

INSTALLATION INSTRUCTIONS



K312RELAY

ClearTouch™



Specifications:

Power Supply: 120VAC/208VAC/240VAC 50/60Hz

Max Range: 1800W @120V 3120W @208V
or 3600W @ 240 V

Max Range: 15A Max, Resistive

Listing: c ETL us



⚠ DANGER ⚠

ELECTRIC SHOCK OR FIRE HAZARD

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

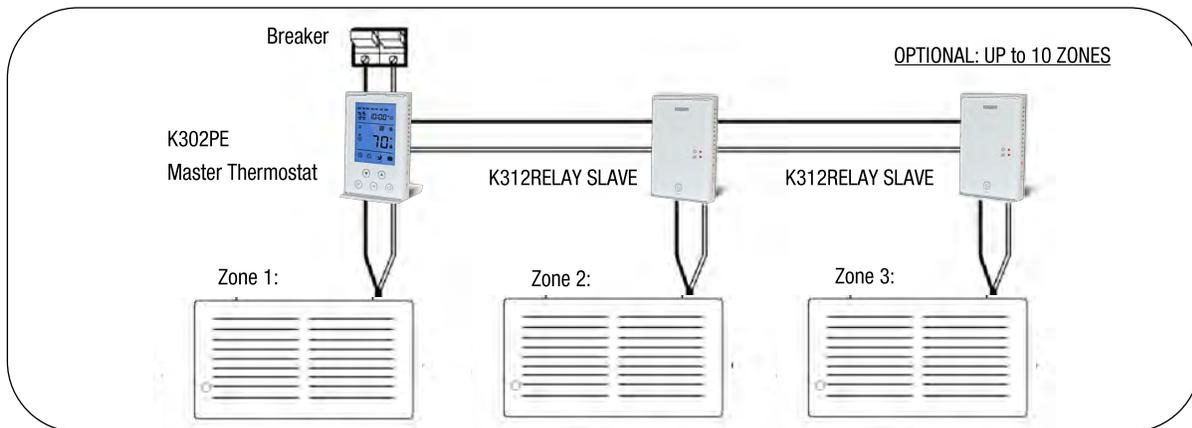
⚠ WARNING ⚠

READ CAREFULLY - These instructions will help prevent difficulties that might arise during 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.

FUNCTIONS AND FEATURES

This Slave Relay has been designed for heating applications that exceed 15 amps.

- Dual Voltage (120vac or 240vac)
- Connect up to 10 Slave Relays per Master
- Must use with K302PE Master Thermostat
- Touch-Sensitive Buttons
- Blue Backlit Display



PRODUCT OVERVIEW

The K312RELAY output board is a new intelligent product for temperature control. It can control a heating load 120V/240V in accordance with the main thermostat input signal. It is accurate and sensitive with high reliability and performance. This remote module will function only if connected to a thermostat K302PE Master Thermostat.

INSTALLATION INSTRUCTIONS

! **DANGER** !

ELECTRIC SHOCK OR FIRE HAZARD

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

The installation of the thermostat must comply with the applicable local and/or national electrical code and utility requirements. This installation should be performed by a qualified electrician where required by law. Ensure that all wiring connections to the thermostat are correct and tight to prevent electrical shorts. Use the appropriate wire to meet local and national electrical codes for rated power consumption.

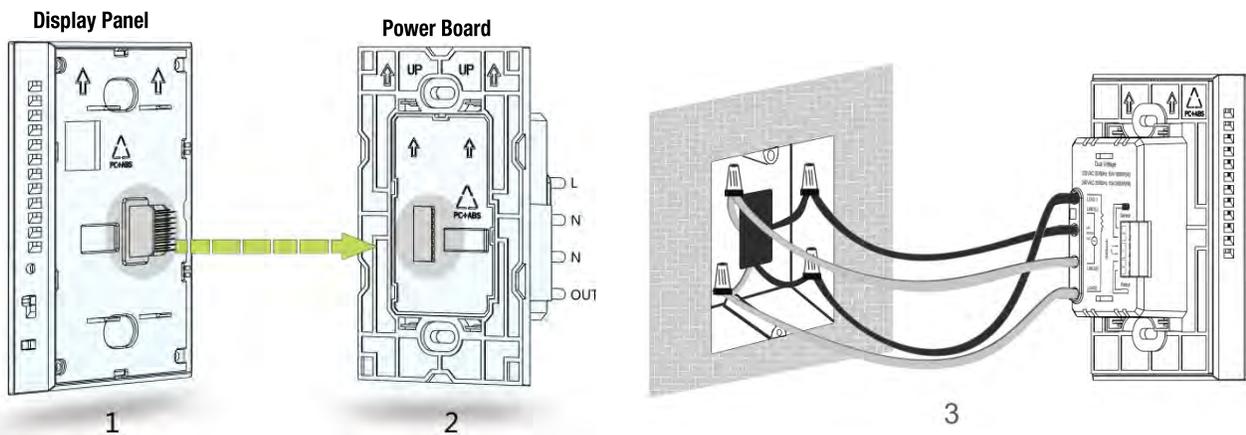
WARNING!

