

# HARVIA

## Digital KIP Heater Installation & Owner's Guide



This guide should be used in conjunction with the manufacturer's heater manual found inside the heater box.  
Please be sure you and your electrician review both before installation.



**Read this entire manual through to the end before proceeding with the installation.**

## HEATER INSTRUCTIONS

Your Salus Sauna is paired with a genuine Finnish heater manufactured by Harvia Oy, the world leader in sauna heaters. Refer to this guide for installation and operation instructions. **Please note, a licensed electrician should perform all electrical work**, and Salus Saunas staff is available to assist with any questions you or your electrician may have. Please call us at 888-287-0111 for technical assistance.

## PERFORMANCE EXPECTATION

Based on its cubic footage, your sauna kit has been paired with an appropriately sized heater to achieve optimal sauna temperatures. Properly installed, you should expect your KIP heater to consistently heat your sauna to at least 170 F at approximately head height when sitting on the bench. This temperature should be achieved in 45-60 minutes, although this timeframe can be longer depending on the ambient temperature outdoors.

Please note, saunas at elevations greater than 5,000' above sea level may not perform as efficiently as they would at sea level. If you are above this threshold and are not achieving the aforementioned expectations, please contact Salus Saunas technical support.

## HEATER WARRANTY

Your Harvia heater comes with a 1 year warranty on the heating elements, and a 5 year warranty on the other components.

Information for your electrician:

### 4.5kW and 6.0kW KIP Heaters

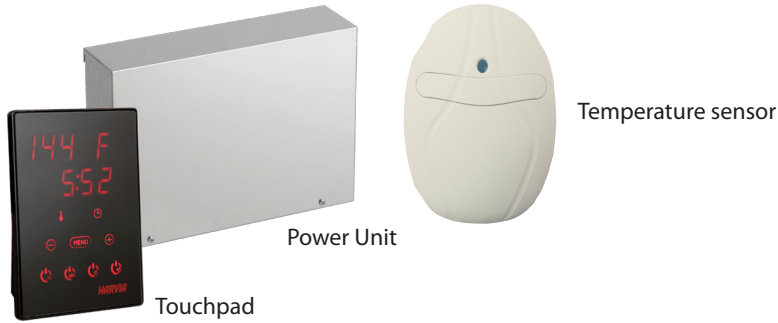
- 30-amp double pole breaker
- 240 volts
- 1 Phase
- 10/2 wire. If the distance is greater than 90 feet from the power source, we recommend using an 8/2 wire to accommodate for voltage drop.
- Do not use GFCI with this heater
- Use copper wire with 90C insulation

### 8.0kW KIP Heaters

- 40-amp double pole breaker
- 240 volts
- 1 Phase
- 8/2 wire
- Do not use GFCI with this heater
- Use copper wire with 90C insulation

**WARNING!** Do not place anything combustible close to heater, above the heater, and on both sides of the heater. This includes but not limited to towels, lights, robe hooks, accessories, etc. Nothing should be on the same wall as your heater that is combustible.

**Note:** It is possible you will receive two temperature sensors - one in the heater box and one in the Xenio control box. They are the same sensor - set one aside as a spare for possible later use.

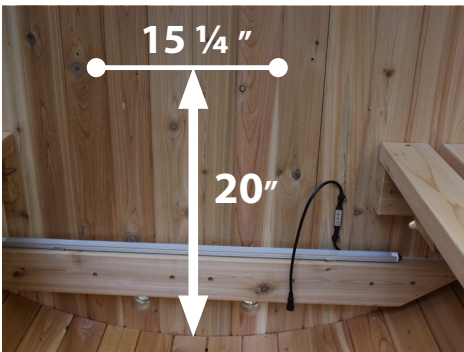


The KIP heater is a wall mounted unit. Position the heater in the designated heater location in your sauna according to the instructions below.

Remove the hardware bag from the baggie with the safety placards (2), selecting the two longer lag screws (1.5"). You will secure these into the sauna wall so that 1/4" of the screw protrudes from the wall



**a. For barrel saunas,** the 1 1/2" lag screws should be mounted approximately 20" off the lowest point of the barrel and spaced 15 1/4" apart and centered above the vent holes. Note: The heater will conceal a portion of the LED light. This is normal.



