



OPERATION

Refer to Figure 4 & 5 for adjustment access location, connectors and labels.

Variable Step Attenuator

BDA gain that indicated in the spec can be reduced by up to 30 dB in 2 dB steps using the variable step attenuator. Gain adjustment is made with rotary switches located on the front panel of the BDA enclosure. Arrows on the shafts of these switches point to the value of attenuation selected. BDA gain can be determined by subtracting the attenuation value from the gain reported on the BDA Test Data Sheet for that side of the unit. The attenuators are labeled for Uplink and Downlink.

ALC (Automatic Level Control)

To minimize intermodulation products, each amplifier in the BDA contains an ALC feedback loop. The ALC circuit senses the output power and limits it to the factory preset level, as indicated in the specification.

ALC function is located in each power amplifier. A red LED indicator located on the Front main panel (see figure 5) illuminates when output power meets or exceeds the ALC preset point.

To establish proper operating gain on the Uplink and Downlink sides, start with the Downlink. Observe the red LED indicator on the Downlink amplifier. Units are shipping with maximum attenuation. Decrease attenuation one step at a time until the red LED is lit. Then, using the Downlink step attenuator, increase the attenuation until the red LED goes off. Repeat the process for the Uplink, and then repeat the process for the second band. This setup should be done under RF signal transmit for either path the level indicator is accurate to +/- 0.4 dB of the ALC set point.

Verify the downlink in-building signal strength and the uplink signal strength at donor antenna meets requirements. Reduce the gain if needed.



Note: Operation of BDA-UHF-36/36-80-AB at maximum gain with greater than -30 dBm average power incidents on the MOBILE or BASE ports could cause damage to the BDA.

WARNING:
Input Signal Level
above - 30 dBm may cause
damage to system