

Insignia

Installation Guide

Signature Steam

Generator

7.5kW - 18kW

ATTENTION INSTALLERS!

These instructions must be
left with the customer.



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*Thank
You*

Thank you for choosing the Insignia Signature Steam Generator. Please take the time to carefully review this booklet to ensure a successful installation and long-lasting performance of your steam unit. A meticulous and accurate installation is key to achieving the exceptional quality and reliability you expect from your product for years to come.

Installation Advice

1. If the generator is installed at a place where access is difficult, the water supply valve must be easy to access for emergencies.
2. A GFCI must be installed on the power supply, power wire, fuse and breaker must comply with the nameplate on the unit and the table (next page).
3. The solenoid valve can endure maximum 0.8MPa (8kg/cm²) water pressure. To protect the solenoid valve from extremely high water pressure, please turn down the inlet slightly or install water pressure reducing valve.
4. Do not install saddle-backed or needle valves on the inlet. Please dredge and clean the pipe before installation.
5. Strictly no blocked or blended pipes, otherwise this will have a negative effect on the flow of steam and condensate. The steam pipelines should be installed with a slight angle so that the condensate can flow back to the generator or the steam head.
6. Steam generator should be installed indoor to avoid freezing.
7. The generator should be installed and leveled with the arrow pointing upward at an easy-access place, otherwise do not switch on.
8. The steam pipeline must be copper pipes or stainless-steel pipes, all other material such as plastic, acrylic must **not** be used since they cannot endure 150°C or higher temperature.
9. All inlet and apertures should be sealed to prevent any steam escaping and to protect the generator and yourself.
10. Do **not** drain water into the steam room from the water tank as may scald, causing serious injury or damage to the steam room.
11. All inlet water pipes and steam pipelines should be built according to the National Standard and this should be done before sealing the wall.

Models, Parameters and Dimensions

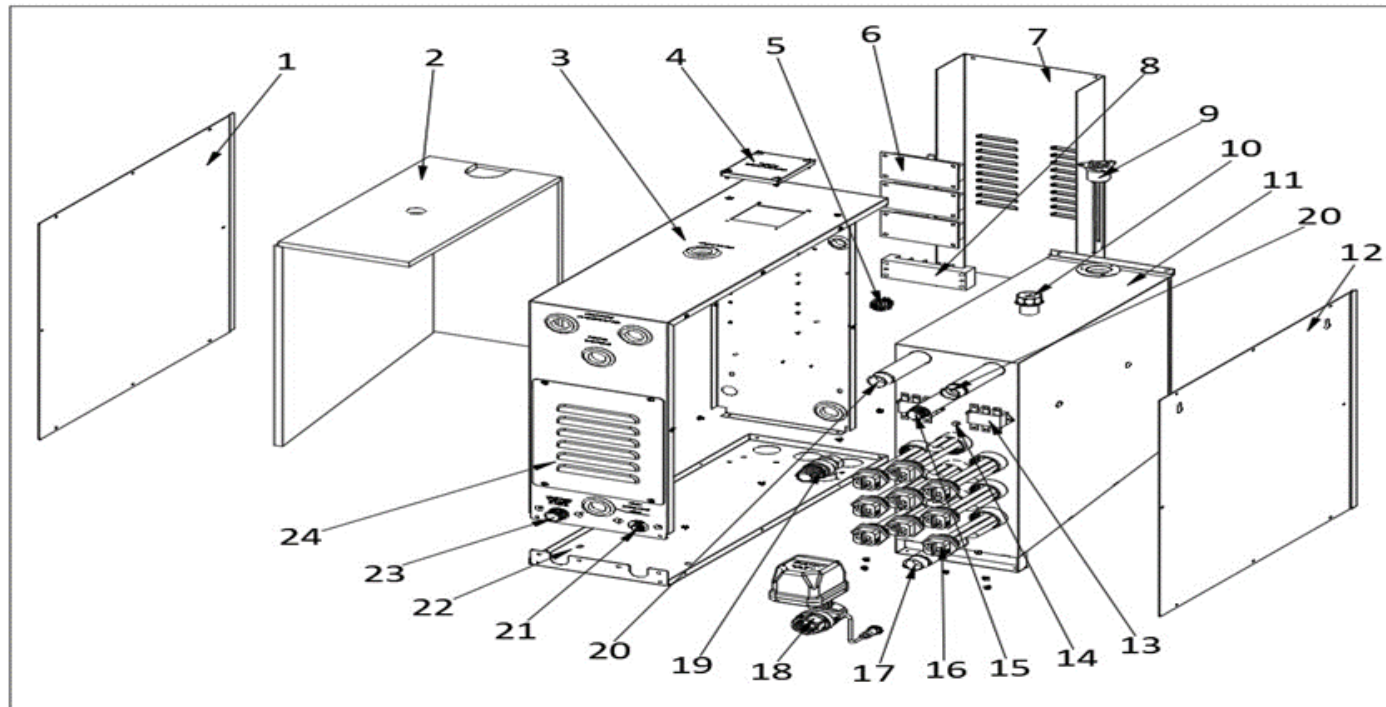
Model/Power	Phase	Heating Elements	Voltage/Current	Power Wire	Breaker	Room Volume	Dimensions
kW	1/3	Number x kW	V/A	Number x mm ²	Amps	m ³	Length x Width x Height (mm)
AIO 7.5kW	1	3 x 2.5	215-240/33.75	3 x 6.0	32	6.5—9	418 x 150 x 317
AIO 7.5kW	3	3 x 2.5	380-415/11.25	5 x 2.5	10.5	6.5—9	418 x 150 x 317
AIO 10.5kW	3	3 x 1.5 + 3 x 2	380-415/15.9	5 x 2.5	14	9—12	490 x 174 x 397
AIO 12kW	3	6 x 2	380-415/18.2	5 x 2.5	17.5	11—14	490 x 174 x 397
AIO 15kW	3	6 x 2.5	380-415/22.7	5 x 2.5	21	13—18	490 x 174 x 397
AIO 18kW	3	9 x 2	380-415/27.3	5 x 4	25	16—22	511 x 174 x 472

1. The rated power is measured under single phase 230V, therefore the actual operating power under single phase 215-240V, 50/60Hz, or three phases 380-415V, 50/60Hz may be different from the rated value.
2. The 7.5kW generator, can be made as 215-240V single phase or 380-415V three phases. Please note the earth wire should not be less than 1.5mm², the live wire and null wire should not be less than 2.5mm².
3. The 10.5kW, 12kW, 15kW and 18kW generators, can be only be installed by 380-415V three phases. Please note the earth wire should not be less than 2.5mm², the live wire and null wire should not be less than 4.0mm².

How to choose the right kW steam generator?

Visit <https://www.insigniashowers.com/steam-generator-sizing> and use the online calculator to calculate which steam generator we recommend for your steam room.

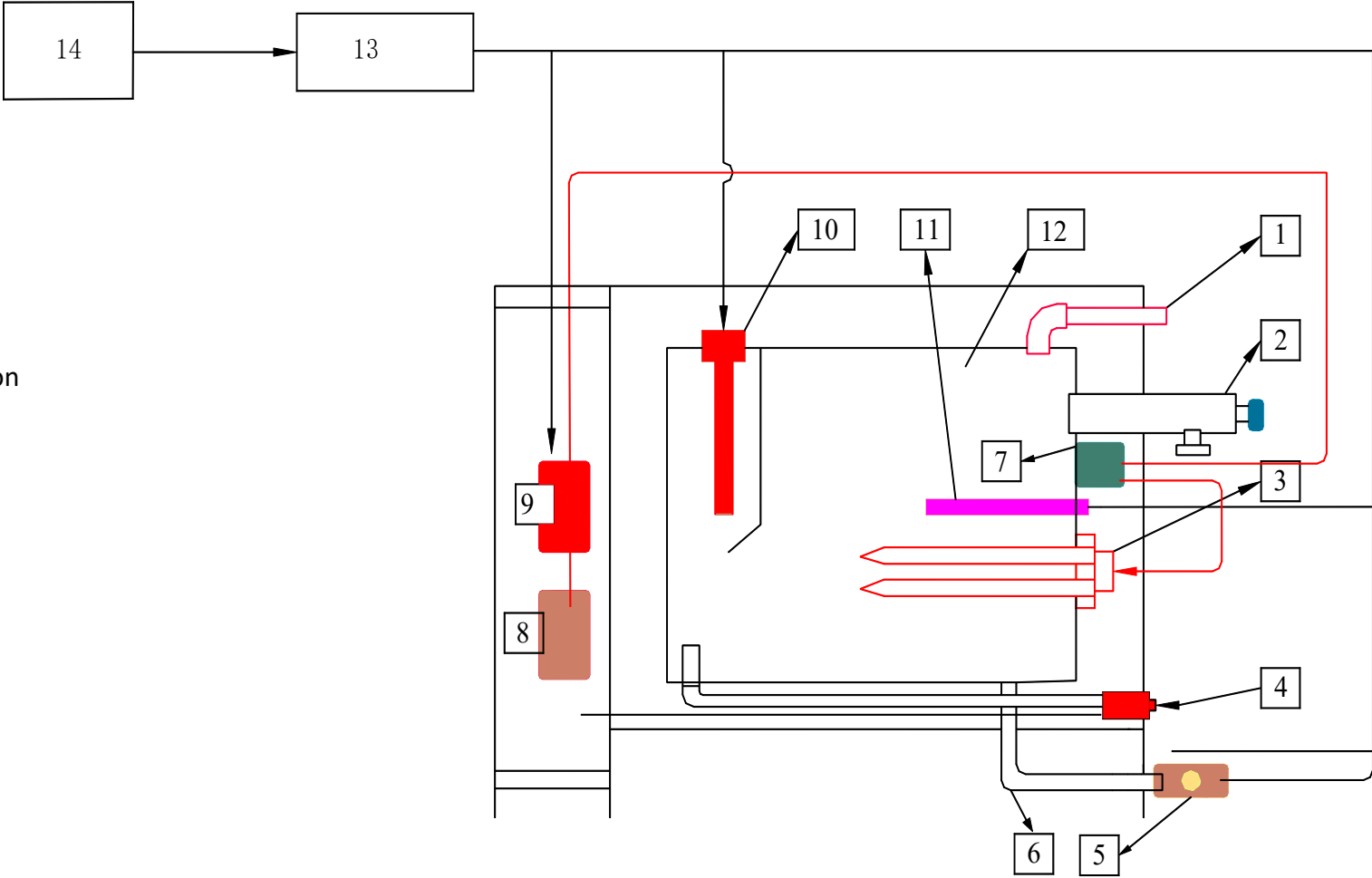
Steam Generator Construction



- | | | |
|--|-----------------------------------|---|
| 1. Front Cover | 10. Service Hole (1/2") | 19. Safety Valve |
| 2. Thermal Insulation | 11. Water Tank | 20. Steam Outlet |
| 3. Main Frame | 12. Back Cover | 21. Connector for Drain Valve Power Supply (DC-12V) |
| 4. Water Level Sensor Service Hole | 13. Overheat Protection Device | 22. Base |
| 5. 12-Pin Connector to Central Control Box | 14. Temp Sensor for Water Tank | 23. Water Inlet Valve |
| 6. Relay Board | 15. Safety Valve Connector (1/2") | 24. Service Hole for Heating Element |
| 7. U-Shape Cover | 16. Heating Element | |
| 8. Thermal Board | 17. Drain Outlet (3/4") | |
| 9. Water Level Sensor | 18. Drain Valve | |

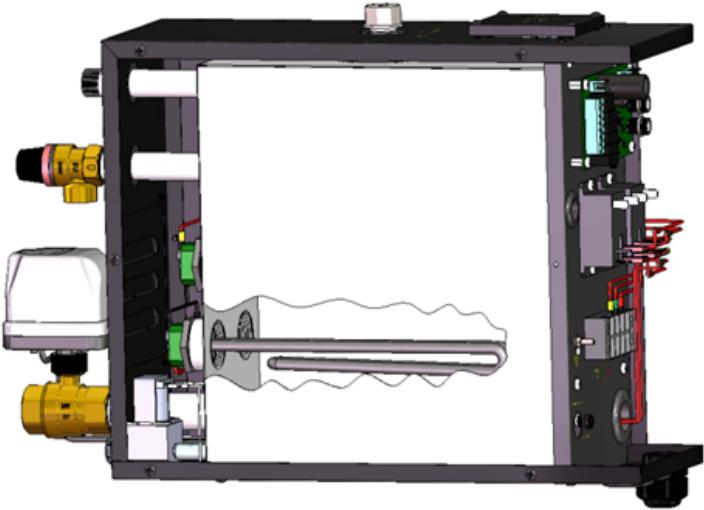
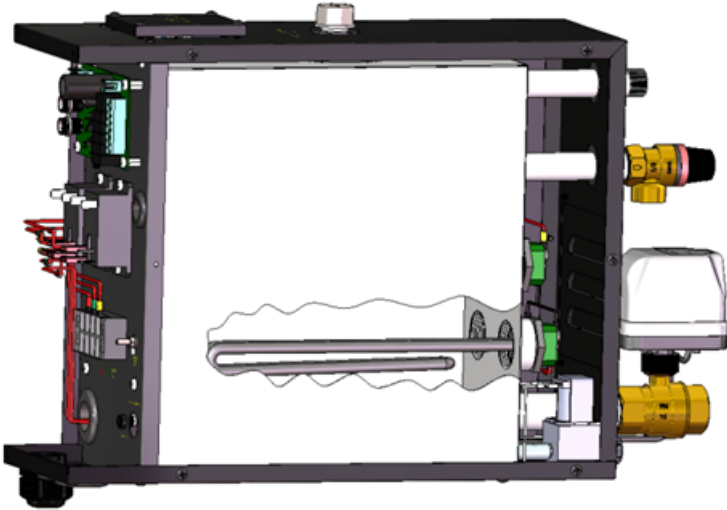
Steam Generator Construction

- 1. Steam outlet
- 2. Safety valve
- 3. Heating elements
- 4. Solenoid water inlet valve
- 5. Drain valve
- 6. Drain pipe
- 7. High-temperature protection
- 8. Wire terminal
- 9. Sub-board (relay)
- 10. Water level sensor
- 11. Temperature sensor
- 12. Inner water tank
- 13. Central box
- 14. Controller



Steam Generator Orientation

To change the orientation of the steam generator, swap over front cover #1 and back cover #12 as shown on page 6



Installation of steam generator body

Switch off all power supply before installation, and check whether you have the correct model for your steam room according to table (page 5).

Do not install the generator outdoors, in wet, freezing, or corrosive places. Do not install the generator near to inflammables such as oil paint, diluents and fuel. Be mindful of the steam pipeline and safety valve since the high temperature of steam is dangerous in very close proximity.

The generator can be installed in left or right hand orientation (see page 7 on how to change this).

Always ensure the unit free from obstruction.

The generator **MUST** be installed in a dry and very well-ventilated place - minimum requirement of 1.3 cubic meter of air space is required. Never starve the unit of air as it could cause the unit to enter into heat protection mode and could damage the unit.

The generator can be installed either on the wall or on the ground but must be well fixed. Install the generator as close as possible to the steam room.

To install the generator on the wall, drill two small holes with diameter of 8mm on the wall and insert the expansion screws, then hang the generator on those screws (not supplied).

To install the generator on the ground, install a frame on the site and then screw the generator into the frame.

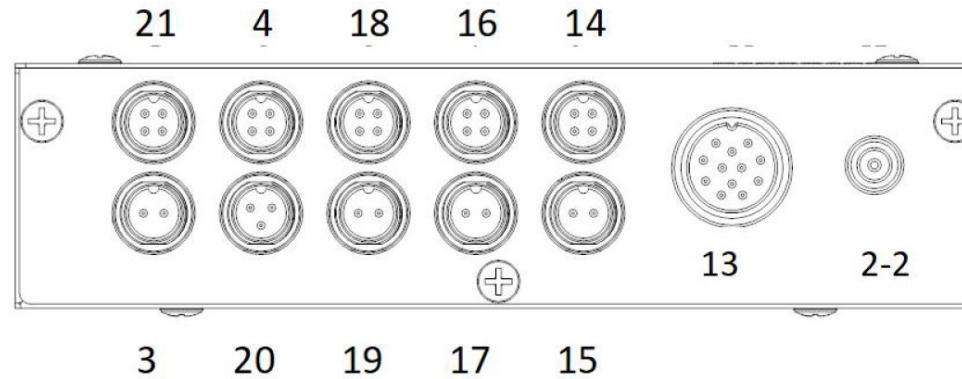
The central function box should be installed as near to the steam generator as possible, as the length of the cable (connecting the steam generator and the central function box) is 500mm. Only the cable provided will work with the system, do not extend the cable.

