

# CTHI-IN-1A

## 18-HE60D85-1

# INSTALLER'S GUIDE

**Customer Property —**  
**Contains wiring, service,**  
**and operation information. Please retain.**

Library	Service Literature
Product Section	Unitary
Product	Unitary Accessory
Model	T'stat, Panels, Timers, Relays
Literature Type	Installer's Guide
Sequence	1A
Date	October 2000
File No.	SV-UN-RT-CTHI-IN-1A 10/000
Supersedes	CTHI-IN-1

**Models:**  
BAYCTHI001CA  
BAYCTHI002AA

## CONVENTIONAL THERMOSTAT INTERFACE

### General Instructions

The conventional Thermostat Interface (CTI) provides the customer with the ability to use a thermostat with the Voyager Mirco control units in place of a zone sensor. The following thermostats may be used with a CTI; BAY28X153, BAYSTAT003, BAYSTAT011 and BAYSTAT024.

### Inspection

Check the packaging and contents for damage. Check for concealed damage before storing. Report any damage immediately to the transportation company, and make any appropriate claims. Replace damaged parts only with authorized parts.

### Parts List

- 1 - CTI Board
- 4 - Screws
- 1 - Connector Cable
- 1 - Wiring Diagram Label

### Installation

1. Shut off all power to unit. Observe the caution:

**⚠ WARNING:** *OPEN and LOCK the unit's power disconnect switch to prevent injury of death from electrocution or from contact with moving parts before attempting any installation or maintenance.*

2. Remove unit control box access panel.

3. Remove dead front panel from control box.

Refer to Figure 1 for typical field wiring and Component location for steps 4 - 7.

4. Mount CTI in unit control box, immediately to the right of the Unitary Control Processor (UCP). Pre-drilled holes and screws are provided.
5. Remove connector P7 from J7 of the UCP and install connector on J1 of the CTI.
6. Utilize cable included with CTI to connect J2 of the CTI to J7 of the UCP.
7. Connect room thermostat to terminal block (LTB) as shown for the type unit. See Figure 1 for typical field wiring.
8. Place wiring diagram label on dead front cover.
9. See unit wiring diagram for balance of wiring.
10. Replace all panels.

**Note:** *When using a programmable thermostat, (BAYSTAT024) with CTI, the emergency heat needs to be set to cycle, on calls for heat. The slide switches inside the thermostat must be checked to ensure that slide switch number 9 is set to the "ON" position. If this switch in the "OFF" position, the electric heat will be on continuously.*

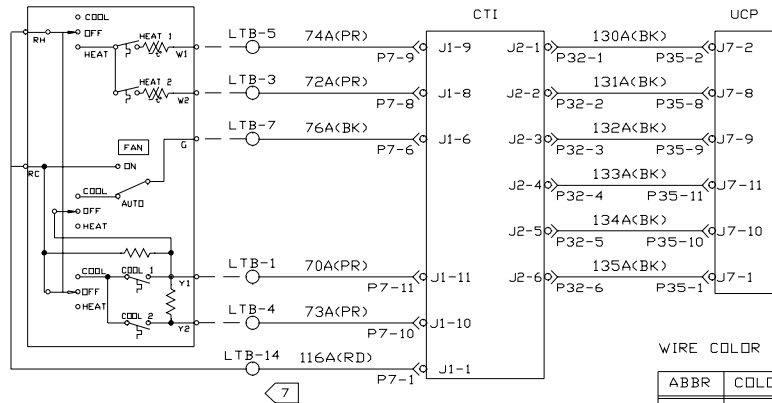
Since the manufacturer has a policy of continuous product improvement, it reserves the right to change specifications and design without notice. The installation and servicing of the equipment referred to in this booklet should be done by qualified, experienced technicians.  
© American Standard Inc. 2000

