

# NorthStar Indoor Series Owner's Manual

# NS 44 with SL2 Control and CB 13-1 and Bluetooth Sound Sytem (Optional)



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Read all instructions carefully before installation including instructions packaged separately with the sauna heater. Please leave all instructions and warranty with the owner.

**WARNING:** When using electrical sauna heaters and associated sauna products, basic precautions must be followed, including the following:

- 1. Grounding is required.
- 2. No electrical receptacle shall be installed in the sauna room.
- 3. Be sure rocks are placed in the heater according to the Heater Installation and Operation Instructions.
- 4. Do not tamper with the door or install a latching or locking system. Malfunction of which may cause entrapment inside the heated room.
- 5. Do not block ventilation openings. Vents must be kept free of obstruction so proper airflow is maintained in the sauna room. Do not stack anything in front of the vents.

**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.

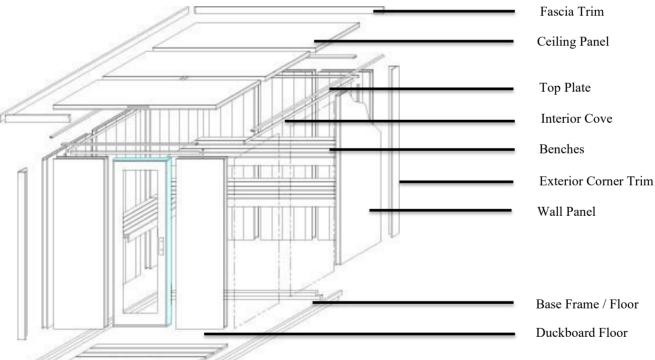
**WARNING:** The use of alcohol, drugs, or medication is capable of greatly increasing the risk of fatal hyperthermia.

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

### ROOM ASSEMBLY

- Each panel is heavy. Be careful to avoid injury when installing, especially the roof panels.
- Two adults are required for the installation of sauna room.
- The wall panels are connected with tongue and groove slots which will be installed in the following way:
  - When setting panels, ensure the tongue lines up into the groove.
  - o Connect corners of wall panels with screws in the side wall.

# Trim Profiles Hardware Package Custom Cut Hardurge Kit Would Bol 15 IN HE 8809-311 Exterior Fascia Trim Eve Trim / Exterior Cove Molding Fascia Trim



Note: Parts depicted in the diagram will differ between models.

UO=50926-0 08/02/21 UN

9 x 3" Wood Screw

9 x 2" Wood Screw

# **INSTALLATION OF SAUNA ROOM**

- 1. Position the base frame (or optional floor panel) in the desired location on a level surface.
- 2. Fasten the corners of the base frame using one 3" screw at each corner in the predrilled holes.

Note: Predrilled holes are purposely made at an angle.

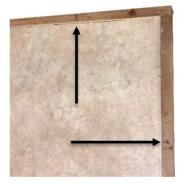
Note: The base must be level before installing wall and ceiling panels. If the surface is not level, you may need to shim the floor panel to get it level.





The base is numbered to correspond with the panels for correct locations. The right wall panel is labeled #1, the back wall panel is labeled #2 and etc...(See picture below)





3. Place the right-side wall panel on the outer edge of the corresponding floor panel.



4. Place the back wall panel on the floor and butt it to the right wall panel.



5. Secure the back wall to the right wall with three 3" Torq screws (provided). Install one screw on the top of the wall, one in the middle, and one on the bottom. Ensure the tongue and groove wall boards are tight together at the interior corner of the sauna and the corner is flush on the outside edge when screws are installed.



6. Install the left wall panel. Repeat step 5 between left wall and back wall.



7. Install the front wall panel. Repeat step 5 on both corners of the front wall.



8. Install top plates to the corresponding wall panels on front and back sides with the notched ends facing up. Install the left and right-side top plates so they fit into the notches.

Note: Before installing top plates, ensure all panels are connected together on top and on the corners.





9. Secure top plates using the 2" Torq screws. Install one screw in each corner and one screw in the center of each wall.

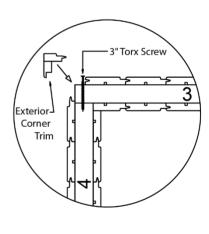


10. Install corner caps to each corresponding wall panel and secure with Brad nails or finishing nails (not supplied).

Note: Some woods will twist, which is normal, so installation can be more difficult. See end of manual for suggestions on how to install a twisted corner cap.