Warning: Turn OFF the power at the circuit breaker before installing. Installation to be performed by a qualified electrician or authorized technician.

Refer to thermostat and heater load specifications before installation of the thermostat to see if it can handle the amp load. The maximum this thermostat can run is 1800W @120V or 3600 W @ 240 V (15A). Install unit in a grounded metal or plastic wall junction box, indoors 4 1/2' to 5' above the floor. Avoid any area where it can come in contact with external sources of heat and cold. This includes plumbing pipes, direct sunlight, a T.V. set, lamps, and drafts from a door or window, as this may cause inaccurate temperature readings. The most convenient place is above the light switch. Not for Outdoor use.

WIRING INSTRUCTIONS

Caution: Turn off power at the circuit breaker before performing any work on the electrical connections. None of the electrical connections must be live until the installation has been completed and the housing is closed. Only a qualified electrician or authorized technician are permitted to open the terminal box.



Wiring requires a Phillips screwdriver

1. Disconnect power supply to prevent electrical shock or damage to the product.
2. Run line voltage wiring to the location of thermostat.
3. Use a screwdriver to separate the Display Panel and power board of the thermostat, as shown in Figure 1 and Figure 2
4. Choose the proper installation location. Installation height is about 4 1/2 to 5 feet above the floor. For indoor use only.
5. Do not install close to a heat source, such as hot water pipe, heating pipe, wall-mounted light fixture or in direct sunlight.
6. Connect the incoming power wires to Line 1(L) & Line 2(N) wires on the power board, using the provided wire nuts, as shown on figure 3.
7. Connect the heater load wires to the Load 1 & Load 2 wires of the power board, using the connectors, as shown on figure 3.

Connection to the Master Thermostat (K302PE)

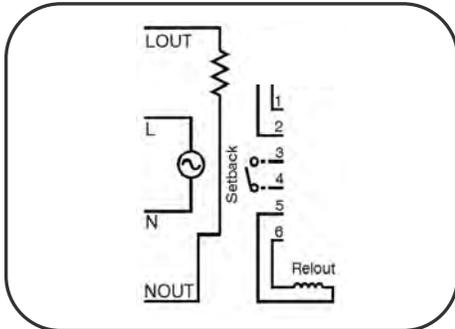
Connect the low voltage wire from the master thermostat (K302PE) into terminals no. 3 & 4 on back of the power board and tighten the screws with the screwdriver provided in the box.

If required: To add an additional Slave Relay, connect the low voltage wire from the second Slave Relay into terminals no. 5 & 6 (Relout) on back of the power board and tighten the screws with the screwdriver provided in the box. See below diagram.

8. Install the power board into the electrical box with the 2 screws provided, and then clip & fasten the front Display Panel into place with the bottom screw.
9. Make sure your K302PE thermostat is COMPLETELY RECESSED into the junction box and flush with the wall. NO WIRES SHOULD BE EXPOSED outside the metal or plastic junction box.

WIRING INSTRUCTIONS (CONTINUED)

WIRING DIAGRAM:

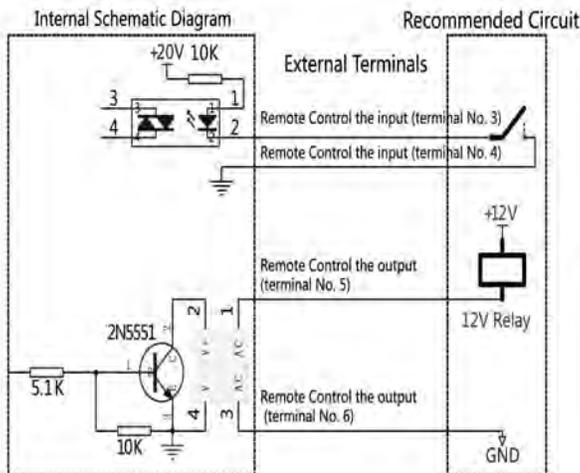


Safety Information:

