

# Oceanic

## Sauna & Steam

Infrared Heaters and Control System  
07.03.24



## Table of Contents

<b>1. Safety Precautions</b>	<b>3</b>
<b>2. System Overview</b>	<b>3</b>
2.1. Basic Overview Diagram	3
2.2. Infrared Heaters	4
2.3. Control Box	4
2.4. Keypad	4
2.5. Temperature Sensor	4
<b>3. Infrared Sauna Design and Layout</b>	<b>4</b>
3.1. Example Layout	5
<b>4. Installing Heater Units</b>	<b>6</b>
4.1. Vertical Units	6
4.2. Under Bench Heaters	7
4.3. Lighting	7
<b>5. Speakers</b>	<b>8</b>
<b>6. Audio Input (AUX)</b>	<b>8</b>
<b>7. Circuit Diagram</b>	<b>9</b>
<b>8. Keypad Functions</b>	<b>10</b>
<b>9. Keypad Operation</b>	<b>11</b>
9.1. Mini Steam Generator Safety Precautions	12
9.2. Parameters	12
9.3. Mini Steam Generator Circuit Diagram	12
9.4. Parts Description	13
9.5. Installation	13
9.6. Controls and Indicators	14
<b>10. Mini Steam Generator Operation</b>	<b>14</b>
<b>11. Mini Steam Generator Maintenance</b>	<b>14</b>

Thank you for purchasing Oceanic Infrared Heaters and Control System. It is important to read the following instructions carefully before installing this equipment into your sauna. If you are unsure about anything please contact someone from either the Oceanic Saunas sales team or the technical department before continuing.

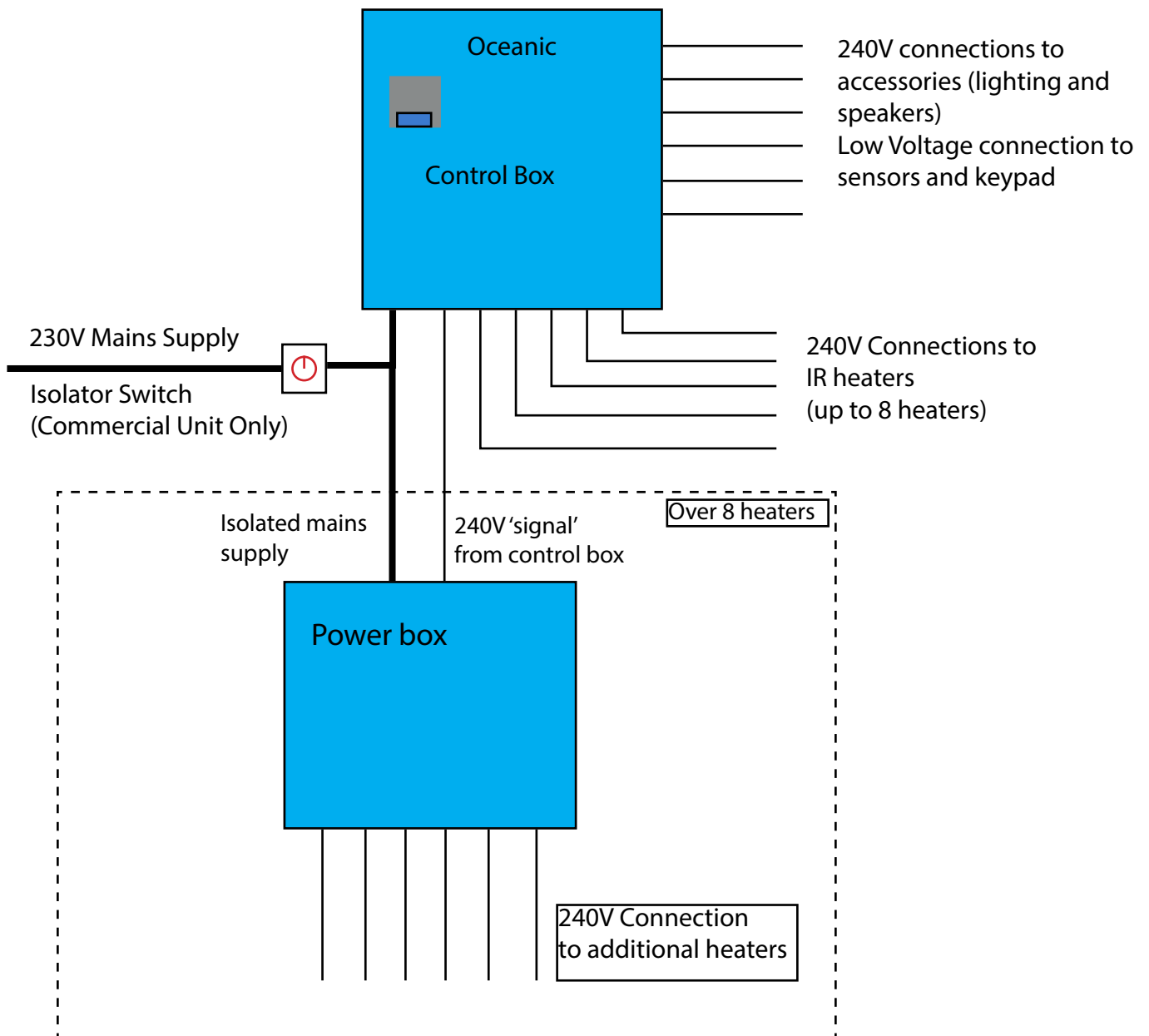
## 1. Safety Precautions

Please read these precautions before installing the sauna equipment. If you have any questions or concerns ask a member of staff before using the sauna.

