

# INSTALLATION AND MAINTENANCE



Smart Heating Solutions

## K702E-DTSB AUTONOMOUS DUAL TIMED STAT

**⚠ DANGER ⚠**

**ELECTRIC SHOCK OR FIRE HAZARD**

READ ALL WIRE SIZING, VOLTAGE REQUIREMENTS AND SAFETY DATA TO AVOID PROPERTY DAMAGE AND PERSONAL INJURY



### Specifications:

2 Pole 4 Wire  
 Power Supply: 208/240 VAC  
 Program Battery Backup  
 Max Range: 3328W@208 V (16A)  
 3840W@240V (16A)  
 Manual Temperature Adjustment: 55-74°F (12.7-23°C)  
 Temperature Display Range: 32-122°F (0-50°C)  
 Differential: 1°F (.5°C)  
 Adjustable Display Offset: 1-18°F (1-5°C) Lower  
 Temperature Control Range: 40-74°F (4-23°C)  
 Tenant Temperature Range: 55-74°F (12.7-23°C)  
 Anti-Freeze Low setting: 40°F (4°C)  
 Set Back Timings: Minor, Hrs: 1,2,3,4,8,12,16  
 Major, Hrs: 12,24,36,48,60  
 Setback Temperatures:  
 Minor, 66,62,58°F. (18,16,14°C)  
 Major, 55,52,40°F. (12,11,4°C)



## ⚠ WARNING ⚠

**READ CAREFULLY** - These instructions will help prevent difficulties that might arise during thermostat installation. Studying the instructions first may save considerable time and money later. Observing the following procedures will keep installation time to a minimum. Save these instructions for future use.

### Product Applications

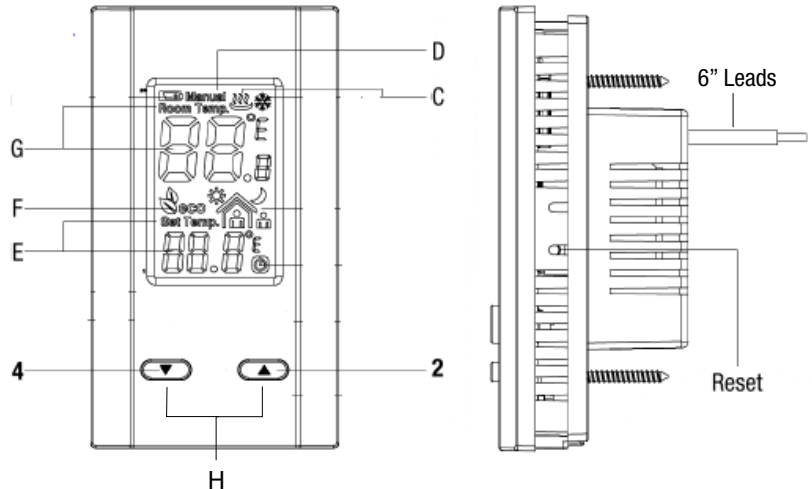
K702E-DTSB Autonomous Dual Timed Setback is designed to be used where an Automatic timed electric heat setback is needed and a second lower setback for longer away times. This is typically used in College Dormitory's, Motels, Temporary housing, anywhere the tenant is not financially responsible for the cost of heating and has an active life pattern. This guarantees and reinforces good energy saving habits and places the burden on the Tenant for the higher heating levels and their efforts to remain above a predefined reasonable and typically comfortable level.

### Be safe and smart, electricity can cause severe injury or death. If you are uncomfortable hire an electrician for the project

This Autonomous Dual Timed Setback is for small fan electric heater, baseboards, radiant ceiling, wall panel heaters, cove heaters, or any 208/240 Line voltage resistance heating systems that do not have an electric motor over 1/3 hp. The thermostat will be warm to the touch on top. This is normal operation and also provides air currents across the face of the thermostat that better help it sense room temperature.