**b. For indoor saunas,** the screws should be mounted 20" off the floor, and spaced 15 1/4" apart approximately centered above the vent holes (if present). It is fine that the heater is covering the holes as ventilation still occurs.



Hang the heater on the mounting screws to ensure it is level and that its base sits 5-7" off the floor of the sauna.

If these criteria are met, make a mark on the wall of the sauna directly behind one of the rubber gaskets on the lower back of the heater; this will be where the power enters the sauna. Take the heater off the wall and remove the rubber gasket, exposing the cutout. It does not matter which gasket is removed.



**NOTE:** While this location is the most common, the power can enter the sauna at any location. It is not recommended you use the pre-drilled vent holes as an entrance for the conduit.

Remove the two screws holding the stone guard in place. Pry the guard back and lift up to remove it. Clip the ziptie holding the heating elements in place being sure the tie doesn't fall into the heater.



Flip the heater on its back and remove the bottom cover so your electrician can gain access to the terminal block.

# POSITIONING THE HEATER COMPONENTS

## Indoor Saunas

For indoor sauna applications, mount the power unit on or near the sauna. It can be mounted on the exterior of the sauna, or on an adjacent wall. The main power for your heater will connect here first, and then relay onto your heater. Next, consider where you'd like to mount your touchpad. You can mount the touchpad wherever it's most convenient for you. We do not recommend mounting the touchpad in the sauna itself.

## Outdoor Saunas

Neither of these components are waterproof, so proper precautions should be taken for outdoor sauna applications. Please consider the following:

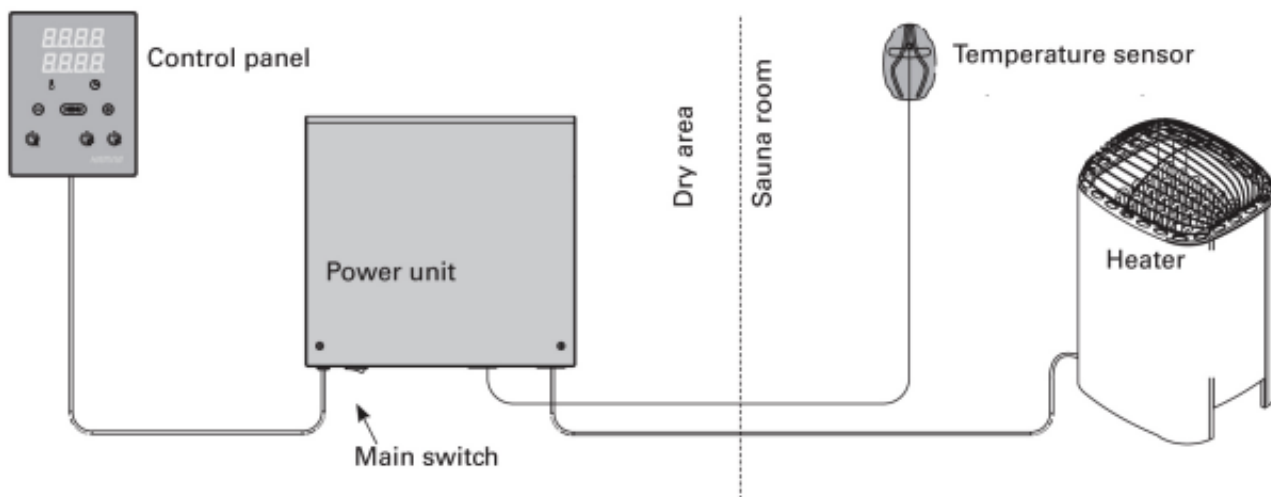
### Power Unit

- The power unit should be mounted in a dry location. If it cannot be mounted in a dry location, then it should be mounted in a ventilated weatherproof enclosure.
- Please note that the temperature sensor that comes with the sauna kit has a 15' reach - the sensor is mounted in the sauna and connects to the power unit. If the sauna is located greater than this distance away from where the power unit is installed, then the power unit should be mounted nearer to the sauna in a weatherproof enclosure with proper ventilation. The image on the right is an example of an enclosure. Alternatively, you can purchase a longer temperature sensor wire directly from Salus Saunas.



