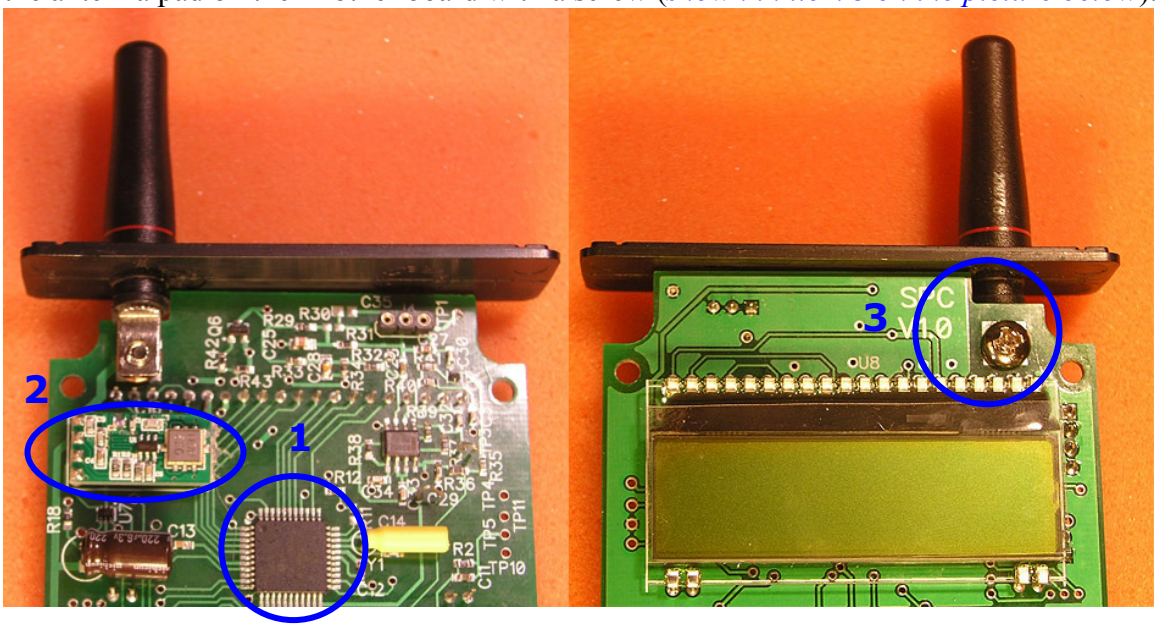
FCC ID: X4USPC
Exhibit 13: Limited Split Modular – Installation Procedure

The manufacturer installation procedure:

1. The Host device's mother board is assembled with all surface mounted components including: the microcontroller (A Microchip PIC 18FXXK25) which serves as the controlling element of the Limited Split Modular transmitters (*shown in item 1 on the picture below*) and the DC/DC converter voltage regulator circuit.
2. The motherboard is tested for all functionality except RF.
3. The RF Front-end test: stand-alone testing for frequency accuracy, output power and harmonics. All measurements are referenced to data obtained from "golden units" that passed were similarly measured at the Test firm Laboratory.
4. The RF Front-end assembly: circuit is soldered on the motherboard of the host device (*shown in item 2 on the picture below*).
5. Antenna installation: The antenna permanently inserted in plastic front panel and affixed to the antenna pad on the mother board with a screw (*shown in item 3 on the picture below*).



6. The host device is assembly in the plastic enclosure.
7. Final RF test:
    a. Temporarily program MCU with "RF Test" firmware that allows it to transmit continuously. This same firmware was used for measurement conducted by the Test Firm laboratory for *FCC 15.231(b) and (c) emission tests* in the attached report.
    b. Placed the host device is in fixture 3 meters from log antennas 300MHz to 3GHz connected to a Spectrum Analyzer.
    c. Test frequency accuracy, emission level at fundamental, occupied bandwidth and spurious emission up to 2.7 GHz.
    d. Note: All measurements are referenced to data obtained from the host device and Limited Split Modular transmitters that passed 15.231 and 15B part A FCC test at the Test firm Laboratory as per attached report.

8. Final firmware:
    a. Once the device passed the RF tests, download the final firmware (HEX file) to the MCU.
    b. Verify, the configuration fuses in the firmware are set read/write protected.
    c. Final firmware configuration: The software subroutines associated with controlling the RF Front-end element are identical to the software used to pass the Test Firm's *Activation time FCC 13.231(a)(1).*