

# Virta Heater Installation & Owner's Manual



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.

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Your Salus Saunas 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. 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**

Properly installed, you should expect your Harvia Virta heater to consistently heat to 180-190 degrees fahrenheit.

# YOUR HEATER'S WARRANTY

In a residential setting, your Harvia heater comes with a 1 year warranty on the heating elements, and a 5 year warranty on the other components. In a commercial setting, your heater comes with a 1 year warranty on all components in the heater.

Our warranty does not cover general wear and tear caused by the elements, neglect, or faulty electrical connections.

VIRTA HEATER POWER REQUIREMENTS									
Heater Size (kw) Standard Virta	Model Number	Voltage (V)	Group	Phase	Recommended Wire Size	Amperes Drawn	Recommended Breaker Size	Power Unit Required	Heater Dimension (wxdxh)
6	HL6U1	240	1	1	10/2	25	30	CX30-U1-U3	16x13x33
8	HL8U1	240	1	1	8/2	33.4	40	CX45-U1-U3	16x13x33
9	HL9U1	240	1	1	8/2	37.5	45	CX45-U1-U3	16x13x33
10.5	HL11U1	240	1	1	6/2	43.75	50	CX45-U1-U3	16x16x33

Note: per the manufacturer's recommendation, a GFI breaker should NOT be used.

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.

# POSITIONING YOUR HEATER, POWER UNIT, AND TOUCHPAD

You should have received two boxes with all the necessary components for your Virta heater. The first is the heater box itself. Remove the heater from the box and clip the zip tie from the stone grates. Next, open the Xenio control box - this box will contain the power unit, the digital touchpad, hardware, and temperature sensor.



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 Virta heater is a floor mounted unit. It should sit on a level surface, but the feet can be adjusted to accommodate a slight gradient. Position the heater in the designated heater location in your sauna.

# **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:

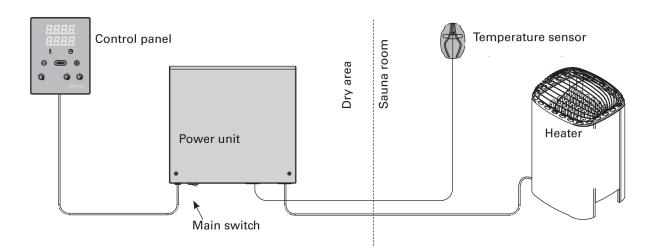


#### **Power Unit**

- 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 left 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**

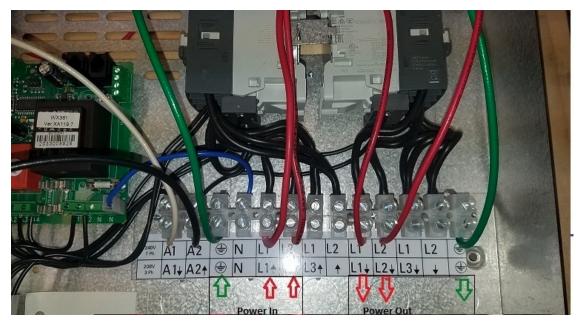
Please note, the power unit provided with your sauna is rated for single-group connection. The instructions below are for single-group connections only.

#### **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.

Note: for visual purposes the wiring images you will see in this manual do not utilize the knockouts.

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.

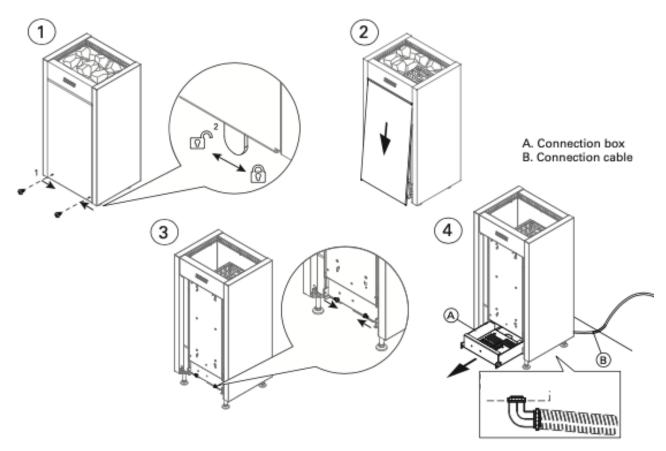


Power Unit Wiring

#### **Outgoing Power**

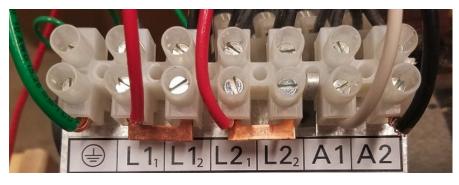
Next, you'll want to relay power to the heater itself.

Remove the front cover of the heater by forcing the two tabs under the heater towards the center of the heater and lifting out. Next, remove the screws holding the terminal-block tray in place. Slide out the tray to gain access to the terminal-block. Also, cut out the center of one of the rubber gaskets under the heater - this is where the wire will enter the heater.



Using the same gauge wire you used to bring power to the power unit, connect the left-most outgoing L1 and L2 power unit terminals to  $L1_1$  and  $L2_1$  on the heater. Next, connect  $L1_1$  and  $L1_2$  together with the provided copper jumpers. Do the same with L2\_1 and L2\_2. Finally, connect the ground terminal at the power unit to the ground terminal at the heater.

Now, connect A1 on the power unit to A1 on the heater. Repeat for A2. This completes the high-limit safety circuit. It is ok to use a 12 gauge wire for this circuit.



Heater Wiring

#### **Temperature Sensor**

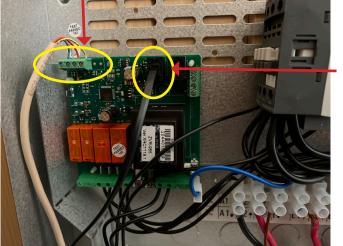
The temperature sensor mounts in your sauna and provides feedback to the power unit regarding the temperature in your sauna. We advise mounting this sensor approximately 18" to the side of the heater, and approximately 18" below the highest point of the sauna. Use the provided hardware to mount the sensor.



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.

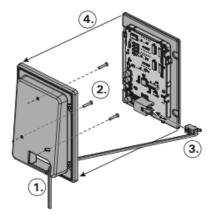
**Temperature Sensor** 



Touchpad data cable

#### 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.

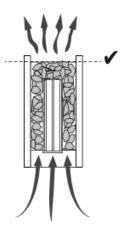


Next, connect the other cable to the port closest to the power unit's mini-terminal block that is connected to the temperature sensor.

Replace the unit's cover and turn the power switch to the on position.

#### **Placing the Stones**

You should have received 4 boxes of stones with your Virta heater - you might not use all of them. Gently place the stones around and on top of the heating element grates. *Do not "play Tetris" with the stones to fit as many in the heater as possible* - this will compromise heating efficiency. Once you set a base layer of stones in the heater, gently drop the stones and let them rest where they land. Fill the heater with stones until the top of the stones are 1-2" below the top edge of the heater.



It is recommended that you remove the stones once a year, and replace any that have cracked or corroded. It is a good idea to rinse these stones at this time, too. If you need more stones, you may purchase them from Salus Saunas.



# **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 Virta 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, 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.



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