



INNOVATIVE COMMUNICATION SOLUTIONS



## OUTDOOR BDA INSTALLATION PROCEDURE

**IMPORTANT:** DO NOT APPLY A.C. OR DC POWER TO THE BDA UNTIL CABLES ARE CONNECTED TO BOTH PORTS OF THE BDA AND THE ANTENNAS.

1. Mount the BDA on the wall with the RF connectors pointing DOWN. Using appropriate screws and anchors, attach the BDA to the wall at the six mounting holes on the side flanges.
2. Ensure that the isolation between the donor antenna and the service antenna is at least 12 dB greater than the BDA gain. (Use the higher of the Uplink and Downlink gains reported on the BDA test data sheet).
3. Connect the cable from the donor antenna to the BDA connector labeled “**BASE**” and the cables from the service antennas to the BDA connector labeled “**MOBILE**”.
4. Verify that the Uplink and Downlink attenuation is positioned to its maximum setting (30 dB).
5. Connect the AC power cord to the BDA and then to the power source. Turn the power switch to the ‘ON’ position. Verify that the “**Power On**” indicator is lit.

**\*NOTE: Due to the inconsistency of generators in the field, G-Wave recommends the use of a Power Line Conditioner on the AC source.**

Installation of the BDA is now complete. To adjust the gain controls to suit the specific signal environment, refer to “OPERATING PROCEDURE”.

**Note:** For repeat installations of existing equipment, make sure the attenuation is positioned to its maximum setting (30 dB). After verification of attenuation, follow the above steps starting with step 1.

### **\*OPERATING PROCEDURE\***

To establish proper operating gain on the Uplink and Downlink sides, start with the Downlink. Verify that the attenuator is set the maximum position of 30 dB. Observe the red indicator lamp on the Downlink amplifier. Decrease attenuation one step at a time until the lamp is lit. Then, using the Downlink step attenuator, increase the attenuation until the lamp goes off. Repeat the process for the Uplink. The level indicator is accurate to +/- 0.4 dB of the **ALC** set point.

**Note:** Operation of the BDA in the alarm condition will void the warranty, and output power should be immediately reduced using the variable step attenuator.

**Operation of BDA-CELLAB/PCSF-33/33-80-OCMG at Maximum Gain with greater than -43 dBm average power incident on the MOBILE or BASE ports can cause damage to the BDA.**

### **\*Oscillation Detect LED INDICATOR**

**When the oscillation LED is illuminated, immediately reduce the gain using the variable step attenuators. (Start by increasing the Uplink variable attenuator and balance gain indifference with the Downlink variable attenuator.)**

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