

ALIGNMENT

Refer to Figure 1 for the location of alignment point.

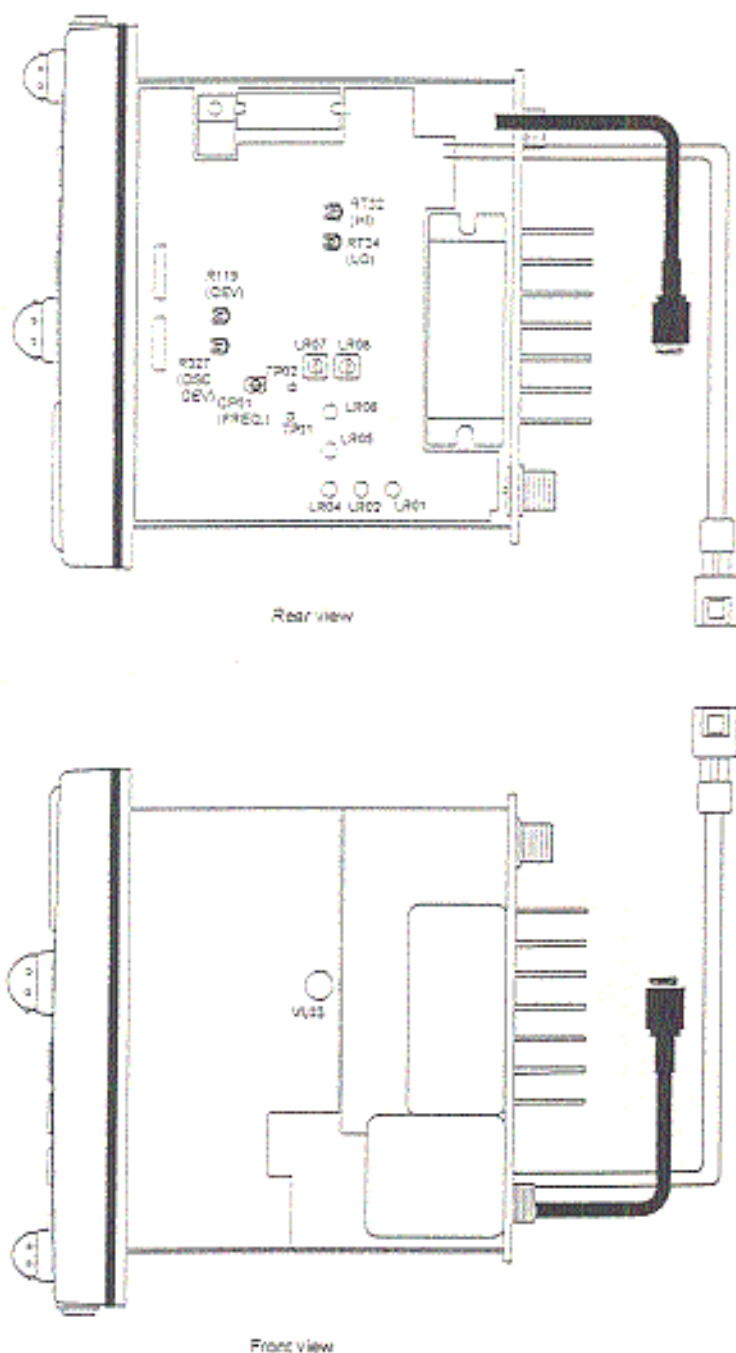


Figure 1 Test Points

1 General

the test mode has been built in the microprocessor in order to adjust and confirm the performance of transceiver.

1. Loosen the four screws on the rear of the transceiver and remove the cover.
2. Set up the equipment as shown in Figure 1. Confirm that the power supply is set for 13.8 VDC measured at the transceiver.
3. To turn on the radio on the test mode while the H/L and NAV keys are hold down. Then press and hold down the volume knob until the LCD display will show a model name. And set the volume and squelch for mid-range.