### Touchpad

- The touchpad should be mounted indoors in a dry area.
- The touchpad connects to the power unit with the provided 20' data cable. If you need a longer data cable for your application, you may purchase one directly from Salus Saunas.





## CONNECTING YOUR HEATER TO POWER

Please note, the power unit provided (CX170-U1-15) with your sauna is rated for single-group connection. The instructions below are for single group connections only.

### Incoming Power

First, you will need to bring power to your power unit. Remove the power unit's cover and pry out the appropriate knockouts that will allow the wiring to enter and exit the unit.

Connect the power cord to the appropriate terminals, with the two hot lines connecting to the left-most L1 and L2 terminals, and the ground connecting to the ground terminal. A neutral line is not needed - this is only required if a light or ventilation fan is connected to the power unit, an application that is not available in the U.S. market.

### Outgoing Power

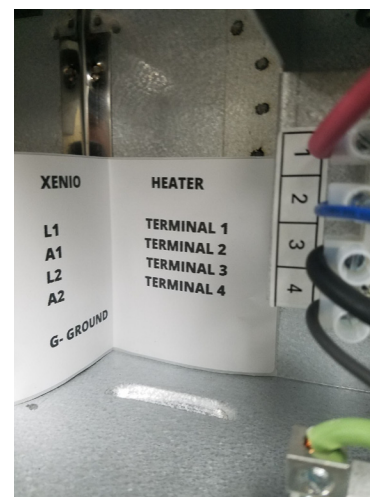
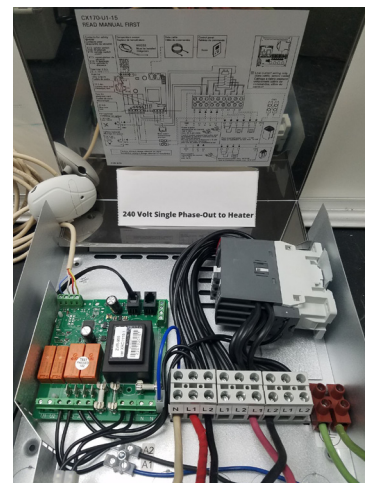
Next, you'll want to relay power to the heater itself.

First, connect the ground at the power unit to the ground terminal at the heater. Next, connect outgoing L1 to T1 at the heater, and outgoing L2 to T3 at the heater. Next, complete the high-limit safety-circuit by connecting A1 at the power unit to T2 at the heater, and A2 at the power unit unit to T4 at the heater. You may use strands of 12ga wire for the high-limit safety circuit connections.

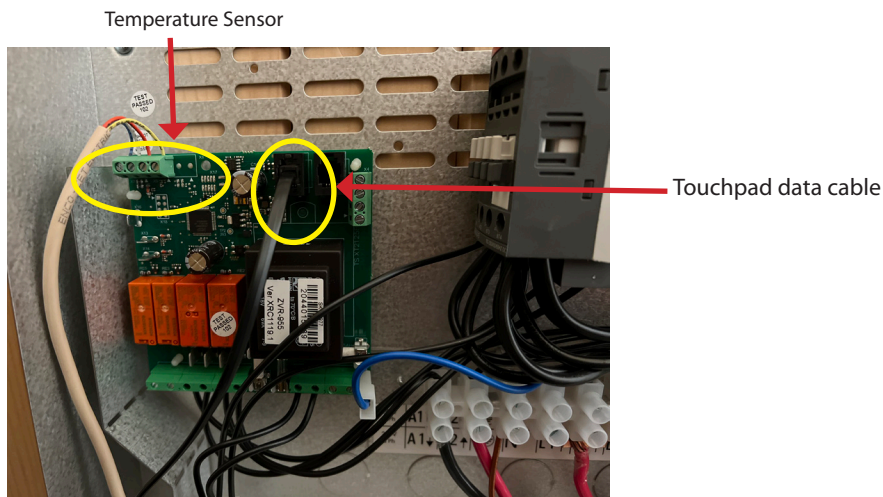
**\*\*\*NOTE:** If your heater arrived with copper jumpers pre-installed in the heater's terminal block, please remove and discard these. These are not needed.

