SAVE THESE INSTRUCTIONS

INSTALLATION INSTRUCTIONS

king

K322E Non-Programmable ClearTouch™

DANGER

ELECTRIC SHOCK OR FIRE HAZARD

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

Specifications:

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

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

Max Range: 15A Max, Resistive

Accuracy: ±01F（01C）

Temperature Control Range: 41°F-95°F

Temperature Adjustment Scale: 1°F

Listing: c ETL us

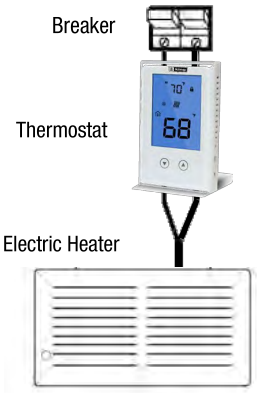
WARNING

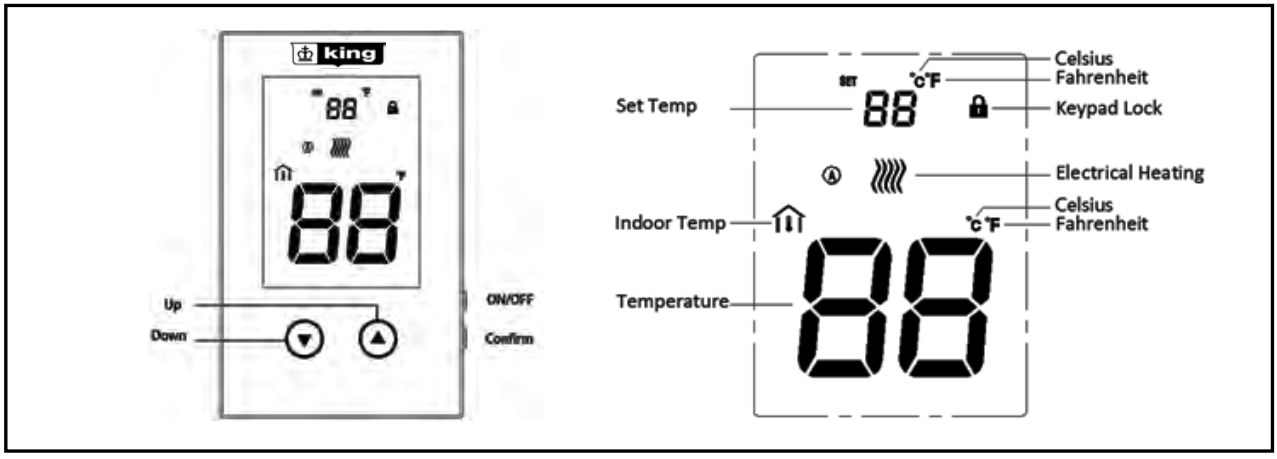
READ CAREFULLY - *These instructions will help prevent difficulties that might arise during thermostat installation. Studying the instructions first may save considerable time and money later. Observing the following procedures will keep installation time to a minimum. Save these instructions for future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

FUNCTIONS AND FEATURES

This Thermostat has been designed to control fan-forced and radiant line voltage electric heater.

- Dual Voltage (120vac or 240vac)
- Touch-Sensitive Buttons
- Blue Backlit Display
- Temperature Lock Feature: Set a Min and Max Temp Limit
- System On/Standby switch





PRODUCT OVERVIEW

The ClearTouch K322E combines user-friendly touch sensitive buttons with a sleek modern design. Offering simple non-programmable control of your comfort.

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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.

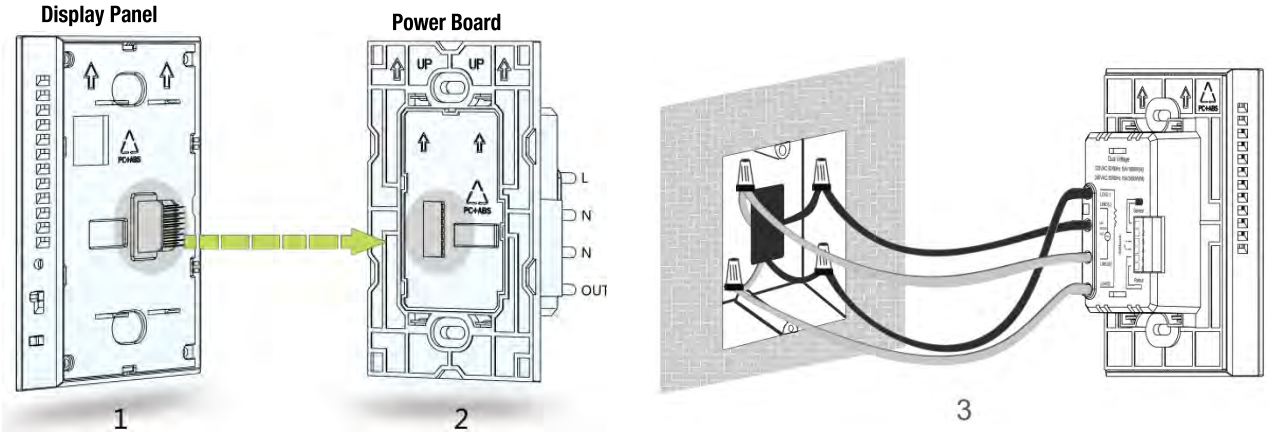
WARNING!

