THERMOSTAT DISPLAY CONTROL (TDC)

Cat. No. 95A03-TWH

Installation Instructions

DI-031-95A03-05A$_{AR3363}$ (95I03-1T)

INSTALLATION **ENGLISH**

WARNINGS AND CAUTIONS

- **WARNING: TO AVOID SERIOUS PERSONAL INJURY** never push objects of any kind into this product through openings, as they may touch dangerous voltages.
- **WARNING: TO AVOID SERIOUS PERSONAL INJUR**Y never touch uninsulated wires or terminals unless the wiring has been disconnected at the network interface.
- Never install communications wiring or components during a lightning storm.
- Read and understand all instructions. Follow all warnings and instructions marked on the product.

WARNINGS AND CAUTIONS

- Do not use this product near water - e.g., near a tub, wash basin, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.
- Never install communications components in wet locations unless the components are designed specifically for use in wet locations.
- Use caution when installing or modifying communications wiring or components.
- SAVE THESE INSTRUCTIONS.

DESCRIPTION

The 95A03-TWH Thermostat Display Control (TDC) is designed to be used with Leviton's 65A60-1 TDC Communication Interface and an Omnistat2 RC-2000 series thermostat as an easy-to-access interface. Leviton's RC-2000 series thermostats can control both single and multi-stage HVAC systems, and are available using either hardwired communication or ZigBee wireless.

The TDC can be flush mounted on a wall for a clean and attractive appearance. It can be used to select the desired temperature, adjust fan and mode settings, and more. The TDC has a built-in temperature sensor that can be averaged with up to 3 other TDC sensors and/or the sensor in the RC-2000 thermostat. Temperature averaging ensures precise reading and automation for comfort and enhanced energy efficiency.

Required Components:

• Model 65A60-1 TDC Communication Interface

• Omnistat2 RC-2000 series thermostat with firmware Version 1.05B or later

INSTALLATION

The (TDC) connects directly to a TDC Communication Interface (65A60-1) using Cat 5, unshielded, twisted pair (UTP) for communications. Each end of the wire is terminated with an RJ45 connector. The correct wiring scheme for the Cat 5 cable is standard EIA/TIA 568A. Properly terminating the Cat 5 cable is crucial for the operation of the system.

The total distance of Cat 5 between the TDC and TDC Communication Interface not exceed 1500 feet.

Insert the RJ45 connector on one end of the cable to the jack labeled U2 on the TDC Communication Interface. Insert the RJ45 connector on the other end of the cable to the jack on the TDC.

A maximum number of 4 TDC keypads can be connected to a TDC Communication Interface.

CONFIGURING THE TDC

After the TDC and TDC Communication Interface have been installed and connected, there are several installation settings on the RC-2000 thermostat that need to be configured.

Note: Some of the TDC installation settings are only displayed if the TDC and TDC Communication Interface have been installed and are communicating with the RC-2000.

To access the Installation Settings on the RC-2000:

1. From the Home Page, press the Scroll Wheel.
2. Turn the Scroll Wheel until "Setup" is highlighted.
3. Press the Scroll Wheel or [Select] to select "Setup".
4. Turn the Scroll Wheel until "Installation Settings" is highlighted.
5. Press the Scroll Wheel or [Select] to select "Installation Settings".
6. Read the warning and then press [Continue] to proceed.

Temperature Sensors

To configure the temperature sensor(s) that will be used to display the temperature on the TDC:

1. From the Installation Settings menu, turn the Scroll Wheel until "Temperature Sensors" is highlighted.
2. Press the Scroll Wheel or [Select] to select "Temperature Sensors".

The Temperature Sensor settings are used to configure the internal temperature sensor, optional remote temperature sensor, and temperature sensor in the TDC. Any temperature sensors that are set as the same type (i.e. indoor or outdoor) will display the average temperature reading among the sensors.