For better service and maintenance, please install the generator with the nameplate face to front and leave more than 250mm space around the generator.

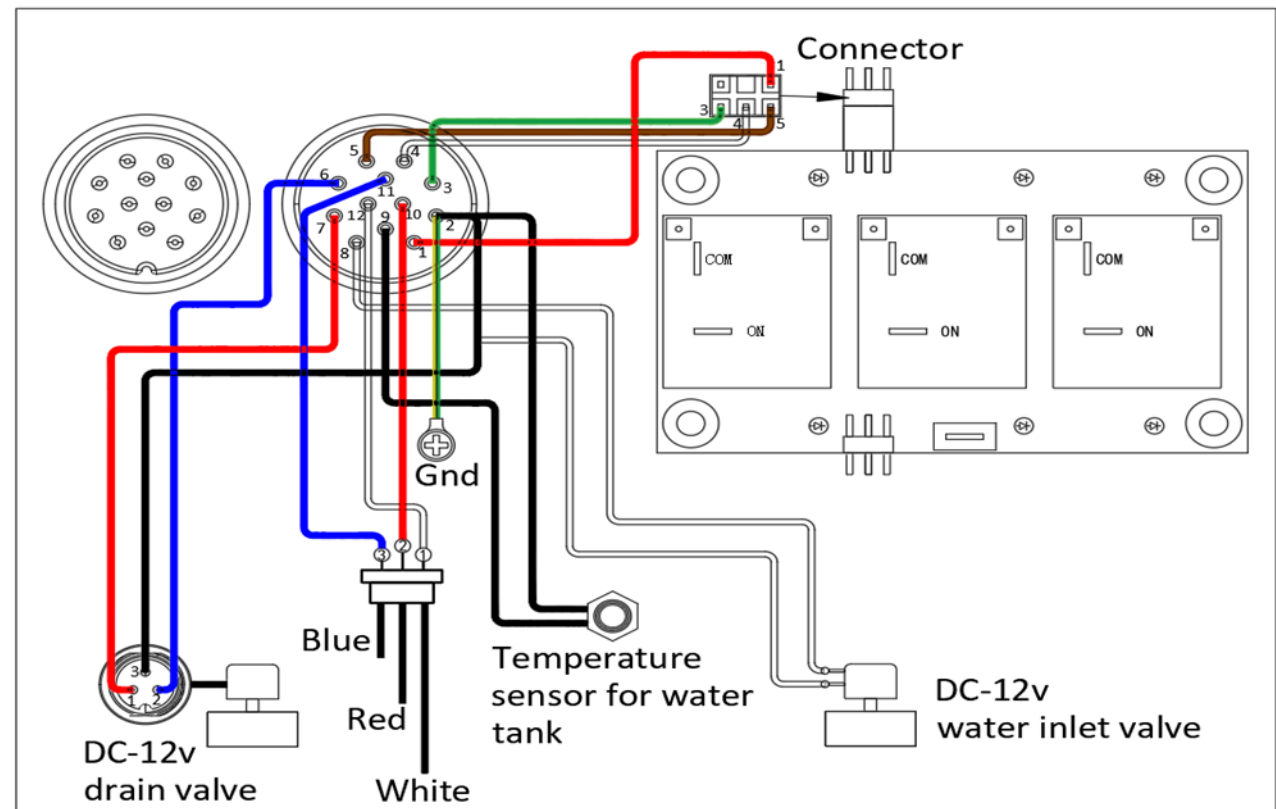


Central Function Box

- 21. APP (Not functional)
- 3. Steam room temperature sensor
- 4. Controller
- 20. Steam room humidity sensor
- 18. Fast steam switch
- 19. Fan
- 16. Coloured lights
- 17. Salt spray generator
- 14. Aroma pump
- 15. Descaling pump
- 13. Connector to the steam generator
- 2-2. Power supply 12V DC



Steam generator 12-core cable socket corresponding functions



NOTE: (explanation of indicators on the main board)

- D34: Main board power supply indicator
- D39: Relay contact on-off state indicator
- D24: Water level detection signal indicator
- D18, D19, D20: Heating indicator

Installation of Central Function Box

1. Hang the central function box on the wall, or place on a flat secure surface.
2. Central control box needs to be powered separately and comes with its own 12v adapter.
3. Use the 12-core data cable provided to connect the steam generator to the central function box.
4. The 12-core data cable is 100cm long, therefore ensure the central function box is located within this distance from the steam generator.
NOTE: A 300cm 12-core data cable is available from Insignia should you require a longer cable, please contact the store.
5. Connect each function equipment (if purchased) to the corresponding connector on the central function box (i.e lights, aroma pump, descaler etc.)



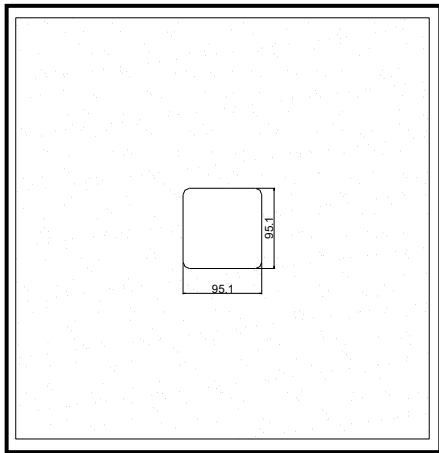
Control Panel Installation

The control panel should be installed at approx. height that is comfortable for the user, inside or outside the steam room, whichever is most convenient for your setup. Create a recess as shown, install the housing box, tile to the edge of the housing box, ensure cabling is pulled through, connect the control panel and then place the control panel into the recess.

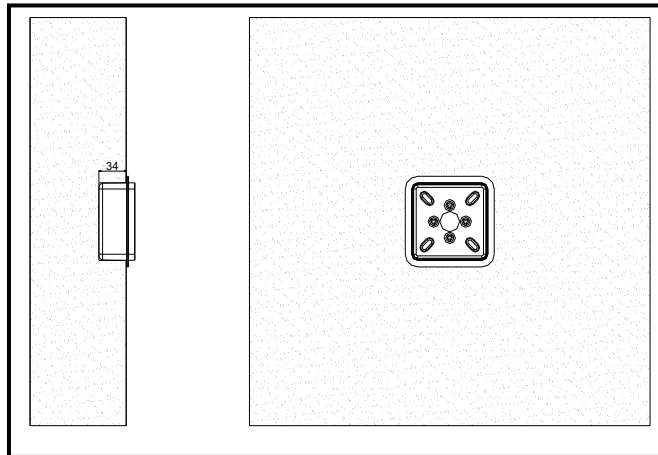
Create a wall recess for the control panel

95.1mm x 95.1mm

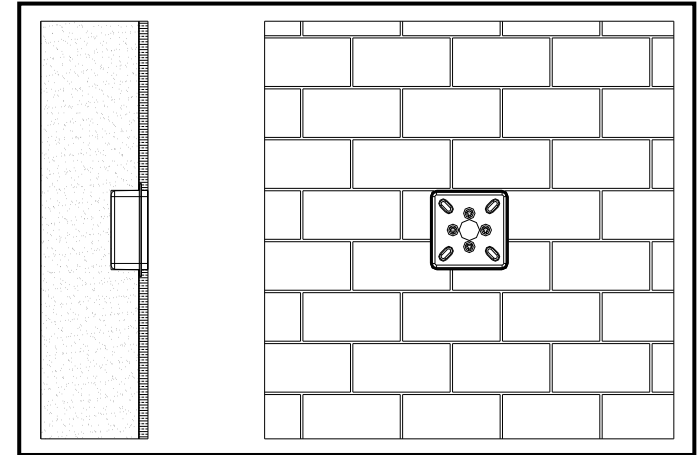
Depth = 34mm



Place the housing box into the recess created.



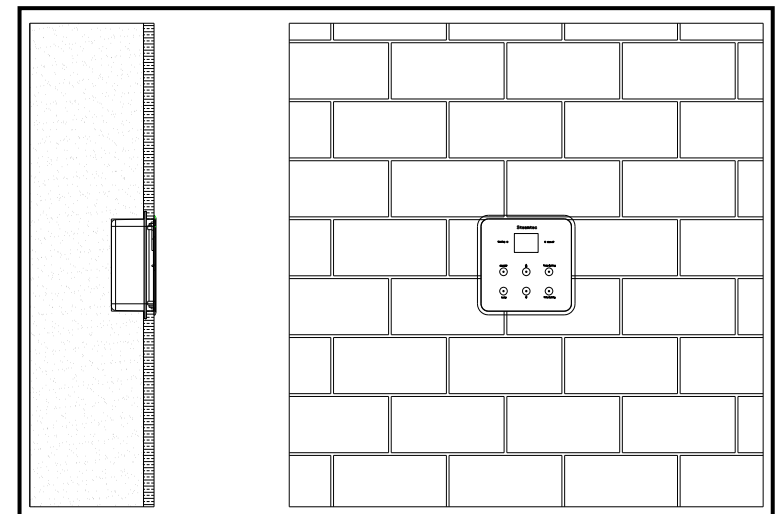
Tile tight to the edge of the housing box.



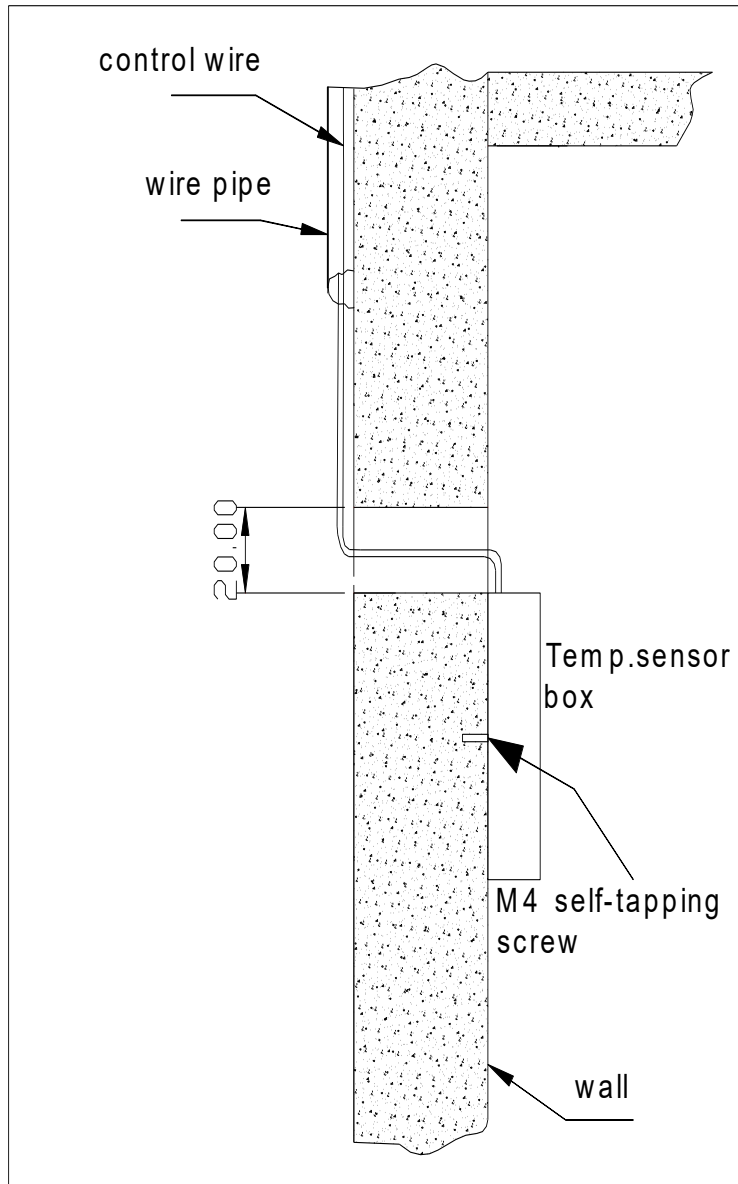
Connect panel and insert.



Route the control cable through the conduit ($\phi 25\text{mm}$), with one end connecting to the controller and the other end connecting to the #4 connector of central function box.

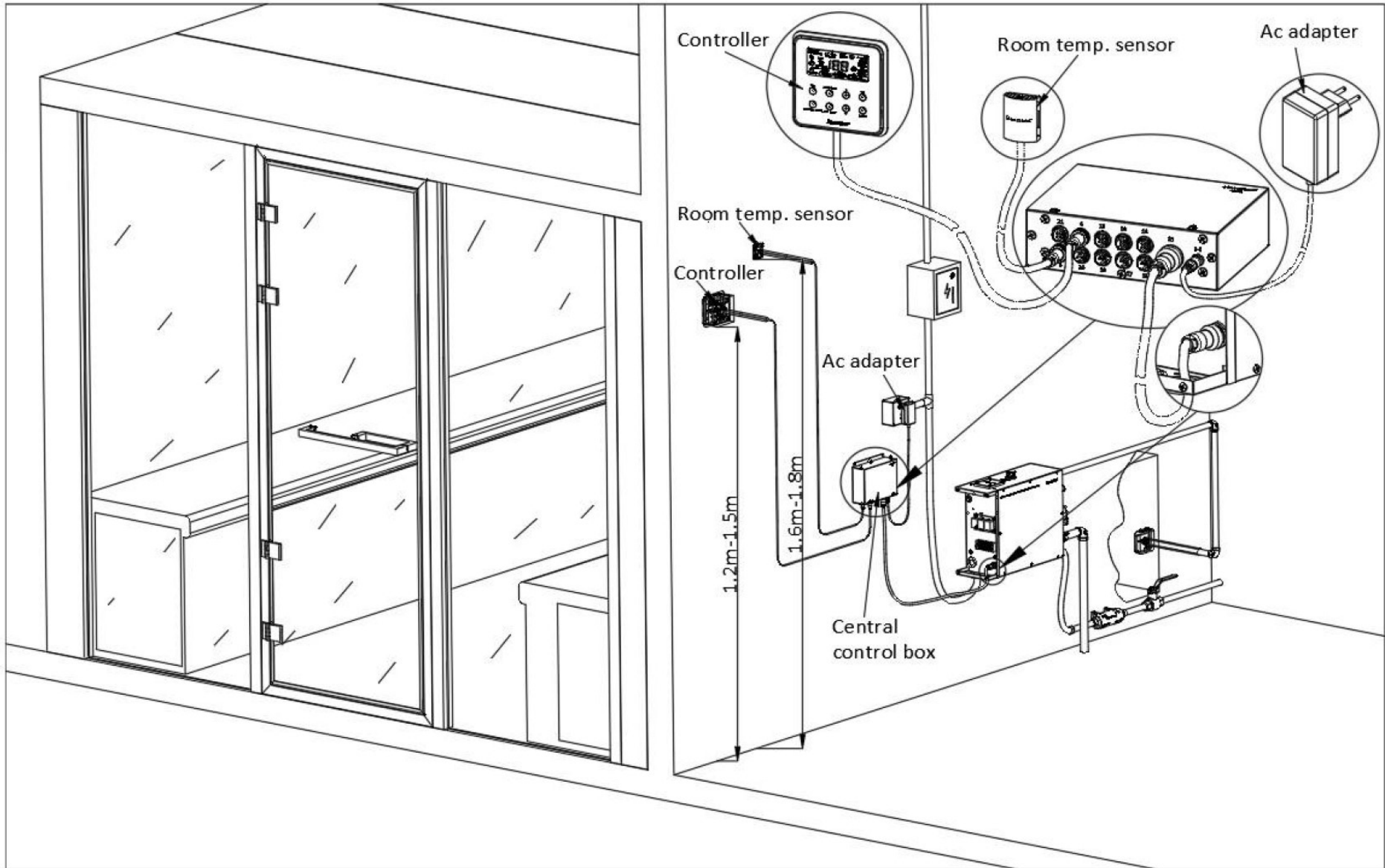


Installation of temperature sensor



1. The temperature sensor is used to measure the temperature inside the steam room, so that the generator can work automatically according to the pre-set temperature and maintain a constant room temperature.
2. The control wire and temperature wire should not be parallel to the power wire.
3. The control wire and temperature wire should not intersect with the power wire.
4. The installation height of the sensor should be approx. 1.6 –1.8m from ground.
5. Drill a hole (diameter 20mm), to allow the aviation connector to pass through the wall. Screw down the sensor in the steam room.
6. Pull the sensor wire through the conduit ($\phi 25\text{mm}$) then connect into the central function box.

Illustration of a typical set up



Power Supply

Electrics:

**All circuits MUST be installed by licensed electricians and conform to local and national codes.
NEVER undertake these works yourself.**

Power supply must be cut off before installation, maintenance and repair. Pressing the on/off button on the controller will **NOT** cut off the power supply. Always turn off at the mains.

No additional power supply or wire is allowed to connect to the generator. Do **NOT** connect the earth wire to the neutral/null wire.