2. Voltage-Controlled Oscillator (VCO) Adjustment

1. Select channel 16 and adjust LV03 of VCO for a voltage reading 2.2VDC at test point marked "Lock TP".

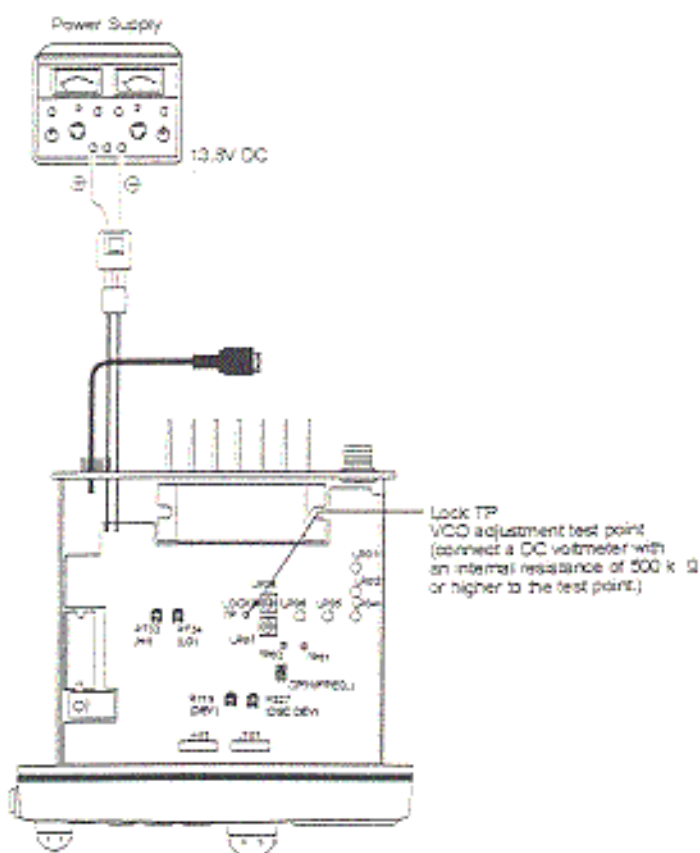


Figure 2

3. Transmitter

1. Key the transmitter. Adjust RT32 for 24W.
2. Unkey the radio.
3. Set the radio to low power. Key the radio and adjust RT34 for 0.8W. Unkey the radio.
4. Set the radio to high power. Key the radio and adjust CP01 for a service monitor reading of 156.800MHz +/-50Hz.
5. Unkey the radio.
6. Key the radio and set the output level of the audio generator as to produce +/- 3.0kHz deviation. Increase the audio generator output by 20dB and adjust R119 for +/- 4.5kHz deviation.

7. Unkey the radio. Off the audio generator output.
8. Select channel 70.
9. Every time push the Key, it turns to 1300Hz, 2100Hz, Dot pattern.
Set the 2100Hz. Adjust R327 for +/- 3.0kHz deviation.