- Do not wire the infrared controls on a multi plug or multi socket extension lead.
- Read operating instructions before turning on the sauna.
- Do not cover the heaters as this could cause a fire.
- Do not touch the heaters, they are very hot while the sauna is on.
- Elderly persons, pregnant women, or those suffering heart disease, high blood pressure, diabetes or not in good health are advised to seek medical opinion before using a sauna room.
- Do not smoke in the sauna room;
- Avoid using the sauna room immediately after strenuous exercise;
- Do not use the sauna room when under the influence of alcohol;
- Leave the sauna room at once if you feel sleepy, sick or uncomfortable;
- Ensure there is good ventilation for the sauna room
- We do not recommend this product is used by children under 16years old unless they are supervised by an adult
- This appliance is not intended for use by persons including children with reduced physical, sensory or mental capabilities or lack of experience unless they have been given supervisor or instruction concerning the use by a person responsible for their safety
- Commercial operators should post a notice of these precautions in a prominent position.

## 2. System Overview

### 2.1. Basic Overview Diagram



## 2.2. Infrared Heaters

Two types of infrared heater are available, vertical and horizontally mounted units. Both units incorporate a single 300W infrared element, reflector and wiring socket housed in a timber surround with a perforated protective cover. Each unit is individually plugged into the control box via a 3m 240V cable supplied. If a longer length of cable is required please contact the sales team and specify the correct length.

The vertical units are to be installed behind or in front of the seating position at around back / chest height around 850mm from floor level to centre of the unit.

Horizontal Units are to be positioned beneath bench at low level ~ 250mm from floor level.

The quantity of heaters required will depend upon the size of the sauna and how many people it is intended for. See Sauna Layout for further information.

## 2.3. Control Box

The control box contains the relays for switching the IR Heaters on/off along with the main circuit board for controlling inputs from the keypad, sensors etc. This box is typically mounted on top of the sauna but can also be located on the side wall (externally). The location will affect the required cable lengths to the heater units.

The domestic unit can be plugged into a 13amp socket as the total power is limited to 8 units (2400W). The commercial unit must be wired via an isolator switch and when combined with the additional Power Box can power upto a further 11 IR heater units (total 5700W)

## 2.4. Keypad

The oval shaped keypad is supplied with a 5m 6pin low voltage cable to connect directly to the control box. A 10m version of this cable is available if required and can be purchased online through the Oceanic website. The keypad should be mounted outside the sauna, typically at height of 1500mm from floor level for ease of use. The keypad is used to control the length of time the heaters are on for along with the desired air temperature inside the room. The keypad can also be used to control low voltage lighting circuit and speakers if installed (available separately from Oceanic website).

## 2.5. Temperature Sensor

The temperature sensor is supplied with a 3m 4pin cable and should be located inside the sauna at a height of around 1300mm from floor level and not directly in front of an IR heater.

## 3. Infrared Sauna Design and Layout

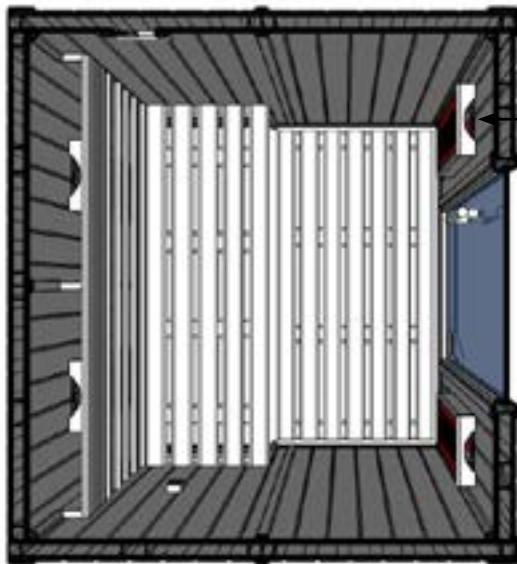
Before purchasing the IR units and controls we recommend carefully designing the layout of the sauna. Unlike traditional saunas Infrared saunas are typically designed for users to sit upright surrounded by the Infrared emitters. Normally there should be one vertical unit behind each user with possibly another somewhere in front and horizontal at low level behind.

Vertical IR units are for behind and in front of the body above bench height. Horizontal units are for low level beneath the benches.

## 3.1. Example Layout

Drawings below show the layout of the system from our D1020 IR Sauna Cabin, see website for further details and images.

