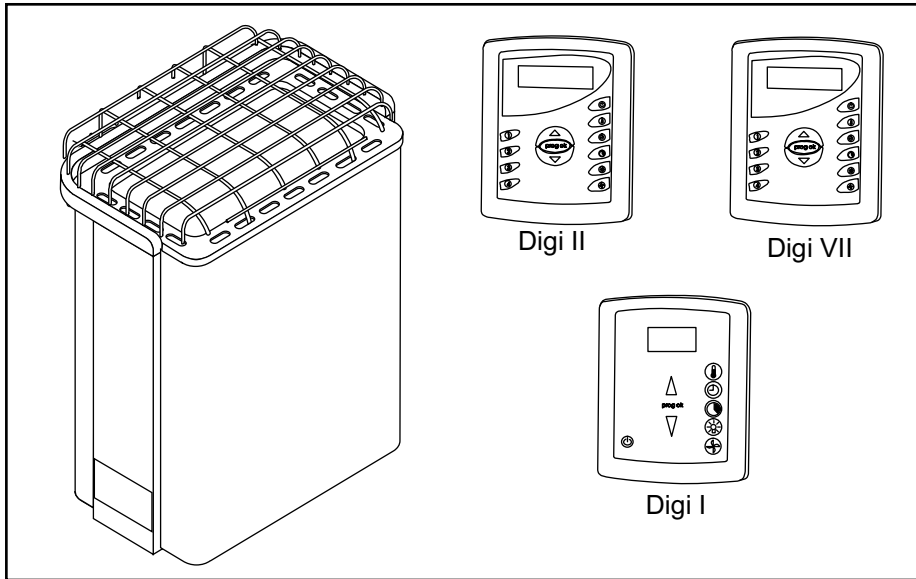


Installation & Operation Instructions



Sauna Heaters SO-45-D, SO-60-D, and SO-80-D (UL # 1714-450-1705, 1714-600-1705, 1714-800-1705) and **Control Models Digi I 60 min, Digi I 24 hr, Digi II 60 min, Digi II 24 hr, Digi VII 60 min, and Digi VII 24 hr** (UL # 1601-11, 1601-11-1, 1601-14, or 1601-14-1, 1601-15, 1601-15-1)

Read all instructions carefully before installation. Please leave all instructions and warranty with the owner.

WARNING

Prolonged exposure to elevated temperatures is capable of inducing hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches several degrees above the normal body temperature of 98.6°F. The symptoms of hyperthermia include an increase in the normal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of the hyperthermia include failure to perceive heat, failure to recognize the need to exit the room, unawareness of impending hazard, fetal damage in pregnant women, physical inability to exit the room and unconsciousness.

WARNING

The use of alcohol, drugs, or medication is capable of greatly increasing the risk of fatal hyperthermia.

SECTION 1: GENERAL INFORMATION

These heaters are UL approved for permanent installations. All wiring must be performed in accordance with NEC and local codes. See **Diagram 4** for wire and room size requirements.

These heaters are wall mounted, 18¾" W x 11" D x 24¼" H, with wall mounted controls outside the sauna room.

WARNING

Do not take a sauna if using alcohol, drugs or medications.

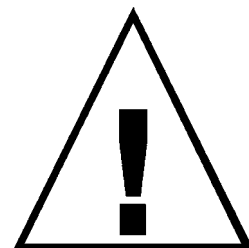
Pregnant women or persons with poor health should consult their physician before using any sauna.

Caution fire hazard: Do not use the sauna room for drying clothes, bathing suits, etc. Do not hang towels above heater or place any object other than the rocks supplied on the heater. If any darkening of the wall around the heater is noticed discontinue sauna use immediately.

Inspect sauna regularly for required maintenance to heater, control and benches. Replace wood surfaces which show any signs of deterioration.

The heater gets extremely hot during operation and should not be touched or burns may result.

Minors should be adequately supervised whenever near a hot or warming sauna.