- 11. Place the ceiling panel on the room.
- 12. Fasten ceiling panel down to the wall panels using 3" screws.

Note: Ceiling panel is designed 1/4" smaller than the opening. Make sure the top of the sauna walls is square with the ceiling panel.



Note: Trim is sent long and needs to be trimmed onsite for proper fit.

13. Nail fascia trim to the exterior back wall so it is flush to the left and right edges of the wall.

Note: The fascia top should be flush with the top of the wall panel.

- 14. Install fascia to the side walls so it is flush to the back fascia and the edge of the front wall.
- 15. Install fascia to the front wall so it is flush to the left and right-side fascia.





- 16. Install interior cove to front wall so it lays flush to left and right edges of the wall.
- 17. Install cove to back wall so it lays flush to left and right edges of wall.
- 18. Install cove to left and right side walls so it lays flush to front cove and back cove.



# **ELECTRICAL / HEATER ASSEMBLY**

19. Place CB Box on the floor for easy access. Remove the cover to access the electrical connections.





20. Connect all the quick connections into the CB Box according to the picture and installation manual.

1

2

3

4

5

Note: All the low voltage connections have unique connectors.

- 1- Bluetooth Power (3 pin from Bluetooth sound bar (optional))
- 2- Room Temp Sensor (4 pin from wall)
- 3- High Limit (2 pin from heater)
- 4- Control (RJ 11 from wall)
- 5- Lights (RJ 45 from wall)

Green = ground

Black = L1 (hot)

White = N (neutral)

NOTE: A GFCI (Ground Fault Interrupt Circuit) device is not required by NEC. A GFCI may be installed if required by local codes but will nuisance trip during use of the product.

CAUTION: Loose wire connections can cause heat damage to wires, terminal blocks, and other components and may void the warranty.

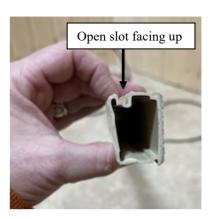
- 21. Connect wires from power cord from outside the room to the lower terminal block labeled L1, N, and Gnd.
- 22. Connect wires from the heater to upper terminal block labeled T1, T2, and Gnd to the sauna heater.
- 23. Install the CB Box to the back wall. Use the two spacing blocks provided as a guide to find the lower left corner of the box to wood corner trim on wall.

Note: If the mounting holes of CB box line up with a groove in the wall, move the box left or right so they line up on a solid portion of the tongue and groove.



- 24. After all connections, mount the CB Box to the back wall with the four screws provided in the hardware pack inside the CB box.
- 25. Install plastic wire raceway on right side wall. Peel adhesive strip off the back side of raceway and attach to the wall, flush with the floor and about 12" from the front of the room. Make sure the open slot is facing up so wires can be inserted.





- 26. Hang heater on front wall. Use the information from the sauna heater installations.
- 27. Remove the rock grill from the heater. Remove the two screws on the top back of heater.
- 28. After removing the screws for the rock grill, the mounting bracket will be loose from the heater.
- 29. Secure the sauna heater-mounting bracket to wall brackets using the in-predrilled holes.
- 30. Hang the heater on the mounting bracket tabs.





31. Insert the large black main power cable into the open slot of the wire raceway.



- 32. Insert the sensor and control cables into wire raceway, one cable at a time, and orientate them so they are on top of the large power cable and positioned towards the back of the raceway.
- 33. When all the cables are in the raceway, seal the raceway shut by starting at one end and snapping the "cover" shut as you move towards the opposite end. If the cover will not close you may need to reorientate the wires.

34. Assemble wood heater guard before installation using the screws and wooden buttons provided. Use the two spacing blocks as a guide for installation. Place one block horizontally on the floor and the other stacked vertically on top. Install the wood heater guard around the sauna heater using the 1 1/8" screws provided.



35. Rinse the rocks of dirt and dust. Install the rocks into the heater. Place small or flat rocks around the outer perimeter of heat chamber, including the ends. Place larger rocks loosely in middle of heater. Fill the heater until flush with the top of the outer shroud. Add 3 to 4 large rocks to top of heater.

\*Note: There will be extra rocks provided. The concept of rock placement is to promote good airflow through the heater.

\*Note: Use only the "olivine" sauna rocks provided with the heater. If other rocks are used, the warranty is void.

#### Never operate the heater without rocks.

- 36. Install the rock grill to the top of the heater with the two screws.
- 37. Place cover on CB Box with the four screws provided.