Internal Sensor:	This will enable or disable the onboard temperature sensor for indoor use only. *Enabled
External Sensor 1:	This will enable the external temperature sensor for indoor or outdoor use. All indoor and outdoor temperatures are averaged between all sensors of the same type. *Disabled
External Sensor 2:	This will enable the expansion module temperature sensor for indoor or outdoor use. All indoor and outdoor temperatures are averaged between all sensors of the same type. *Disabled
TDC Sensor:	This will enable the expansion module temperature sensor for indoor or outdoor use. All indoor and outdoor temperatures are averaged between all sensors of the same type. * Disabled

By default, the RC-2000 is configured to only display the temperature of its internal temperature sensor on the TDC.

To average the internal sensor in the RC-2000 with the temperature sensor in the TDC, set the Internal Sensor to "Enabled" and the TDC Sensor to "Indoor".

To use only the temperature sensor in the TDC, set the Internal Sensor to "Disabled" and the TDC Sensor to "Indoor".

Note: when multiple TDC keypads are connected to the TDC Communication Interface and if the TDC Sensor is set to "Indoor", then all of the temperature of each of the temperature sensors in the TDC keypads will be averaged together.

TDC Options

To configure the Periodic Flash and Eco Mode setback options for the TDC:

1. From the Installation Settings menu, turn the Scroll Wheel until "TDC Options" is highlighted.
2. Press the Scroll Wheel or [Select] to select "TDC Options".

Periodic Flash

When Periodic Flash is sent to "Off" (default setting), one minute after that last time a button is pressed on the TDC keypad, the display on the TDC is turned off. The display will remain off until a button is pressed on the TDC keypad. When a button is pressed on the TDC keypad, the display is turned back on for one minute.

When Periodic Flash is set to "On", the TDC display is turned on and the temperature is displayed every ten seconds. After displaying the temperature for three second, the display is turned off for ten seconds. Whenever a button is pressed on the TDC keypad, the display is turned on for one minute.

Eco Mode Setback

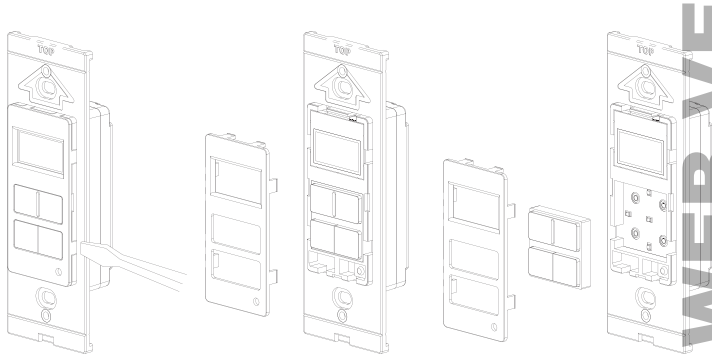
Eco Mode is used to quickly setback the heat and cool setting of the RC-2000 thermostat for energy savings. The TDC can be used to set the RC-2000 to Eco Mode when leaving the premises, and then restored to normal upon returning.

The number set for the Eco Mode Setback option is the number of degrees that the heat and cool setting will be setback whenever the TDC is set to Eco Mode. The default setting is 4 degrees.

CHANGING THE COLOR OF THE TDC

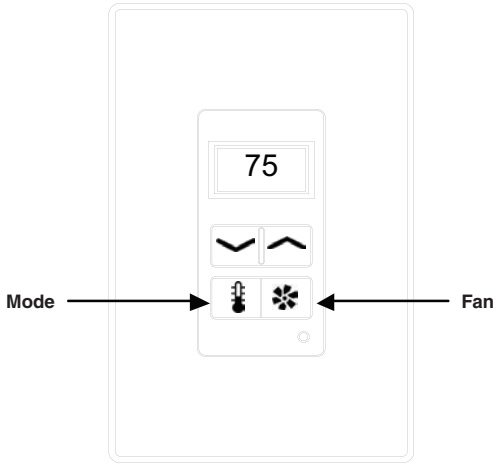
The color of the TDC may be changed to complement the interior décor. The TDC is supplied with a white faceplate, rubber keypad, and insert. Additional colors are available; contact your Leviton distributor for more information. Change the color of the TDC as follows:

1. Remove the faceplate.
2. The insert attaches to the TDC with two latches on the right and two on the left. Using a small-blade screwdriver, gently depress each latch on one side while lifting up on the insert. Once the latches are released on one side, remove the insert from the other side.
3. Remove the rubber keypad.
4. Insert the new rubber keypad. Align the latches of the new insert to the openings on the TDC and gently snap into place.
5. Attach the new faceplate.