Only the original parts and elements from our factory are allowed to be used in installation, operation, maintenance and repair.

After the installation of the pipeline and electrical circuits, careful checking must be performed before switching on the generator.

The generator has been carefully installed, checked and tested; therefore the user only needs to install the power wire.

The power supply should be 215-240V for single phase or 380-415V for three phase, 50/60Hz.

The selection of fuse and breaker must strictly follow the data in the table on page 5. Choose the suitable power wire according to the table on page 5 and local codes.


Installation

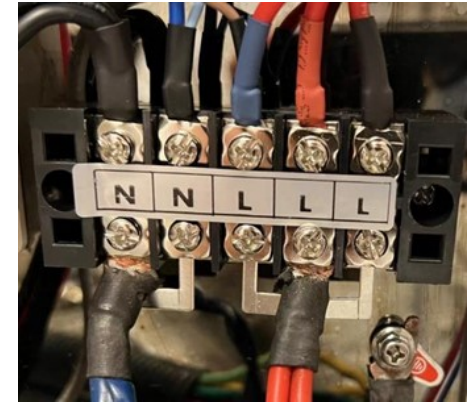
Remove the U-shape cover off the generator, insert the 3-core (1 live, 1 neutral/null and 1 earth) power wire (single phase, 215-240V, 50/60Hz) or 5-core (3 lives, 1 neutral/null and 1 earth) power wire (three phases 380-415V, 50/60Hz) into the hole on the underside of the generator case and connect to The correct terminal. Tighten the wire terminal to prevent the wire(s) becoming loose and potentially arcing the power and damaging the unit.

Installation—Single & 3 Phase

Single phase, 215-240V AC, 50/60Hz power supply:

Connect the Phase wire to the terminal labelled as “L2” in the middle;
connect the Neutral wire to the terminal labelled as “N” and connect the

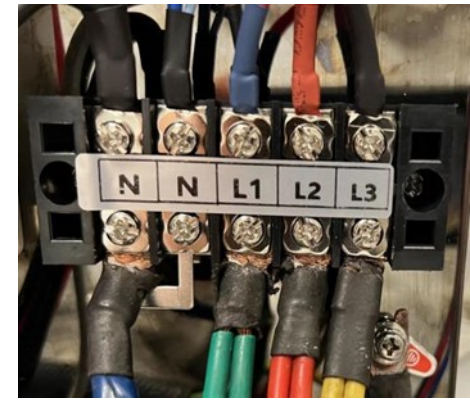
Earth wire to the terminal labelled as “”.



Three phase, 380-415V AC, 50/60Hz power supply:

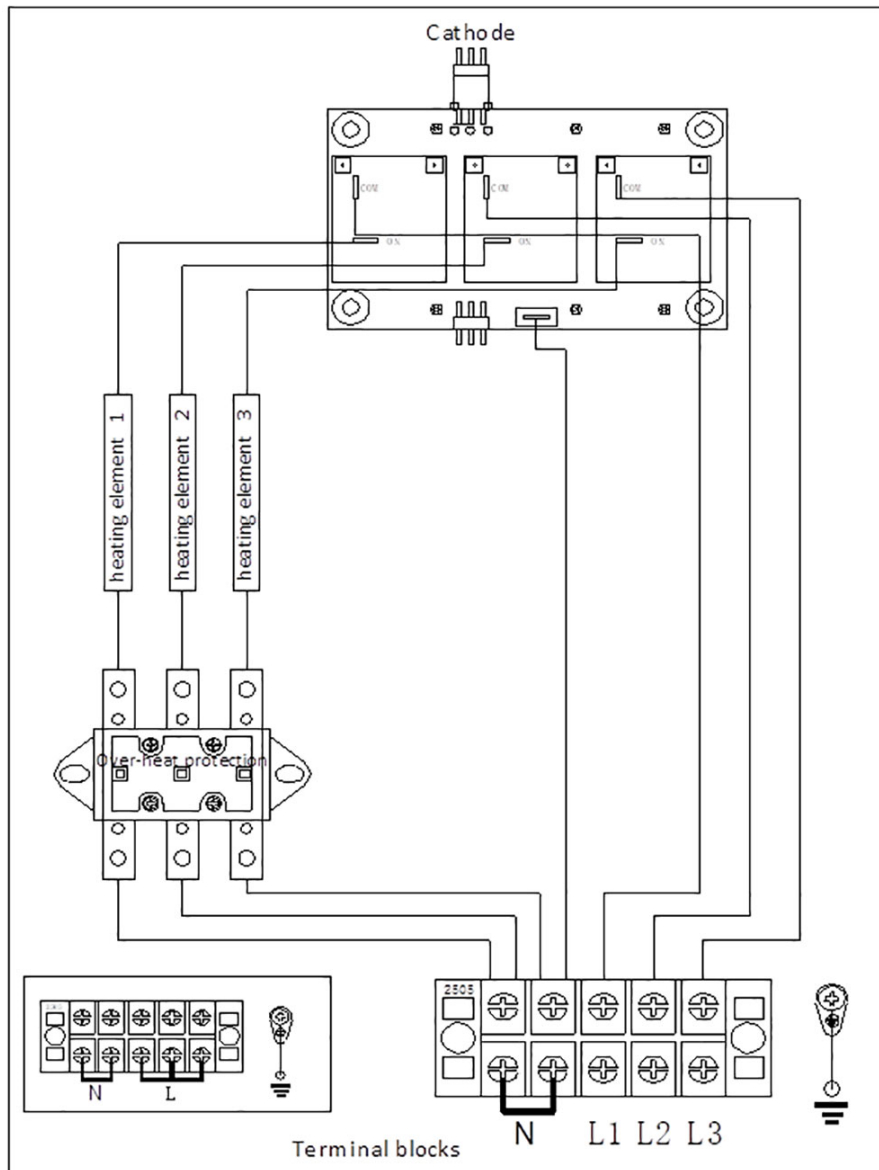
Connect the 3 Phase wires to the terminals labelled as “L1”, “L2” and “L3” respectively.
Connect the Neutral wire to the terminal labelled as “N” and connect the Earth wire to the terminal labelled as

“”.



IMPORTANT! Make sure all power connections are well secured by tightening the screws.

Pipeline Installation — 7.5kW Generator

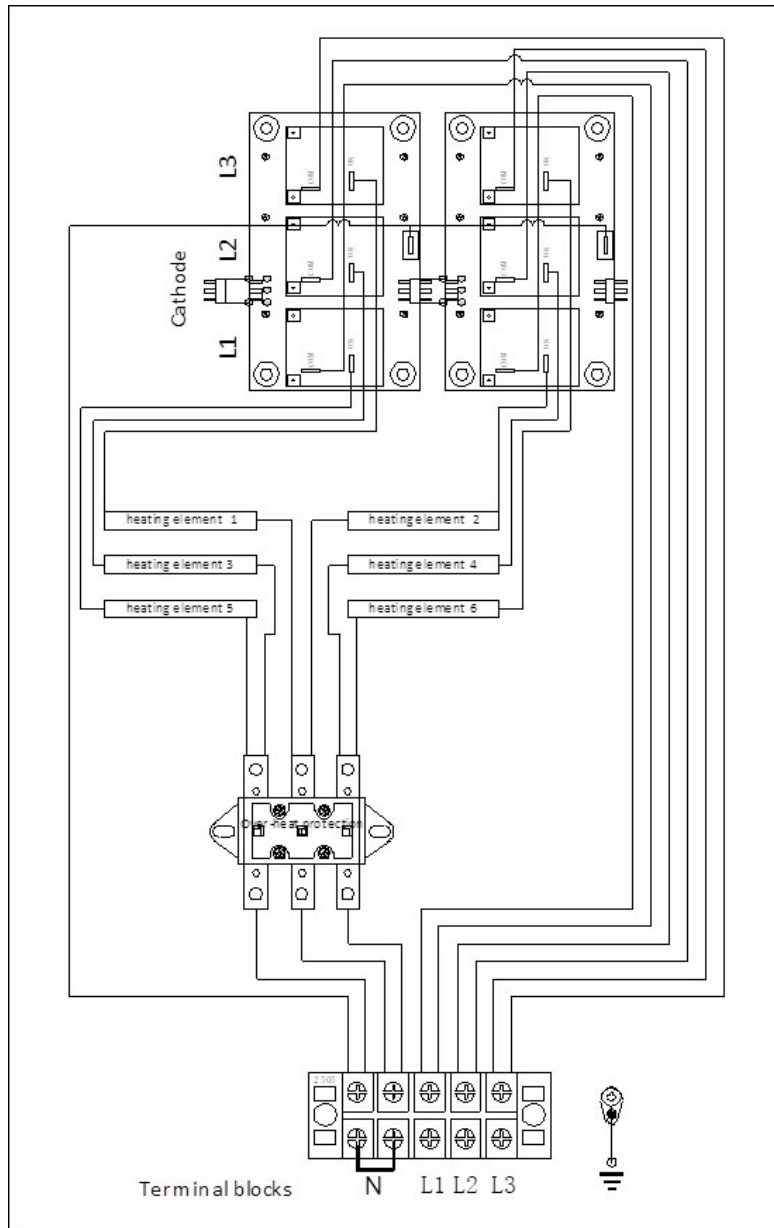


7.5 kW Generator

1. Service hole 1/2"
2. Steam Outlet: 1/2"
3. Safety Valve 1/2"
4. Water Inlet 1/2"
5. Drain Outlet 3/4"
6. Power Supply for Drain Valve



Pipeline Installation — 10.5kW/12kW Generator

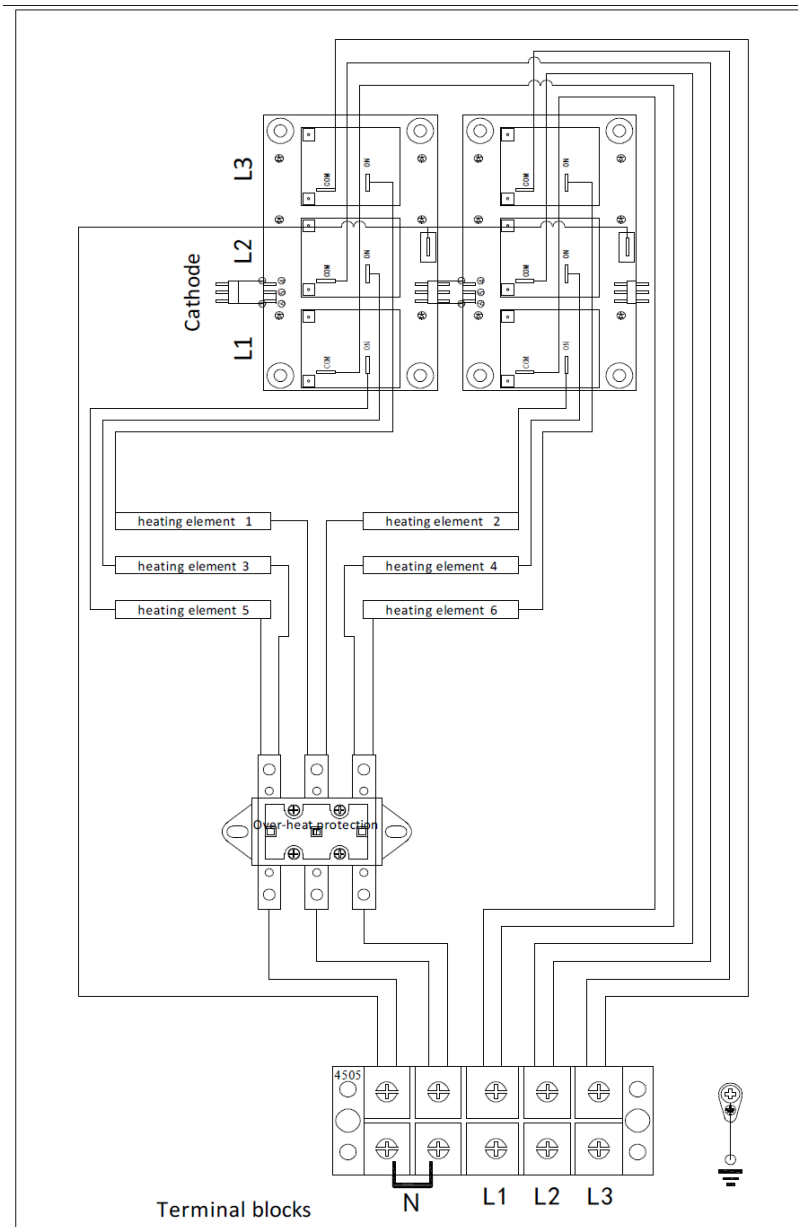


10.5kW/12kW Generator

1. Service hole 1/2"
2. Steam Outlet: 3/4"
3. Safety Valve 1/2"
4. Water Inlet 1/2"
5. Drain Outlet 3/4"
6. Power Supply for Drain Valve



Pipeline Installation — 15kW Generator

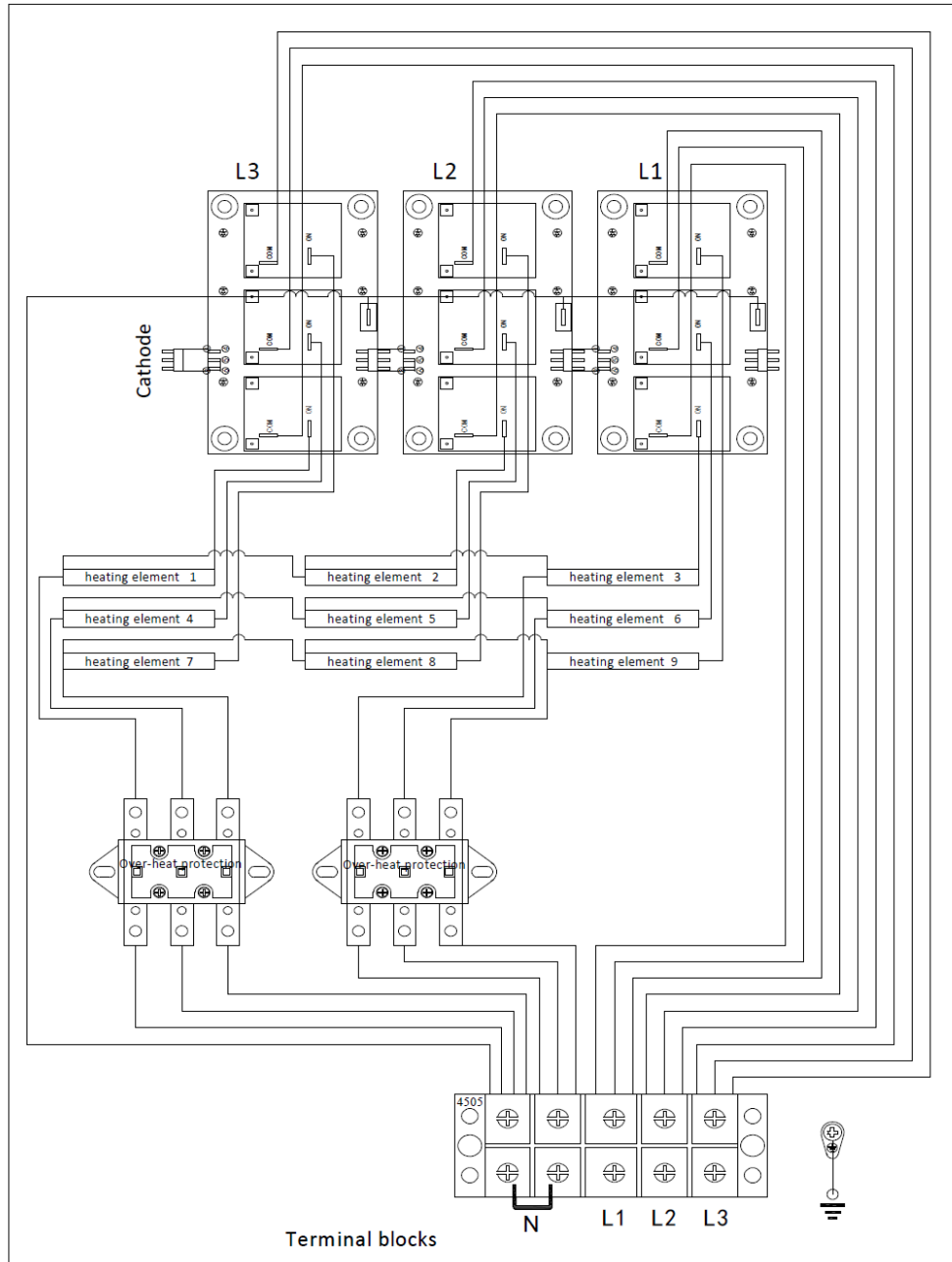


15kW Generator

1. Service hole 1/2"
2. Steam Outlet: 3/4"
3. Safety Valve 1/2"
4. Water Inlet 1/2"
5. Drain Outlet 3/4"
6. Power Supply for Drain Valve

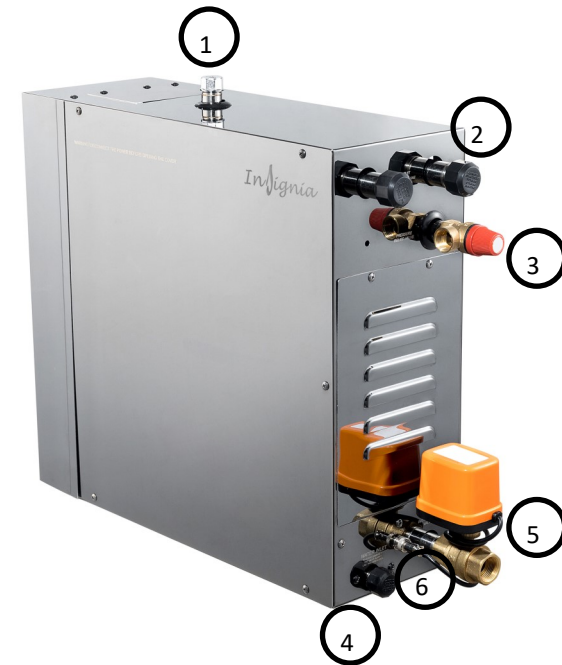


Pipeline Installation — 18kW Generator



18kW Generator

1. Service hole 1/2"
2. Steam Outlet: 3/4" x2
3. Safety Valve 1/2"
4. Water Inlet 1/2"
5. Drain Outlet 3/4"
6. Power Supply for Drain Valve



Installation of the Generator

Water Inlet:

First connect the water treatment cartridge (if applicable) to the water inlet solenoid valve. Then use a 1/2" flexible stainless steel hose to connect the other side of the water treatment cartridge and the water supply pipeline. Do not connect to metal water supply pipeline directly as it could may damage the water inlet valve. **IMPORTANT:** Only use a cold water supply.

