



Public Wireless CM-100 User / Installation Guide

PRELIMINARY

Revision: PRELIM_DW_01
Date: 20 May 2008

FCC Compliance:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Antenna Care/Unauthorized Modifications:

Use only the supplied antenna. Use of any other antenna other than the one supplied with this unit could damage the unit and may violate FCC regulations. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

PRELIMINARY

The installation of a CM-100 has 3 main steps: 1) configuration of the CM-100 before it goes to the installation site, 2) the installation at the location and 3) the verification the unit is working.

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IP BTS CONFIGURATION PROCEDURE USING A ROUTER

Important: turn wireless card off in your Personal computer before starting BSC Installer. (Turn router and radio on after starting the Installer.

1. Parts needed to program a radio
 - i. POE source to power radio
 - ii. Router
 - iii. 3 Ethernet cables 36 inches long
 - iv. BTS Installer software
 - v. Computer
2. Start BCS Installer
3. Add Mac ID of radio under New
4. FIND AND SELECT
5. ACTION – SET/GET ATTRIBUTES – CLOSE
6. UNIT ID – UNCHECK “RESET BTS AFTER SETTING”
7. ATTRIBUTES 1 – ENABLE – CONFIG FLAGS – F1, F7, F9, F11
8. ATTRIBUTES 2 – CONFIG PRIMARY OML LIST
 1. NUMBER OF ADDRESSES IN LIST = 1
 2. PRIMARY OMC IP ADDRESS = DEPENDING ON BSC BEING USED
9. DOWNLOAD – ENABLE DOWNLOAD – “BROWSE” – USE NEWEST VERSION. THEN “OK”
10. CONFIGURE UNIT ID
11. SET/GET NV ATTRIBUTES – “OK”
12. DOWNLOAD SOFTWARE – IP BTS WILL BLINK
13. Select listen
14. Set Freq. to PCS1900 (default is 1800)
15. FREQ SYNC – PCS1900 –RUN TEST 5 TIMES
 - ARFCN LISTS – APPLY WHITE LIST – SET ALL
 - APPLY FREQ SYNC OPTIONS AND ADJUST CLOCK – “OK”
16. CONNECT- WHEN GREEN – START TEST – SINGLE DIGIT TO PASS
17. PRINT SCREEN/PASTE SCREEN SHOT OF PASSING TEST

Installation of the CM-100 on the messenger cable

1. Parts needed for the installation
 - a. Programmed CM-100 that has a Picocell which has been preconfigured with it OML Address and a Lantronix XPRESSDR+ which has been pre-configured with the latest firmware revision and is configured for DHCP.
 - b. (Adjustable) Strand antenna mounting bracket.
 - c. Antenna.

- d. LMR-400 Coax of the proper length for the distance between CM-100 and antenna mounting locations.
 - e. (50 Ohm) Cable TV coax of the proper length from the CM-100 to Cable junction box with connectors.
 - f. Tools needed 1/2 inch box wrench and 7/16 inch box wrench.
 - g. Antenna Bracket leveling tool.
2. Installing CM-100 on Messenger Cable wire
- a. Loosen the 1/2 inch clamps in the center of the CM-100 case.
 - b. Loosen the cable coax so that the cable can be moved to allow the CM-100 clamps to be attached to the messenger cable.
 - c. Hook the CM-100 clamps onto the messenger cable and tighten the clamps with the 1/2 inch wrench.

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3. Installing the antenna mounting bracket
- a. Hook the bracket on the Messenger cable.
 - b. Using the antenna leveling tool, level the bracket in the perpendicular plane from the messenger cable and tighten the 1/2 inch bolt.
 - c. Using the antenna leveling tool, now level the bracket in the parallel direction to the messenger cable.
 - d. Install the antenna and connect the antenna coax to the antenna and the end connector on the CM-100.
 - e. Install the cable coax to the cable splice and to the CM-100.

Testing

- a. Call the Network Operation Center (800-XXX-XXXX) and report the serial number of the unit.
- b. The NOC will inform the installer the unit is working or not.
- c. If not working follow the trouble procedures as directed by the NOC.