OPERATION OF THE TDC

When the TDC is first connected or when a button is pressed on the TDC keypad, the temperature is displayed. Depending on how the TDC is configured, the temperature may be from only the internal temperature sensor of the TDC (or the average from all TDC keypads connected to the TDC Communication interface), from only the internal temperature sensor of the RC-2000 thermostat, or the average from all connected TDC keypads and the internal temperature sensor of the RC-2000 thermostat.



Changing the Temperature Setting

To change the desired temperature setting, press the up or down arrow button. With the first press of either the up or down arrow button, the temperature setting for the current mode is displayed (a snowflake is displayed for cool mode and a flame is displayed for heat mode). Press the up or down arrow button to raise and lower the temperature, respectively. At any time while changing the temperature setting, press the Mode button to change the temperature setting for the opposite mode. A few seconds after that last time a button is pressed, the TDC will exit the temperature setting screen and display the current temperature.

Changing the Mode

To change the current mode, press the Mode button. With the first press of the Mode button, the current mode is displayed (a snowflake is displayed for cool mode, a flame is displayed for heat mode, and snowflake and flame with revolving arrows is displayed for auto mode, and a circle with a slash is displayed for off). Press the Mode button to cycle through the choices of modes.

Changing the Fan Setting

To change the fan setting, press the Fan button. With the first press of the Fan button, the current fan setting is displayed (a fan is displayed for Fan Auto mode, a spinning fan is displayed for Fan On mode, and fan and spinning fan with revolving arrows is displayed for Fan Cycle mode). Press the Fan button to cycle through the choices of modes.

Eco Mode

To put the thermostat in Eco mode, press and hold the Mode or Fan button until a leaf is displayed in the top-right corner on the TDC display. When in Eco Mode, the heat and cool temperature setting will be setback the number of degrees configured in the Eco Mode Setback option on the RC-2000. While in Eco Mode the leaf is displayed. To exit Eco Mode, press and hold the Fan or Mode button (to return to the previous temperature settings), or simply raise or lower the current temperature to the new desired setting.

FCC COMPLIANCE

This equipment 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. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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 receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1 800 405-5320.**

LEVITON LIMITED WARRANTY

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that products manufactured by Leviton under the Leviton brand name ("Product") will be free from defects in material and workmanship for the time periods indicated below, whichever is shorter: • **OmniPro II and Lumina Pro:** three (3) years from installation or 42 months from manufacture date. • **OmniLT, Omni IIe, and Lumina:** two (2) years from installation or 30 months from manufacture date. • **Thermostats, Accessories:** two (2) years from installation or 30 months from manufacture date. • **Batteries:** Rechargeable batteries in products are warranted for ninety (90) days from date of purchase. **Note:** Primary (non-rechargeable) batteries shipped in products are not warranted. **Products with Windows® Operating Systems:** During the warranty period, Leviton will restore corrupted operating systems to factory default at no charge, provided that the product has been used as originally intended. Installation of non-Leviton software or modification of the operating system voids this warranty. Leviton's obligation under this Limited Warranty is limited to the repair or replacement, at Leviton's option, of Product that fails due to defect in material or workmanship. Leviton reserves the right to replace product under this Limited Warranty with new or remanufactured product. **Leviton will not be responsible for labor costs of removal or reinstallation of Product**. The repaired or replaced product is then warranted under the terms of this Limited Warranty for the remainder of the Limited Warranty time period or ninety (90) days, whichever is longer. This Limited Warranty does not cover PC-based software products. **Leviton is not responsible for conditions or applications beyond Leviton's control**. **Leviton is not responsible for issues related to improper installation, including failure to follow written Installation and operation instructions, normal wear and tear, catastrophe, fault or negligence of the user or other problems external to the Product**. To view complete warranty and instructions for returning product, please visit us at **www.leviton.com**.

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