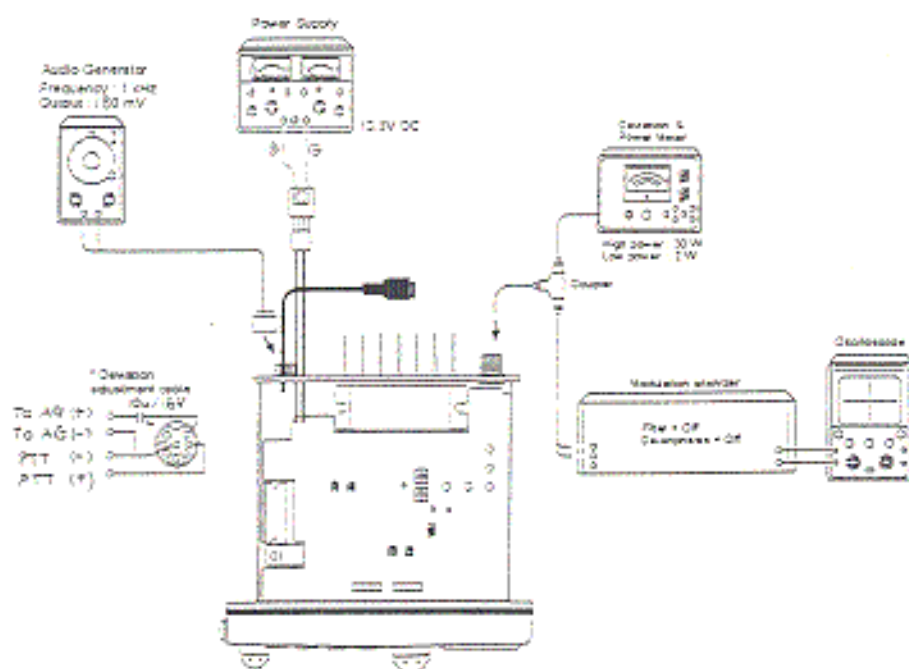


Figure 3

4. Receiver

1. With the channel selector on The front panel, set the transceiver to channel 06 (156.05MHz).
2. Adjust LR07 and LR08 until the spectrum analyzer is maximum.
3. Repeat steps 2 for wea Adjust R327 for +/- 3.0kHz deviation.ther channel WX01.

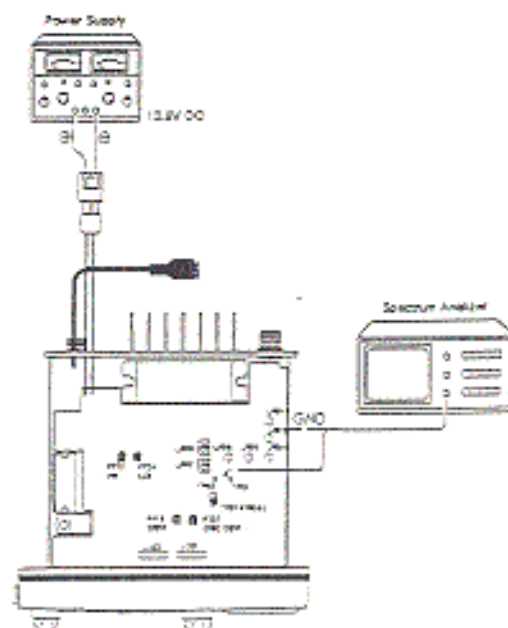


Figure 4

5. Front End

1. Adjust LR01, LR02, LR04, LR05 and LR06. So that the data on the spectrum analyzer as shown below.

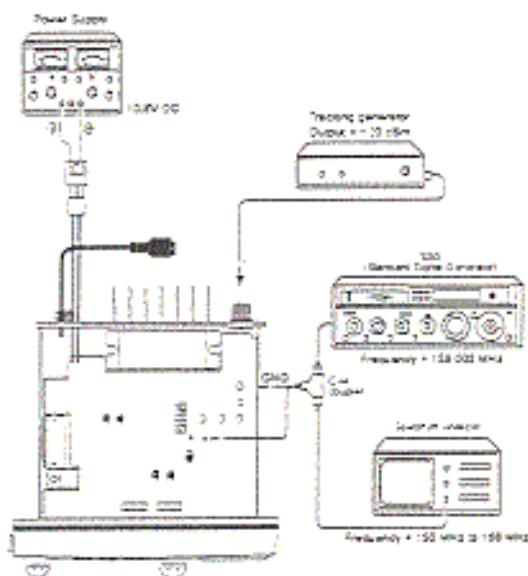


Figure 4

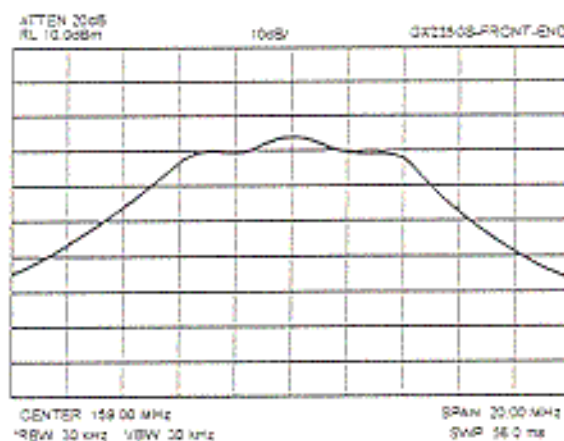


Figure 5

6. Sensitivity

1. With the channel selector on the front panel, set the transceiver to channel 06 (156.300MHz).
2. Confirm that the 12dB SINAD sensitivity is 0.45uV or less and that the 20dB QS sensitivity is 0.5uV.
3. Repeat steps 1 and 2 for channel 28(162.000MHz).