

Tune Up

Testing Tools and Instruments

- 1、 One set digital radio tester (Aeroflex 3920)
- 2、 One piece program cable
- 3、 One 5A/24V power supply
- 4、 One computer installed with debugging and testing software

Debugging Steps

- 1、 Adjust the supply voltage to DC 7.4V.
- 2、 Connect the radio to the power supply, Connect it with the radio tester and program cable.
- 3、 Switch 3920 into analog mode.
- 4、 Opening the testing software and start debugging mode.
- 5、 To calibrate “frequency stability modulating”, parameter needs to be set as $\pm 100\text{Hz}$.
- 6、 Set “ high power of transmit ” as $34.72 \pm 1\text{dBm}$ (4..5W Max)
- 7、 Set “low power of transmit” as $25.55 \pm 1\text{dBm}$ (0. 5W Max)
- 8、 Adjust the “I Road amplitude of analog transmit & Q road amplitude”
make analog transmit frequency deviation as of 2kHz-2.1kHz.
- 9、 Adjust “CTCSS(67Hz) frequency deviation” as 0.3kHz-0.4kHz.
- 10、 Set “CTCSS(151.4Hz) frequency deviation” as 0.3kHz-0.4kHz.
- 11、 Set “CTCSS(254.1Hz) frequency deviation” as 0.3kHz-0.4kHz.
- 12、 Set “DCS frequency deviation” as 0.3kHz-0.4kHz.
- 13、 Adjust “receive sensitivity”, until the SINAD of instruments is in the range of 4-7dB.