Installation & Operation Instructions

DIAGRAM 1

MOUNTING BRACKET LOCATION AND MINIMUM DISTANCE TO COMBUSTIBLE MATERIAL

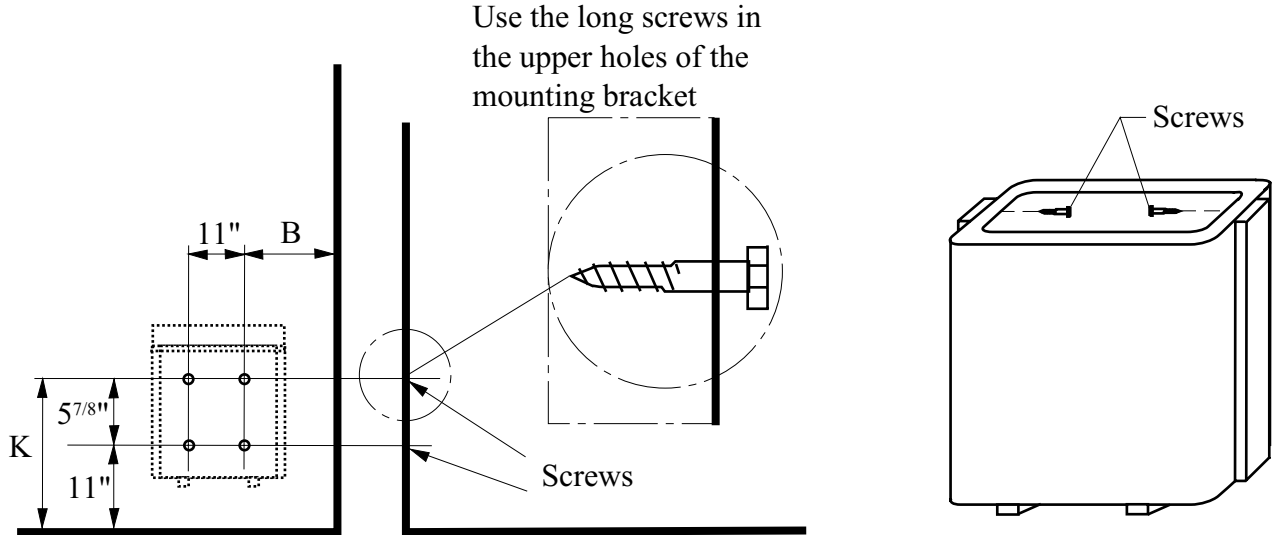


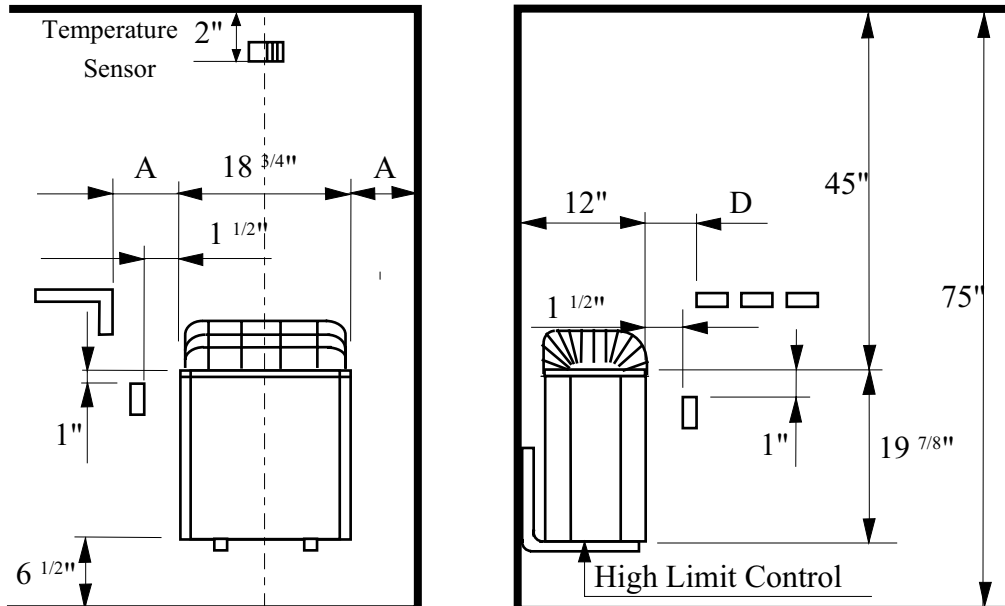
Table 1

HEATER	MINIMUM			
	"A" DISTANCE	"B" DISTANCE	"D" DISTANCE	"K" DISTANCE
SO-45-D 1714-450-1705	1 1/4"	5 1/8"	3.0"	16 7/8"
SO-60-D 1714-600-1705	2 1/4"	6 1/8"	4.0"	16 7/8"
SO-80-D 1714-800-1705	3 1/4"	7 1/8"	5.0"	16 7/8"

! OBSERVING MINIMUM DISTANCES IS REQUIRED TO REDUCE THE RISK OF FIRE HAZARD

Note:

Connect sensor wires to J3 pins 1 and 2 on circuit board in the heater. Low voltage wire must be routed through the protective paper channel inside the heater to separate low and high voltage wiring. See **Diagram 5** for proper connections.



Installation & Operation Instructions

SECTION 2: MOUNTING OF SAUNA HEATER

HANGING THE HEATER: Using the template provided, drill four 9/64" holes to fasten the heater brackets to the wall. Install two 1/4" x 1 1/2" hex head lag screws (supplied with the heater) through the top holes on the mounting brackets (one screw per bracket). Tighten these screws. The screws must be threaded through the wall into a framing member or backing board to support the heater weight. Locate the two 1/4" x 1" hex head lag screws (supplied with the heater) then install them into the two lower mounting holes. Tighten to lock the heater brackets in place.

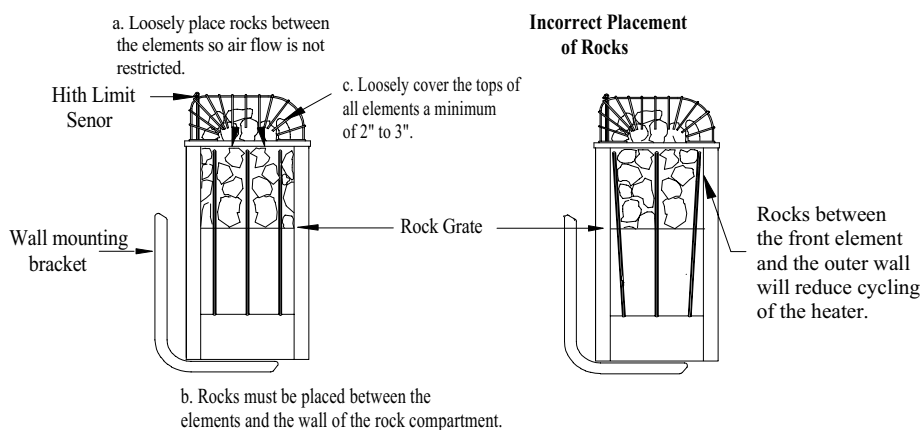
Place the heater on the wall brackets and fasten with screws. See **Diagram 1 & 2** for the heater location details and the necessary clearances to combustible materials.

SECTION 3: PLACING OF ROCKS

The rocks supplied with the heater have been chosen to provide the best heater performance. Use of any other type of rock may void the heaters warranty. Never operate the heater without rocks in place!

Rinse the rocks with water before placing in the heater. Packing the rocks too tightly may cause the heater high limit switch to trip. Follow the below rock placement instructions. After completion, attach the guard with the screws provided.

On a yearly basis, remove all rocks, clean rock fragments, and reinstall reusable rocks. Follow the directions below for placement and the amount to use of rocks to install.



1. Put smaller rocks in first around the outer perimeter of the heating chamber.
2. Completely fill all four sections (front, 2 center sections between elements, and back). In the outer sections, use smaller rocks placed more tightly (see note b).
3. Place rocks loosely in the center 2 sections (see note a).
4. Be sure rocks complete cover the elements (see note c).

WARNING

Fire sprinkler systems used inside any sauna room should be properly rated for sauna room temperatures.

Do not pour chlorinated pool or spa water on heater. Excessive water use on heater may cause damage and void warranty.

Do not install a shower in the sauna room.

Electric Shock Hazard - High voltage exists within this equipment. There are no user serviceable parts in this equipment. All installation and service to this equipment should be performed by qualified licensed personnel in accordance with local and national codes.

Do not construct sauna room so as to restrict air flow through the bottom of the heater.

Packing the rocks too tightly may cause the heater high limit switch to trip.

