

#### WARNING

Electrical grounding is required on all Insignia Steam Generators.

All electrical supplies should be disconnected when servicing generator.

All wiring must be installed by a licensed electrical "part P" certified contractor in accordance with local and national codes.

All plumbing must be installed by a licensed plumber in accordance with all applicable local and national codes.

Insignia series generators are for indoor use only.

Insignia series generators are not for space heating purposes.

Be certain that the steam shower enclosures are properly sealed to avoid water damage from escaping steam. It is recommended that 100% silicone be used to seal all pipes and fittings. Steam must be prevented from escaping into the wall cavity.

Never shut off the water to a steam generator that is in use.

Electric Shock Hazard - High voltage exists within this equipment. There are no user serviceable parts in this equipment.

# REDUCE THE RISK OF OVERHEATING AND SCALDING

- ${\bf 1.} \ {\bf Exit\ immediately\ if\ uncomfortable,\ dizzy\ or\ sleepy.\ Staying\ too\ long\ in}$
- a heated area is capable of causing overheating
- 2. Supervise children at all times.
- Check with a doctor before use if pregnant, diabetic, in poor health or under medical care.
- 4. Breathing heated air in conjunction with consumption of alcohol, drugs

# REDUCE THE RISK OF SLIPPING AND FALL INJURY

Use care when entering or exiting the steam room, floor may be slippery.

NOTE: For additional safety instructions, see owner's manual.





# INSIGNIA STEAM GENERATORS

(12KW MODEL)

380V / 3 Phase (240V Conversion on page 8)

Note for installer: These instructions <u>MUST</u> be left with the owner to fully read.

READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.

PLEASE NOTE: A "POST WARNING" NOTICE
MUST BE

DISPLAYED CLEARLY ON THE DOOR FOR ALL USERS TO BE AWARE OFF.
THESE NOTICES MUST BE
PRODUCED BY THE OWNER TO COMPLY WITH HEALTH AND SAFETY LEGISLATION.



#### **IMPORTANT**

An exhaust fan installed outside the steam room is strongly recommended to remove excess steam from the bathroom or shower area.



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### **Steam Room Design Basics**

#### Step 1

Choose your steam room space. The ideal ceiling height is 7' to prevent uncomfortable cooler temperature variations near the floor, and we recommend going no higher than 8'. If the ceiling has to be higher than 8'. A ceiling slope of at least 3/4" per foot will prevent condensation from dripping on bathers. The steam room space also has to be totally enclosed, with a vapor proof steam room door to prevent steam from escaping. All inside surfaces must be completely sealed with a waterproof material such as tile. A floor drain should be centred in the room. The rough opening size of the Steam Room Door will need to be properly framed in before tiling room. Skylights and exterior windows are not recommended for efficiency, and the steam will block the view through the window. Tip: ask your local home or building supply centre for proper vapor barrier to install before tiling over walls, ceiling and floor. The best vapor

barrier will be a large sheet that will cover ceiling and walls with 1



#### Step 2

piece (less seams is better).

Select a non-porous wall and ceiling surface material that complements the decor of your room. Porcelain tile, marble, granite, travertine and Ceramic tile are great surface materials for steam rooms. To ensure the most comfortable steam room experience possible, choose a generator sized for the dimensions and unique characteristics of your steam room. Tip: Ask your local home or building supply centre for proper backing materials and adhesives to securely attach surface material (tile, marble, etc) over vapor barrier. If you are not familiar with tiling a room, it may be best to hire a professional to install the surface material in your steam room.

#### Step 3

Find a good spot to install the steam generator. Within 10 feet of the steam head is recommended by most manufacturers. Utility hook-ups include wiring a dedicated 240V electrical circuit back to the board and plumbing in a fresh water line. Common locations include, a bespoke cabinet outside the room, a nearby closet, basement or attic. IMPORTANT: the steam generator system will need to easily be accessible for occasional maintenance and should not be exposed to freezing temperatures. It must never be installed in the actual room itself.