Drain Outlet:

Use 3/4" copper pipe or stainless steel pipe to connect the drain outlet to the drain pipeline of the house. The drain pipeline should be installed with a small downward gradient to assist residual water in the steam generator flow through the drain pipe.

IMPORTANT: DO NOT use locking pliers to over-tighten the drainpipe connection. Just ensure it's watertight by using PTFE sealing tape. The water which comes out from the steam generator will be over 100°C so plastic pipe/acrylic pipe/FRP pipe or other similar material pipe will NOT be suitable.

Steam Outlet:

Use copper or stainless steel pipe to connect the steam head and the steam outlet pipe of the generator. The pipe should be as short as possible, with minimal bends and elbows. This is to avoid excessive length in the steam journey and the opportunity for it to condensate within the pipeline. Always ensure the steam pipe has a gradient for the condensation to drain. Failure to do so can cause boiling water to flow through the steam head.

IMPORTANT: DO NOT install a right angle bend immediately on the steam outlet as the pressure from the steam generator can not exit the steam unit quick enough and can cause the unit to trip out or activate the pressure valve.

For 7.5kW steam generators, the steam outlet is 1/2". Use AT LEAST a 1/2" steam pipe that is stainless steel pipe or copper pipe.

For 10.5kW, 12kW & 15kW steam generators, the steam outlet is 3/4". Use AT LEAST a 3/4" steam pipe that is stainless steel pipe or copper pipe.

For 18kW and above steam generators, the steam outlets are TWO 3/4" , Use AT LEAST TWO SEPARATE 3/4" steam pipes that are stainless steel or copper. DO NOT cross the two steam pipes.

Attention: Always choose the right diameter steam pipe. If the pipe size is smaller than our recommendation, it may cause the steam generator internal pressure to increase suddenly which may damage the steam generator and be a safety risk.

Installation of the Generator

Safety Valve:

This is to release the pressure of steam generator. Use 1/2" copper pipe or stainless steel pipe to connect the safety valve and the drain pipeline of the house. **DO NOT** block it.

Steam Head:

The steam head should be approx. 300mm from the ground and at least 150mm from the installed seating. Please apply silicone glue on the steam pipe nipple and back of the steam head, then screw the steam head on to the steam pipe nipple. The Aromatherapy reservoir should face upwards.

There are 2 options on how to install the steam head as shown in Fig1 & Fig2 below.

Service hole:

Can be used as maintenance hole or another steam outlet 1/2". For maintenance, please refer to Warranty And Services.

FIG 1

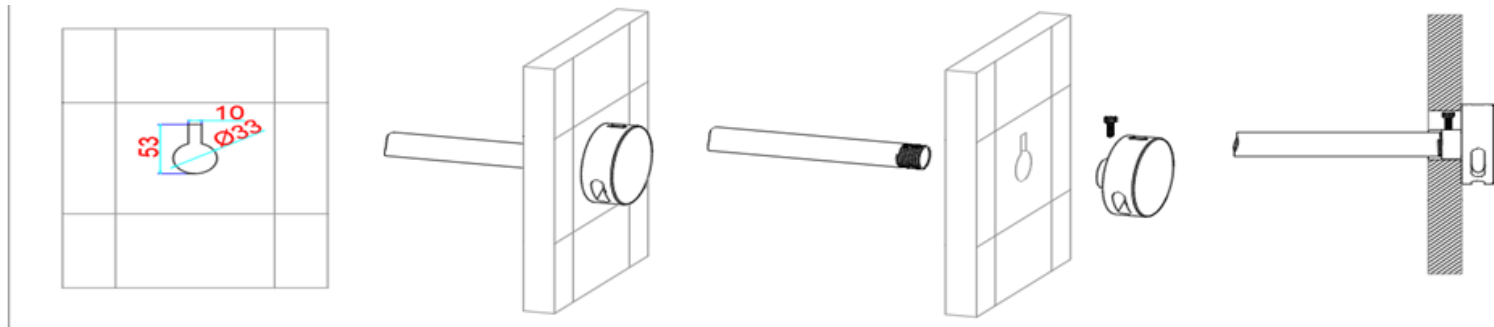
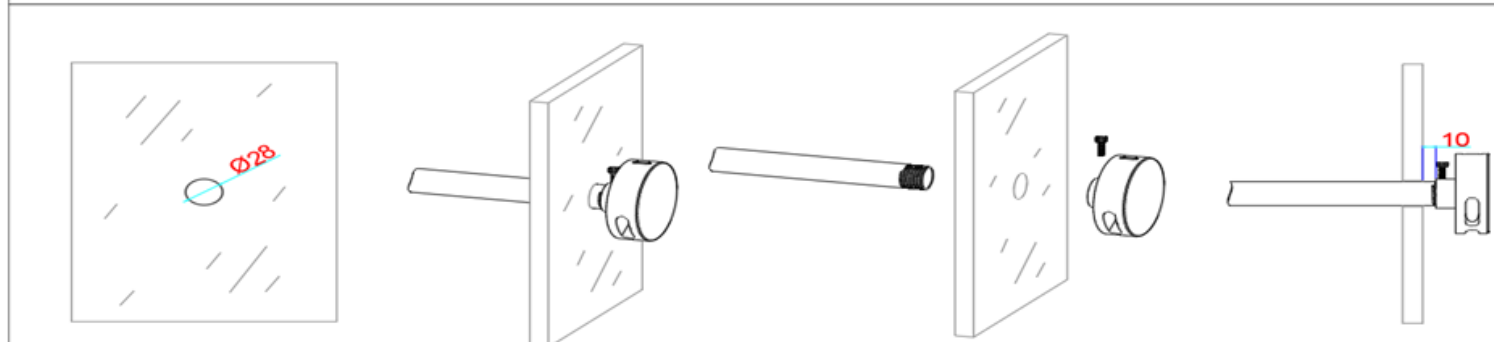


FIG 2

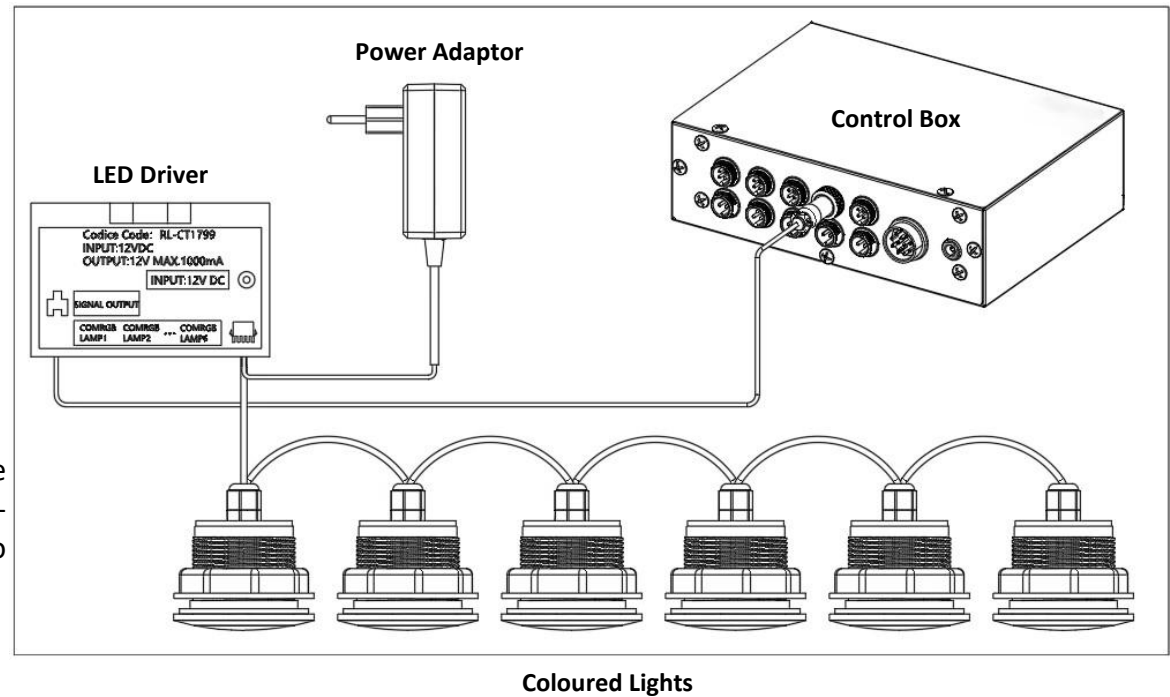
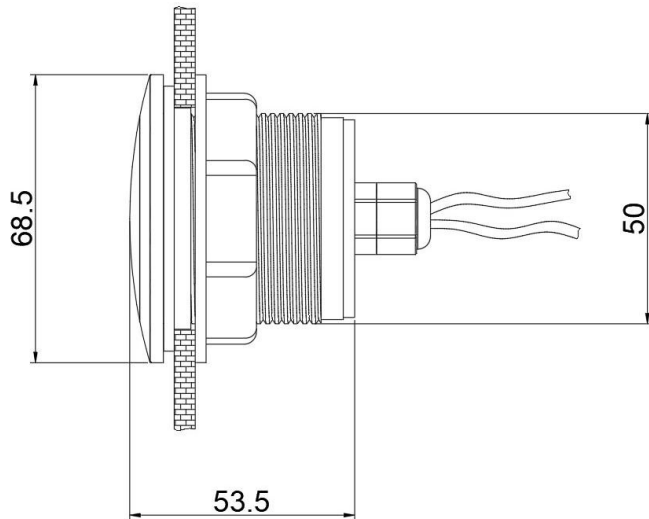


Accessories Installation: Lights

Installation of lights

- Light size: 68.5 x 53.5mm
- Light voltage: AC 12V
- Working current: 83mA
- Working temperature: -10°C to +70°C
- Watts: 1W/PC
- LED Driver output 3A

Open a hole $\phi 52\text{mm}$ on the ceiling, place the light into the hole and screw the rubber ring from the backside. If no access to securing from the rear you can silicone the light in to position.



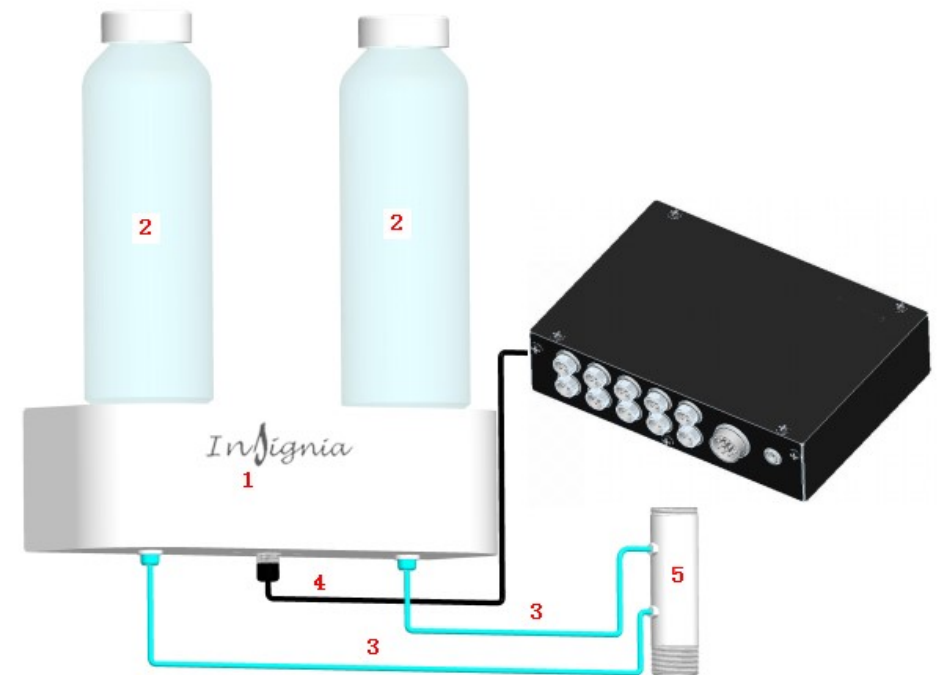
1. Connect the **Power Adaptor** to the **LED Driver**
2. Connect the **Coloured Lights** to each other in a chain, with one end connecting to the **LED Driver**.
3. Connect the **LED Driver** to the **Control Box**.
4. Connect the **Control Panel** to the **Control Box**.

Accessories Installation: Aroma Pump

WARNING:

- **NEVER** use pure (100% concentration) aroma oil, as it will damage the machine. You must use some carrier oil (such as grapeseed oil, wheat germ oil, sweet almond oil, evening primrose oil etc.) to dilute and make concentration less than 50%.
- Do not use water soluble perfume or perfume with emulsifiers or aldehyde. Aroma Pump system might become damaged.
- Do not introduce excessive aroma liquid into the steam room to avoid any harm for your health, or any damage to the steam room which is made of acrylic or glass fiber.
- Aroma steam may cause drowsiness and dizziness. If you feel any discomfort, leave the steam room immediately and seek medical advice if necessary.
- Keep the aroma pump and essential oil away from children. If any contact is made with eyes or mouth, rinse immediately with plenty of water, and seek medical help if necessary.
- Aroma oil is flammable. Keep away from sources of ignition. Keep container tightly closed and be in a well-ventilated place.
- Do not sparge aroma liquid to the wall of steam room.

We strongly recommend the caution (right) to be placed in a visible location near the steam room for all users.