Installation & Operation Instructions

DIAGRAM 2

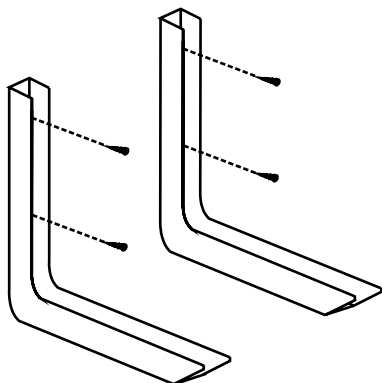


DIAGRAM 3

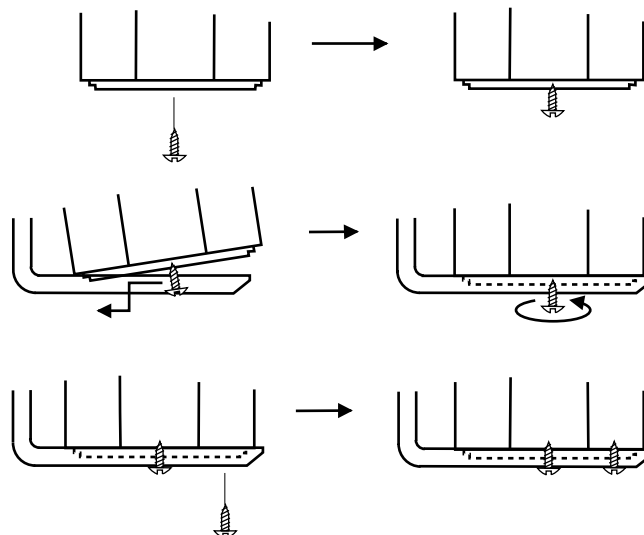


DIAGRAM 4

HEATER MODEL UL #	kW	MINIMUM ROOM			MAXIMUM ROOM		PHASE	VAC	AMPS	WIRE SUPPLY TO HEATER
		Floor Area	Ceiling Height	Volume Cu. Ft.	Ceiling Height	Volume Cu. Ft.				
SO-45-D 1714-450-1705	4.5	16 sq. ft.	75"	100	96"	210	1	208	21.6	2 #10 AWG + N+Gr
							1	240	18.8	2 #10 AWG + N+Gr
							3	208	12.5	2 #12 AWG + N+Gr
							3	240	10.8	2 #12 AWG + N+Gr
SO-60-D 1714-600-1705	6.0	28 sq. ft.	75"	175	96"	310	1	208	28.8	2 #8 AWG + N+Gr
							1	240	25	2 #8 AWG + N+Gr
							3	208	16.7	3 #12 AWG + N+Gr
							3	240	14.4	3 #12 AWG + N+Gr
SO-80-D 1714-800-1705	8.0	40 sq. ft.	75"	250	96"	425	1	208	38.5	2 #8 AWG + N+Gr
							1	240	33.3	2 #8 AWG + N+Gr
							3	208	22.2	3 #10 AWG + N+Gr
							3	240	19.2	3 #10 AWG + N+Gr

Installation & Operation Instructions

SECTION 4: ELECTRICAL HOOK-UP

Electrical installation must be made by a licensed electrician in accordance with the National Electrical Code and local regulations.

Remove the painted cover from the side of the heater. Route the feed wires and low voltage wires through the holes provided in the bottom of the heater and connect the wires to the appropriate labeled wires and circuit board positions. To determine the correct wire size, refer to **Diagram 4**. Use copper supply wire only, suitable for minimum 90 degrees C. The heater must be grounded! See **Diagram 5** for proper connections.

Connect low voltage control wires from A1 on heater to A1 on control, then repeat A2 through B5 on heater to A2 through B5 of the control. See **Diagrams 1 & 5** for proper connections.

SECTION 5: HEATER SCREEN (GUARD RAIL)

Install a wooden heater guard to prevent the sauna bather from accidentally touching the sauna heater. Install the heater guard rail with the height clearances and dimensions shown in **Diagram 7**.

SECTION 6: OPERATION

The controls for this heater have a thermostat to adjust the sauna temperature and a timer to control when the heater starts and stops. The maximum the timer will allow the heater to operate is 60 minutes. **Control Model Digi XX 24 hr (UL # 1601-XX-1) is for commercial applications with an attendant on duty.** This version of control allows the sauna to heat for a maximum of 23 hours. Clock will display hours and minutes.

The Control shall be mounted outside the room. A 16ft control wire is provided with the system. The maximum length of the control wire is 90ft and additional wire may be special ordered.

The sensor shall be mounted over the heater 2" from the ceiling; sensor wire is connected to terminals 1 and 2 on the circuit board. See **Diagram 1 & 5**

Locking Key Pad The control keypad can be locked. With the control in the Off mode, **press the up arrow key**, then **down arrow key** and then **fan key**. "Locked" will be displayed. This will make all keys inactive until the control is unlocked.

To unlock the control repeat the same sequence.

Control Overview Digi II 60 min (UL #1601-11)

Alarms The control is equipped with an alarm that indicates a faulty thermostat sensor and or wire. The control will display "heat sensor cable cut". During the alarm the control will turn power off to the heater. The control display will remain on. Rectify the fault situation and recycle power to heater. If problem persists refer to **Section 13**.

WARNING

Do not locate benches over heater. Minimum clearance of ceiling above heater 45".

For minimum clearance from heater to wooden surfaces refer to Diagram 1 for distances. The mounting brackets supplied provide the proper clearance from the heater to the wall.

Use only copper wire of the size and type indicated in the Heater Specification Chart and the temperature rating indicated on the heater junction box.

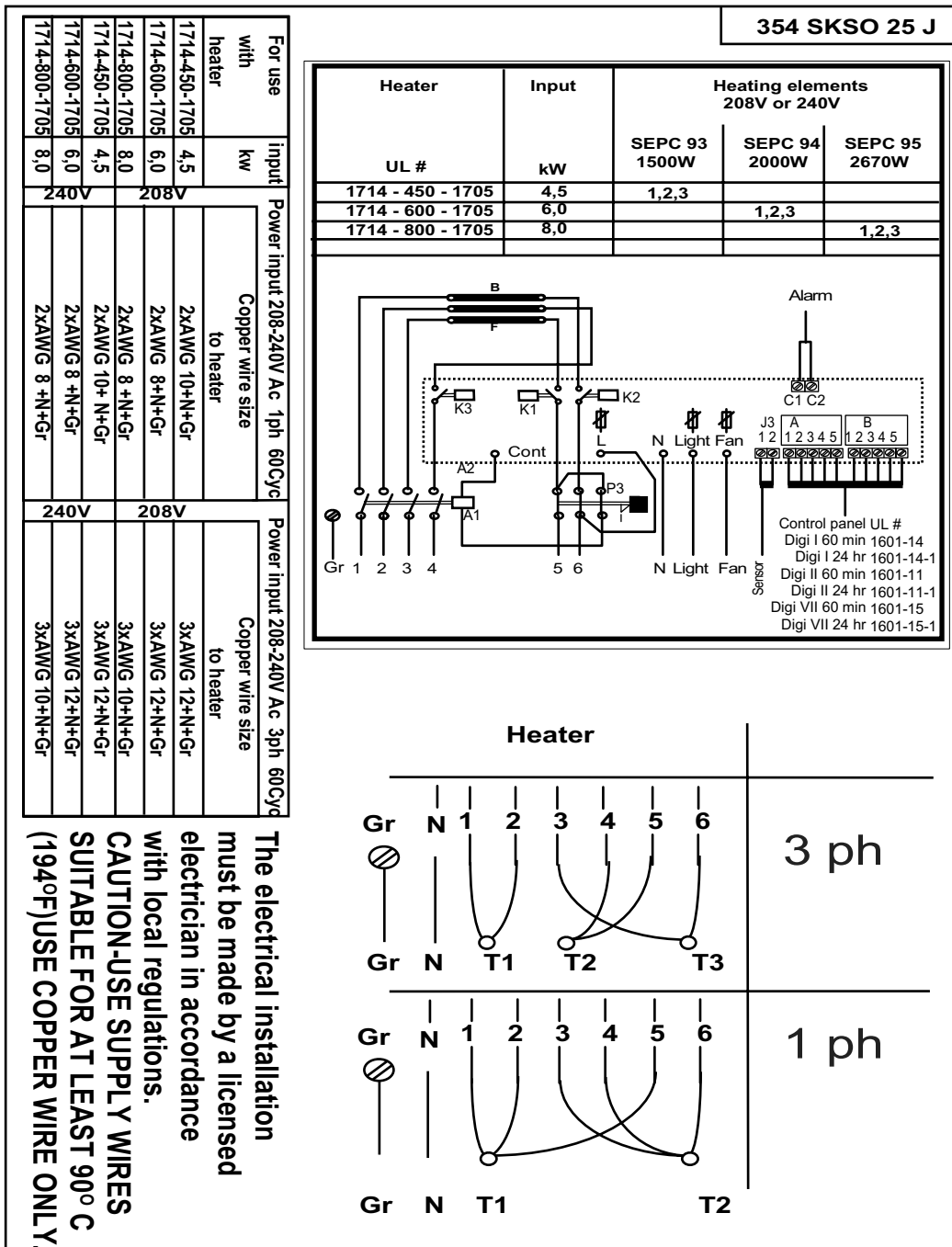
All heaters and controls must be grounded per NEC to prevent electrical shock in case of unit failure.

