

# Specification and debugging Method for Portable Radio

## 1 Debugging tools

1) Integrated tester 8921; 2) PC and installed CPS software; 3) AEROFLEX 3920; 4) Spectrum Analyzer FSU。

## 2 Debugging Method & Requirement For TX section

| Item                   | Instrument Configuration | Measuring   |                                                         | Methods and tools |                                                                                                                                                                                                                                                        | Specification                | Remarks                                               |
|------------------------|--------------------------|-------------|---------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------|
|                        |                          | Test Device | Test Point                                              | Assistant tool    | Steps                                                                                                                                                                                                                                                  |                              |                                                       |
| 1. Frequency stability | Set 8921 to TX mode      | 8921        | Connect Portable Antenna port to RF IN/OUT port of 8921 | PC                | 1) Open CPS software and enter testing mode.<br>2) Double click Frequency stability;<br>3) Adjust the data value of software & Observe the Frequency via 8921;<br>4) Adjust till Frequency reach <b>174 MHz±1kHz</b> ;<br>5) Click OK to save data.    | <b>≤2.5ppm</b>               | Within ±1kHz while in testing mode                    |
| 2. TX power            | Set 8921 to TX mode      | 8921        |                                                         |                   | 1) Open CPS software and enter testing mode.<br>2) Double click TX High Power, Click F1 to F8 separately;<br>3) Adjust the data value of software & Observe the TX power via 8921;<br>4) Observe the Current flow;<br>5) Click <b>OK</b> to save data. | <b>Target Power: 37.1dBm</b> | Power requirement only apply to Manufacturing Process |