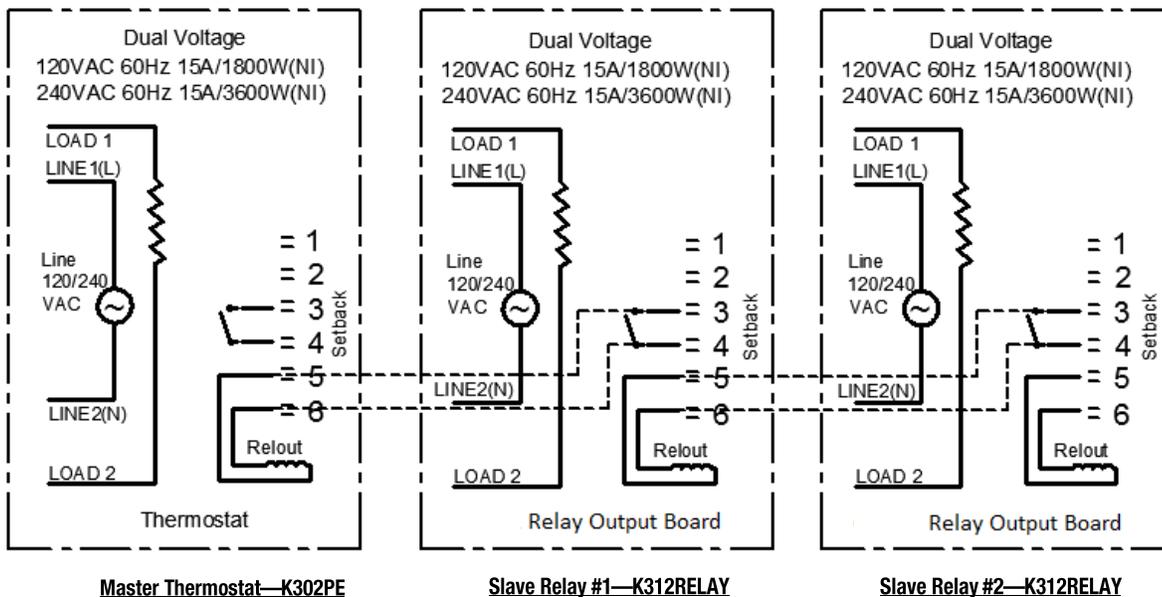
- Installation must be carried out by a certified professional electrician.
- Disconnect all power before performing maintenance work to avoid product damage.
- Shocking, dropping or stepping on the product will damage it and void the warranty.
- The thermostat should be kept away from corrosive chemicals.
- Damage to the product could result in a faulty electrical system that may cause fire.

Wiring Instructions :

- **Setback:** This is an **input** signal driven by a remote contact. One terminal connects to the internal power source by 10K resistance; another terminal connects to the internal ground. The circuit diagram as shown on the left.
- **Relout:** This is an **output** allowing the remote control of a series of Slave Relays (K312RELAY). Inside the thermostat is an open drain circuit, driving a 24V relay. The maximum drive current is 30mA. The circuit diagram as shown in the left. This is used to connect to a Slave Relay (K312RELAY) to expand the heating area. Multiple Slave Relays can be interconnected in a daisy chain, see below:



Master / Slave Wiring Diagram



Master Thermostat—K302PE

Slave Relay #1—K312RELAY

Slave Relay #2—K312RELAY

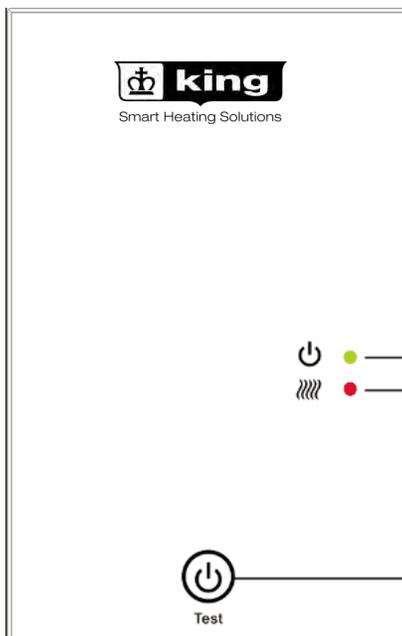
OPERATION INSTRUCTIONS



K312RELAY
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INSTRUCTIONS CONTINUED



Test Button

If there is no remote control signal from the main thermostat, press and hold the TEST button to perform an electrical function test loop of the heating relay.

During or after the test loop, press Reset/Test button again to resume normal operation.

Main Functions

Output Control - Electric Heating Test (Time:30min)

Press and hold TEST button. The power indicator light will blink, the electric heating indicator light turns on, and the heaters turns on as the signal of Relout begins to output. Press and hold TEST button again (or automatically after 30min), the device will exit the test and heater powers off.

Remote Signal Control

When the terminal of Setback detects an input signal from the master thermostat, the indicator light of electric heating turns on, and the heater turns on as the signal of Relout begins to output. After 30min, the heater will power off automatically.

Note: Remote Signal Control has the highest priority.