Plan View



Vertical IR Heater



Control box mounted on top of ceiling

Side Section

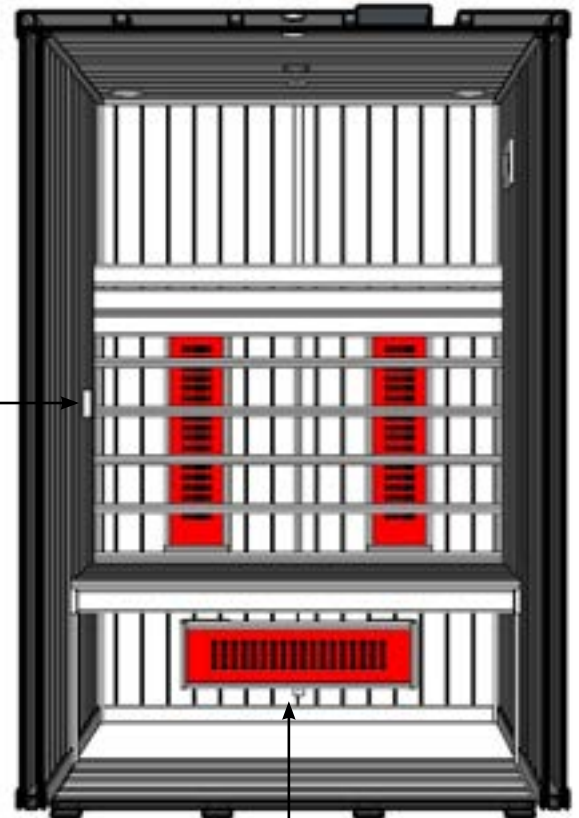


Vent

Backrest

Temperature Sensor

Front Section

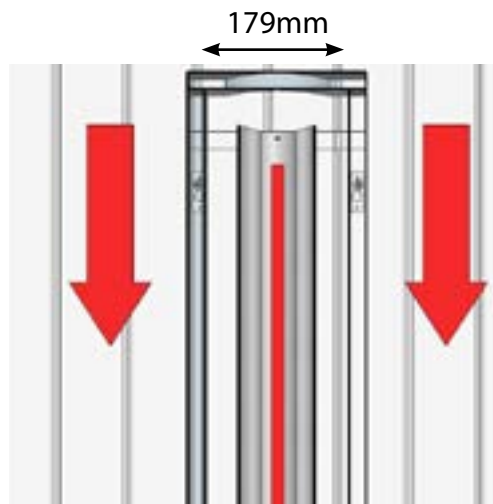
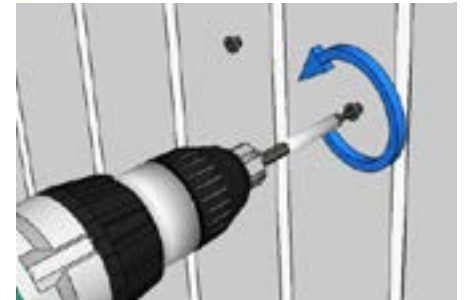
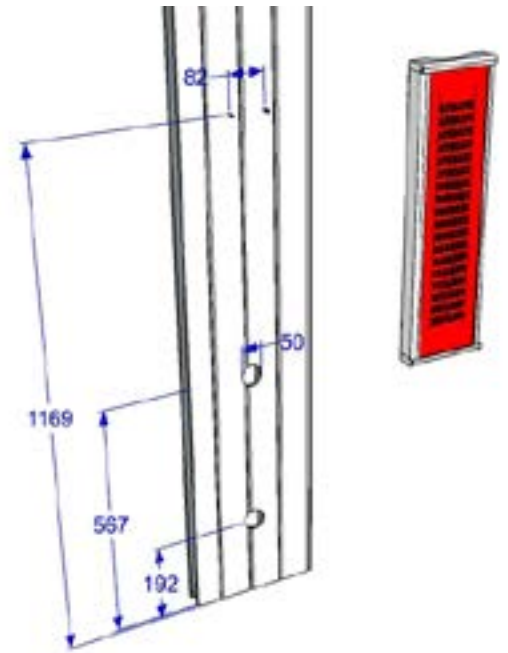


Horizontal IR Heater

## 4. Installing Heater Units

### 4.1. Vertical Units

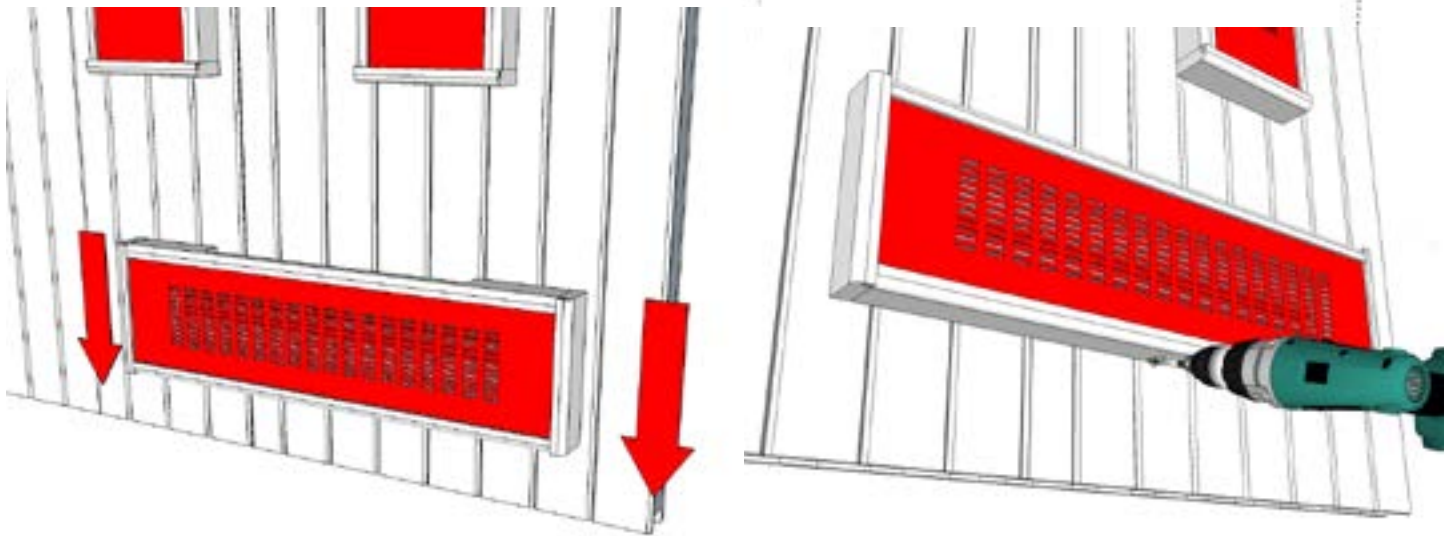
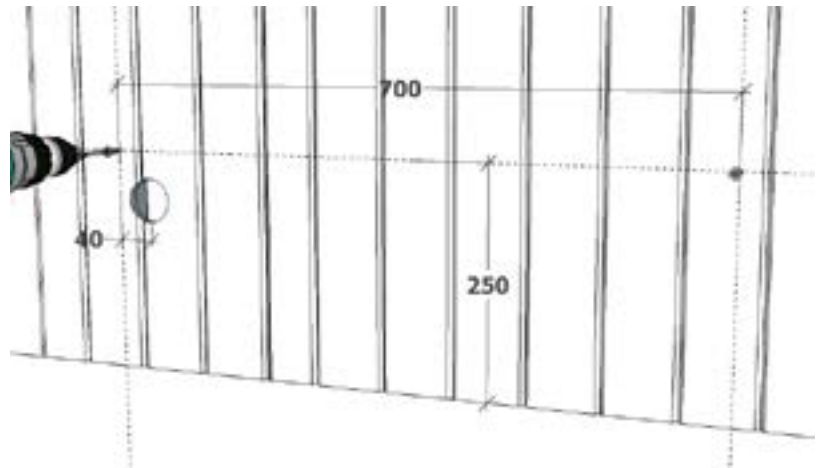
- i. Ensure the cable is long enough to connect the heater unit to the control box.
- ii. For the vertical heater drill a 50mm hole at 567mm from the floor in the wall cladding for the power cable to feed through.
- iii. Pilot and drill 2 x 30mm screws at 82mm centres 1169mm from floor level (suggested height)
- iv. Feed the male end of the power cable through the hole and connect to the bottom of the heater unit.
- v. Drop the heater unit onto the screws
- vi. Fix at the bottom with 30mm screws.