Power Voltage: 120V-240V 50/60Hz

Motor Voltage: DC12V

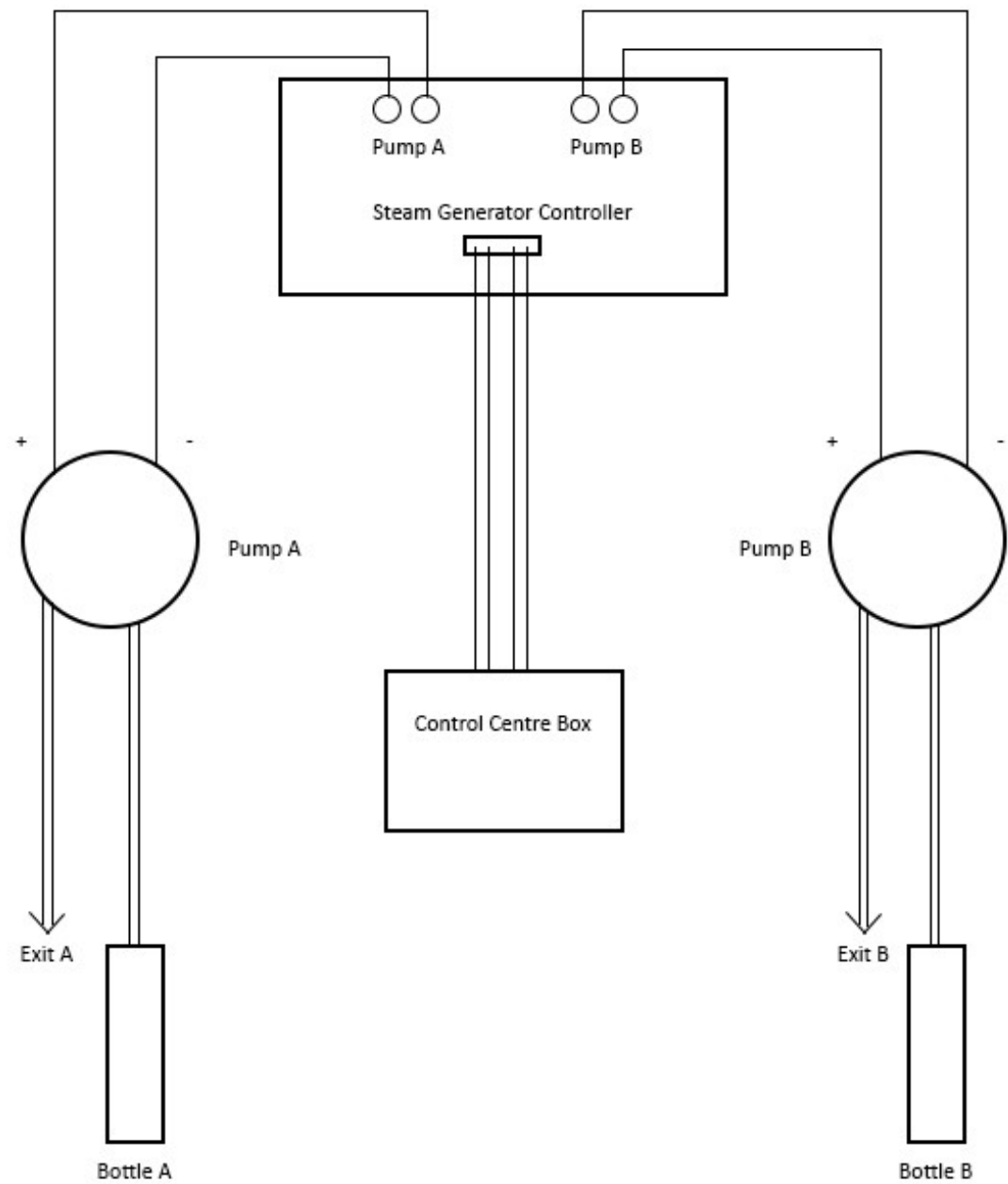
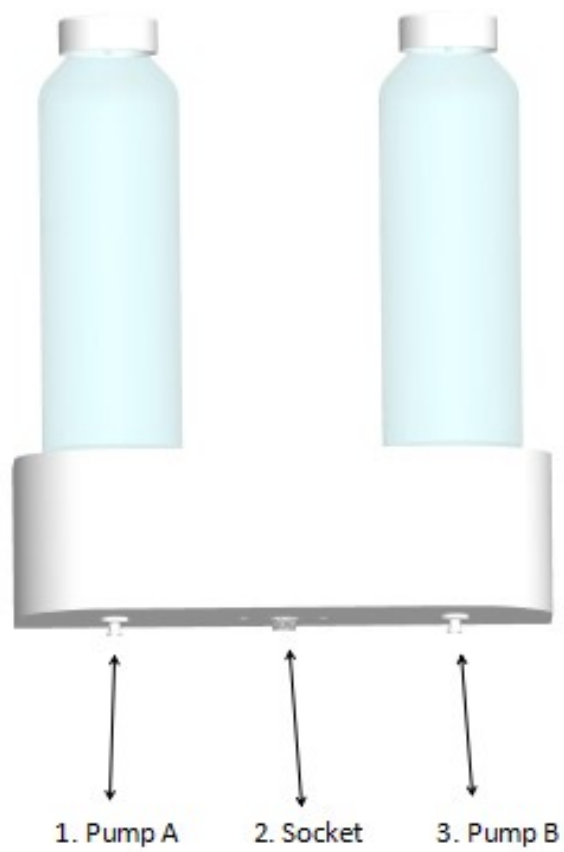
Rated Power: 5W x2



CAUTION

This steam room is installed with an [aromatherapy dispensing system](#).

Please leave the room immediately if you feel discomfort or have any [anaphylactic reaction](#), including [difficulty in breathing](#) or (eyes/[nasal](#) cavity/throat/skin) irritation. Seek medical advice if symptoms persist.



Accessories Installation: Aroma Pump

Locate the aroma pump system to somewhere you can easily monitor the consumption of essential oils and for easy oil replacement. The aroma pump system is designed and intended for indoor use only, should be located indoors in a dry clean location and not subject to moisture, condensation or similar high humidity environments. The aroma oil container should be fixed onto a secure vertical surface. Hang the aroma pump on two screws with a distance of 215mm, and 1.5m above the ground.

Do not install aroma pump systems outdoor or in a location where water could freeze.

Do not install aroma pump systems near flammable or corrosive materials and chemicals.

Install the aroma pump system in an easily accessible location, which could provide access for maintenance and refills.

The system should **NOT** be installed in areas accessible to children. It is strongly recommended to install the system in a separate room.

The aroma pump system output **MUST** be higher than the 3/4" Injection pipe, but the height difference should not exceed 1.5m.

Isolated to Heat Sources:

Do not install the aroma pump system directly below or above the steam generator where it is subject to heat.

Minimum distance between the aroma pump system and steam generator **MUST** be 0.5m (500mm)

Ambient temperature at and around the Aroma pump system should not exceed 32°C, because the oil needs to be stored in a cool place.

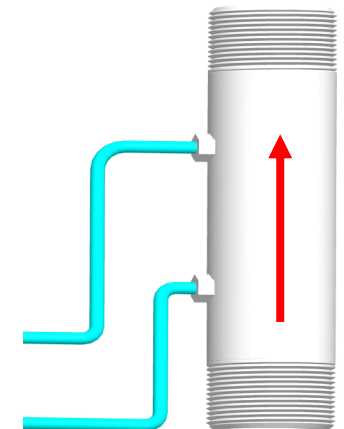
Installing the aroma oil injection:

For installation on a 3/4" steam output pipe, connect the steam pipe line to the 3/4" Injection pipe directly.

For installation on a 1/2" steam output pipe, use a 1/2" to 3/4" converter between the steam pipe and 3/4" injection pipe.

The 3/4" injection pipe should be within 2.5 meters from the steam head, and note that the 3/4" injection pipe should be installed vertically, this will prevent the aroma oil flowing back towards the steam generator.

Use PTFE tape on the threads for a better seal.



Accessories Installation: Descaling Pump System

Cautions

1. Should be installed where it's convenient to check amount of descaling liquid.
2. Should installed indoor only and installed in a dry, clean environment.
3. Should be installed vertically, around 1.5m away from the ground.
4. Should be installed where it's easy to add liquid and carry out maintenance.
5. Should be installed in a specified and isolated room where children can't reach.
6. Never install outdoors or place where the liquid can become frozen.
7. Never install where flammable, corrosive or chemicals are in close proximity.

Location

The descaling pump cannot be installed directly above or below the steam generator. It is recommended to keep it a minimum 0.5 meter from the steam generator.

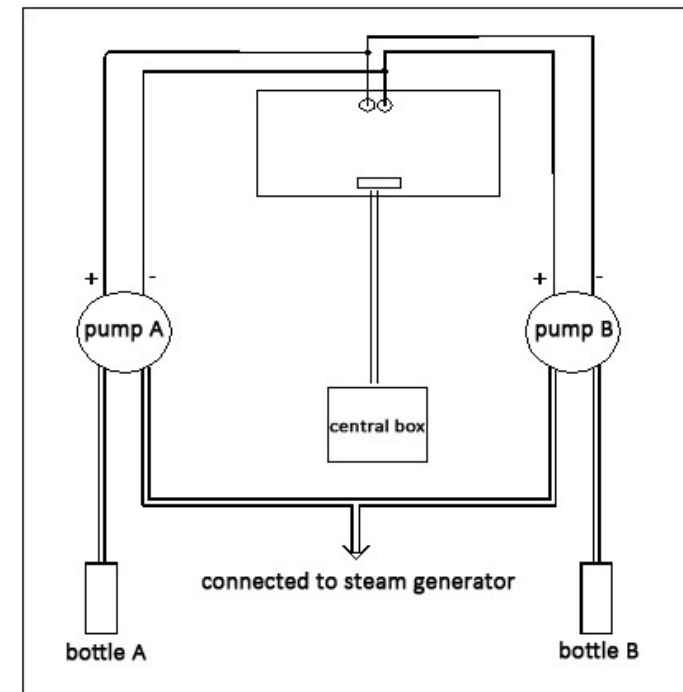
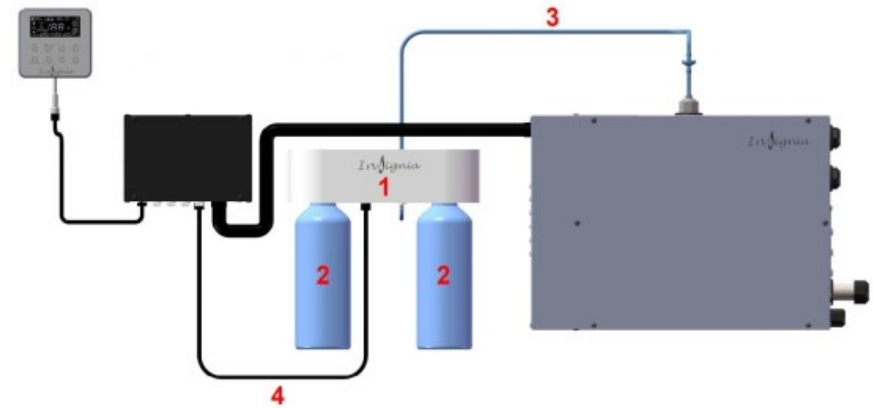
How much descaling liquid is required each time?

7.5, 10.5 and 12kW = 270ml each time

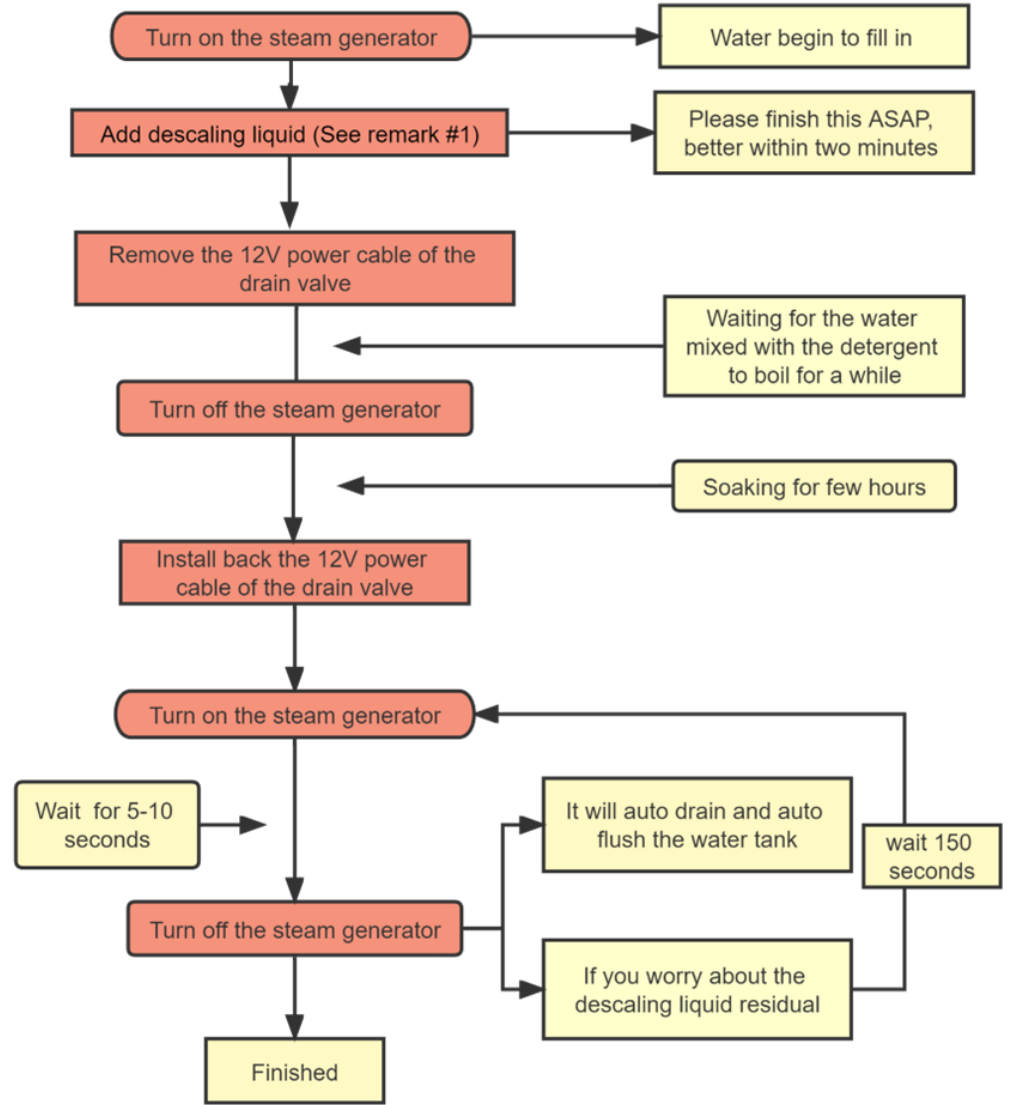
15 and 18kW = 540ml each time

Descaling pump glass bottle capacity: 1000ML each bottle, total 2 bottles.

Attention: the system will begin to pump descaling liquid into tank 5mins after generator is turned off. Please check amount of descaling liquid regularly.



Steam Generator Manual Descaling Procedure



Remark #1: Please open the descaling hole on the top of the steam generator before heating up the water. If you are manually adding descaling liquid, make sure to add the descaling liquid and tighten the lid before the water is heated to avoid scalding from steam.

Accessories Installation: Fan

All circuits should be installed by licensed electricians and conform to local and national codes.

Mains power supply must be cut off before installation, maintenance, and repair. Pressing the on/off button on the controller does NOT cut the power from the supply.

Make sure that the installation complies with each country's current mechanical and electrical norms.

Make sure there are no loose elements near the ventilator, as they could run the risk of being sucked up by it. If it is going to be installed in a duct, check that it is clean of any element that could be sucked up by the ventilator.

When installing the fan, make sure that all the fittings are in place and that the structure which supports it is resistant enough to bear its weight at full functioning power.

The unique design of the support bracket allows the central cartridge, which holds the motor and impeller to be fitted/removed without dismantling the ductwork.



Installation of the Fan

1. Fix the support
2. Connect the ducts
3. Place the motor body in position and secure
4. Carry out the connections

①



②



③

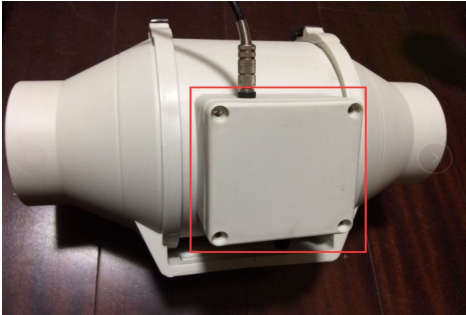


④



The low profile design of the fan makes it the most effective solution for installations where space is restricted.