### Features of Front Display and Controls

- 2 ) Up Temperature Button
- 4 ) Down Temperature Button
- C ) Heating ON LCD Indicator
- D ) Manual Setting Icon
- E ) Preset Temperature Display
- F ) ECO Setback Indicator  
(Illuminates When Operating with Set Temp Under 62°F/16.6°C)
- G ) Room Temperature Display
- H ) Temperature Offset Display Compensation

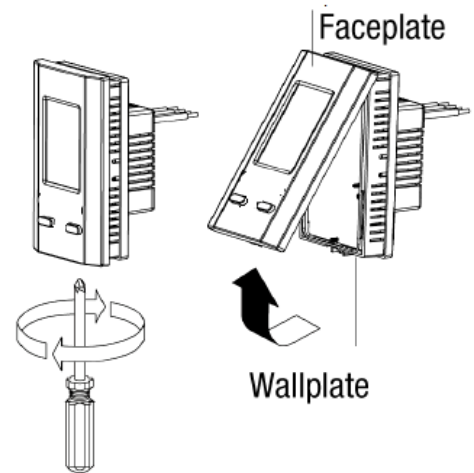


FOR INDOOR USE ONLY

# WIRING INSTRUCTIONS

## Wiring Requires a Phillips Screwdriver

1. Disconnect power supply to prevent electrical shock or damage to the product.
2. Loosen screw on the bottom of plastic housing.
3. Run line voltage wiring from the main panel to the J Box location for the thermostat and another set off to the Heater/s you are controlling.
4. Connect output terminals to heating system in accordance with instructions from the 240 volt electric heat system.
5. Make sure your wire nuts are very tight or they can melt. Mount Stat to the J box making sure it is COMPLETELY RECESSED into the junction without pinching wires and flat to the wall without gaps. NO WIRES SHOULD BE EXPOSED outside the metal or plastic junction box. Do not overtighten the J Box mounting screws. Display or circuit board could be damaged. Carefully replace cover aligning the 3 pins that mate up to the front cover and screw the cover on with a phillips tip driver.



## Operation Instructions

1. The Autonomous Dual Timed Setback series thermostat default is programmed to automatically set back to 66°F/18.8°C in 2 hrs. and 55°F/12.7°C in 48 hrs. See Chart for other options.

## Manual Temperature Adjustment Range: 55°-74°F (12.7-23°C)

1. Press the "Up" and or "Down" arrow key and LCD will show a flashing temperature with "Set Temp" symbol.
2. Proceed by pressing the "Up" or "Down" arrow key to set the desired temperature. Every time you press the "Up" or "Down" arrow key, the temperature will change the temperature value by 1°F/1°C.
3. When you've completed setting the desire temperature, wait 3 seconds until the LCD stops flashing and the thermostat will start operation and backlite will turn off. When the room temperature reaches the desired setting, the thermostat will cycle to maintain the set temperature for the time programmed.

## Display Temperature Offset Compensation:

In unusual cases your Autonomous Dual Timed Setback may register "Room Temperature" higher than what the actual temperature is. You can adjust the registering value by using Temperature Compensation value.

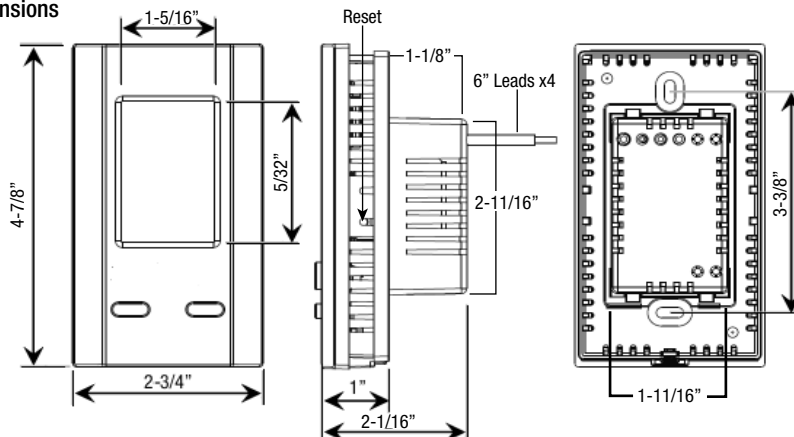
1. Press and hold the "Up" and "Down" arrow keys at same time for 5 seconds.
2. The initial value is 0°F/0°C. Press the "Up" or "Down" arrow key to adjust the value.
3. After adjustment value has been completed, do not press any key, wait for 10 seconds until the display returns to normal operation.