Electrical outlets or receptacle must not be installed in a sauna room.

A guardrail or fence is required around the heater to prevent burns from accidental contact.

Installation & Operation Instructions

DIAGRAM 5



The electrical installation must be made by a licensed electrician in accordance with local regulations. CAUTION-USE SUPPLY WIRES SUITABLE FOR AT LEAST 90°C (194°F) USE COPPER WIRE ONLY.

IMPORTANT WIRING INFORMATION:

A neutral wire is required to operate the control. The electrical installation must be made by a licensed electrician in accordance with local regulations.

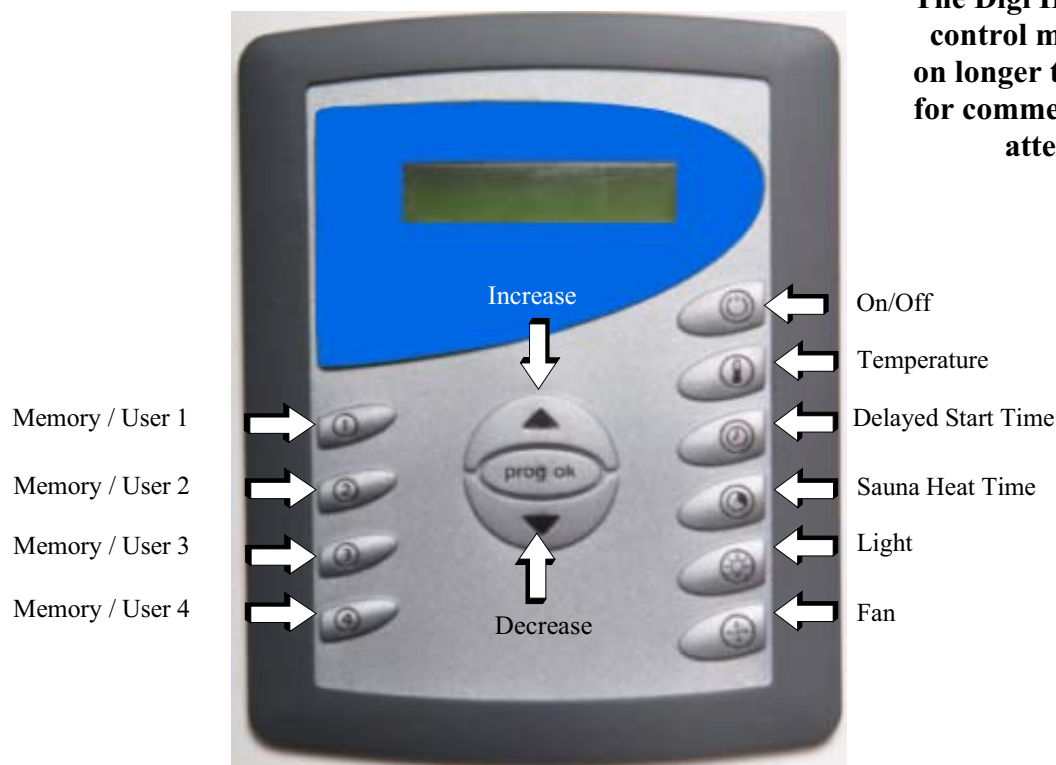
Use 14-2 with ground wire for the fan and light. Maximum 120W light and fan circuits allowed.

CAUTION-USE SUPPLY WIRES SUITABLE FOR AT LEAST 90°C (194°F) USE COPPER WIRE ONLY.

Installation & Operation Instructions

SECTION 6: OPERATION DIGI II

The Digi II 24 hr (UL# 1601-11-1) control model can be set to stay on longer than 60 minutes. This is for commercial use only where an attendant is present.



Control Setup for Control Model Digi II 60 min (UL # 1601-11):

This setup has **6 different menus**.

To escape from this **Setup Menus**, press the **On/Off** button or the device will **automatically exit** the menu in approx. **4 seconds**.

To enter the Setup Menu press **PROG/OK** button and hold down for approx. **3 seconds** until the following appears in the display:

MENU 1
TIME:12:00

Setting the Clock: Press the up arrow and hold down: The minutes and hours will begin to change. When the hour reads the correct time, release the up arrow key and enter minutes by repeatedly pressing the arrow key for each minute. Press **PROG/OK** to save the time in memory.

Next will display:

MENU 2
LANGUAGE: ENGLISH

Setting Language: Press the up or down arrow key repeatedly until the language you desire appears in the display. Press **PROG/OK** to save the Language in memory.

Installation & Operation Instructions

SECTION 6: OPERATION DIGI II, CONTINUED

Next will display:

MENU 3

OFFSET: T1 0C

Using the arrow keys, select the calibration value (0 +/-10C).

Example: After reading the temperature on the thermometer in the sauna, you may have noticed that the temperature reading on the sauna thermometer is lower than the display on the control. Set Offset T1 to +4C to get the displayed temperature to match the thermometer. **(This offset does not change the actual temperature, this is just for indication only.)** Press **PROG/OK**: to save the calibration value.

Next will display:

MENU 4

SMARTSAUNA: OFF

Using the arrow keys, select ON or OFF Press **PROG/OK**: to save the setting.

Note: SmartSauna records the temperature changes during a sauna, and based on this information, the control can determine the length of time needed to heat the sauna to reach a set value. **This function is only used in the time delay mode.**

Next will display:

MENU 5

CLOCK: 24 h

Using the arrow keys, select a 12 or 24-hour clock. If a 12-hour clock is selected, AM or PM will appear in the display after the time. Press **PROG/OK**: to save the setting.

Next will display:

MENU 6

TEMPERATURE: C


Using the arrow keys, select the desired temperature scale. (Celsius or Fahrenheit) Press **PROG/OK**: to save the setting.

Programming Memory (User buttons)

Press **ON/OFF** and the greeting appears in the display and the backlight comes on. Next press **PROG/OK** and the following will appear in the display: The first number indicates start time, the length of sauna duration, and the last number is the desired temperature.

5:30 PM 01:00 156F The maximum operational time is 60 minutes for the heater.