Unscrew and open the wiring box



Connect the neutral wire and live wire



EU type 220 V single phase: Connect "N" and "LA"

DO NOT connect anything to "LB"

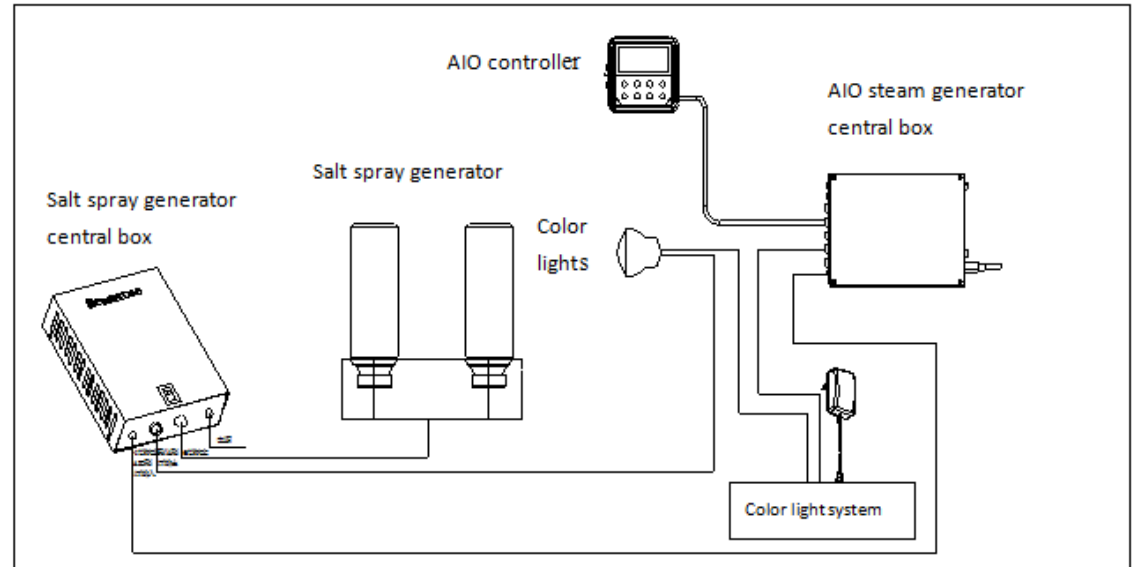
Does **NOT** support EU type 380V 3 phase

Model	INS-TL004
Noise	High 31/Low 26dB
Speed	High 2200/Low 1850r/min
Size	L302xW204xH195mm
Power	High 26W/Low 23W
Air Volume (per hour)	High 198m ³ /Low165m ³
Air Pressure	High 156/Low 131pa
Diameter	97mm

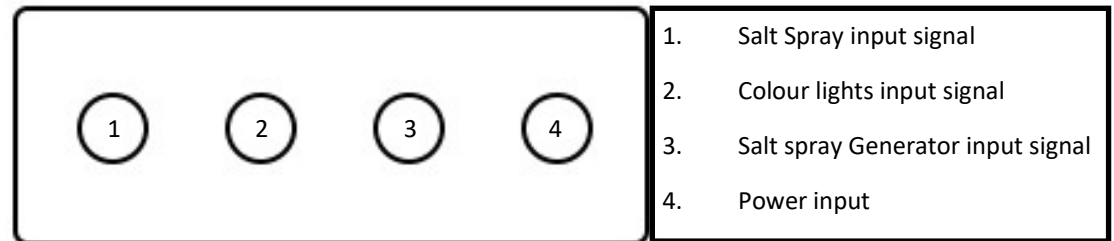
Installation of the Salt Spray Generator

The generator is able to atomize salt water into tiny particulates and mix in the air for breathing and absorbed by skin, this is good for health.

- A. **Power supply:** AC110-240V
- B. **Spray head working voltage:** 36V
- C. **Working Current:** 880mA
- D. **Rated Power:** 20W±5
- E. **Ultrasonic frequency:** 1.7MHz±10%
- F. **Maximum spray rate:** ≥3mL/min
- G. **Spray particle diameter:** 5µm ≥65%
- H. **Noise:** ≤10dB
- I. Two full bottles of salt water can continuously atomise for 2-4 hours. The complete model, connected to the signature steam generator can set a working time, spanning from 1-60 minutes, or be set to run continuously. Once the salt is used up, it will stop functioning automatically. The independent model requires manual activation and deactivation, with no time able to be set.
- J. For an independent installation of the salt spray generator, skip steps 1 & 2 (right).
- K. The salt spray generator **MUST** be installed vertically, never install horizontally as this unit will not work. Salt spray generator central box should be installed in a dry place, do not install in the steam room.



Salt spray generator central box



1. Connect the steam generator central box to the salt spray generator central box — DC connector 1.
2. Connect the last coloured light in the circuit to the salt spray generator central box — DC connector 2.
3. Connect the salt spray generator to the salt spray generator central box — DC connector 3.
4. Connect power using the power adaptor.

Functions and Operations—Salt Steam Generator

Attention:

- Do **NOT** turn on the salt spray generator if there is no salt water in the bottles.
- The generator central box **must not** be installed in areas that are highly acidic, high in moisture, explosive or flammable.
- Do **NOT** rotate the head of generator or take apart when it is working.
- Do **NOT** put your fingers into the generator.
- Do **NOT** block the cap's vent and drain hole.
- It's recommended you use softer water to prevent scaling and prolong the life of the unit.
- The spray head of the salt generator is preset with a "lack of water" protection function. If the generator stops working through a lack of water, turn the system off and back on again before refilling with water.
- In the event of a malfunction, we strongly advise against disassembling the unit yourself.
- The salt spray generator should be out the reach of children to avoid any accident.

Filling the bottles with salt water

Remove the glass bottles from the salt spray generator. Unscrew the cap, fill up with the saltwater solution, screw the cap on and replace the bottle in position. It is normal for a small amount of leakage when the bottle is being replaced. Once replaced, the salt reservoir will start to fill until it reaches the bottle level.

Do not use a high concentration of salty water, you should dilute according to your personal preference. **Our suggestion is to mix 9g salt to every 1000ml water.**

Maintenance:

The salt water container and spray head should be washed with fresh water every week.

The end cover of the generator should **NOT** be washed directly with water, instead wipe with a clean wet towel. Do **NOT** wash it with alcohol, chemicals or hot water.

When not in use for a long time, the remaining water should be poured out and disposed of safely.

Accessories Installation: Water Processor

The Water Processor (magnetic scale reducer) works by reducing the random bonding of the calcium and magnesium molecules that cause limescale buildup. In areas where irritating hardness deposits form in shower heads or on kettle elements the magnetic scale processor works as a water conditioner. Any scale that does form will be less tenacious and more easily removed.

Always ensure water is isolated before installation.

The installation of the processor does **not** require any electrical current.

Remove both end caps from the cartridge, being careful not to lose the rubber washer located in the water outlet cap. No washer is supplied with the water inlet. Note the directional flow on the back of the cartridge as shown below.



Choose your location for the cartridge and attach the wall mounting clips as shown below. The cartridge can be installed horizontally or vertically, but always follow the flow direction.



- An accessible position should be between 1m and 3m from the appliance it is intended to protect
- The “water in” requires a ½” BSP connection, either flexible hose or rigid fix.
- The “water outlet” requires a ½” BSP female connection, either flexible or ridged fix.
- Once both ends are connected, turn on the water and check for leaks. If present, isolate water and remedy the fix accordingly.

NOTE: If installing directly on to a steam generator, the water outlet thread can be screwed directly on to the steam generator water inlet valve.

Technical Specification: Water Treatment Cartridge

- Dimensions: 51mm x 160mm
- Materials: Stainless Steel 304
- Water flow: Direction noted on the side of the cartridge
- Scale inhibition theory: Magnetic lines cutting
- Suitable water temperature: 2°C — 120°C
- Maintenance: Not Required
- Lifespan: 8-10 years
- Main benefit: Reduce Scale inhibition
- Earth bonding continuity not required

IMPORTANT!

The water utilities cannot be held responsible for the quality of the water passed from this reducer.

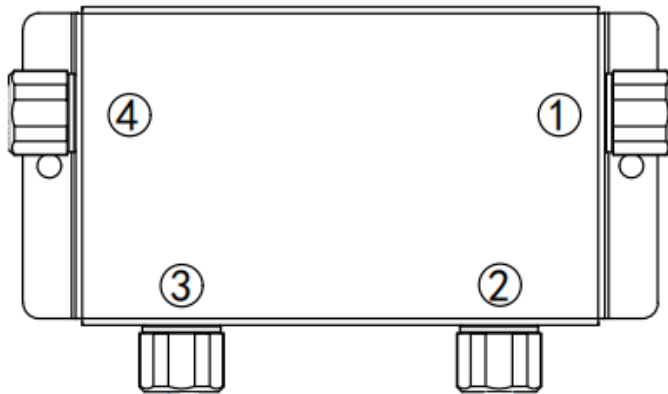
Magnets may affect or interfere with sensitive mechanical and electronic equipment such as heart pacemakers, computers, magnetic media and watches.

Always keep magnets at least 300mm away from such devices

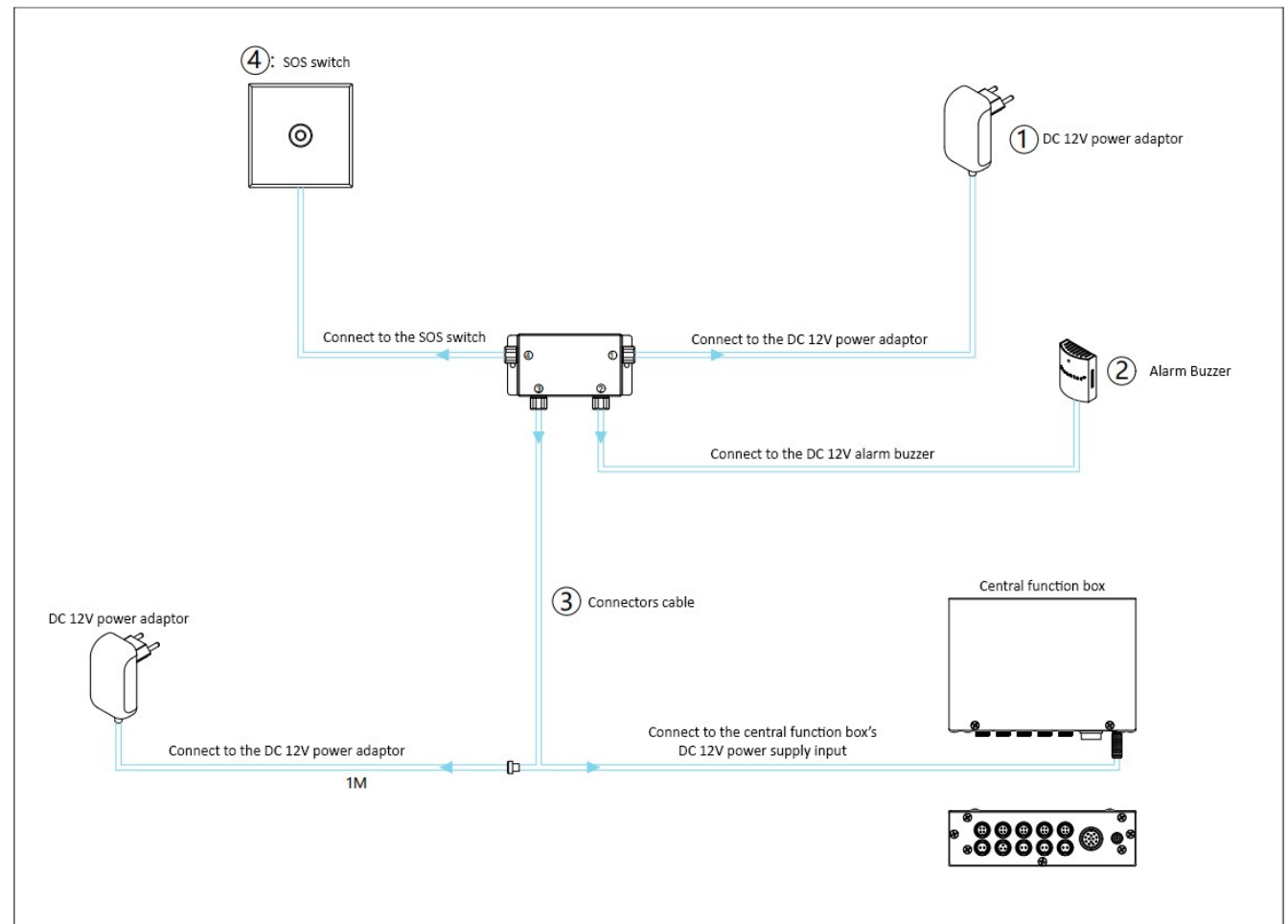


Accessories Installation: Emergency Alarm System

The **Emergency Alarm System** is designed for commercial use in places like spa centers, sauna center, heath clubs, etc. With the Emergency Alarm System, the user can press the Emergency button which is located inside the steam room, then the system will send out the buzzing sound to alert the staff, whilst stopping the steam generator at the same time. Pressing the Emergency button again, will stop the buzzing sound & steam generator will continue to work.



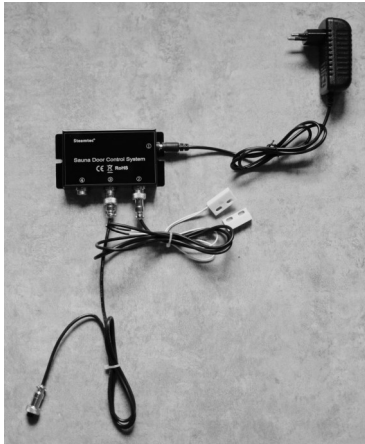
- ① Connect to the DC 12V power adaptor
- ② Connect to the Alarm buzzer (similar to the temperature sensor, but the buzzer has a red light on it)
- ③ Connection line 1 to 2
- ④ Connect to the SOS switch



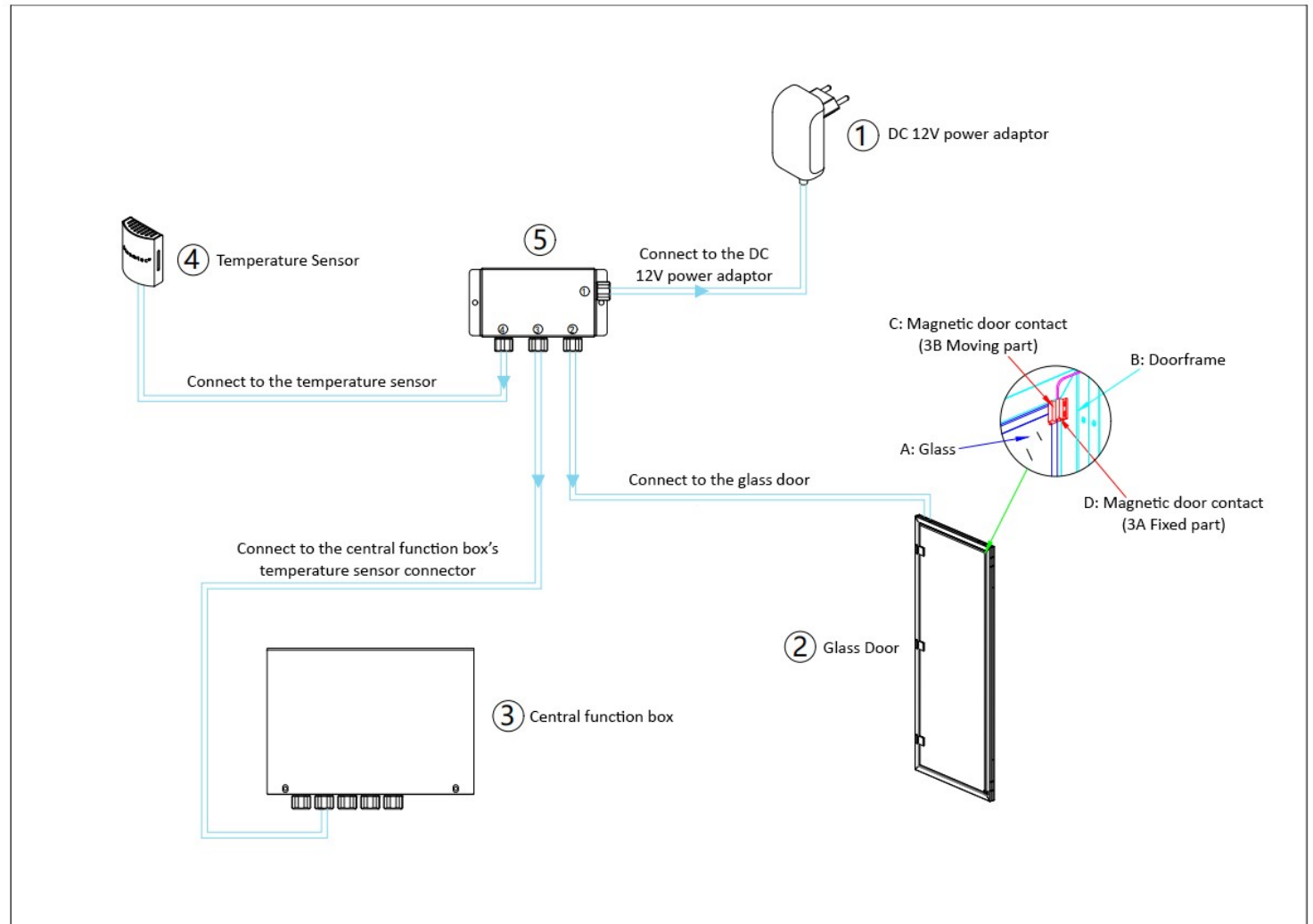
Accessories Installation: Door Control System

With this system, if the steam room door is opened more than one minute, the system will turn off the steam generator automatically.

The system should be installed on the external wall of the steam room.