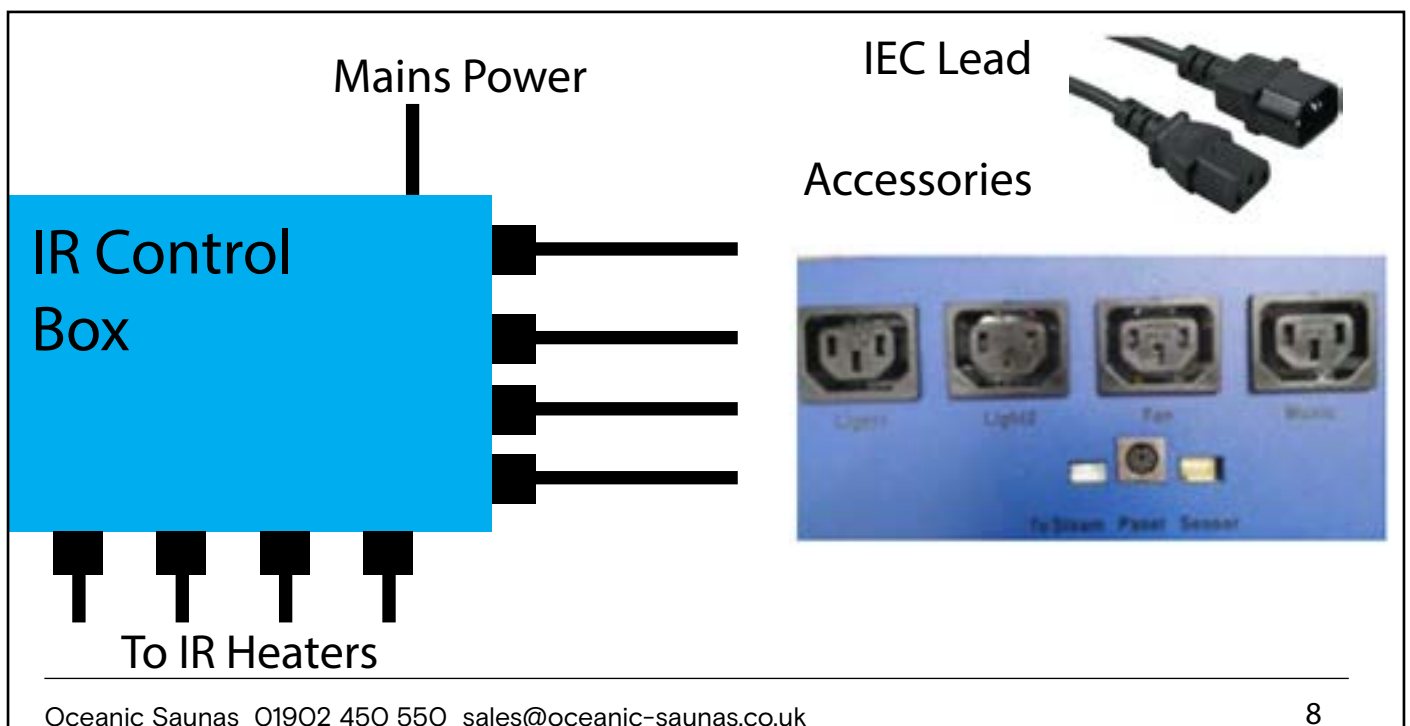
## 4.2. Under Bench Heaters

- i. Pilot drill and screw 2 x 30mm screws at 700mm centres approx 200- 300mm from the floor, but most importantly 40mm to the left off the centre of the wire hole.
- ii. Hang the heaters onto the screws
- iii. Fix underneath with 1x 30mm screw central to the frame Audio Input (AUX)



## 5. Accessories

There are four 230V/100W outputs for accessories that can be switched via the keypad; Lighting 1, Lighting 2, Fan and Music.





## 5.1. Lighting

To wire low voltage downlights into the control box. Connect the 12V transformer to the Light 1 or Light 2 output on the control box via an IEC lead supplied. Wire the positive and negative cables into the relevant terminals on the transformer.

Downlights purchased from Oceanic typically include a 12V 60VA transformer which can power up to 2No downlights per transformer when each light is fitted with a 20W light bulb. It is possible to run a total of 4No downlights via one of the lighting outputs on the control blue box. Follow installation instructions supplied with the light fitting.

