## Honeywell

INSTALLATION INSTRUCTIONS

# NPB-LON

## APPLICATION

This document covers the mounting and wiring of the NPB-LON option card in a WEB-201, CP-201 or WebStat™ series controller.

### Table 1. NPB-LON Option Description.

Description	Notes
FTT-10A LON (LonWorks) adapter with 2-position removable screw- terminal connector plug.	Up to 2 LON <sup>®</sup> option cards may be installed. • If one Lon option, it operates as LON1, regardless of slot. • If two LON options, LON1 is Option slot 1 and LON2 is Option slot 2. See Fig. 2 for location of option slots.

For related mounting and wiring details, please see the Mounting and Wiring Instructions document, form no. 95-7722.

## CONTENTS

Included in this package are the following items:

- An NPB-LON option card, along with connector end plate.
- One 2-position terminal plug, for wiring to an FTT-10 LonWorks<sup>®</sup> network.
- This NPB-LON Installation Instructions.

## MATERIAL AND TOOLS REQUIRED

The following tools and supplies may be required for installation:

- #2 phillips screwdriver: use to install the NPB-LON.
- Small flat-blade screwdriver: used for making wiring connections to the FTT-10 LonWorks network.

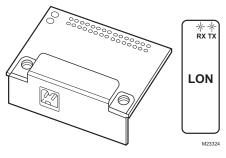


Fig. 1. NPB-LON Option.

### MOUNTING

## 

Power to the controller must be off when installing or removing option cards or damage will occur! Also, be very careful to plug any option card into its connector properly (pins aligned).

Mount the NPB-LON option card in either of the option card slots of the controller as available. See the notes in Table 1 about LON adapter software assignments if installing two NPB-LON option cards.

## Mounting NPB-LON option card on a controller

- 1. Remove power See the above warning.
- 2. Remove the cover. To do this press the four tabs on both ends of the unit and lift the cover off.
- NOTE: If accessory modules are plugged into the controller, they may need to be slid away from the unit to get to the cover tabs.
  - Remove the battery and bracket assembly by taking out the four screws holding it in place and set them aside for later. Unplug the battery from the connector on the controller (See Fig. 2).



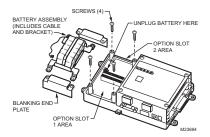
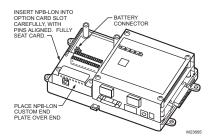


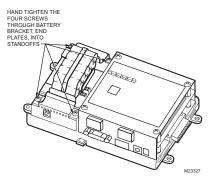
Fig. 2. Remove Screws and Battery Assembly.

- Remove the blanking end plate for the slot the option card will be installed into (retain the blanking end plate in case the option card is removed at a later date).
- Carefully insert the pins of the NPB-LON into the socket of the appropriate option card slot. The mounting holes on the option board should line up with the standoffs on the base board. If they do not, the connector is not properly aligned. Press until the option card is completely seated.
- 6. Place the custom end plate that came with the NPB\_LON over its connector (See Fig. 3).



#### Fig. 3. NPB-LON Inserted, End Plate on Top.

- 7. Plug the battery cable into the battery connector on the controller (See Fig 3. for location).
- Set the battery and bracket assembly back over the option card slots, with the mounting holes aligned with the standoffs.
- Place the four screws through the battery bracket, end plates and into the standoffs on the controller base board. Hand tighten these screws (See Fig. 4).



#### Fig. 4. Re-Fasten Screws through Battery Bracket.

**10.** Replace the cover. If accessory modules were unplugged, plug them back into the controller as before and secure.

### WIRING

Connect LonWorks FTT-10 communications wiring to the 2 position connector of the NPB-LON. Note that polarity is not a factor in FTT-10 wiring.

Refer to the LonWorks FTT-10A Free Topology Transceiver User's Guide for technical guidelines associated with free topology restrictions, and the Junction Box and Wiring Guidelines for Twisted Pair LonWorks Networks for more detailed information on wiring specifications. These documents are available on Echelon's web site (www.echelon.com).

### LEDS

Two LEDs are visible on the top of the NPB-LON option card (cover must be removed):

- RX (green) Receive, indicates that another LonWorks device is transmitting a message.
- TX (yellow) Transmit, indicates that the controller is transmitting a message on the LON trunk.

These LEDs are included on the top label of the NPB-LON (See Fig.1).

 $LON^{\otimes}$  and  $LonWorks^{\otimes}$  are registered trademarks of Echelon Corporation. WebStat<sup>TM</sup> is a trademark of Honeywell International Inc.

#### Automation and Control Solutions

Honeywell International Inc. 1985 Douglas Drive North Golden Valley, MN 55422 customer.honeywell.com

® U.S. Registered Trademark
© 2007 Honeywell International Inc.
62-0263 J.I. 02-07

Honeywell Limited-Honeywell Limitée 35 Dynamic Drive Toronto, Ontario M1V 4Z9



Printed in U.S.A. on recycled paper containing at least 10% post-consumer paper fibers.

