

# Cilindro Xenio Heater Installation & Owner's Manual



# **IMPORTANT SAFETY INSTRUCTIONS**

DANGER: Indicates a hazardous situation that, if not avoided, will result in death or serious injury. WARNING: Indicates a hazardous situation that, if not avoided, could result in death or serious injury. CAUTION: Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury. NOTICE: Indicates information considered important, but not hazard-related.

READ ALL INSTRUCTIONS BEFORE INSTALLATION AND USE TO AVOID INURY OR DAMAGE TO HEATER

FOLLOW SAFETY INFORMATION IN THIS DOCUMENT TO AVOID SERIOUS INJURY OR DEATH

REFER TO YOUR LOCAL BUILDING CODES FOR ANY SPECIFIC INSTALLATION REQUIREMENTS

ALL ELECTRICAL WORK NEEDS TO BE COMPLETED BY A LICENSED ELECTRICIAN. FAILURE TO DO SO COULD CAUSE INJURY OR DAMAGE TO THE HEATER.

MANUFACTURERS MANUAL TAKES PRECEDENCE OVER ANY DIRECTIONS LISTED IN THIS DOCUMENT

**KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE** 

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• This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

• Consult your doctor about any health-related limitations related to sauna use. Ignoring advice from your medical provider could cause serious injury or death.

• Do not let people with pre-existing health conditions bathe in the sauna on their own. Using the sauna could cause these users to lose consciousness.

• Parents should consult your pediatrician before allowing children to use the sauna. Ignoring advice from your medical provider could cause serious injury or death.

• Do not smoke, use alcohol, or exercise in the sauna. These tasks could cause users to lose consciousness.

• Do not exceed 30 min. in the sauna at one time, as excessive exposure may be harmful to health. The sauna should not be used as an endurance test.

• Do not place any combustible material over the sauna heater (towels, bathing suits, wooden bucket or ladle)! This will cause the sauna to catch fire.

• Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98,6 °F. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting.

• Do not sleep in a sauna in which the heater is operating. Sleeping in a heated sauna may lead to injury or death.

• Do not alter the heater in any way, unless explicitly instructed in this manual. Altering the heater could cause electrocution or fire risk.

• Only use stones approved for sauna heater use. Inadequate stones may crack or explode leading to serious injury.



• Keep all occupants away from the heater and when it is hot. The stones and outer surface of the heater may burn your skin.

• Do not throw excessive amounts of water on the stones. The evaporating water is boiling hot and could cause burns.

• Do not throw water directly onto the elements. This could cause burns and damage to the heater.

• Be very careful when moving in the sauna, as the benches and floors may be slippery. This could cause the user to slip and fall.



Your Almost Heaven Sauna is paired with a genuine Finnish heater manufactured by Harvia, the world leader in sauna heaters. This guide should be used in conjunction with the manufacturer's heater manual found inside the heater box. The Almost Heaven Saunas staff is available to assist with any questions you or your electrician may have. Please call us at 888-355-3050 for technical assistance.

#### **PERFORMANCE EXPECTATION**

Properly installed, you should expect your Harvia Cilindro heater to consistently heat to 170-180 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.

CILINDRO HEATER POWER REQUIREMENTS									
Heater Size (kw) Built-in Controls	Model Number	Voltage (V)	Group	Phase	Recommended Wire Size	Amperes Drawn	Recommended Breaker Size	Power Unit Required	Heater Dimensions (WxDxH in inches)
6	HPCS6U1H	240	1	1	10/2	25	30	CX30-U1-U3	14/13/40
8	HPCS8U1H	240	1	1	8/2	33.4	40	CX45-U1-U3	14/13/40
9	HPCS9U1H	240	1	1	8/2	37.5	45	CX45-U1-U3	14/13/40
10.5	HPCS11U1H	240	1	1	6/2	43.75	50	CX45-U1-U3	16/15/45

## POSITIONING YOUR HEATER, POWER UNIT, AND TOUCHPAD

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Improper installation of heater could cause heater to fall leading to burns and other injuries.

You should have received two boxes with all the necessary components for your Cilindro heater. The first is the heater box itself. Remove the heater from the box. 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.



Upon its arrival to you, the Cilindro heater has two adjustable feet pre-installed into its base. In this state, it can be used in conjunction with the provided mounting bracket, instructions for which can be found in the manufacturer's manual. However, when being installed in an Almost Heaven Sauna, it is recommended that you remove the two additional feet from the provided mounting bracket replacing them into the vacant holes under the heater. In this way, the heater will be sitting directly on the floor.