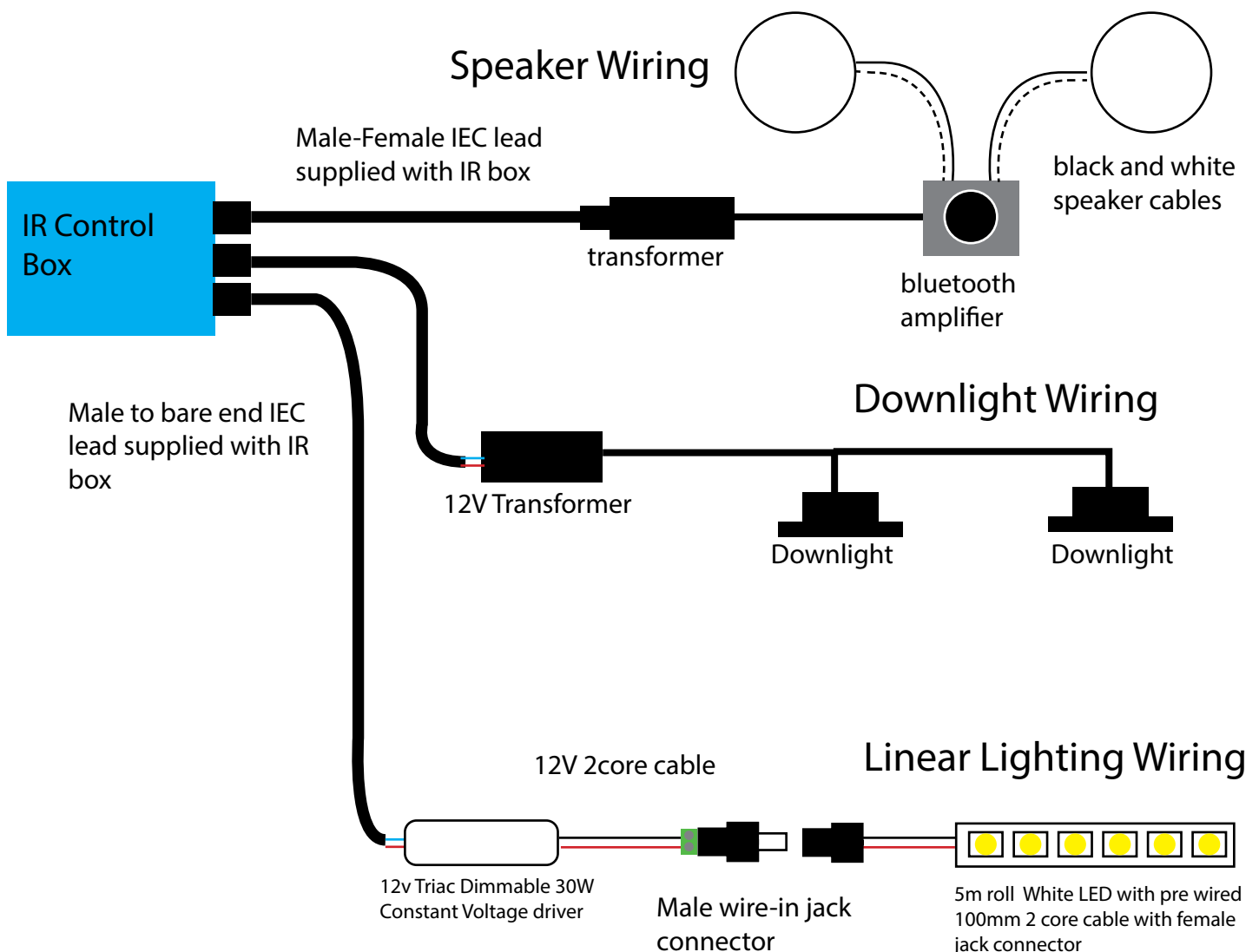
For linear LED tape connect the 12V LED driver to either Light1 or Light2 output on the control box using the IEC lead provided. Wire the linear tape as shown in the per the instructions for the linear lighting kit.