Note! The start time reading in the display is not saved in the memory slots. Time delay is not a memory option.

Press the **Sauna Heat Time**  button and the hours and minutes (hh:mm) will appear in the display. Sauna Heat Time: **01:00** The duration can now be set using the arrow keys. When the desired time has been selected, press **PROG/OK** to return to previous screen.

Installation & Operation Instructions

SECTION 6: OPERATION DIGI II, CONTINUED

Programming Memory (User buttons) continued...

Press the **TEMPERATURE**  button and the temperature value will appear in the display current temperature setting: **156F** The temperature can now be set using the arrow keys. When the desired temperature has been selected, press **PROG/OK** and the display will return to the previous screen.

To save the values to memory, press the memory buttons 1. The display will now read:

PROGRAM1
01:00 156F

Press **PROG/OK** once again to return the display to **17:30 01:00**
156F

To program another memory button go back to the beginning of Programming Memory (user buttons). Press **ON/OFF** to exit the programming mode.

Review When the device is in Off mode, you can review your programmed values by pressing the memory buttons.


Setting Time Delay without SaunaSmart:

The control is in the Off mode:

Press **ON/OFF** and A greeting appears in the display and the backlight comes on.


Press **PROG/OK** and the following will appear in the display start time, sauna length, and temperature.


5:30 PM 01:00 The maximum operational time is 60 minutes for the heater.
156F

Press Time Delay  button and the hours and minutes (hh:mm) will appear in the display.

START:
12:00

The start time can now be set using the arrow buttons. When the desired time has been selected, press **PROG/OK** and the display will return to the previous screen.

Press the **Sauna Heat Time**  button and the hours and minutes (hh:mm) will appear in the display. Sauna Length: **01:00** The duration can now be set using the arrow keys. When the desired time has been selected, press **PROG/OK** to return to previous screen.

Press the **TEMPERATURE**  button and the temperature value will appear in the display current temperature setting: **156F** The temperature can now be set using the arrow keys. When the desired temperature has been selected, press **PROG/OK** and the display will return to the previous screen.

Press **PROG/OK** and hold down for about 3 seconds until the following appears in the display:

3:00 PM
5:30 PM SAUNA

3:00 PM is the current time and **5:30 PM** is the start time, when the sauna is automatically turned on.

Installation & Operation Instructions

SECTION 6: OPERATION DIGI II, CONTINUED

Setting Time Delay with Saunasmart:

Saunasmart means choosing the time to enter the hot room, not the time to turn the heater on. The system will calculate when to turn on in relation to entry time. The control will be able to determine how long the system needs to run to reach set temperature. This function usually takes 3 heat cycles to get time versus temperatures memorized.

The entire programming process is the same as "Setting Time Delay without Saunasmart" except for the final step of programming display.

3:00 PM

3:00 PM is the current time

5:30 PM SMART

5:30 PM is the time the room is ready to enter.

Setting Program for a Repeat Sauna Everyday:

Taking a sauna every day at the same time automatically without reprogramming, do the following: Press **PROG/OK**. The following will appear in the display start time, duration and temperature.

5:30 PM 01:00 156F The maximum allowable operation time for the heater to operate is 60 minutes.

Press **PROG/OK** and hold down for about 3 seconds until the following appears in the display:

3:00 PM

5:30 PM SMART (or **Sauna** depending on what delay mode is selected)

3:00 PM is the current time and **5:30 PM** is the time the room is ready to enter.

Daily Operations of Memory (User buttons):

Press **ON/OFF** and the greeting appears in the display and the backlight comes on.

Press the appropriate button to start operation of the **Light** and **Fan** ; press again to shut off. The corresponding symbols will appear in the display.

Press **Memory Button 1 - 4**: The system will turn on and operate according to the button's preset time and temperature until program has expired. The control will then turn off.

Daily Operations Using Time Delay Functions:

Press **ON/OFF** and the greeting appears in the display and the backlight comes on.

Next press **PROG/OK** and the following will appear in the display start time, duration and temperature.

5:30 PM 01:00 156FC The maximum operational time is 60 minutes for the heater.

If all information is correct: Press **PROG/OK** and hold down for about 3 seconds until the following appears in the display: Leave the control on and return when system is ready.

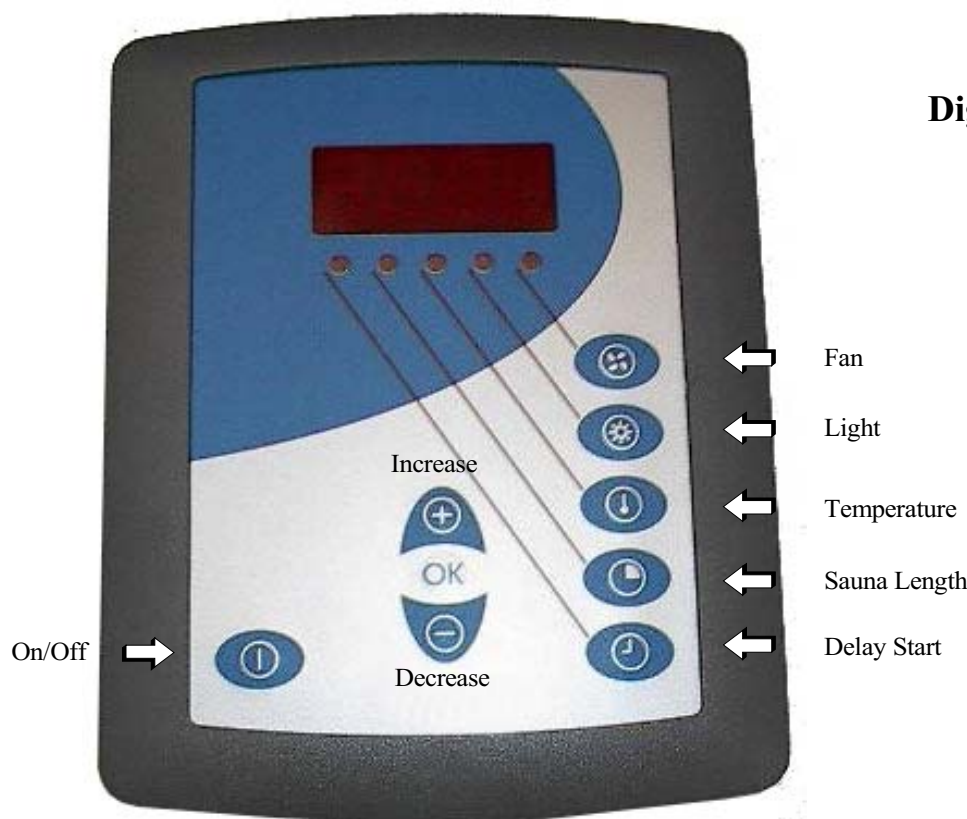
3:00 PM

5:30 PM SMART (or **Sauna** depending on what delay mode is selected)

If the control settings are not correct, go to the "**Setting Time Delay**" portion of the manual to program control and then return to portion when completed.

