

INSTALLATION OF THE BLT LAN TRANSCEIVER

CellNet MODEL NUMBER: 26-00616

Notice: FCC Sec. 15.105 (b)

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the antennae.
- Increase the separation between the computer and the LAN.
- Connect the computer into a power source different from that to which the LAN is connected.
- Consult CellNet Data Systems or an experienced technician for help.

Caution: Any changes or modifications not expressly approved by the grantee of this device could void the users authority to operate the equipment.

The BLT LAN Transceiver is built to be mounted in any location, and any orientation providing it is within the ambient temperature range of -40 to +85 degrees C and less than 95% humidity.

Connect the RJ45 serial I/O to the host controller or computer using any length cable between .5 and 3 meters.

The LAN can be powered by any dc power source from 10.5 to 15.5 volts capable of supplying 1 amp with less than 150 milivolts p-p of ripple into the 4 pin Molex input power connector.

WARNING: The unit is protected against reverse connection for up to 2 amps for 5 seconds or forward direction up to 3KV for not more than 50 uSec. Exceeding the proceeding may result in damage to the unit. The **12 volt return** (ground) **connects to the pin 4** (top pin closest to RJ45 connector) and the **plus 12 volts connects to pin 3** (top pin closest to the two-pin Molex connector).

According to the terms and conditions of the FCC license, the power cable must have a clamp-on ferrite filter with two turns through it - mounted within .1 meter of the LAN power connector. The filter must provide a minimum loss equivalent to Steward ferrite part number 28A2025-0A0. This is a type 28 material clamp-on core having 200 - 300 Ohms per turn at 100 MHz.

The LAN is designed to receive or transmit by switching between two external whip antennae having omnidirectional gains of not more than 5 dBi. Care must be exercised when connecting or disconnecting the OSX right-angle antenna connectors: do not pull on cable; move connectors directly in or out by holding connector body.

It is recommended that the coaxial connection between the BLT LAN and its antennae be kept short as practical for the mounting configuration - 0.2 to 0.5 meters.

Before application of DC power, check to assure that the cover is secured by the ten screws, that the antennae, SIO and power connectors are completely engaged, and that the DC source is in the range between 10.5 and 15.5 Volts dc.

A test program called CELLGRAB.EXE nicknamed GRABBER for the controller pc is available from CellNet Data Systems. Versions 3.0-46 or later are applicable.

Upon application of DC power, the POWER light should illuminate followed in 2 to 5 seconds by the CPU OK light. Normal power supply current is .2 amps in the receive mode and .7 amps in transmit.

If, at any time, the CPU OK light goes out, or fails to stay on, the LAN requires either the controller to issue a BREAK command over the SIO line or the DC power to be re-initialed.

If the either of the two indicators remain off, check to assure DC power is adequate. If the power is ok but either of the indicators remain off, then replace, or, return the unit to a CellNet Data Systems repair facility.