## 5.2. Speakers

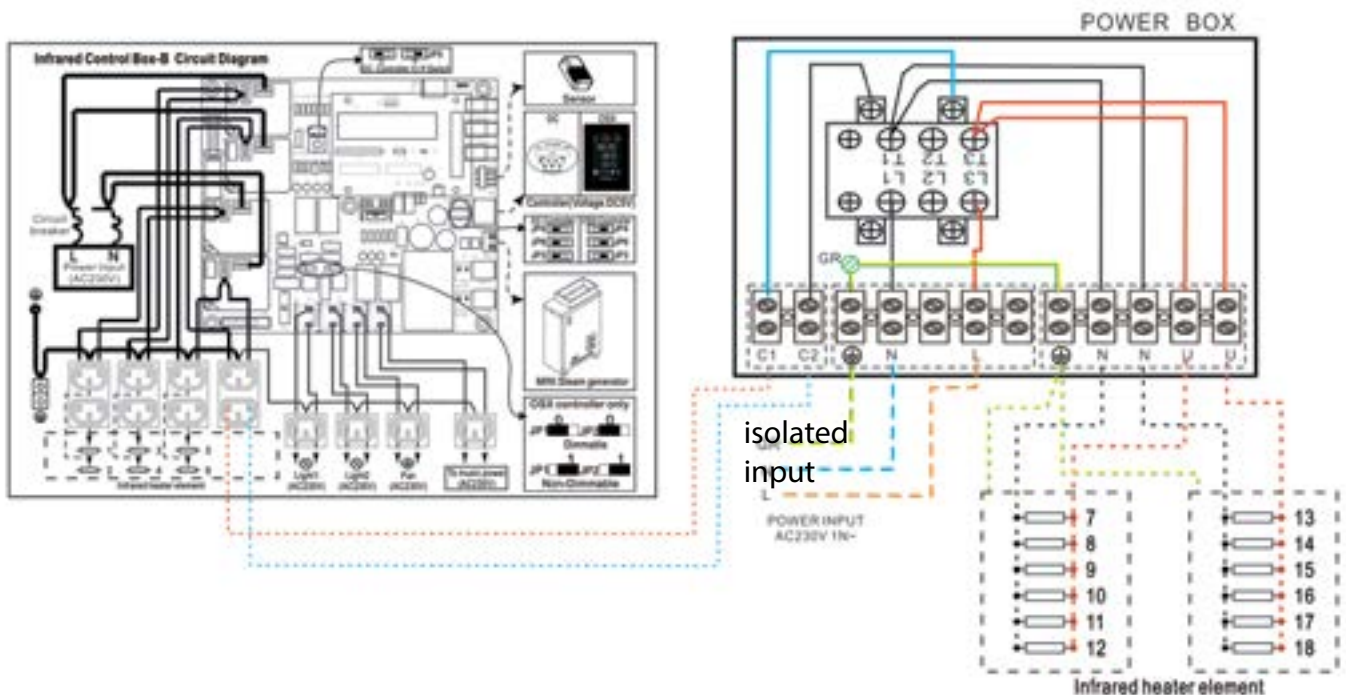
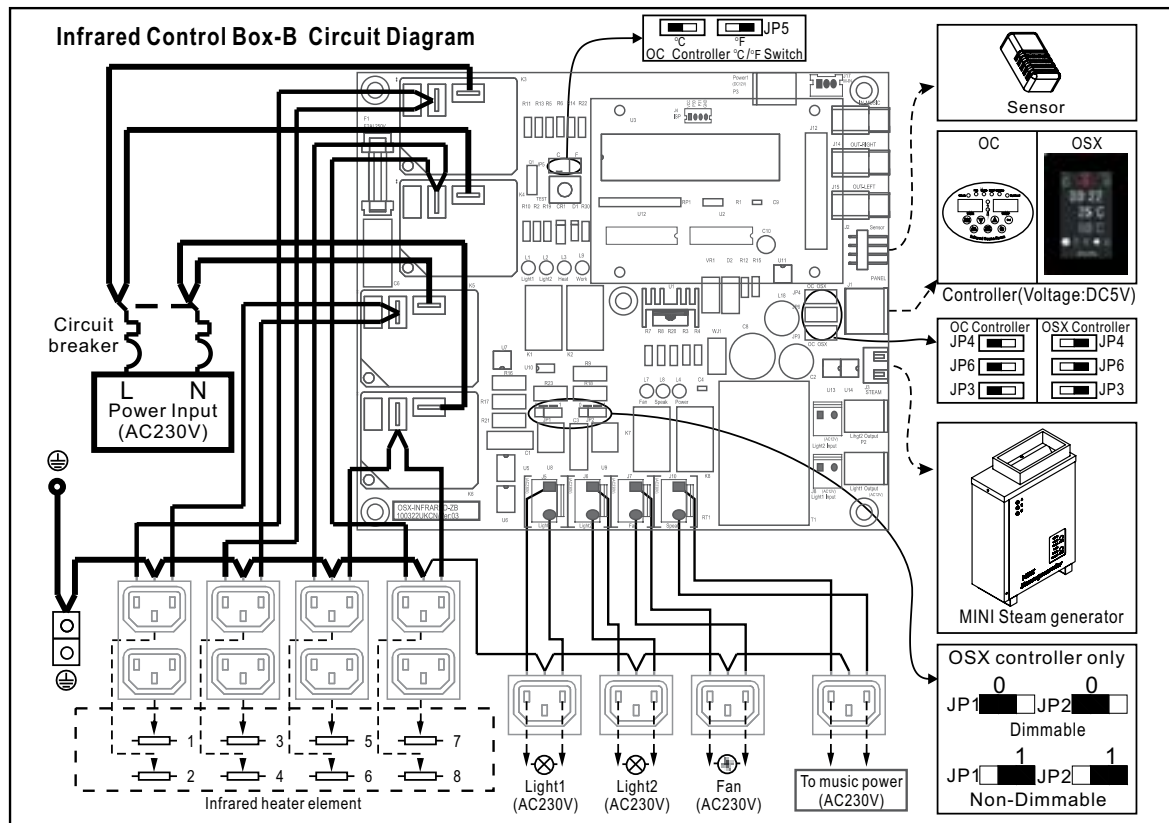
Plug the male/female IEC lead directly into the transformer for the bluetooth amplifier, continue the wiring of the speakers as per the speaker instructions using the black and white speaker cables provided. Connection to the amp can be made via an Aux input or connection to bluetooth.

## 5.3. Fan

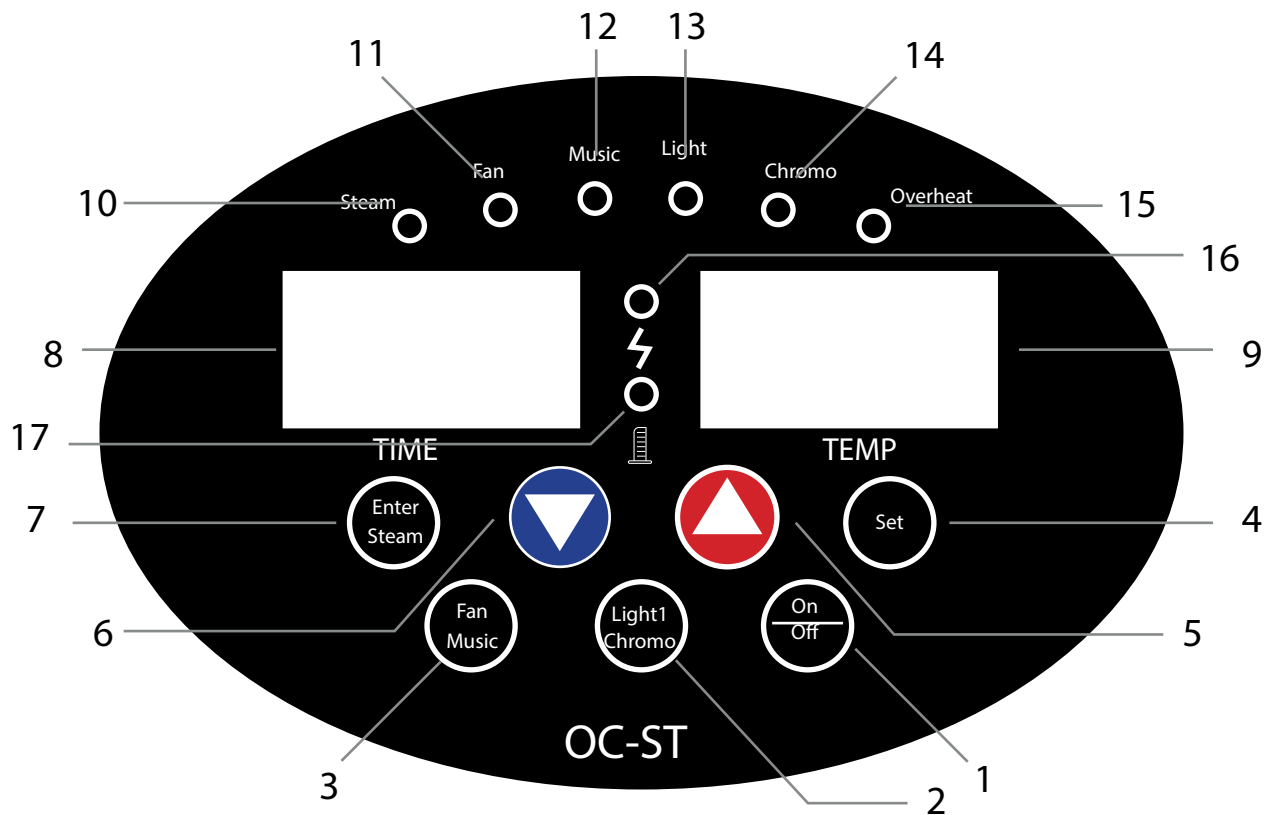
A fan is not a requirement on Oceanic saunas that have built in vents for natural ventilation. If you intend to install a fan and control via the keypad ensure the power does not exceed 100W.



