

## Cable repeater setup:

The cable repeater is configured in two steps. The first is to adjust the gain on each antenna. The second is to adjust the gain between the repeater and the TIM.

### Step 1-

- 1.1 Remove jumper J3 in the “A” leg 0670-00-0776-01 board. This will activate the RF tap that is the SMA connector on the 0670-00-0776-01 PCB.
- 1.2 Using the SMA to SMA cable attach one end to the 0670-00-0776-01 PCB. With a programmed test telepak attach the second SMA to SMA connector to the telepak with the 30dB attenuator in series at the telepak. Attach the other end to the spectrum analyzer using a SMA to N adapter.
- 1.3 Set the analyzer to span the correct frequency and measure the peak amplitude. Record this value.
- 1.4 Detach the cable from the spectrum analyzer at the adapter. Attach the cable from the 0670-00-0776-01 PCB to the analyzer.
- 1.5 Attach the telepak with the cable and attenuator to an antenna on the repeater leg that is on the “A” leg. Adjust the antenna gain such that the spectrum analyzer peak measurement for the frequency is the recorded value minus 1 to 2 dB. Repeat for all antennas on the “A” leg.
- 1.6 Install the removed jumper to J3. Detach the SMA cable at the 0670-00-0776-01 board.
- 1.7 Remove jumper J3 in the “B” leg 0670-00-0776-01 board. This will activate the RF tap that is the SMA connector on the 0670-00-0776-01 PCB.
- 1.8 Attach the SMA cable from the analyzer to the 0670-00-0776-01 PCB .
- 1.9 Attach the telepak with the cable and attenuator to an antenna on the repeater leg that is on the “B” leg. Adjust the antenna gain such that the spectrum analyzer peak measurement for the frequency is the recorded value minus 1 to 2 dB. Repeat for all antennas on the “A” leg.
- 1.10 Install the removed jumper to J3. Detach the SMA cable at the 0670-00-0776-01 board.

This completes the antenna setup.

### Step 2-

- 2.1 Remove the BNC connection of the antenna network from “A” leg on the TIM.
- 2.2 With the server running WMTS.EXE and displaying the detailed RF list screen, attach the telepak to the TIM using the 30dB attenuator and the SMA to BNC cable. Record the RSSI displayed for the channel that the telepak was assigned.

- 2.3 Disconnect the cable from the TIM and replace the antenna network cable.
- 2.4 Detach the SMA to BNC cable from the telepak. Attach a SMA to SMA cable to the telepak with the 30 dB attenuator. Attach the other end of this cable to an antenna on the repeaters "A" leg by removing the antenna stick and attaching the SMA cable.
- 2.5 Adjust the rotary switch the "A" leg of the cable repeater 0670-00-0776-01 board. Set the gain on the cable repeater to the reading from the TIM with the telepak attached minus 1 to 2 dB.  
Note: set both switches on the repeater board to the same settings.
- 2.6 Switch the antenna network "A" leg and "B" leg.
- 2.7 Attach the other end of this cable to an antenna on the repeaters "B leg.
- 2.8 Adjust the rotary switch the "B leg of the cable repeater 0670-00-0776-01 board. Set the gain on the cable repeater to the reading from the TIM with the telepak attached minus 1 to 2 dB.  
Note: set both switches on the repeater board to the same settings.
- 2.9 Switch the antenna network "A" leg and "B" leg back.
- 2.10 Detach the telepak and replace the antenna stick.

Perform the verification walk around.