Installation & Operation Instructions

SECTION 6: OPERATION DIGI I



Digi I 60 min Control
UL # 1601-14

Control Setup for Control Model Digi I 60 min (UL # 1601-14):

Setting Temperature Scale:

The control in the Off mode:

Press **ON/OFF** (⏻) FAHR will appear. Press the Up button to toggle between Fahrenheit and Celsius. Press **OK** when the appropriate scale is displayed.

Setting Time Delay:

Press Time Delay (🕒) button and the indicator light will flash when making changes. Press the up or down arrow to get the appropriate setting. When the desired time has been selected, press **OK**.

Press the **Sauna Heat Time** (🕒) button and the indicator light will flash when making changes. Press the up or down arrow to get the appropriate setting (60 minutes maximum). When the desired time has been selected, press **OK**.

Press the **TEMPERATURE** (🌡️) button and the indicator light will flash when making changes. Press the up or down arrow to get the appropriate setting. When the desired temperature has been selected, press **OK**.

Press **OK** and hold down for **approximately 3 seconds** until time comes on and the “:” in the time starts to flash. The control is programmed to the above settings.


Installation & Operation Instructions


SECTION 6: OPERATION DIGI I, CONTINUED

Starting Sauna Immediately:

The control is in the Off mode:

Press **ON/OFF**  **00:00** will appear. (Number indicates minutes)

Press the **SAUNA HEAT TIME**  button and the indicator light will flash when making changes. Press the up or down arrow to get the appropriate setting (60 minutes maximum). When the desired time has been selected, press **OK**.

Press the **TEMPERATURE**  button and the indicator light will flash when making changes. Press the up or down arrow to get the appropriate setting. When the desired temperature has been selected, press **OK**.

Press **OK** and hold down for **approximately 3 seconds** until time comes on and the “:” in the time starts to flash. The control is programmed to the above settings.

Note: Control holds the previous sauna length and temperature setting.

Control Setup for Control Model Digi I 24 hr (UL # 1601-14-1):

Control Model Digi I 24 hour is for commercial applications with an attendant on duty. This control allows the sauna to heat for a maximum of 23 hours. Refer to 1601-14 control operation for programming. Clock will mean hours and minutes.

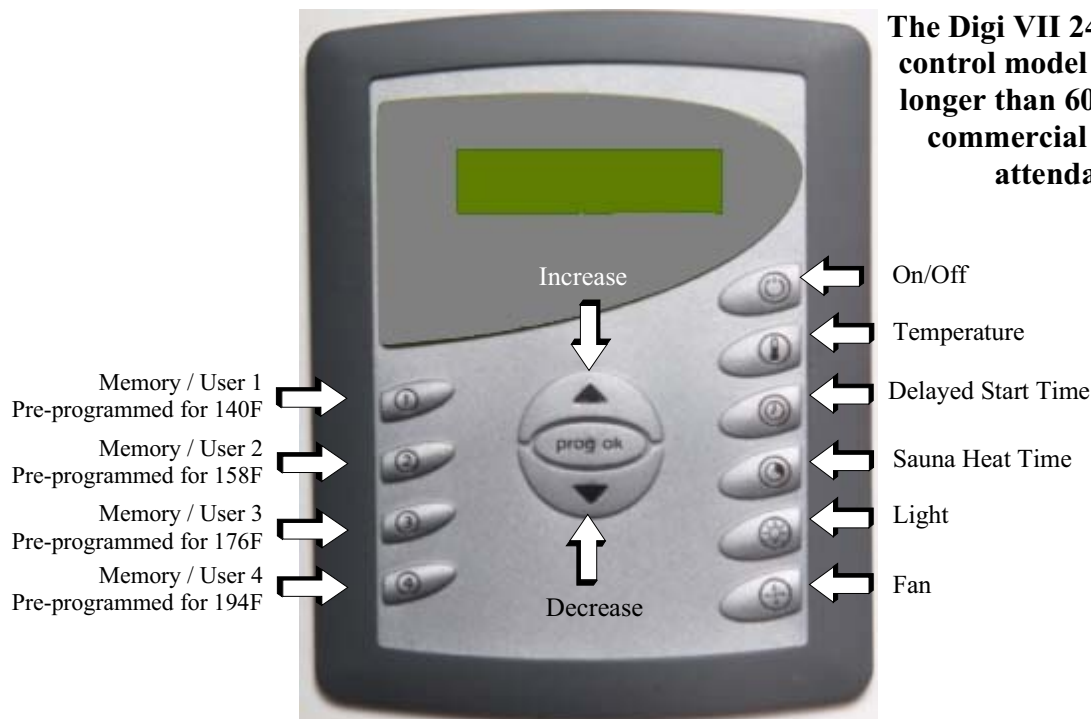
SECTION 6: DIGI VII OPERATION

Digi VII is also equipped with an alarm for high temperature. The alarm setpoint is determined in the Main Menu area of programming. If the control alarms for high temperature, follow the directions on the control to reset the alarm. The sauna should not be used again until the cause of the high temperature alarm has been determined and corrected.

Connect the audio and visual equipment to C1 and C2 on the circuit board inside the heater. The audio and visual equipment should be mounted outside the sauna but within hearing range.

Installation & Operation Instructions

SECTION 6: OPERATION, DIGI VII



The Digi VII 24 hr (UL # 1601-15-1) control model can be set to stay on longer than 60 minutes. This is for commercial use only where an attendant is present.

Control Setup for Control Model Digi VII 60 min (UL # 1601-15):

This setup has **7 different menus**.

To escape from this **Setup Menus**, press the **On/Off** button or the device will **automatically exit** the menu in approx. **4 seconds**.

To enter the Setup Menu press **PROG/OK** button and hold down for approx. **3 seconds** until the following appears in the display:

MENU 1
TIME:12:00

Setting the Clock: Press the up arrow and hold down: The minutes and hours will begin to change. Set clock to appropriate time. Press **PROG/OK** to save the time in memory.

Next will display:

MENU 2
DAY: MONDAY

Using the arrow keys, select the correct day of the week. Press **PROG/OK**: to save the setting.

Next will display:

MENU 3
LANGUAGE: ENGLISH

Setting Language: Press the up or down arrow key repeatedly until the language you desire appears in the display. Press **PROG/OK** to save the Language in memory.

Installation & Operation Instructions

SECTION 6: OPERATION, DIGI VII CONTINUED

Next will display:

MENU 4

OFFSET: T1 0C

Using the arrow keys, select the calibration value (0 +/-10C).

Example: After reading the temperature on the thermometer in the sauna, you may have noticed that the temperature reading on the sauna thermometer is lower than the display on the control. Set Offset T1 to +4C to get the displayed temperature to match the thermometer. (**This offset does not change the actual temperature, this is just for indication only.**) Press **PROG/OK**: to save the calibration value.

Next will display:

MENU 5

CLOCK: 24 h

Using the arrow keys, select a 12 or 24-hour clock. If a 12-hour clock is selected, AM or PM will appear in the display after the time. Press **PROG/OK**: to save the setting.

Next will display:

MENU 6

TEMPERATURE: C

Using the arrow keys, select the desired temperature scale. (Celsius or Fahrenheit) Press **PROG/OK**: to save the setting.