## 6. Circuit Diagram



## 7. Keypad Functions



No	Part	Description
1	On/off	Push to turn the equipment on or off
2	Light	Push to turn on the light in the room.
3	Fan / Music	Push once to turn on fan (not required) Push twice to turn on speakers
4	Set	Preset time and temperature - <b>(you must then press 'Enter' to save settings)</b>
5	∧	Increase button
6	∨	Decrease button
7	Enter / Steam	Press Enter to save settings. Steam function not required
8	Time display window	Display the work time of the steam generator
9	Temp display window	Display the detected temperature of steam room
10	Steam	Not Used
11	Fan	Indicated the Fan is active (not required for Oceanic IR sauna)
12	Music	Indicated the Speakers have been turned on
13	Light 1	Indicated the Light is turned on
14	Chromo	Light to indicate secondary lighting circuit
15	Overheat	Indicator LED for overheat - turn machine off and wait for 1 hour before switching back on, if problem persists contact the seller.
16	L7	Indicates the detected temperature is lower than the preset temperature and sauna heater is heating.
17	L8	Indicates the detected temperature is higher than the preset temperature and the sauna heater is idling.

## 8. Keypad Operation

- i. Once all the cables has been correctly connected to the control box and the box and the power cable has either been plugged into the wall socket (domestic) or hard wired to the isolated mains supply (commercial) you can press the 'On/Off' button on the keypad to turn on the infrared sauna.
- ii. The keypad should now display a time and a temperature and L7 should be orange to show that the lamps are warming up. The time displayed is the length of time that the sauna will stay on for before turning itself off. The can be can be increased or decreased as described below. The temperature shown is the current air temperature inside the cabin, the maximum air temperature can be increased or decreased as described in point iv.
- iii. Adjusting the time. Press the 'Set' button once. The time will now flash. Increased or decrease the time using the blue and red arrow keys. Once the correct time is flashing press the Enter key to save the selection. If you do not press the Enter key the time will not be saved and will revert to the previous setting. The maximum time you can select is 1hour and 30 minutes for a session.
- iv. Adjusting the temperature. Press the 'Set' button twice. The temperature will now start flashing. Increase or decrease using the blue and red arrow keys. Once correct press the 'Enter' button to save. The maximum air temperature is 60 degrees for the infrared sauna.
- v. The keypad will remember the time and the temperature that you selected on your previous session when you turn the sauna on.
- vi. To activate the other functions such as turning on the lighting and speakers, press the associated key the correct number of times as described in the table on the previous page. The associated LED will light up to show you that the light or speakers are on.
- vii. Overheat light. All saunas are fitted with a built-in thermal cut-out that trips automatically if the temperature in the sauna rises above a safe level. The reset button is located in the remote thermostat. If you cannot ascertain what caused the increase in sauna temperature, do not attempt to reset the sauna, but either notilfy Oceanic Saunas Ltd, or call in a qualified electrician.

Please read the Infrared Sauna Operation Manual for full instructions on how to use and look after your infrared sauna.

If you encounter any difficulty with this assembly procedure or think we could have explained anything more clearly we would welcome your comments, please call T: 01902 450550 or T: 01902 871127 technical help line.

## Mini Steam Generator

The mini steam generator is an optional accessory for domestic infrared sauna cabins only, not for use in commercial cabins. It is powered and controlled independently from the infrared heaters but can be run simultaneously as the IR heaters are hermetically sealed. The generator is filled manually from above, there is a manual drain valve if you need to drain the generator.

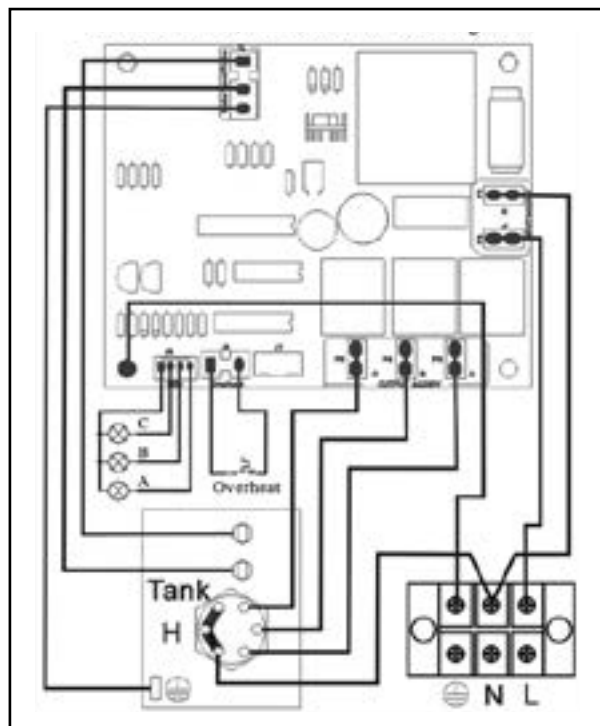
### 8.1. Mini Steam Generator Safety Precautions

- i. The equipment must be installed vertically
- ii. Stop pouring water into the boiler when the high level LED light (A) turns on. Don't let the water reach the holes in the top cover. You can release water using the valve at the bottom.
- iii. If overheat indicator LED light turns on, cut off the power supply and do not do not turn back on until the problem has been resolved. If in doubt please contact our technical team.