1. Power Adapter for the door control system
2. Glass Door
3. Sensor— 3A fixed part with cable, install on the door-frame; Sensor 3B moving part, install on the door. Make sure when the door closed, the sensor 3A and 3B maximum are no further than 2mm apart.
4. Temperature Sensor
5. Door Control Box

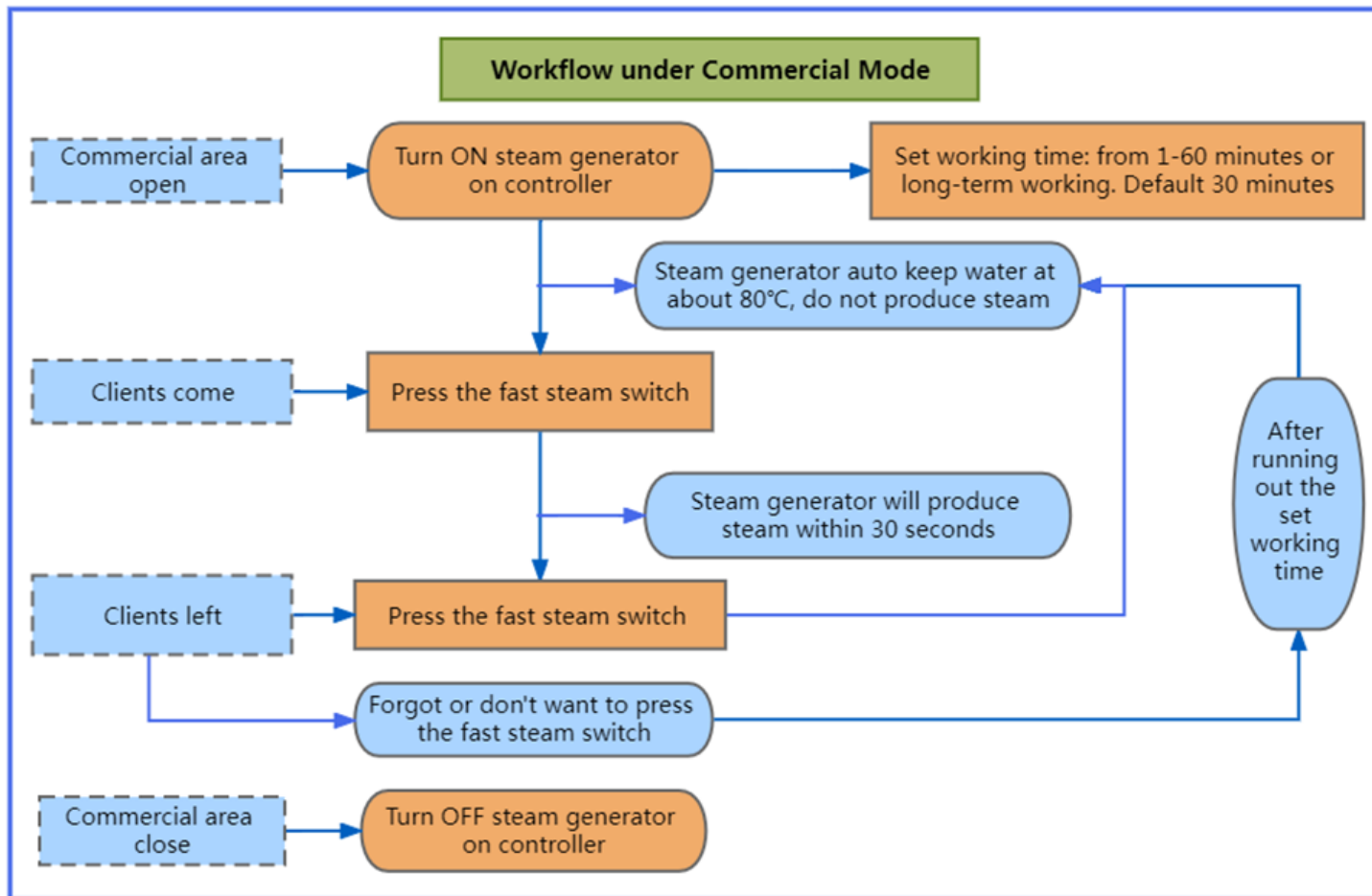
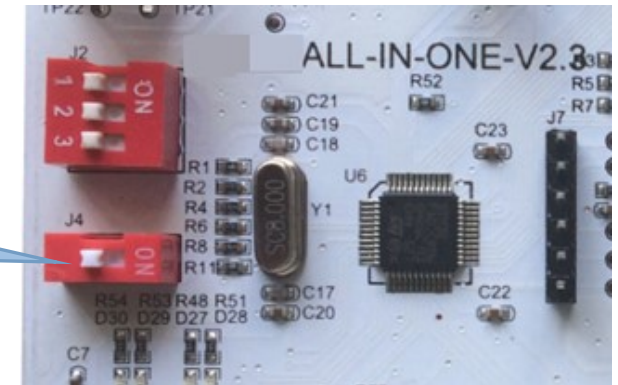


Commercial Mode

All steam generators are preset to domestic mode, however, should you wish to swap it in to the commercial mode, make the following adjustment within the central function box.

NOTE: This should only be done if you have all the correct accessories to operate the unit in this mode.

Toggle J4 jumper to the "ON" position to convert the unit in to commercial mode.



Commercial model operating guide

Turn on the steam generator by pressing the ON/OFF button on the main controller on the steam generator which in turn will begin to heat up the water. Once 80°C has been reached the steam generator will be in standby mode, ready for use.

When the fast steam button is pressed, steam will be produced in approx. 30 seconds. After 30 minutes, the system will revert back to “stand by” and steam will stop being produced. Simply press the button again to activate the steam or stop it at any time.

Advantages:

This design saves consumers’ waiting time, as well as also saving energy.

The 30 minutes automatic ‘back to stand by status’ design would prevent energy waste caused by the owner or customers forgetting to turn off the steam generator after use.

The fast steam button is designed to be installed inside the steam room so users can reactivate easily if they wish to continue their steam session after automatic shut off after 30 minutes.

If the steam session time less is than 30 minutes, it can be back to set back to ‘stand by’ status manually by pressing the button and switching off the steam.

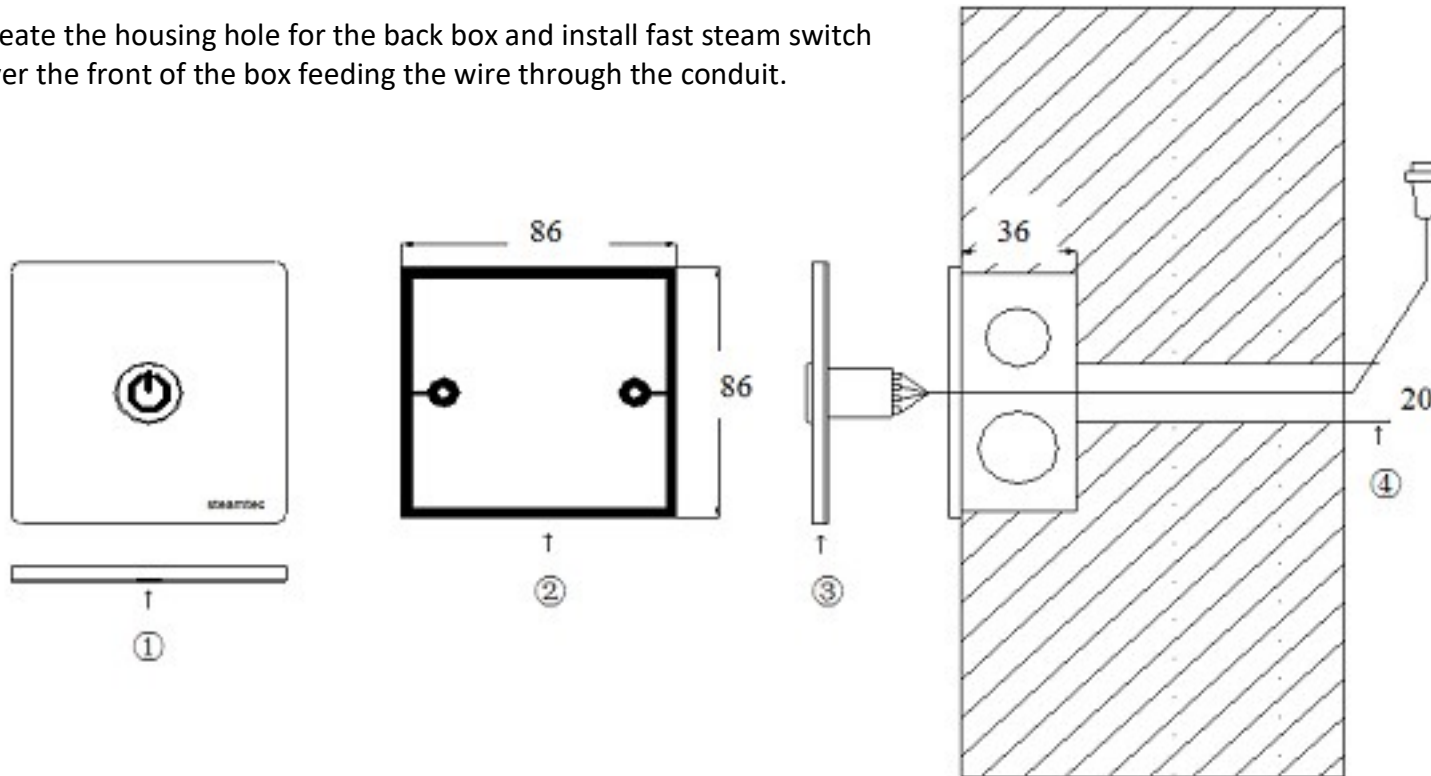
- Once the “fast steam” mode is activated, the steam generator will go into “commercial mode” and the controller will show “commercial mode” and the remaining working time. The time counts down from 30 to 0.
- Once 30 minutes runs out, it will revert back to stand by (Heat preservation state).



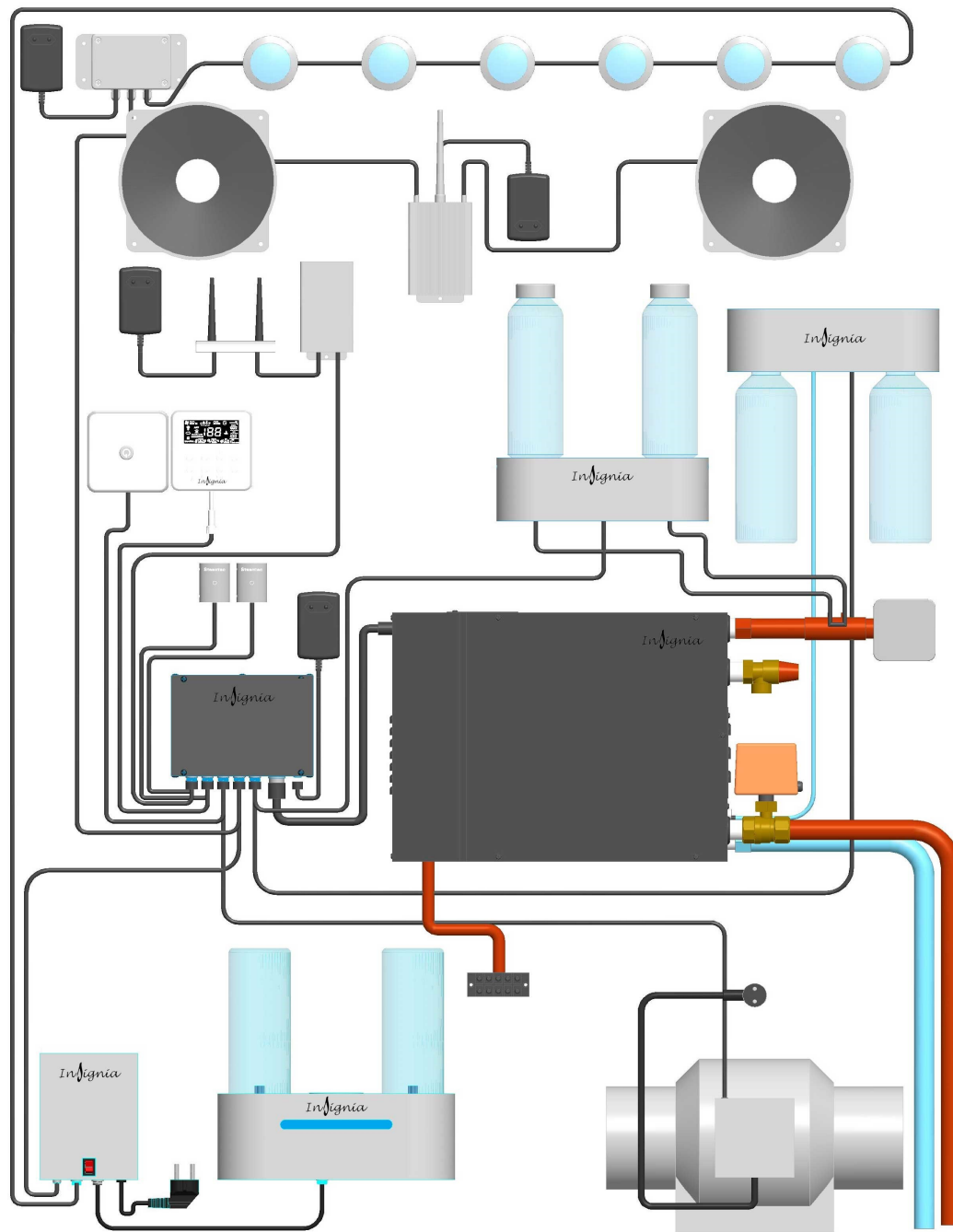
Accessories Installation: Commercial Mode — Fast Steam

Commercial mode-fast steam function is designed for commercial use in places like spa centers, sauna center, health club, etc. Under commercial mode, the water tank always keeps the water temperature at 80°C, once the customer enters into the steam room and presses the “fast steam” switch, the steam will come out in approx. 30 seconds and runs for 30 minutes. After this time, the system will the revert back to stand by (Heat preservation state).

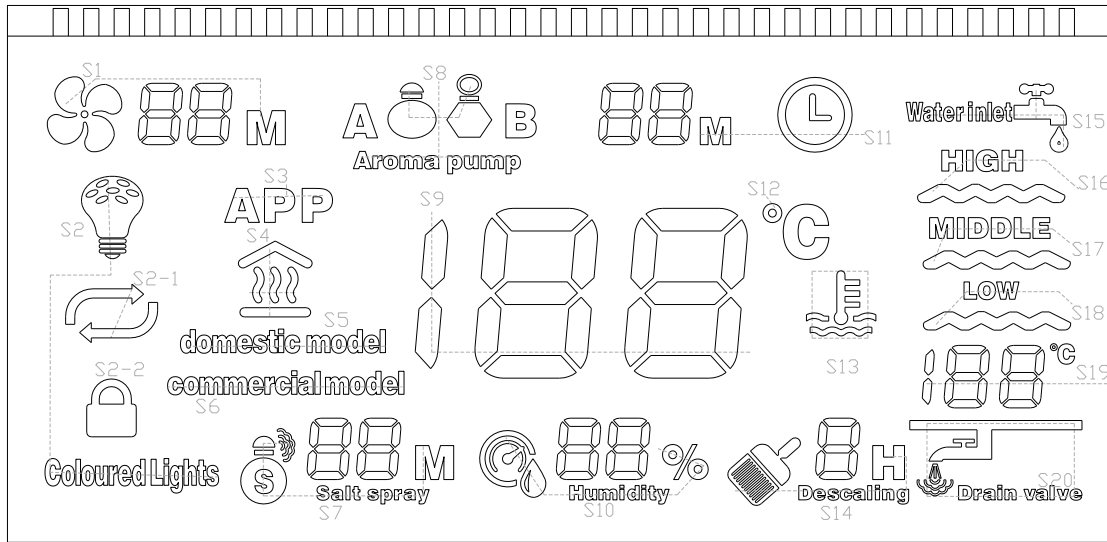
Create the housing hole for the back box and install fast steam switch over the front of the box feeding the wire through the conduit.