### Temperature Sensor

The temperature sensor mounts in your sauna and provides feedback to the power unit regarding the temperature in your sauna. We advise mounting this sensor approximately 14" to the side of the heater, and approximately 14" below the highest point of the sauna. Use the provided hardware to mount the sensor.

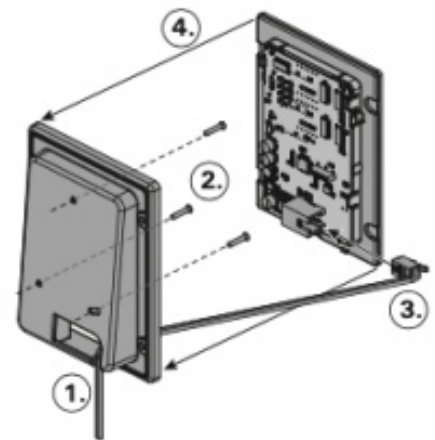


Next, feed the sensor wire out of your sauna in order to connect to the power unit. Secure the wiring to the circuit board mini-terminal. Starting on the outside and moving in, the wires should connect in the following order: blue - white - red - yellow.



### Touchpad

The touchpad should be mounted indoors in a dry location, preferably in your home. Once you've determined this location, use a flathead screwdriver to gently pry the screen of the touchpad from the mounting bracket. Feed the data cable through the hole in the mounting bracket, and mount the bracket to the location you selected. Push the data cable connector into the port on the back of the screen and snap the screen back into the bracket.



Next, connect the other cable to the port closest to the power unit's mini-terminal block that is connected to the temperature sensor. Replace the power unit's cover and turn the power switch to the on position.

### PLACING THE STONES

Rinse your sauna stones to prepare them for placement. Beginning between the back wall and back heating element, place the smaller stones in between and around the three heating elements being sure that the heating elements stay in their original vertical position and do not touch each other. The stones should touch the elements, but not bend them. Reserve the larger stones for placement on top of the heating elements, covering them completely. Replace the stone guard you removed at the beginning of the heater installation.



Note: Packing stones in too tightly will restrict airflow and affect the efficiency of your heater. Loosely position the stones around and above the heating elements. It is common to have 5-10 stones left over.

## OPERATING YOUR HEATER

Note: Your touchpad's default settings are compatible with your heater. No changes are necessary.

### Immediate Start

Turn your breaker on. If everything is connected correctly, the buttons at the bottom of the screen should illuminate. The bottom left button is the main power unit - press it, and you should hear a loud "clunk" from the power unit, which is the contactors engaging. If you do nothing, it will begin heating immediately; the display will show the current temperature in the sauna, as well as the time remaining on the heat cycle.



### Delayed Start

Turn the power button on the touchpad. Press "menu" until the clock icon is flashing. Adjust the preset time by pressing + or - until you get to the desired preset time. You are able to preset your heater in 10 minute increments for up to 12 hours. The time remaining before your heater begins heating should appear below the brackets at the top of the touchpad.



### Setting the Temperature

The temperature displayed on the screen is the temperature inside the sauna where the temperature sensor is mounted. To set your desired sauna temperature, press the power button on the touchpad. Press "menu" until the thermometer icon flashes. Adjust the temperature with the + or - until your desired temperature is displayed. The sauna will heat to and hover around this temperature.

## GENERAL OPERATION INFORMATION

- Your Digital KIP heater is UL certified. Because of this, it is required to shut off after one hour of use. If you wish to continue your sauna session, you will have to restart the heater if the heating period times out.
- If your heater isn't heating, turn off your breaker and try pressing the reset button under the heater as the high-limit safety circuit may have been tripped. If this continues to happen, your sensor may be too high or too close to the heater.
- This is a traditional sauna heater with sauna stones. As such, you may pour water onto the stones according to your humidity level preference. Please note, however, it often only takes a ladle-full to achieve the desired effect.

If there is an error code displayed on the touchpad, please refer to the error code list found in the manufacturer's manual

