

Installation Instructions for the FT-10 Network PowerCommand® LONWORKS® SLTA-10 Gateway Kits 541-0866

GENERAL INFORMATION

This kit contains one PowerCommand® LONWORKS® SLTA-10 Gateway and power supply, two serial cables, a network terminator, and two mounting brackets. Figure 1 shows the LONWORKS Gateway.

The LONWORKS SLTA-10 Gateway is the hardware interface between a personal computer and a LONWORKS FT-10 network, in this case a PowerCommand Network. The PC can access the network either locally through its EIA-232 port or remotely through modems and existing telephone lines.

The gateway translates LONWORKS network protocol into a protocol a PC can understand. The software can access, poll, and control all devices on a PowerCommand network.

Refer to the *FT-10 PowerCommand Network Installation and Operation Manual (900-0529)* for instructions on network topology, wiring, software installation, and connection of the Gateway to the network.

The following table lists the power supply needed for the SLTA-10 Gateway kits covered by this instruction sheet.

KIT	POWER SUPPLY
541-0866-01	None
541-0866-02	US 120V
541-0866-03	EUR 220V
541-0866-04	UK 220V
541-0866-05	JAPAN 100V

PowerCommand is a registered trademark of Cummins Inc.
InPower is a trademarks of Onan Corporation.
LONWORKS is a registered trademark of Echelon Corp.
LonMaker is a trademark of Echelon Corporation.
Windows is a registered trademark of Microsoft Corp.

KIT PARTS

Before installing the SLTA-10 Gateway, verify all components are present:

- Power Supply (Included in all kits except 541-0866-01)
- Network Terminator (FT-10)
- Harness, Null Modem
- Harness, Straight Thru
- Control (Network Gateway FT-10)
- Mounting Brackets (2)

INSTALLATION

If there is a site network installation drawing, refer to it for the LONWORKS Gateway location. If a site network installation drawing is not available, refer to the *FT-10 PowerCommand Network Installation and Operation Manual (900-0529)* for network topology and maximum network length. **All wiring must conform to the specific network topology, node and distance limits.**

Locate the LONWORKS Gateway near an electrical outlet. If the LONWORKS Gateway must remain powered during an electrical power failure, use an uninterruptible power supply (UPS). A UPS provides backup AC power for a minimum of 30 minutes. Use of a UPS allows the modules on the PowerCommand network to communicate a power failure to a remote location via the SLTA-10 and modem during a power failure. A multi-plug receptacle may be needed to connect more than one device to the UPS.

Choose a clean, vibration-free mounting surface. Avoid locations that are hot, damp or dusty. The temperature range must not exceed -40 to +185°F (-40 to 85°C).

CONFIGURATION

The Gateway has an 8-position DIP switch that configures the gateway. The eight switches are shown in Figure 1. Each switch must be set correctly for proper operation with PowerCommand software for Windows II. The default positions are set for 38,400 bps data transfer rate. The PC serial port must be set for the same data transfer rate. Switches 6, 7, and 8 set the transfer rate. Alternately, the Gateway

can be set for "autobaud" in which case the Gateway will sync in at the data rate of the host PC. Configure the Gateway for autobaud by setting switch 5 in the up position.

For a Remote Host, set Switch 2 in the up position (the PC is connected through a modem). For a Local Host, set Switch 2 in the down position (the PC is connected directly).

