, system is splash proof only when vents are closed).
14. Select the appropriate mode of operation on the TCR.MBA.50 WB power amplifier. The PA is setup for auto_ON and should turn ON whenever external power is applied or when two batteries are installed and the system is turned ON.)
15. Tune the RAD1 to the receive frequency.
16. Tune the RAD2 to the transmit frequency (frequency should be at least 15% higher than the receive frequency).
17. Install the antennas at least 50 feet apart if space permits or if antennas are mounted on a mast install the transmit antenna on top and the receive antenna below the transmit antenna separated at least by 10 feet.
18. The system is now ready for repeater operation.

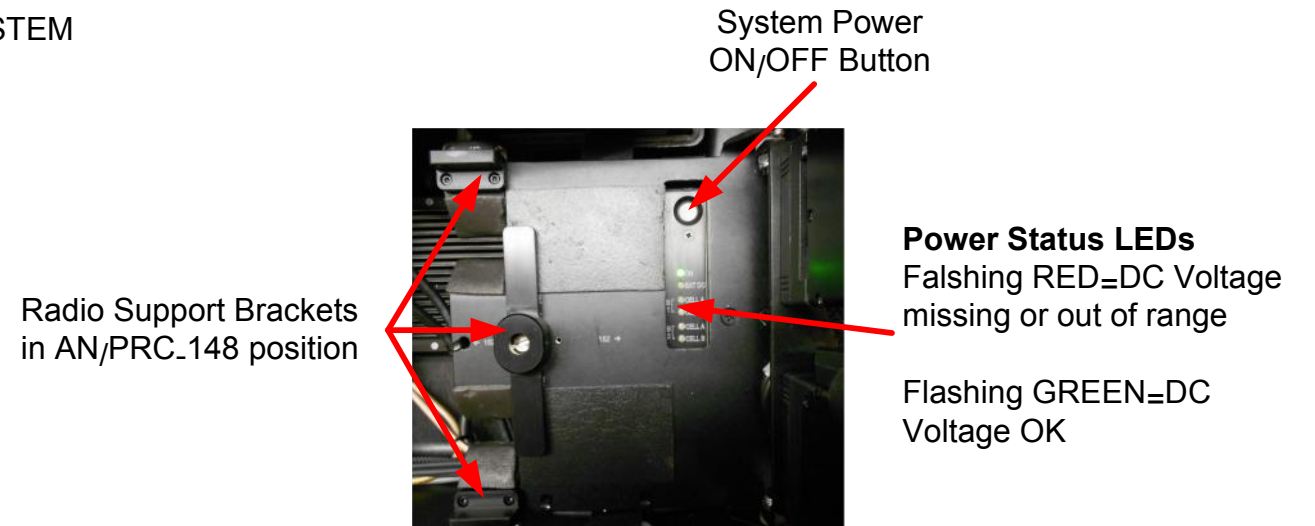


Figure 5

Radio Support Brackets in AN/PRC-148 position



Figure 8

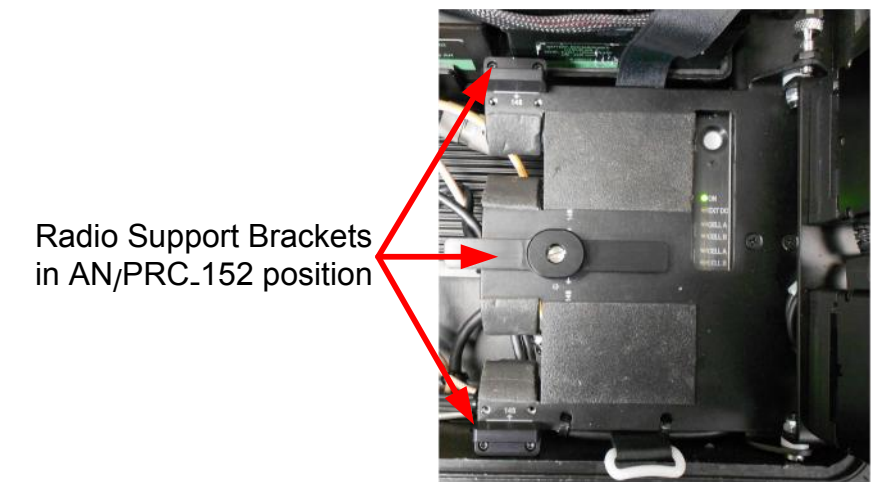


Figure 6

Radio Support Brackets in AN/PRC-152 position

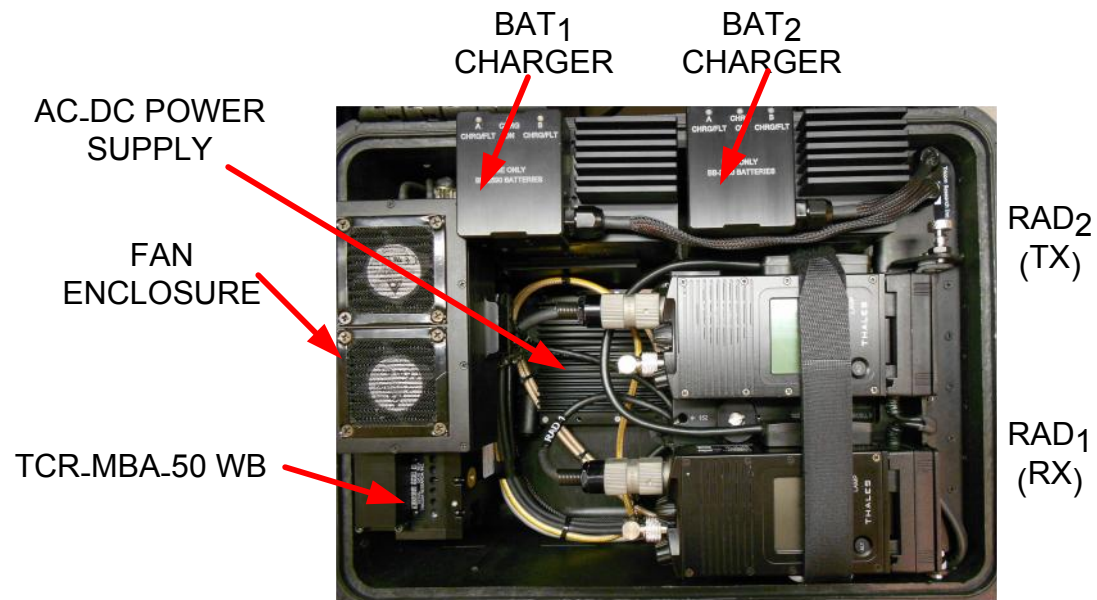


Figure 1

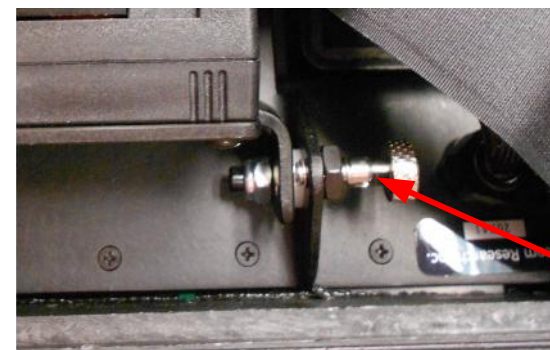


Figure 3

Locking Pin in Unlocked Position

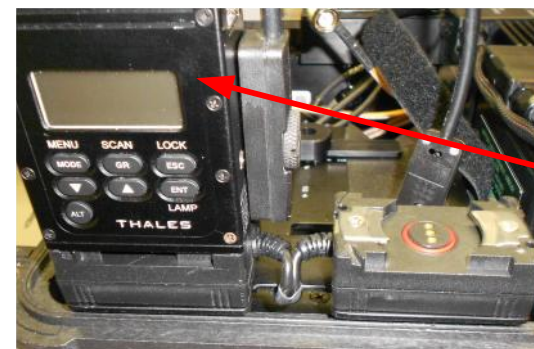


Figure 4

RAD1 installed in vertical position and retransmission cable connected



Figure 7

Charger Status Indicators
CHRG/FLT _ RED=Fault
 YEL=Charging
 OFF=Charge Complete

CHRG ON _ GREEN=Charger Enabled
 OFF=Charger Disabled



Figure 2