**NOTE:** The TimerStat can only adjust the displayed temperature compensation downward by up to 18° F/10°C.

## Reset Your Autonomous Dual Timed Setback:

In case your thermostat is not functioning correctly, (possibly due to a static charge) you can reset the unit back to the factory settings. Locate the RESET button on the right side of the unit, lightly press the button with a pointy object and the unit will reset.

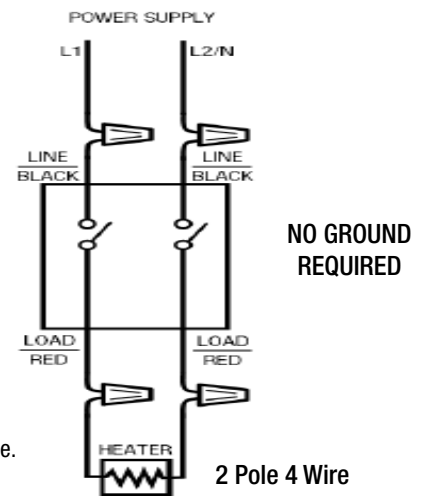
## Thermostat Dimensions



DO NOT USE  
IN SHOWER AREAS  
WHERE WATER CAN  
SPLASH ON  
THERMOSTAT

NOT OUTDOOR  
RATED

## K702E-DTSB Wiring Diagram



# K702E-DTSB: Instructions for Timing and Temperature Settings

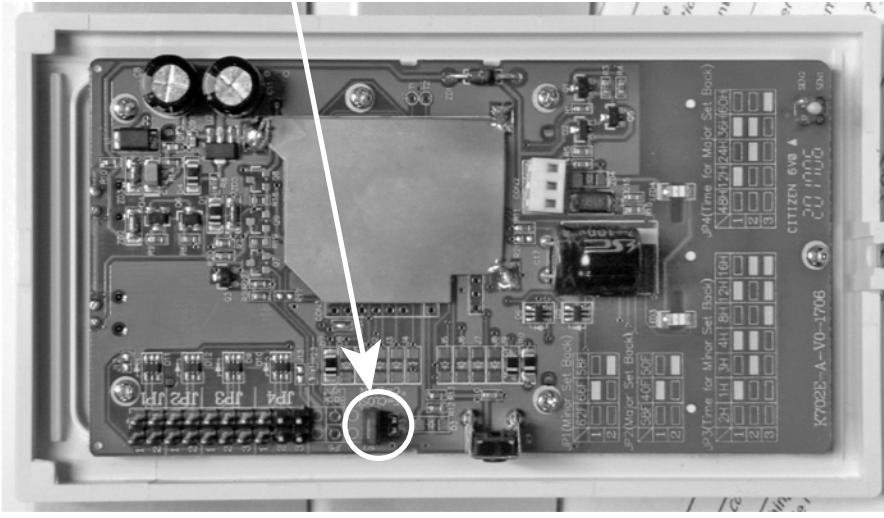
## Autonomous Dual Timed Set Back

Timed comfort where the burden is on the tenant to maintain their set point. Where the Landlord is providing comfort heating and the tenant is responsible for maintaining the set point. Typical uses are Dormitory, Public or temporary housing applications. Public bath-rooms, Motel and Hotel application or anywhere a guaranteed set back is required not based on time of day.

## Manual Temperature Adjustment Range:

55°-74°F (12.7-23°C)

If no jumpers are added the Default temperatures and times are followed.