38. Connect the control wire from the front wall to the control.





39. Use a flat-blade screwdriver to carefully pry the front glass off the control body.

40. Install two of the shorter screws to the control. Place a black plastic wing on the end of each screw. (Longer screws are not used)







41. Mount control on to wall so the wires are inside the wall. Secure control to wall with the previously installed screws and wings. Place glass cover on control.









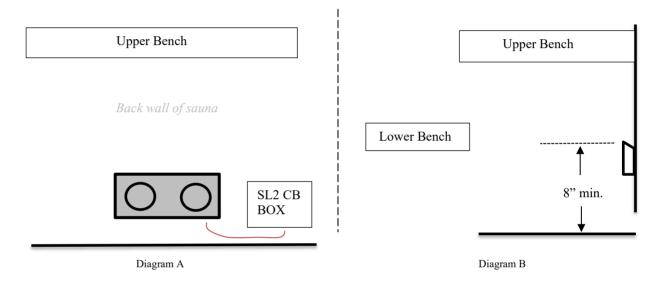
- 42. Temporarily connect the backrest to the back wall.
- 43. Ensure all electrical connections are installed and everything is safe.
- 44. Apply power to the heater. The control will flash for about 15 seconds as it is booting up.
- 45. Press the room light button to ensure backrest lights turn on.
- 46. Press the On button and allow heater to run for 15 seconds, then turn off.
- 47. Put your hands close to the elements (DO NOT TOUCH) to feel if all three elements are heating. Or, have the electrician verify the correct Amp draw for your heater.
- 48. Confirm everything is working. After confirmation, do the final installation of the control and install rocks in the heater.

#### User and installation manual for SL2 Sound Bar (Optional)

This Bluetooth Audio system has been designed exclusively for use with the SL2 and SL2-C sauna control systems. Do not attempt to connect to any other control system. Record the product serial number, found on the back of the sound bar in the space designated on the back of this document and save for future reference.

#### Mounting SL2 Sound Bar

• It is recommended that you mount the sound bar off the sauna floor. Attach the wooden cleat as shown in Diagram B with the bevel facing up, using the 2" Torx bit screws. The best sound will be achieved if the sound bar is mounted in the center of the back wall. You may want to experiment with locations before securing the wall cleat.



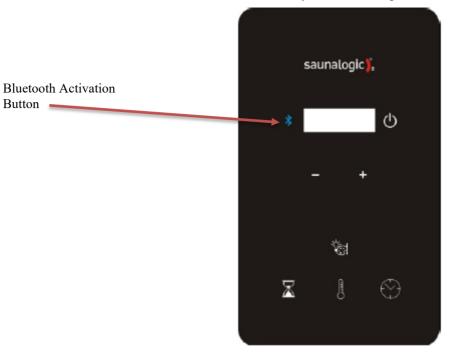
• Hang the SL2 sound bar on the wall cleat. (Mating cleat is located on the back of the sound bar.)



• Connect the sound bar power cord to the "CN6" port, located inside the SL2 or SL2-C contactor box.

#### Using your SL2 Sound Bar

- Touch the Bluetooth button on your SL2 or SL2-C control to activate power to the SL2 Sound Bar.
  - o A confirmation tone will be heard on your sound bar speakers when power is applied.



- Locate "Bluetooth" in your smart device settings. Find and select "Sauna360 Audio".
  - You will hear a confirmation beep when pairing is complete.
- Open your favorite music source App and use the volume keys on your smart device to adjust volume on the SL2 Sound Bar. All control functions are through your smart device and music App.

If you have any questions regarding the use of the SL2 Sound Bar, please contact your local dealer.

Date of Purchase:		
Place of Purchase:		
	Record Serial Number Here	

# **INTERIOR INSTALLATION**

49. Install door handle so the handle with the predrilled holes is inside the room. Secure handle with two screws provided within the handle package and cover screw heads with

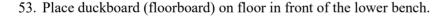
wooden buttons.





- 50. Place upper bench on the upper bench supports. Rest the bench upward for easier installation of the lower bench.
- 51. Place lower bench on the lower bench supports. Lower upper bench into place.
- 52. Secure upper bench with two 3" screws through the framework into the backwall and one 3" screw into right and left sidewalls.

Note: Do not secure the lower bench, as it is designed to slide back out of the way for ease of cleaning.







54. Connect the wires from the back of the backrest to the wires from the back wall. Install the backrest to the back wall through the predrilled holes (standard height is 20" from top of bench to top of backrest). Install wooden buttons over screws.







