

# TD SERIES

## Programmable Energy Saving Thermostat



The TD Series thermostat is a programmable HVAC controller specifically designed to control unit ventilators. It has the ability to control virtually any type of heating and cooling sources available in the industry.

This controller is capable of controlling and monitoring numerous inputs and outputs. A 24 VAC output is used for staged heating or a 2-10 VDC output for modulated heating and has a 24 VAC output for cooling functions.

The TD controller is unique by allowing the user limited adjustments, which include a temperature varying slide switch and a timed occupied override switch. By moving the slide switch up or down the user can vary the temperature  $\pm 3^{\circ}\text{C}$  /  $\pm 5^{\circ}\text{F}$  from the programmed set points. Pressing the timed occupied switch will enable occupied temperatures when in the unoccupied mode. The thermostat will remain in the occupied mode for the programmed duration, up to 240 minutes, then return to normal operation. All other variable parameters are programmable by use of a handheld programmer (sold separately).

The TD Series thermostat will now include the ability to be occupied or unoccupied during the weekends as well as have three independent holiday schedule. Each of these holiday schedules is programmable by using a Handheld Programmer - Rev 1.2+ (sold separately). The user simply enters the start and end days which they would like the holidays to run between. Three of these were provided primarily to help schools during their extended holidays (spring, summer and christmas).

Some of the optional accessories available to further improve efficiencies include a discharge air temperature sensor (currently available for modulated hydronic heat only) and a motion detector used to detect occupancy. The room temperature sensor which is normally housed within the thermostat can a remotely mounted. These are just few of the possibilities that can be implemented into a HVAC control package. If there is a requirement for a special control application please contact us and we will tailor one to suit your needs.

## FEATURES

### Heating

24 VAC Outputs or 2-10 VDC Modulated

### Cooling

24 VAC Output w/ 5 minute Cycle Protection

### Occupancy Override

120 minutes standard, 40 minutes for motion detection equipped units.  
(changeable via Handheld Programmer v1.1+)

### Auto Season Changeover

Switches between heat and cool automatically.

### Temperature Differential

$\pm 1^{\circ}\text{C}$  /  $\pm 2^{\circ}\text{F}$

### Update Interval

Once a minute

### Liquid Crystal Display (LCD)

Displays operating functions, time and present temperature (TD-2 Model Only).

### LED Indicators

Indicates what function the thermostat is currently running.

### Temperature Adjustment Slider

Adjustment for  $\pm 3^{\circ}\text{C}$  /  $5^{\circ}\text{F}$  from set points.

### 24 Hour Clock

Time, Date and Day of the Week. Automatically corrects time during daylight savings. Battery backup provides retention of all programmed variables including time and calendar.

### Programmable Settings

Occupied Heat and Cool Temperature  
Unoccupied Heat and Cool Temperature  
Start and End Occupied Time  
Pre-Condition Start Time  
Discharge Air Temperature  
Time  
Calendar  
Daylight Saving Time  
Time Occupied Duration  
Weekend Occupancy  
3 Independent Holiday Schedules

## OPTIONS

### Remote Temperature Probe

Remotely mount temperature sensor outside of controller.

### Motion Sensor Input

Sense for occupancy via normally closed contact to ground.

### Discharge Air Temperature

Monitors air exiting the HVAC unit and adjusts heat output automatically (Available only on hydronic modulated units).

These are the standard options for both the TD-1 and TD-2. If your application requires a special input or output please contact us

## ELECTRICAL

**Input** 24 VAC @ 350mA  
**Outputs** 2-10 VDC @ 7mA  
12 VDC @ 250mA

**Battery Backup** Lithium Coin Battery  
3 Year Life

**Relays** 6 Normally Open Contacts  
30 VDC @ 1A

**Wiring** 18-22 AWG stranded or solid copper wire  
5-conductor shielded 24 AWG stranded for temperature probes

## MISCELLANEOUS

**Dimensions** 6.2"h x 3.0"w x 1.6"d  
**Warranty** 1 year parts and labour

Specifications are subject to change without notice.