Next will display:

MENU 7

ALARM: 100

Using the arrow keys, select the desired alarm temperature setpoint. Press **PROG/OK**: to save the setting.

Programming the Daily Programs:

The control is in the Off mode:

Press **ON/OFF** and a greeting appears in the display, the backlight comes on, and the following will appear in the display **MON 5:30 PM** Current day of the week and time.


Press **PROG/OK** button and the display will show View Daily Program.

Next press **PROG/OK** and the following will appear in the display: The first number indicates start time, the length of sauna duration, and the last number is the desired temperature.

5:30 PM MON 5:30 PM is the start time and **MON** is the day

01:00 156F 01:00 is the length of sauna and **156F** is the set temperature. The maximum operational time is 60 minutes or 23 hours depending on the control type.


Changing Start Time

To change the start time press the **Delayed Start Time**  button and the hours and minutes (hh:mm) will appear in the display. **Start Time: 1:00 PM** The start time can now be set using the arrow keys. When the desired time has been selected, press **PROG/OK** to return to previous screen. To bypass the day so no heat cycle is used, press the Delayed Start Time button again and the display will read **Start Time: - :- -**.


Installation & Operation Instructions

SECTION 6: OPERATION, DIGI VII CONTINUED

Changing Sauna Length of Operation

To change the sauna length time press the **Sauna Heat Time**  button and the hours and minutes (hh:mm) will appear in the display. **On Time 1:00** The time can now be set using the arrow keys. When the desired time has been selected, press **PROG/OK** to return to previous screen.

Changing Sauna Temperature

Press the **TEMPERATURE**  button and the temperature value will appear in the display current temperature setting: **156F** The temperature can now be set using the arrow keys. When the desired temperature has been selected, press **PROG/OK** and the display will return to the previous screen. If all the information is correct press **PROG/OK**.

Saving Each Day

The display will read **Copy the data to the next day? No**. If the previous day's data should not be copied to the next day choose No. If the next day should be the same as the previous day, press the arrow keys to display Yes. When the desired answer has been selected, press **PROG/OK** to return to previous screen.

Repeating Program Weekly

Repeat programing each day of the week the same way through Sunday. After Sunday has been approved the display will read **Program Repeat Weekly? No**. If the program should not repeat every week continuously, choose No. If the program should run every week, press the arrow keys to display Yes. When the desired setting has been selected, press **PROG/OK**.

Testing Alarm (optional equipment)

The display will read **Test Alarm?** If the alarm equipment is not connected select No by pressing the arrow keys and press **PROG/OK**. If the equipment is connected and it needs to be tested, select Yes by pressing the arrow keys and press **PROG/OK**. The audio and visual alarm should activate if connected. Press **PROG/OK** to deactivate.

Activating the Program

The control will display **Activate Program?** If the delay program should not be activated, choose No. Press **PROG/OK**, the display will read the current day and time. The control is now waiting to be activated to run by delay program or the user memory buttons.

If the delay program is ready to begin, press the arrow keys to select Yes. When the desired setting have been selected, press **PROG/OK**. The display will read current day and time on the first line and the next programmed day and time will alternately flash on the second line.

Daily Operations of Memory (User buttons):

Press **ON/OFF** and the greeting appears in the display and the backlight comes on.

Press the appropriate button to start operation of the **Light** and **Fan** ; press again to shut off. The corresponding symbols will appear in the display.

Press **Memory Button 1 - 4**: The system will turn on and operate according to the button's preset time and temperature until program has expired. The control will then turn off.

Installation & Operation Instructions

SECTION 7: HIGH LIMIT CONTROL (RESET BUTTON)

The sauna heater has a built-in high limit control, which automatically turns off the heater if the temperature inside in the sauna room rises to an abnormally high level.

To restart the heater, let the heater cool and turn the timer down to off, then push the reset button on the bottom of the heater, See the last drawing on Diagram 9 on page 14. If the high limit continually shuts off the heater, refer to Section about Troubleshooting.

SECTION 8: HOW TO TAKE A SAUNA

- When taking a sauna, allow time to relax completely.
- Remove clothing and jewelry...if required, wear a towel loosely.
- After 10 minutes or when perspiration begins, leave sauna and relax in dressing area...follow with a cool shower.
- Cooling time should equal time spent in sauna. Enter sauna room again and stay 5 or 10 minutes.
- Repeat the cycle 2 or 3 times; end with a brisk shower...rinse in cool water.
- Dress when completely dry and perspiration has stopped.
- Some sauna bathers enjoy the soothing effect of steam by splashing water on the heated sauna rocks. Use only one dipper full (approx. $\frac{1}{2}$ cup) at a time and take care to keep clear of the steam as it rises off the rocks.
- Do not smoke, exercise or drink alcoholic beverages in the sauna room.
- Do not pour chlorinated pool or spa water on the heater or corrosion damage may result.



Shower



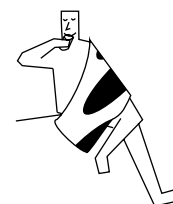
Sauna (10 - 15 min.)



Shower or swim



Rest (10 - 15 min.)



Relax with juice or water

Like it?
Do it again and
feel great.

Installation & Operation Instructions

DIAGRAM 6

TYPICAL PRE-CUT WALL CONSTRUCTION

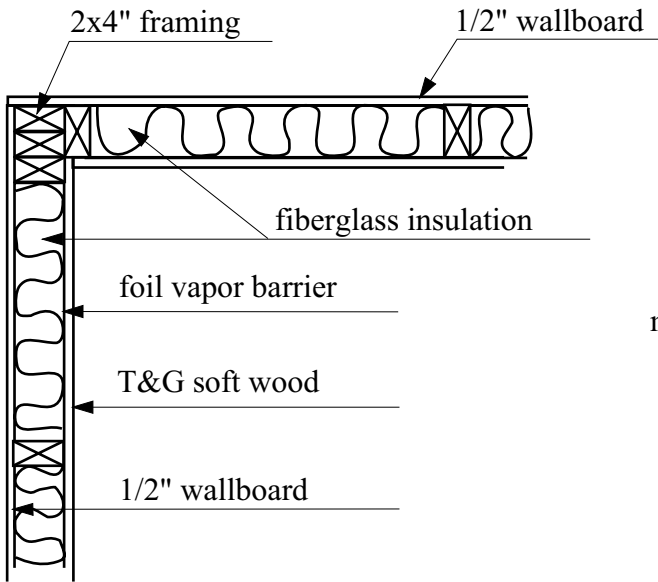


DIAGRAM 7

HEATER SCREEN (GUARD RAIL)