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 ½' 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.

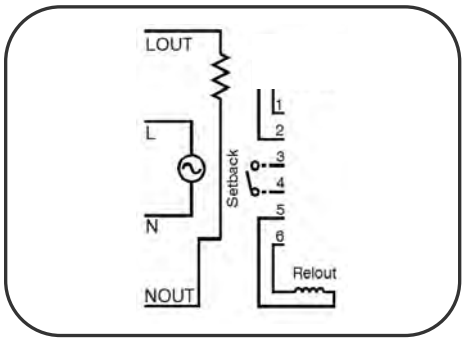
(Optional) Connection to a Slave Relay (K312RELAY)

If the heating area requires the addition of a Slave Relay, connect the low voltage wire for an auxiliary Slave Relay (K312RELAY) into terminals 5 & 6 (Relout) on back of the power board to add a zone. See drawing below.

9. 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.
10. Make sure your K322E 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.

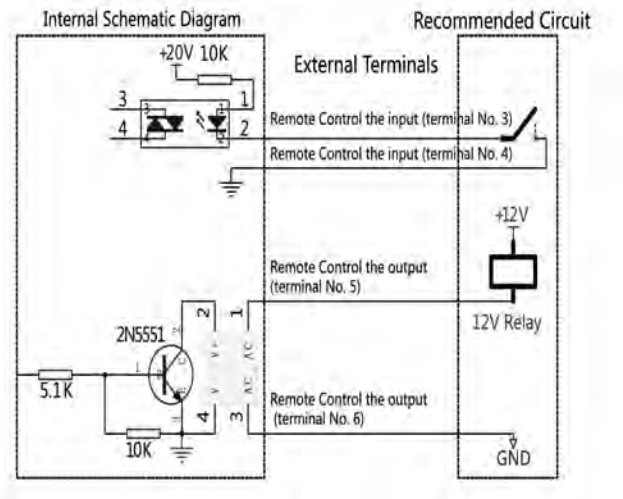
WIRING INSTRUCTIONS (CONTINUED)

WIRING DIAGRAM:



Safety Information：

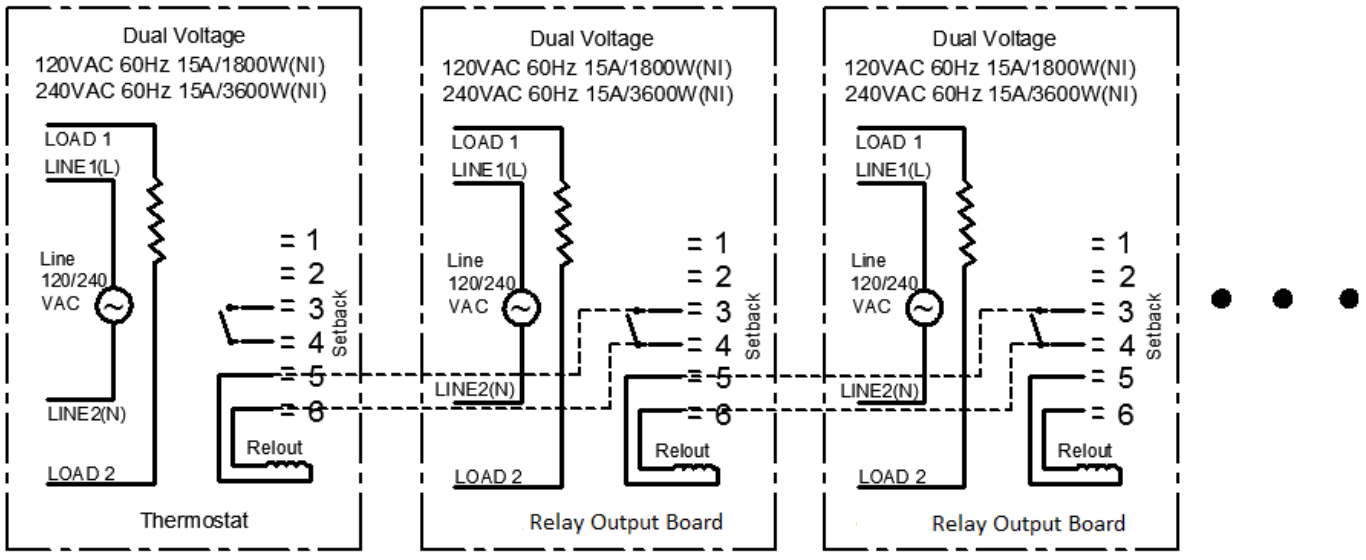
- Installation must be carried out by a certified professional electrician.
- Disconnect all power before performing maintenance work to avoid product damage.
- Shocking, dropping or stepping on the product will damage it and void the warranty.
- The thermostat should be kept away from corrosive chemicals.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



