YX545 Tuning Procedure

All RF tests and calibrations use a signal generator and a spectrum analyzer. The unit is inserted into a fixture and the following procedure is followed:

1. The units are programmed with the current firmware, and verified.
2. Test mode is entered, and the serial number is set.
3. For each RF path:
   a. The frequency response is verified.
   b. The maximum gain is measured and saved.
   c. The LNA gain is determined and saved.
   d. The input is adjusted to provide maximum output power, +9 dBm for downlinks and +20 dBm for uplinks.
   e. The attenuator is calibrated by varying the PWM and measuring attenuation versus PWM.
   f. The output detector is calibrated by varying the input power and measuring the A/D of the detector versus output power.
4. The EEPROM checksum is calculated and saved.
5. The unit is restarted, and the banner message coming from the unit at startup is verified to have the correct model, SW version, and serial number.