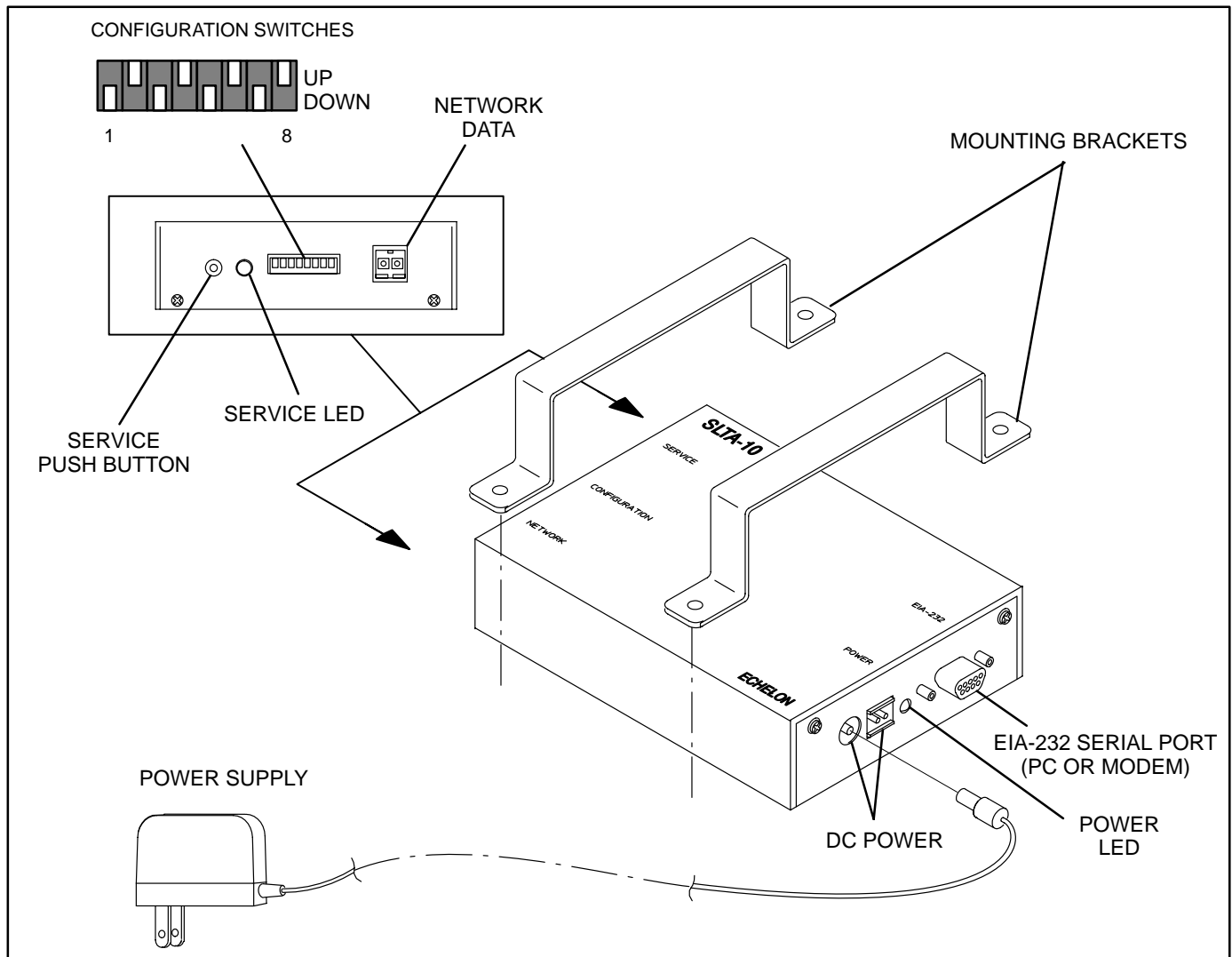


FIGURE 1. PowerCommand LonWorks GATEWAY

After changing the configuration switches, cycle power to the Gateway to activate the changes.

Data Transfer Rate Settings for Switches 6, 7, and 8

SWITCH	6	7	8
9,600 bps	Down	Up	Up
19,200 bps	Up	Down	Down
38,400 bps	Up	Down	Up

Default Configuration Switch Settings

SWITCH	POSITION
1	Down
2	Up
3	Down
4	Up
5	Down
6	Up
7	Down
8	Up

NETWORK CONNECTION

The channel may be terminated at the Gateway with the network terminator that is included with this kit. One device on each network segment must be terminated.

To terminate a network segment, connect the network terminator and the network twisted-pair cable in the two-position network connector. The network terminator has three leads: two data and one ground. The ground lead (green/yellow) is not used and should be clipped.

Use NEMA Level IV (or greater) stranded twisted-pair cable to connect the router to the network bus. Each segment of the network must be terminated. If the router is to be the termination point for this segment, a terminator is provided (see Figure 2).

Network data lines and terminator leads are polarity insensitive. Connect one stranded twisted-pair lead with one terminator lead and the other stranded twisted-pair lead with the other terminator lead. Figure 2 shows the network terminator and twisted-pair cable connected to the Gateway.