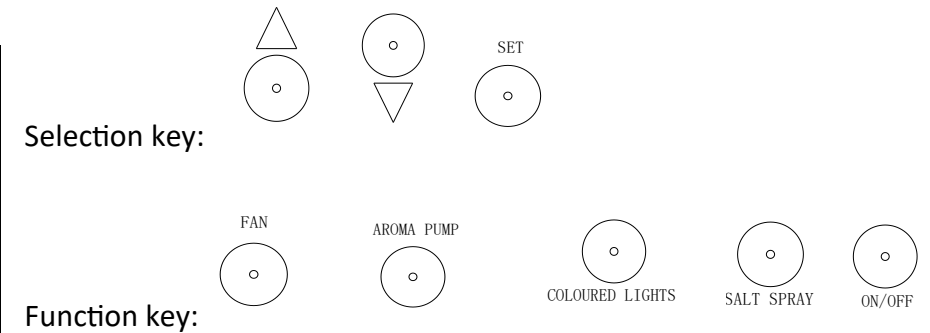
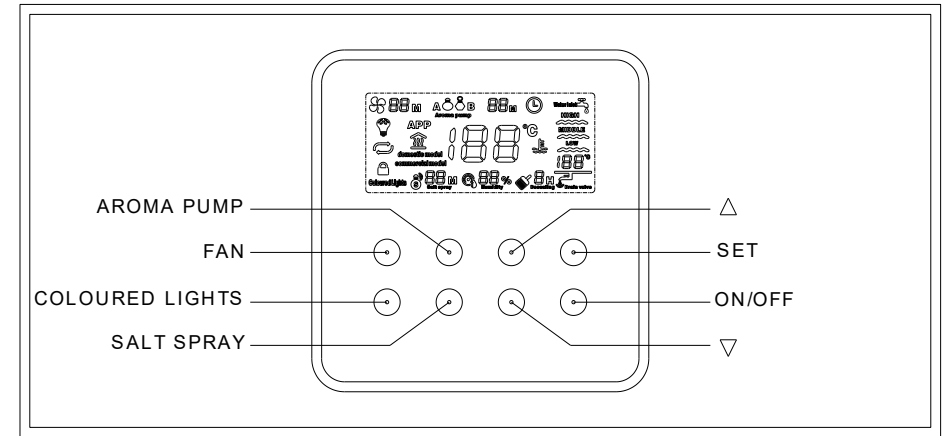
Installation Diagram



Control Panel Interface



S1	Exhaust fan	S7	Salt spray	S14	Descaling
S2	Colored lights	S8	Aroma pump	S15	Water inlet valve
S2-1	Change colors automatically	S9	Temperature instructions	S16	High water level
S2-2	Lock the color	S10	Humidity	S17	Middle water
S3	APP	S11	Working time	S18	Low water level
S4	Heating instructions	S12	Celsius degree	S19	Water tank temperature
S5	Domestic model	S13	Heat preservation instructions	S20	Drain valve
S6	Commercial model				



IMPORTANT: Each first touch will 'wake up' the touch panel, which is denoted by the buttons lighting up. Function and selection buttons will only work once lit.

Exhaust fan:

Press the Fan Button to toggle it ON/OFF. The fan operates by default for 5 minutes, which can be modified by continuously pressing 'SET' and cycling through the interface until the 'FAN' icon/time is shown on the screen. Change the time setting by using the up and down arrows. The range is 1-60 minutes. Once the default/set time is complete, the fan will turn itself off. The default/set time will countdown on the display until it completes and it shuts off. The control panel will remember the time set each time the fan is activated until it is powered off at the mains.

Coloured lights:

Press the Coloured Lights Button to toggle them ON/OFF. To change the colours continuously press 'SET' and cycle through the interface until the 'Coloured Lights' icon is shown on the screen. Press the up arrow to choose the setting 'change colours automatically.' The panel screen will revert back to the home screen and the lights will change colour automatically. To lock the lights on a specific colour, simply press the up arrow on the main interface and it cycles through the colours.

Salt spray:

Press the Salt Spray Button to toggle it ON/OFF. The salt spray operates by default for 30 minutes, which can be modified by continuously pressing 'SET' and cycling through the interface until the 'SALT SPRAY' icon is shown on the screen. Change the time setting by using the up and down arrows. The range is 1-60 minutes. The default/set time will countdown on the display until it completes and it shuts off. The control panel will remember the time set each time the salt spray is activated until it is powered off at the mains.

Temperature instructions:

Set the temperature by continuously pressing 'SET' and navigate to the temperature interface on the panel and change using the arrows. The heating elements will not function if the steam room temperature falls below 6°C or exceeds 60°C. The interface will show –L for 6°C and –H for 60°C.

Aroma pump:

Press the Aroma Pump Button to toggle it ON/OFF. There are two aroma pumps connected. Aroma Pump A and Aroma Pump B, to allow two types of oil. To change which pump dispenses oil, continuously press 'SET' and cycle through the interface until the aroma pump icon is shown then press the arrow to change from A to B Pump or vice versa. The pump has a default operation of 5 seconds which can not be modified. It also has a cooldown time of 5 minutes.

Humidity instructions:

The default value of the humidity sensor is 60%, with a range spanning from 60%-99%. To adjust, continuously press 'SET' and cycle through the interface until the humidity icon is shown then change the setting using the arrows. The steam generator will stop working when the humidity threshold is reached.

Working time:

The default time is 45 minutes, with the range being 1-60 minutes. To change the time, continuously press 'SET' and cycle through the interface until the time icon is shown. Use the up and down arrows to change the time setting. The default/set time will countdown on the display until it completes and it shuts off. The control panel will remember the time set each time the steam is activated until it is powered off at the mains.

Descaling:

Descaling time is from 0-8 hours. "0" means automatically drain immediately, "1-3H" is waiting time, then drain, "4-8H" is where the descaling mode is activated. To activate, continuously press 'SET' and cycle through the interface until the descale icon is shown. Use the up and down arrows to select a time between "4-8H" and after you turn off the steam generator, it will automatically pump descaling liquid into water tank to soak for the set time. For example, if you set 6 hours, it will soak with descaling liquid for 6 hours. When this time is complete, the steam generator will start to drain, flushing, and then power off.

Descaling Pump Times

In the central control box you can adjust the amount of time the descaler pumps the descaling agent for.

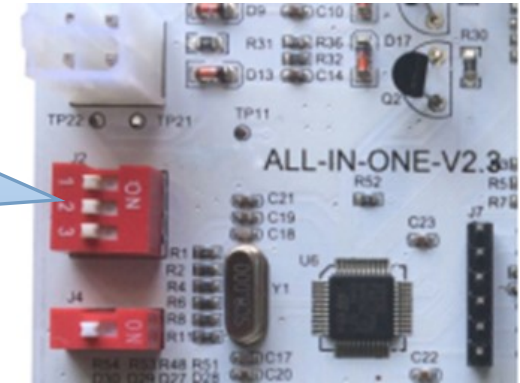
Pump working time:

1----30seconds

2----60seconds

3----90seconds

Factory preset is according to the power of steam generator.



Auto Functions

Auto filling:

The water inlet valve will open automatically once the system has started and fill the generator with water until the water level reaches it's maximum level. If the water level is still lower than the minimum water level 10 minutes after, it indicates a fault of the water supply system, so all heating elements

will stop working. If the screen display shows “



Auto heating up by sections:

The Steam Generator will compare the measured room temperature with the temperature setting on the control panel and then decide the number of working heating elements for the best efficiency.

Auto water supplementing:

If the water level is lower than the desired level when operating, auto-water supplementing function will be on and open the inlet valve, the screen will

display “



Auto drainage:

If the descaling time is set as “0”, when the steam generator is turned off, the system will drain automatically and display “



The drainage valve will be turned on to drain. If the Descaling time is NOT set as “0”, please ref to “**Descaling**”.

Maintenance:

Any leakage of the steam will damage the equipment. To prevent any hazard, steam generators, steam head, parts and pipeline connections should be checked regularly. Clean the solenoid valve, water treatment cartridge and all the other sets in the pipeline regularly according to the local water quality and usage of the steam generator.

Periodically, check the equipment visually to see whether it's over heated, check the stability and corrosion of all the wire plugs.

Replace the heating elements:

Switch off the steam generator at the mains/isolation switch and remove the element access cover when the generator completely cools down. Label the wires which connect to the heating elements which need to be replaced and unplug the wires. Unscrew the heating elements from the housing. Clear the scale in the water tank and screw in the heating elements after putting the rubber rings on them (airproof gasket should be pressed firmly without reversion). Plug on the wires, make sure the heating elements are properly connected before replacing the element access cover.

Replace the sub-board:

Switch off the steam generator and remove the U shape cover when the generator completely cools down. Unplug all the wires on the sub-board. Label all the wires on the relay and remove the sub-board. Install the sub-board back carefully.

Replace the solenoid water inlet valve:

Switch off the steam generator at the mains/isolation switch and disconnect the water supply. Remove the water inlet, steam outlet and draining pipelines after the generator completely cools down. Then lean the steam generator over to remove the base panel. After that, remove the soft pipes, wires and screws so that the faulty valve could be removed. Reverse this process to install the replacing valve.

Replace the water level sensor:

Switch off the steam generator at the mains/isolation switch and remove the small cover on the equipment when the generator cools down. Special care should be taken with the plugs of the water level sensor corresponding to the blue wire, the red wire, and the white wire respectively. Take off all the wires, screw out the water level sensor, and screw in the new water level sensor until the bottom of the plastic nut reaches the same height as the old one. Finally reconnect the wires (all wires must be plugged back into the right place).

Always cut off the mains power supply before any maintenance. Test the equipment after maintenance.

Maintenance

- Check if all pipes using are in correct size, please refer to **Installation of pipeline**.
- Since plumbing leaks or clogged steam pipes and diffusers can be both damaging and dangerous, please check for and rectify leaks and clogged pipes when carrying out routine preventative maintenance of the machine.
- Clean the solenoid valve, magnetizer and all the pertinent components in the water supply pipeline regularly - commensurate with local water quality and frequency of usage of the steam generator.
- Use soft towel to clean the controller.
- Use soft towel to clean the steam generator body.
- Use soft towel to clean the temperature sensor and box.
- The steam nozzles can be cleaned with mild soap solution.
- When operating, check the equipment for signs of over-heating and check for corrosion of critical electrical and mechanical components.
- Test the equipment for proper operation after maintenance procedures are completed.
- Equipment maintenance must be performed by professionals.
- Do descaling (there are heating elements and water level sensor inside) regularly.

How often to do descaling?

*Diluting Hours

Hardness	PPM	Dh*	Mg/l
Very soft	0 to 60 ppm	0 to 4 dH	
Soft	60 to 119 ppm	4 to 8 dH	0-19 mg/l
Medium hard	120 to 179 ppm	8 to 12 dH	20-50 mg/l
Hard	180 to 239 ppm	12 to 18 dH	51-120 mg/l
Very hard	240 to 500 ppm	18 to 30 dH	121-174 mg/l
Extremely hard	over 500 ppm	over 30 dH	>175 mg/l

< 4° dH, very soft water, descaling after 500 hours of use.

> 4° dH, soft water, descaling after 100 hours of use.

> 8° dH, medium hard water, descaling after 50 hours of use.

>12° dH, hard water, descaling after 30 hours of use, installation of a water-softener is recommended.

> 18°dH, very hard and extremely hard water, must install a water purify system.

Otherwise, the heating elements will no longer be eligible for warranty service.

Troubleshooting

Repair can only be performed by qualified professionals, for more services or technical help please contact your retailer.

Insignia Signature steam generator have a self-diagnose function, and some common faults will be displayed on the screen if they occur.

Code	Meaning	Diagnose and Solution
-L	Temperature measured by temperature sensor is below 6 °C	Check whether the room temperature is below 6 °C, the code should disappear after the room temperature reaches 6 °C. Otherwise check the connection of
-H	Temperature measured by temperature sensor is higher than 60 °C	Check whether the room temperature is above 60 °C, the code should disappear after the room temperature drops below 60 °C. Otherwise check the connection of the sensor.
-E	Water supply or water fill faults, the heating elements will not heat up or stop heating up.	Check whether the water inlet solenoid valve works. Check the valve on the water pipeline or water supply source. Check the treatment cartridge (if installed). Check whether the water level sensor connection cable is intact and connected. If any problem is on these items, clean or remove/replace, then restart the machine to see if you have resolved the problem.
EE	Communication fault between the controller and circuit board on the central box.	Please check the connection cable wire is connected and not damaged.
d or dd	Time runs out or pressed the "ON/OFF" button, machine will stop working and go in the auto drain progress.	No issue, this is normal behaviour for the generator

Troubleshooting

A manual resetting high temperature control switch is installed in the steam generator for over-heat protection. If temperature of the inner tank exceeds 115 °C, the switch will automatically disconnect power supply to heating element. In this case, it is necessary to disconnect the main power supply to steam generator, allow the unit to completely cool down and then carefully check heating elements, water level sensor, relay on sub-board and water supply pipeline. **The temperature switch should only be manually reset after the fault has been located and solved.**

Diagnosing procedure:

The Signature steam generator controller can show the status of the steam generator working. If the generator can fill with water and drain out water properly but does not heat up, check the connection wire between main circuit board and the sub-board, the relays on sub-board, and heating elements.

If water comes out from the steam outlet pipe, clean or change the outlet solenoid valve.

If the system keeps on heating up even if the current temperature is more than 2 °C above the setting value with the indicator on, carefully test the relays on the sub-board and if faulty change the whole sub-board.

The above fault diagnosis and troubleshooting can refer to the function of the following main board indicators.

D24: 12V power supply

D34: 5V power supply

D22: drain OFF

D26: drain ON

D23: water fill in

D18.19.20: heating elements

D14: descaling

D15: salt spray generator

D16: Fan

D27.28: APP

D11: aroma pump A

D12: Aroma pump B

D29:30: Controller

Please refer to the circuit and connection diagrams for diagnosing and repair.

ALWAYS cut off the power supply before carrying out any repair.

If problems still cannot be solved by the procedures listed above, please contact your retailer.

Warranty

Product	Operating with Descaling pump	Without Descaling Pump
Controller	2 Years	2 Year
Heating Element	2 Years	1 Year
Steam Generator Body	2 Years	1 Year
Water Level Sensor	2 Years	1 Year
Temperature Sensor	2 Years	1 Year
Control Box	1 Year	1 Year
Drain Valve	1 Year	1 Year
Fast Steam Controller	2 Years	2 Years
Aroma System	1 Year	1 Year
Descaling System	1 Year	1 Year
Led Light System	1 Year	1 Year
Exhaust Fan	1 Year	1 Year
Salt Generator	1 Year	1 Year

For full details please visit www.insigniashowers.com/warranty-terms

Steam Room Safety Guide

1. Never leave children unattended in the vicinity of the steam room .
2. Never allow children to use the steam function. This function is for **ADULTS ONLY**.
3. Always be aware of the steam outlet position. Never use in close proximity to the person using it.
4. Exit the steam room immediately if feeling dizzy, faint or short of breath.
5. Do NOT use the steam room if you're pregnant, have a heart condition, have low or high blood pressure. If you're unsure consult your GP before use.
6. If you have any underlying health conditions which you feel could be aggravated by using a steam room, consult your GP before use.
7. If you begin to have any issues with your health after using a steam room, stop immediately and consult your GP regarding your symptoms before continuing to use.
8. Consult your GP before using the steam room if you're on medication at all, especially with drowsy side effects.
9. Never use this steam room if you have been drinking alcohol or under the influence of other substances.
10. Do not allow animals to enter the steam room.
11. Always turn power supply off after use.
12. Always turn water supply off after use.
13. Proper ventilation is recommended for the steam room.

WEEE Compliance Statement

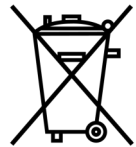
The UK Waste Electrical and Electronic Equipment (WEEE) regulations came into force on 2 January 2007. Under this new legislation, producers of electrical and electronic equipment (EEE) have to fulfil certain obligations.

Under the WEEE directive Insignia is considered the producer of certain products we supply and in line with the demands of the legislation we are pleased to offer the opportunity to return these products to us for treatment and recycling.

Insignia products will generally have an identifying mark and the common crossed out wheelie bin label. We accept returns of all products carrying the Insignia brand. All other products are either considered outside the scope of WEEE or Insignia is not technically the producer of these products. Insignia also accepts historic like-for-like WEEE returns. All WEEE returned to Insignia will be recycled in appropriate treatment and recycling centres in accordance with the legislation. If you wish to return any products to us, please send your item(s) to our head office.

Company Contract No. 326457

WEEE Producer No. CBDU64227



LABELLING

Products labelled with the WEEE symbol (a crossed out “waste bin”) indicate that the final user should not discard this product along with other household waste, but that it must be collected and treated separately.



Returns Address for WEEE

Insignia

9a Deans Road, Old Wolverton, Canon Industrial Park, Milton Keynes, Buckinghamshire, MK12 5NA, UK



EU – Declaration of Performance

Insignia declares that all its products complies with the essential requirements and other relevant provisions of Directive 305/2011/EC. A copy of the Declaration of performance is available from www.insigniashowers.com/ce-certification

Insignia™ is a registered trademark of Maclean International Ltd, 9a Deans Road, Old Wolverton, Canon Industrial Park, Milton Keynes, Buckinghamshire, MK12 5NA, UK

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Insignia

Should you require additional assistance with the
installation of your product
please call 01908 317512
or email: technical@insigniashowers.com