Scale  
F° Pin On Default  
C° Pin Off / Reset

Time and temperature selection printed on circuit board for future reference and adjustments.

### Minor Set Back (JP1)

### Major Set Back (JP2)

Default		
<input type="checkbox"/> JP1.1=OFF <input type="checkbox"/> JP1.2=OFF	<input checked="" type="checkbox"/> JP1.1=ON <input type="checkbox"/> JP1.2=OFF	<input type="checkbox"/> JP1.1=OFF <input checked="" type="checkbox"/> JP1.2=ON
66°F/18.8°C	62°F/16.6°C	58°F/14.4°C

Default		
<input type="checkbox"/> JP2.1=OFF <input type="checkbox"/> JP2.2=OFF	<input checked="" type="checkbox"/> JP2.1=ON <input type="checkbox"/> JP2.2=OFF	<input type="checkbox"/> JP2.1=OFF <input checked="" type="checkbox"/> JP2.2=ON
55°F/12.7°C	52°F/11.1°C	40°F/4.4°C

### Time for Minor Set Back (JP3)

JP3.1  
 JP3.2  
 JP3.3

Default		
<input type="checkbox"/> JP3.1=OFF <input type="checkbox"/> JP3.2=OFF <input type="checkbox"/> JP3.3=OFF	<input checked="" type="checkbox"/> JP3.1=ON <input type="checkbox"/> JP3.2=ON <input type="checkbox"/> JP3.3=OFF	<input type="checkbox"/> JP3.1=OFF <input type="checkbox"/> JP3.2=ON <input checked="" type="checkbox"/> JP3.3=ON
2H	1H	3H

Default		
<input type="checkbox"/> JP3.1=OFF <input type="checkbox"/> JP3.2=OFF <input type="checkbox"/> JP3.3=OFF	<input checked="" type="checkbox"/> JP3.1=ON <input type="checkbox"/> JP3.2=ON <input type="checkbox"/> JP3.3=ON	<input type="checkbox"/> JP3.1=OFF <input type="checkbox"/> JP3.2=OFF <input checked="" type="checkbox"/> JP3.3=ON
8H	4H	12H

### Time for Major Set Back (JP4)

JP4.1  
 JP4.2  
 JP4.3

Default		
<input type="checkbox"/> JP4.1=OFF <input type="checkbox"/> JP4.2=OFF <input type="checkbox"/> JP4.3=OFF	<input checked="" type="checkbox"/> JP4.1=ON <input type="checkbox"/> JP4.2=OFF <input type="checkbox"/> JP4.3=OFF	<input type="checkbox"/> JP4.1=OFF <input type="checkbox"/> JP4.2=ON <input checked="" type="checkbox"/> JP4.3=ON
48H	12H	24H

Default		
<input type="checkbox"/> JP4.1=OFF <input type="checkbox"/> JP4.2=OFF <input type="checkbox"/> JP4.3=OFF	<input checked="" type="checkbox"/> JP4.1=ON <input type="checkbox"/> JP4.2=ON <input type="checkbox"/> JP4.3=OFF	<input type="checkbox"/> JP4.1=OFF <input type="checkbox"/> JP4.2=OFF <input checked="" type="checkbox"/> JP4.3=ON
60H	36H	60H

- Manual Programming of Jumpers JP1,2,3,4:
- 2 time Jumpers: JP1 Minor, JP2 Major (set back)
  - 2 temperatures Jumpers: JP3 Minor, JP4 Major (set back)
  - Adjustable on site at time of installation.
  - Set back and Timings are Modifiable any time for special needs or if conditions change for a tenant.
  - Default set for: University Dormitory application.  
No jumpers required

Sequence of Operation of thermostat in Default setting.

Tenant sets thermostat to 70°F/21.1°C for Comfort. After 2 hrs. Minor set back drops temperature to 66°F/18.8°C. If tenant doesn't increase temperature after 48 hrs. thermostat will drop to 55°F/12.7°C. Tenant may increase temperature at any time but will continually reset timing but will eventually set back to guaranteeing energy savings.