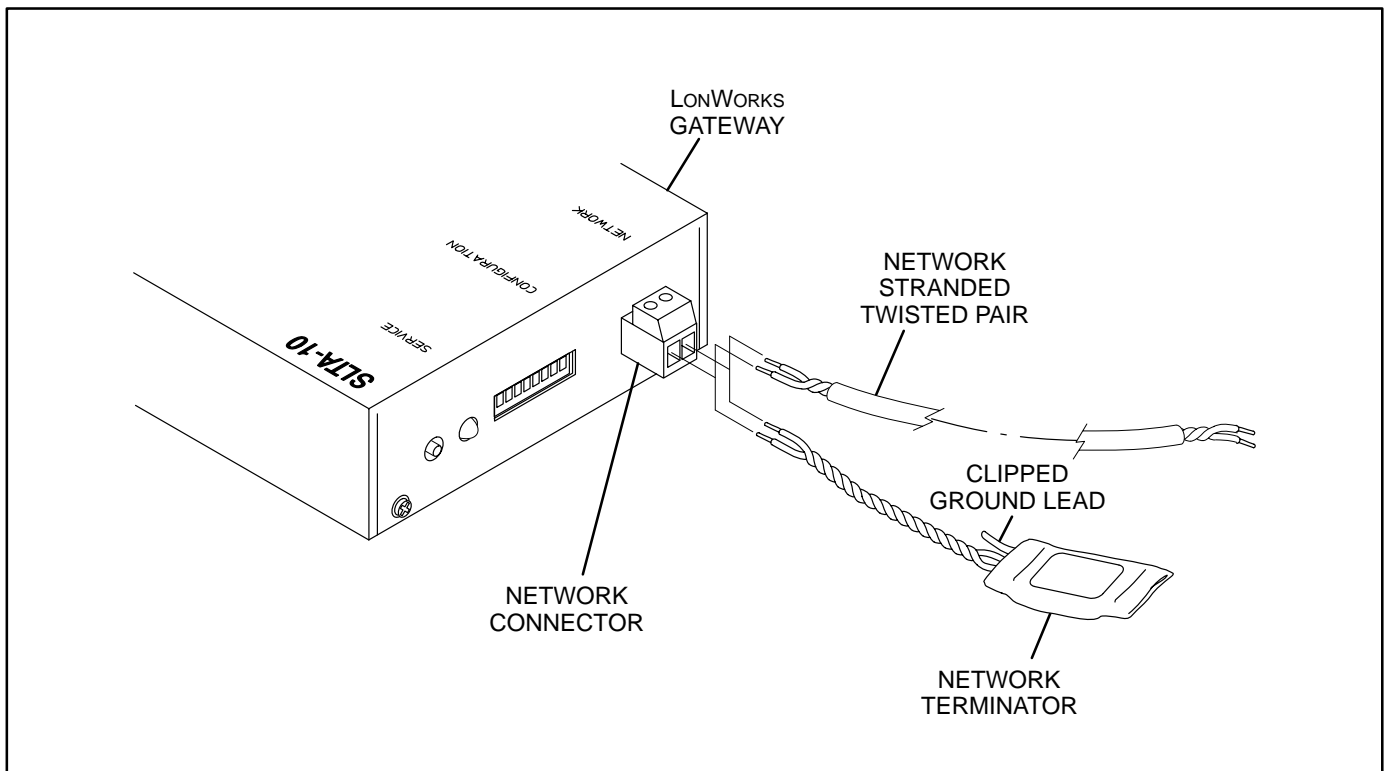


FIGURE 2. NETWORK CONNECTION

PC CONNECTION

⚠ CAUTION Use only the custom made cables included in the kit. Cables from a computer supply store may look the same but may cause equipment damage or connection problems.

For local direct connections to a PC, connect the EIA-232 port of the Gateway directly to the serial port of PC using the 9-pin to 9-pin serial cable (Onan P/N 338-3777) included in the kit.

For remote connections to a PC via a Hayes compatible modem, connect the EIA-232 port of the Gateway directly to the modem using the null modem (9-pin to 25-pin) cable (Onan P/N 338-3778). Connect the Line socket of the modem into a dedicated phone line.

The Gateway can be configured with SLTA Link Manager software, installed with LonMaker™ for Windows, InPower™, or PCW II. Refer to the FT-10

PowerCommand Network Installation and Operation Manual (900-0529) for more information.

MOUNTING

Install the gateway on a clean flat surface, wall, or other flat surface with mounting brackets included in the kit. Figure 3 shows the mounting hole locations for the mounting brackets.

If its mounted to a wall, make sure that no wires, plumbing, gas, or exhaust lines run behind the wall before drilling mounting holes.