Note: You will need channel-lock pliers to remove and reinstall the feet.

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

Due to its height, the top of the Cilindro heater should be anchored to the wall of the sauna. A bracket is provided in the hardware to achieve this; secure it to the wall and heater following the instructions in the manufacturer's manual. We recommend anchoring the heater once all connections have been completed, and prior to placing the stones.

## **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:

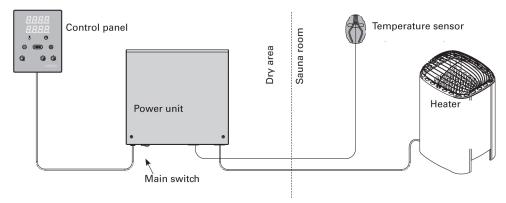
#### **Power Unit**



- 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 at the left is an example of an enclosure. Alternatively, you can purchase a longer temperature sensor wire directly from Almost Heaven Saunas.

## Touchpad

- The touchpad should be mounted indoors.
- 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 Almost Heaven Saunas.



## **CONNECTING YOUR HEATER TO POWER**

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• Turn off power to heater at the breaker before beginning installation. Do not turn power on until installation is complete. Failure to turn off the power could lead to electrocution and even death.

## NOTICE

• Do not use ground fault interrupter (GFI), per UL listing and approval. Using GFI will cause damage to the heater.

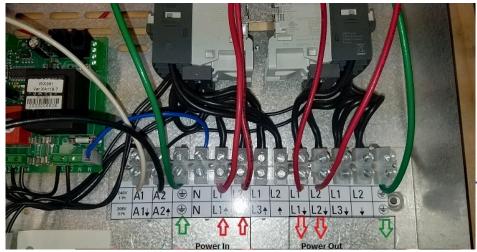
Please note, the power unit provided with your sauna is rated for single-group connection. The instructions below are for single-group connections only.

#### **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**

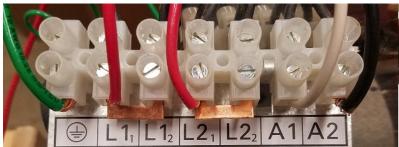
Next, you'll want to relay power to the heater itself.



Remove the terminal block cover (at the back of the heater), and cut out the center of the rubber gasket under the heater - this is where the wire will enter the heater to connect to the terminal block.

Using the same gauge wire you used to bring power to the power unit, connect the left-most outgoing  $L_1$  and  $L_2$  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 highlimit safety circuit. It is sufficient to use a 12 gauge wire for this circuit.



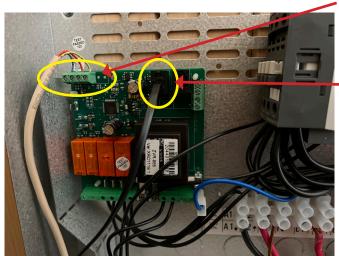
Heater Wiring

#### **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.

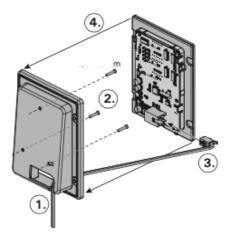


Temperature Sensor

Touchpad data cable

#### Touchpad

The touchpad should be mounted in a dry location. 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 on the underside of the power unit to the "on position".

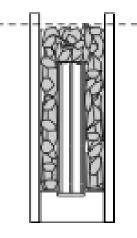
## **PLACING THE STONES**

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• Do not operate the heater without rocks properly installed. This creates a fire risk and damage to the heater.

# **A**CAUTION

- Before placing or adjusting stones, ensure heater is back to room temperature. Failure to do so may cause burns.
- Wear gloves when placing stones in the heater. Inside of heater is sharp and cause cuts or other injuries.



Depending on the size heater you selected, you should have received boxes of stones with your Cilindro heater - you will not use all of them. Rinse the stones before placing them into the heater to remove any dust. Once cleaned, 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 to 2" below the top of the heater.

It is recommended that you remove the stones once a year, replace any that have cracked or corroded. It is a good idea to rinse these stones at this time, too. You may purchase additional stones from Almost Heaven 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 the heater turns on 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 Cilindro heater is UL certified. Because of this, it is required to shut off after one hour of use. 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.

