

Procedure for Setting Transmitter Power

The HPA attenuator switch sets the transmit gain. The gain will be a maximum 12.0 dB at the “0” switch setting. The switches cover an attenuation range of 16.0 dB (0 to F in hexadecimal) in 1.0 dB steps.

The LNA attenuator sets the receive gain in the booster. The gain will be a maximum of 22.0 dB at the “0” switch setting. The switches cover an attenuation range of 16.0 dB (0 to F in hexadecimal) in 1.0 dB steps.

The transmit amplifier provides a maximum RF output power of 20 Watts (+43.0 dBm) and a nominal maximum gain of 12 dB. It is essential that the gain of the booster is adjusted to ensure that the output power does not exceed this level. The following procedure shall be followed:

1. Set the booster transmit attenuation to 16.0 dB by setting the rotary switch on the control panel to F.
2. Enable the BTS Tx carrier output at the required operating power level.
3. While monitoring the booster output power using a suitable power meter, gradually decrease the Tx attenuation until the booster output power reaches the required level (not exceeding 20 W).

The booster system is now ready for performance testing.