**Figure 1**

**Note:** If the thermostat needs a common ground, use LTB-20  
Voltage on terminal 14 will be 24 volts AC.

NOTE: THIS UNIT IS EQUIPPED WITH A CONVENTIONAL THERMOSTAT INTERFACE (CTI), BAYCTHI001C

TYPICAL 2 HEAT - 2 COOL THERMOSTAT



WIRE COLOR CHART

ABBR	COLOR
BL	BLUE
BK	BLACK
PR	PURPLE
RD	RED

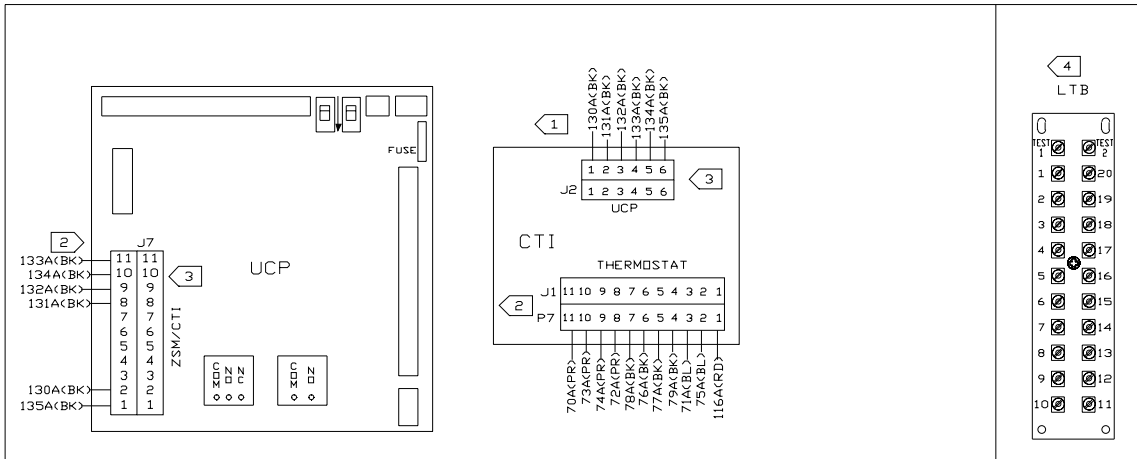
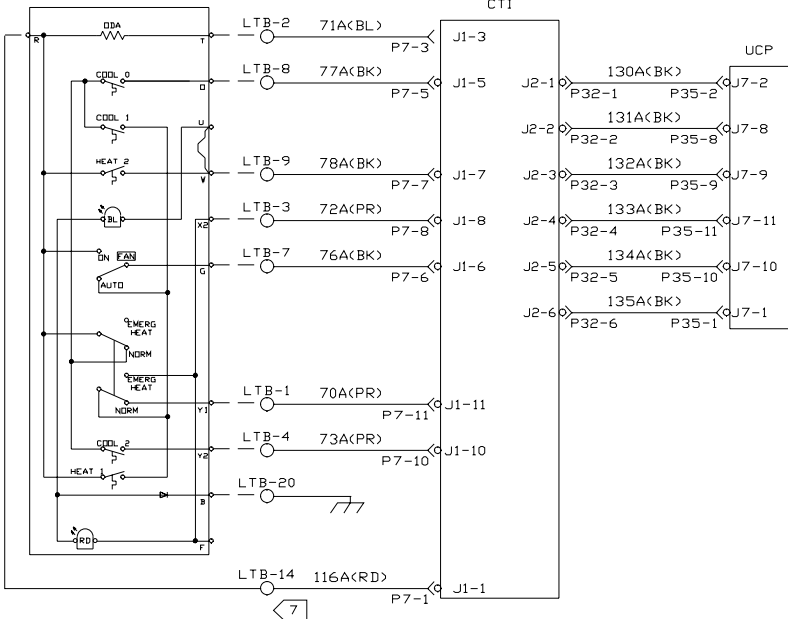
LEGEND

- UCP - UNITARY CONTROL PROCESSOR
- CTI - CONVENTIONAL THERMOSTAT INTERFACE
- LTB - LOW VOLTAGE TERMINAL BLOCK
- ZSM - ZONE SENSOR MODULE

NOTES:

- 1 INSTALL OPTIONAL CONVENTIONAL THERMOSTAT INTERFACE (CTI) AS FOLLOWS:
- 2 MOUNT CTI IN CONTROL BOX IN THE HOLES PROVIDED WITH 4 SCREWS INCLUDED.
- 3 REMOVE CONNECTOR P7 FROM J7 OF THE UCP AND INSTALL CONNECTOR DN J1 OF THE CTI.
- 4 UTILIZE CABLE INCLUDED WITH CTI TO CONNECT J2 OF THE CTI TO J7 OF THE UCP.
- 5 CONNECT ROOM THERMOSTAT TO TERMINAL BLOCK (LTB) AS SHOWN FOR THE TYPE UNIT.
- 6 PLACE WIRING DIAGRAM LABEL ON INSIDE OF ACCESS PANEL.
- 7 SEE UNIT WIRING DIAGRAM FOR BALANCE OF WIRING.
- 8 JUMPERS BETWEEN TERMINALS 13 AND 14 OR TERMINALS 14 AND 15 DEPEND UPON UNIT CONFIGURATION. SEE UNIT WIRING DIAGRAM ON CONTROL PANEL. CHANGES TO THESE JUMPERS ARE NOT REQUIRED DUE TO CTI INSTALLATION.

TYPICAL HEAT PUMP THERMOSTAT



2307-0309A