# SL2 (SaunaLogic 2) Control Operation

#### **Operating Instructions for Heater**

The default bath time is 60 minutes and most customers enjoy temperatures between 150° and 165° Fahrenheit. Length of sauna can be set from 0 to 60 minutes. The time delay before start can be up to 24 hours. Any changes are remembered by the heater for your next bath. Should the heater power be lost then restored, the settings will return to their default values.

#### STARTING SAUNA HEATER IMMEDIATELY

Press the control POWER icon to turn on the sauna control and heater. The room temperature will be displayed on the control. The heater will turn on and begin heating the room to current set points. Once the set temperature is reached inside the room, the control will turn the heater on and off again as needed to maintain the desired temperature. At the end of the selected time (60 minutes maximum), the control will turn itself off and the control display will turn off.

#### SETTING THE TIME AND TEMPERATURE

To set the sauna length time, press the con and then press the ""+" or "-" icons to increase or decrease time for desired setting. The maximum of time is 60 minutes.

To set the temperature, press the and next "+" or "-" icons to increase or decrease temperature for desired setting.

Note: Typical sauna bathing set-point temperature is 150°F to 165°F on the control.

#### PRE-SET DELAYED START

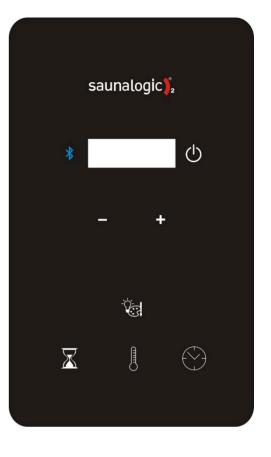
Press the icon and delay time will appear in the display and will toggle between "dlay" the amount of time remaining. The maximum of time is 24 hours. If no delay is desired, press icon to toggle off the function.

#### **Operating Instructions for Lighting**

Press icon to cycle through lighting options. Press and hold the icon for 3 seconds to turn off the lights. Lights will turn off automatically 10 minutes after sauna cycle is completed.

Color sequence – White – Red – Green – Blue – Yellow – Aqua – Purple – Rotation of Colors –
Off

Choose the color of choice and then set lighting brightness. The brightness will be on display for 3 seconds. Press the "+" or "-" icon to increase or decrease the light setting. Setting options are 25, 50, 75, and 100% light output.



#### **AUDIO OPERATION**

#### **Audio Power On**

• Press icon to toggle On or Off the Bluetooth System.

Note: The control does not have to be active for Sound System to operate.

#### **Pairing**

- Refer to your mobile device to pair to the unit.
- The Room device name is Sauna360 Audio

#### **Operation**

- All operations are controlled by the mobile device
- Volume is controlled by the mobile device

#### WARNING

Apple will not warranty your Apple product if used at operating temperatures of 32°F or below and 95°F and above. The recommended operating temperature is 32°F to 95°F to fall into the warranty. Check with any other device manufactures for operation temperatures before using the device in the Sauna/IR Room.

## **USER MAINTENANCE INSTRUCTIONS**

Room Instructions for Cleaning:

Perspiration and dirt may absorb into the wood, so periodic cleaning is needed. Scrubbing the benches and floorboards with a stiff brush and mild detergent is normally sufficient. Light sanding is another option.

#### **Room Assembly Questions**

If corner cap wood is twisted, nail it into the wall panel to secure to room. If it is twisted at the top, start nailing at the bottom and work up as another person is holding the corner cap firm against the wall panel. If it is twisted at the bottom, start nailing at the top and work down.









Trim the excess nail off the corner cap. Apply wood filler to repair spots. Sand clean so you don't see the nail heads.



# **TROUBLESHOOTING**

Error Codes on SL2 Control

**Sn** = Means the sensor is not connected to the CB box. Check the connections between sensor and box

**HL** = Means the Hight Limit switch in sauna heater is not connected to the CB box. Check the connections between heater and box.

**JP** = Means a jumper CN 6 is missing from the Main PCA in CB box.

**Pre-Heat** = Means there is no sensor connected to the CB or the temperature is below 8°F.

Prior to calling, please have the Model, Type Number, and Serial Number from room available.

If you have any questions during the installation of your sauna, please contact your local dealer.

Date of Purchase:	Place of Purchase:	
	Record Serial Number Here	

#### **Enjoy Your Sauna!**

Follow and tag Finnleo (@finnleosauna) on social media!



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