SERIAL CABLES

These cables provide the following interconnects:

- LONWORKS Gateway Module to a Modem
- LONWORKS Gateway Module to a PC

Refer to the site network installation drawing, if available, or refer to the *PowerCommand Network Installation and Operation Manual (900-0529)* for LONWORKS Gateway connection information.

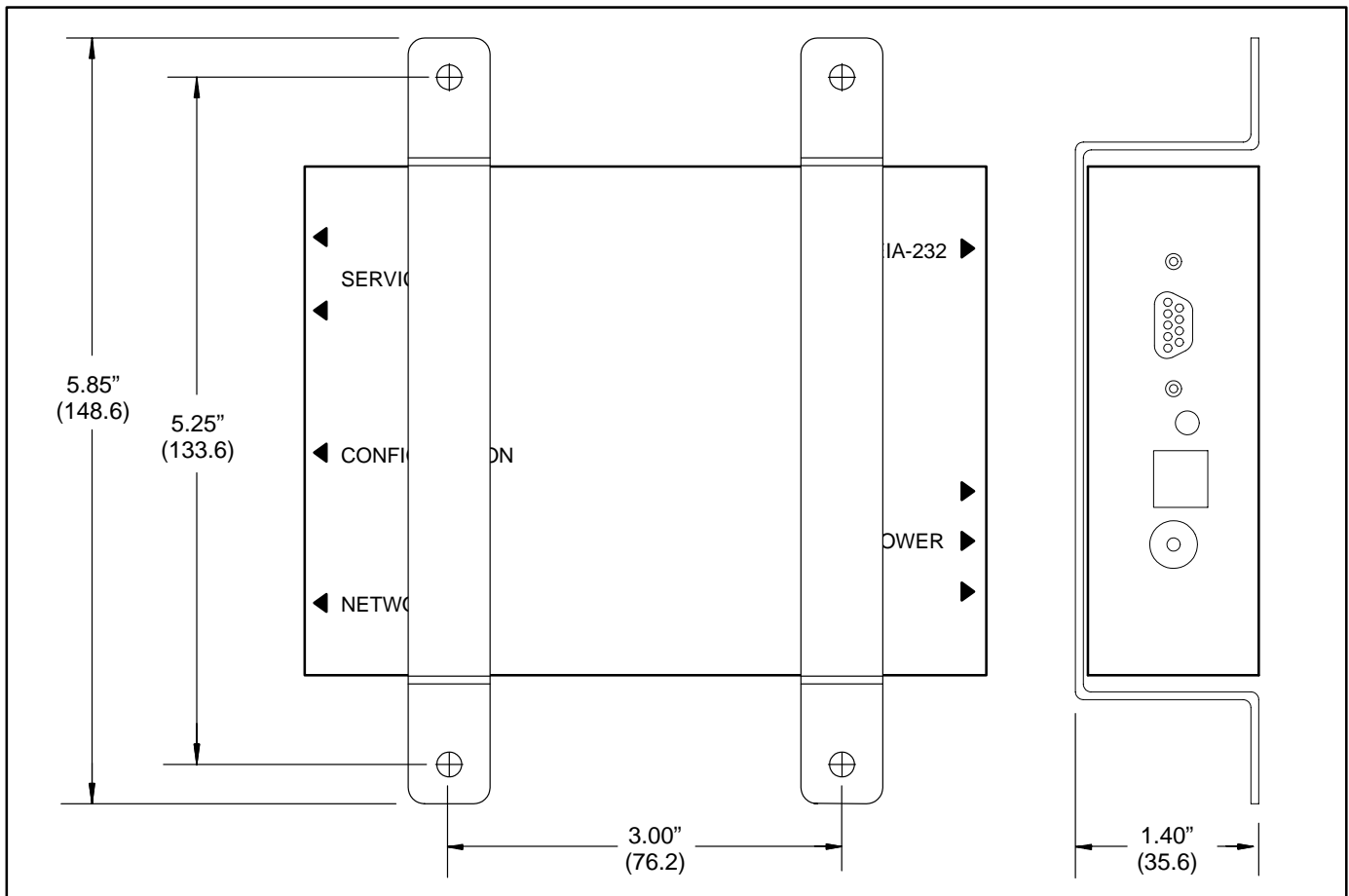


FIGURE 3. MOUNTING BRACKET HOLE LOCATIONS