### 8.2. Parameters

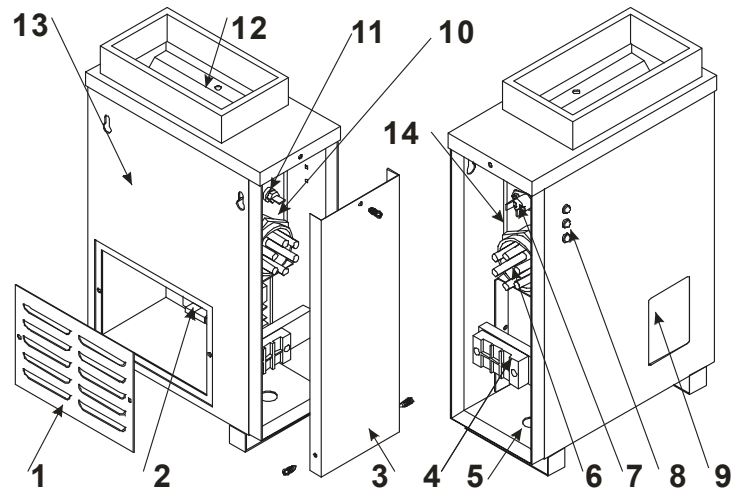
Model	Power (W)			Voltage (V)	Current (A)			Dimensinos LxWxH (mm)
	Class 1	Class 2	Class 3		Class 1	Class 2	Class 3	
OC-Mini-1	500	750	1000	210-240	2.1-2.3	3.2-3.6	4.2-4.8	220 x 100 x 340
OC-Mini-2	1000	1500	2000	210-240	4.2-4.6	6.4-7.2	8.4-9.6	220 x 100 x 340

### 8.3. Mini Steam Generator Circuit Diagram



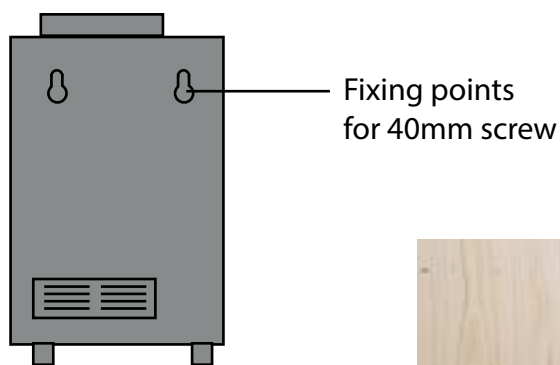
## 8.4. Parts Description

No	Description
1	Back cover
2	circuit board
3	Side cover
4	Terminal
5	Power entry
6	Heat element
7	Overheat switch
8	Water level indicator LED
9	Control panel
10	SUS tank
11	Water level probe
12	Steam outlet and water inlet
13	Shell
14	Heat preservation cotton



## 8.5. Installation

- i. Sauraium Coat application - See separate instructions.
- ii. Position the steam generator on a blank wall panel at low level 150 - 300mm above ground level.
- iii. Fix to cabin wall using 40mm Screws and the locating fixing points on the back of the heater.
- iv. Drill hole through the panel as appropriate height for cable to be inserted.
- v. Connect the steam generator to a 13Amp socket with RCD protection.



## 8.6. Controls and Indicators

## 9. Mini Steam Generator Operation

- i. Once the mini steam generator has been installed correctly onto the wall and the power cable connected to a 13amp socket the unit is ready to use.
- ii. Turn the power on at the 13amp socket and press On/Off button on the Mini Steam Generator
- iii. Note that the LED C should be lit to show the tank is empty
- iv. Fill the generator with water from above using a water jug until A is lit. Do not overfill the generator as the water may start to spit out of the top when heating. If this occurs manually drain some water out into a container using the drain valve at the bottom of the generator.
- v. The generator should now start to heat the water and the 'Heat' LED should be lit
- vi. You can adjust the amount of steam using the Power button to set the generator to 500W, 750W or maximum power 1000W.
- vii. Once the water level drops to C you can add more water to the generator. Be careful as the unit will not be very hot.
- viii. If you are adding aroma to the water this will alter the surface tension of the water and may cause it to spit when boiling into steam. If this happens either reduce the amount of overall liquid in the generator or reduce the amount of aroma in the water. Do not add neat aroma to the tank, ensure the aroma is diluted. Oceanic aromas are to be diluted 1 part aroma to 20 parts water. For every 1ltr of water only add a maximum of 50ml of aroma.
- ix. Ensure you drain the steam generator after the end of your session.

## 10. Mini Steam Generator Maintenance

The single biggest problem with steam generation is the build up of scale resulting from dissolved solids within the water. Scaling can cause the elements to fail, the water level sensors not to function, premature failure of the O-rings resulting in leaks from around the elements. The extent of the problem will vary according to the degree of hardness in the local water supply.

Expect 2500 hours element life, this can be seriously depleted by poor maintenance.

All users must ensure a regular maintenance routine to descale the generator – the frequency of this will vary according to the degree of hardness in the local water supply and the amount of time the generator is used for. Check the water for hardness and arrange the descaling routine accordingly: -

High levels of hardness descale once every 50 to 100 hours of operation.

Medium levels of hardness descale once every 100 to 250 hours operation.

Low levels of hardness descale once every 250 to 1000 hours of operation.

To descale the generator use a solution of weak acid crystals (such as citric acid) mixed with water

Citric acid can be purchased from: [www.oceanic-saunas.co.uk](http://www.oceanic-saunas.co.uk)