Control Wiring :

- 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 surface. Multiple Slave Relays can be interconnected in a daisy chain, see below:

Master / Slave Wiring Diagram



Master Thermostat—K322E **Slave Relay #1—K312RELAY** **Slave Relay #2—K312RELAY**

OPERATION INSTRUCTIONS

K322E Non-Programmable
ClearTouch™

ON/OFF Settings

ON: From the OFF status, slide the ON/OFF side switch up to turn the unit on. Time clock, actual probe temperature, working mode and output status will be displayed on the screen.

OFF: From the ON status, slide the ON/OFF switch down to turn the unit off. It will display OFF and all outputs will be open.

Setting the Set Temp

In any mode, press ▼ or ▲ button to enter into the Set Temp settings interface of the corresponding mode. The Set Temp is blinking.

Press ▼ button to decrease the temperature, press ▲ button to increase the temperature set point.

After enter into the interface of Set Temp settings, press ▼ or ▲ button for 3 sec. to decrease/ increase the temperature continuously.

Once completed, press the **CONFIRM** button on the right side of the thermostat to confirm changes or wait for 10s without any operation to save the values and return to the normal working interface automatically.

Keypad Lock

In the normal working interface, press ▼ and ▲ buttons simultaneously to lock the keypad, at the same time the icon 🔒 will display on the screen.

When the keypad is locked, no adjustment is possible. When the icon of Keypad Lock 🔒 displays on the screen, press ▼ and ▲ buttons simultaneously to unlock the keypad, and the icon 🔒 will disappear from the screen and the keypad is back to its normal state.

Room Temperature Control Mode

When the icon Ⓐ displays on the screen it indicates the system is in Room Temperature Control Mode, when the icon displays on the screen, indicating the ambient temperature from the built-in probe. When the detected indoor temperature is below the set temperature by -2°C (-4°F), electrical heating will be turned on, and the icon ≋ will display on the screen; when the detected indoor temperature is above the set temperature, electrical heating will be turned off, and the icon ≋ will disappear from the screen.

OPERATION INSTRUCTIONS CONT.

Remote Control of Thermostat

When there is a remote control signal input, the Remote icon (bar) blinks; when the detected indoor temperature is below the set temperature by -2°C (-4F), electrical heating will be turned on, and the icon will display on the screen; meanwhile, the Relout sends the output signals. When thedetected indoor temperature is above the set temperature, electrical heating will be turned off, and the icon will disappear, and the Relout turns off the power Module output signal. The default set temperature is 16.5℃ (61℉) on the remote control mode. Note: Remote signal control signal has the higest priority in the logic sequence.

Sensor Failure

When the sensor fails to work, the error icon EEE will be displayed on the screen. The output relay will open. Heating output will stop. Replace sensor.

CONFIGURATION OF USER-DEFINED SETTINGS

Configuration of User Parameters (Hidden Menu)

When the thermostat is OFF: Press and hold the CONFIRM button to enter into the setting interface. Default values and options are defined below:

NO.	Parameter	Default Value	Setting Range	Note
P1	Room Temperature Calibration	0 (00)	-9.5 ~ 9.5°C (-16~16°F)	
P2	Temperature Backlash Value	2°C (4°F)	-0.5 ~ 10°C (-1~18°F)	
P3	Key Volume Level	3	OF/0-9	OF: OFF 0-9: Length of the Key Volume
P4	Backlight Brightness	5	1-8/NO/ FO	1-8: Reserved NO: Always on FO: Energy Saving of Backlight
P5	Celsius/Fahrenheit	OF	OC/OF	OC: Celsius OF: Fahrenheit (After setting, please reset to factory default.)
P6	Factory Reset	53	0-99	Set it to 55 and then press S3 to confirm to set it to Factory Reset.
P7	Heating temp increasing speed	5	0-99	
P8	Max. Temp. range	21°C (70°F)	0-99°C (32-211°F)	
P9	Min. Temp. range	5°C (41°F)	5-99°C (41-211°F)	

Troubleshooting

Problem	Solution
Thermostat functions but no heat from the system	Check wiring instructions & wire identification. Refer to heater manufacturer's installation manual.
No display	Check wiring connection on the back of the unit
Error EEE	Build-in air-sensor is defective. Contact supplier for replacement.