INSTRUCTIONS FOR OPERATING THE COMMS MicroATE RADIO TESTER

![MicroATE On-screen display](image)

Figure 1. MicroATE On-screen display

1. The MicroATE hardware should be configured as per Figure 2.

2. A copy of Wordpad.exe should be in the same folder as the MicroATE software.

3. The latest Subscriber Unit Software image file (su_sch.bnm) and version number (version.txt) should be on the Desktop.
4. Ensure that the power supply is set to 12V, and that the multimeter is switched to the 2 A scale.

5. Start the application by double-clicking on the ‘Micro-ATE Radio Tester’ icon.

6. Press the red button connected between the Reference Radio and the power supply. This will reset the Reference Radio and a message will appear indicating that it has been detected.

7. Click OK. The Reference Radio ‘LED’ in the Hardware Status box should turn green.

8. Insert the 9-pin plug at the “Radio” end of cable B into the connector of the radio to be tested (the ‘Target Radio’). If the radio is communicating to the PC correctly, a message will appear on the screen indicating that it has been detected. Click OK.

9. Click the ‘Start Tests’ button on the application.

The application will first check for serial communications with the Target Radio. If this fails, testing will be aborted and this will be indicated in the Activity window. If communication is successful, the radio history will be extracted from flash RAM and the radio’s Serial Number will be displayed.

Click OK to continue the test sequence.

**Operator Input during testing**

The only test that requires operator input is the Current Consumption test. The operator is required to wait for the reading on the Multimeter to settle (approximately 5 seconds) and then enter the reading in mA (257 for example). Two such measurements are required, one to test maximum current consumption and one to test minimum current consumption. No other operator input is required whilst the test sequence is running.

As each test is performed, the outcome will be indicated by the colour of the associated LED: Green for Pass, Red for Fail, and Blue for Unknown. An Unknown outcome will arise if the test cannot be performed. The operator need not be concerned with the details of each test, but the display is a useful gauge of progress. The full sequence of tests on a working radio takes approximately 1 minute.

When the test sequence completes, the overall result will be displayed. This will be either ‘PASS’ or ‘FAIL’.

If the radio has failed, the Fault Report button will be enabled. Clicking on this button will cause a fault report to be displayed in WordPad. This report will contain a breakdown of the overall result and, where possible, some ‘hints and tips’ for fault finding a failed radio.
WordPad should be closed before continuing. The radio may be unplugged and removed after the ‘Testing complete’ or ‘Fault report available’ message has appeared in the Activity window.

If the Radio Passes all tests the software will automatically attempt to reprogram the unit with the latest software. If this fails after 3 attempts the Operator will be informed that the unit should not be deployed.

If programming is successful the Radio History will be displayed, and the software version number should indicate that the radio contains the latest software build. Click OK to close the Radio History dialogue box before disconnecting the Radio.

**Periodic Checks**

Check that the power supply is set to 12V and that all co-axial cables and connectors are finger-tight.

*** PLEASE KEEP MOBILE PHONES AND RADIO HANDSETS AWAY FROM THE TEST BENCH DURING TESTING ***

![Figure 2. MicroATE hardware configuration](image)