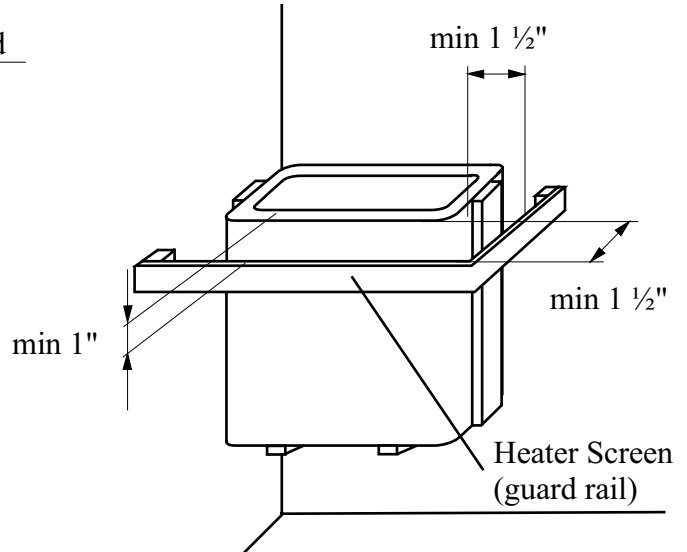


DIAGRAM 8

VENTILATION

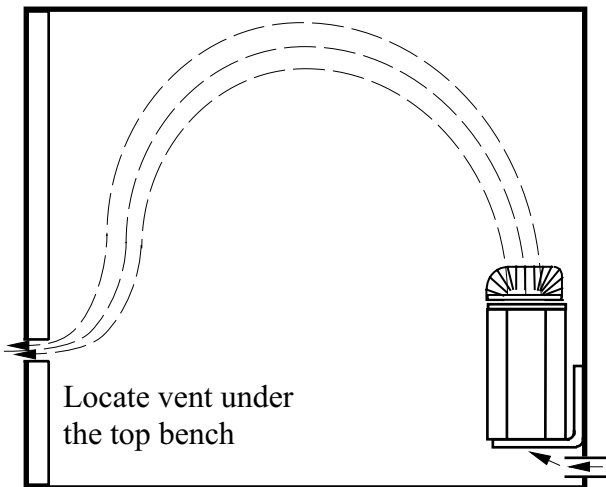
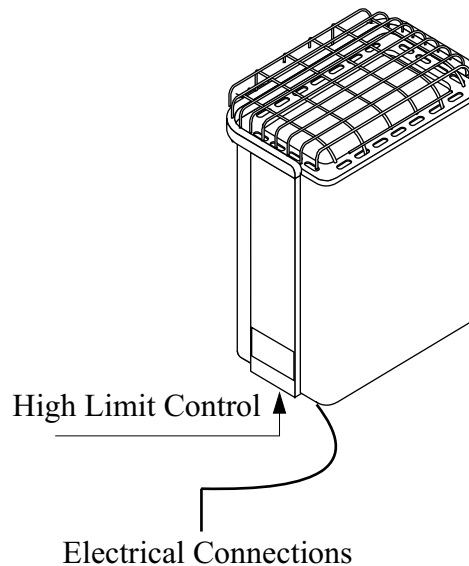


DIAGRAM 9

RESETTING HIGH LIMIT SWITCH



Installation & Operation Instructions

SECTION 9: WARNING PLACARDS

Two metal placards are included in the Installation Instruction Envelope packaged with every Sauna Heater. The CAUTION placard must be attached to the interior wall of the sauna room directly above the heater where it is visible to the bather. The WARNING placard must be attached to the door of the sauna room.

SECTION 10: ROOM CONSTRUCTION

For safety and reliability, the following rules must be addressed.

- No permanent locking or latch system is to be used on the sauna door.
- Acceptable door fittings are: magnetic catches, friction catches, spring or gravity loaded closures. The door must always open outwards.
- The warranty is void if a shower is installed in a sauna room.
- No electrical receptacle shall be installed inside the sauna room.
- The enclosed WARNING: Reduce the risk of overheating ... warning plate must be mounted on or alongside the door outside the sauna room at about eye level.
- The enclosed CAUTION: Reduce the risk of fire ... caution plate must be mounted on the interior wall above the heater.
- The heater should not be operated without its container properly filled with rocks and the rock guard in place.
- If an intercom speaker is installed, it should be away from the heater and as close to the floor as possible.
- If a room light is installed, it should be a surface mounted bracket type. Wall mounted lights should be about 70" above the floor. Ceiling mounted lights should be of an approved type with a junction box that is remote to the fixture itself. Use only a fixture that uses A.F. or fixture type internal wiring. A 60 watt bulb should provide sufficient lighting.
- Fire sprinkler systems installed inside any sauna room should be properly rated for sauna room temperatures.
- Always mount the heater according to these installation instructions.

WARNING

The "CAUTION" and "WARNING" placards must be mounted in accordance with Section 9.



WARNING
REDUCE THE RISK OF OVERHEATING

- * Exit immediately if uncomfortable, dizzy, or sleepy. Staying too long in a sauna is capable of causing overheating.
- * Supervise children at all times.
- * Check with a doctor before use if pregnant, in poor health, or under medical care.
- * Breathing heated air in conjunction with consumption of alcohol, drugs, or medication is capable of causing unconsciousness.



CAUTION
REDUCE THE RISK OF FIRE

Do Not Place Combustible Material On The Heater At Any Time.

For safety purpose sauna door must open out and not lock.

Never use a wood stain, seal or preservative on the inside of your sauna room.

Light fixtures get very hot during operation. Locate light fixture where it will not be a burn hazard.

Installation & Operation Instructions

SECTION 11: VENTILATION

VENTILATION should be changed about 6 times an hour. This can be achieved by making a vent opening (fresh air inlet) in the sauna wall directly below the heater. The air outlet must be lower than the upper benches, as far as possible from the heater and about two feet higher than the fresh air inlet vent, See Diagram 8.

The minimum opening should be determined using one of the following formulas:

$$\text{For } R < 31, \quad V \geq 9.3$$

$$\text{For } R \geq 31, \quad V \geq 0.3R$$

where R = the floor area of the room in square feet and
 V = the minimum vent size in square inches

SECTION 12: MAINTENANCE

The sauna, like a bathroom, should be kept clean and odor free.

Towels or mats should always be used on benches and floor as perspiration otherwise penetrates the soft wood.

Air out the sauna often by keeping the door and vents open when the sauna is not in use. Saunas that are in daily use should be washed down at least once a week to keep them clean and the air fresh. Duckboard should be removed from the sauna, the sauna floor mopped and dried in a conventional manner, and the duckboard thoroughly scrubbed and dried before returning to the sauna room. The sauna heater should be wiped down occasionally with a damp cloth to remove lint and dust. The rocks should be removed once a year for cleaning and small or crumbled rocks replaced.

To clean and remove perspiration stains, use soap or detergent in warm water, best applied with a scrub brush. Badly soiled surfaces may require sanding. Sand paper wrapped around a wooden block works well.

Benches and supporting structure must be inspected annually for potential deterioration due to age, dry rot or abuse. Any boards with signs of deterioration should be replaced immediately to avoid possible injury.

SECTION 13: TROUBLESHOOTING

For troubleshooting or service questions call 1-888-780-4427 and ask to speak with service. Prior to calling please have the Model & UL (Type) Number available. You may also email us at techsupport@saunatec.com