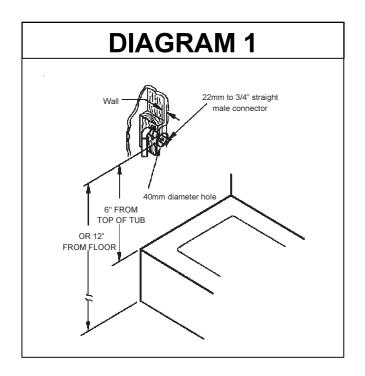
#### IMPORTANT SAFETY INSTRUCTIONS

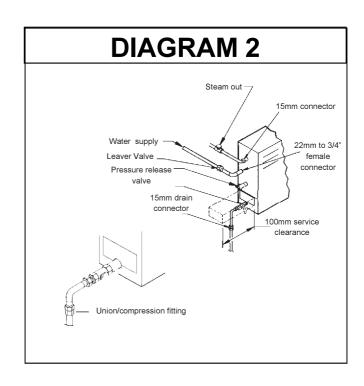
- 1. READ AND FOLLOW ALL INSTRUCTIONS.
- 2. WARNING To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
- 3. WARNING To reduce the risk of injury:
  - a. The wet surfaces of steam enclosures may be slippery. Use care when entering or leaving.
  - b. The steam head is hot. Do not touch the steam head and avoid the steam near the steam head.
  - c. Prolonged use of the steam system can raise the internal human body temperature excessively and impair the body's ability to regulate its internal temperature (hyperthermia). Limit your use of steam to 10 15 minutes until you are certain of your body's reaction.
  - d. Excessive temperatures have a high potential for causing fetal damage during the early months of pregnancy. Pregnant or possibly pregnant women should consult a physician regarding correct exposure.
  - e. Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a steam room.
  - f. Persons using medication should consult a physician before using a steam room since some medication may induce drowsiness while other medications may affect heart rate, blood pressure and circulation.
- 4. WARNING Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6 degrees F. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness and fainting. The effects of hyperthermia include:
  - a. Failure to perceive heat:
  - b. Failure to recognize the need to exit the steam room:
  - c. Unawareness of impending risk:
  - d. Fetal damage in pregnant women:
  - e. Physical inability to exit the steam room: and
  - f. Unconsciousness.

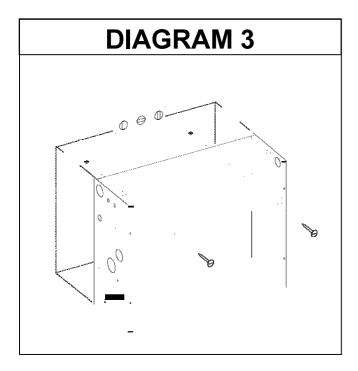
WARNING - The use of alcohol, drugs or medication can greatly increase the risk of hyperthermia.

#### PLEASE SAVE THESE INSTRUCTIONS











The Insignia steam generator can be hung on a wall or sit on a base. The best mounting location will satisfy all or most of the following:

- 1. The steam line should slope to allow condensation to drain. Condensation should drain into the steam room.
- 2. The steam line should be less than twenty feet long. Ten feet is preferred. Steam lines over twenty feet long should be insulated.
- 3. The mounting location should minimize the number of bends and elbows in the steam line.
- 4. The generator should be installed in a dry, well ventilated area. Suggested locations are under a vanity, in a closet, attic, crawl space or basement.
- 5. The location should provide clearance for service and element removal. See diagram 2.
- 6. The mounting location should allow for a drain hook up.
- **7.** The generator must be mounted in a minimum 7 cubic foot space.
- 8. The generator should not be mounted in an area subject to freezing.

#### Wall Mounting:

- 1. Note the location of the mounting holes on the back of the generator. The screws must set directly into studs or equivalent supports.
- 2. Carefully hang the generator on the two screws on it's own mounting brackets. Tighten the screws. Replace the front cover. Secure the front cover with six screws.

#### Very important!

The steam generator **MUST** be installed to allow air circulation on all 4 sides. For example allow a minimum 10cm from any obstruction and not covered in. Please see example on page 12 how to wall mount allowing ventilation around the unit. **NEVER** obstruct the fan, this is for cooling the unit and will operate every time the steam generator is operational.

#### Floor Mounting:

- 1. In general the width of the unit allows it to sit on a shelf, across the ceiling joists or on a floor. The generator must be restrained from moving. Normally the piping will provide adequate support. If not, additional support must be provided.
- 2. All floor installed generators must have provision for routine draining of the tank.

IMPORTANT! Regular maintenance will help your steamer work properly for a long time. Check for leaks, loose or damaged wires, signs of corrosion and calcium build up in the tank on the level probe.

This is particularly important in areas with high calcium levels and other water quality problems. Calcium build can cause poor steamer performance and damage the heating elements!

### WARNING

Do not mount outdoors. Protect from freezing.

Unit must be located as to allow access for service.

The generator will not operate properly, unless it is mounted level with the arrows pointed up.

Do not put a shut off valve in the steam line. Avoid traps and valleys where water could collect and cause a steam blockage. The hot steam line must be insulated against user contact.

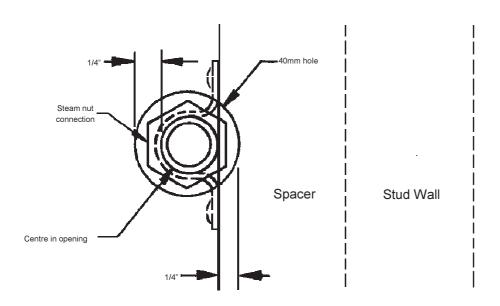
Centering the steam pipe is critical in rooms made of plastic, acrylic, resin, fiberglass or similar materials. Allowing the steam pipes to touch materials not rated for 212 degrees Fahrenheit or higher will result in damage to these materials.

Do not install the steam head near bench(es) or where steam may spray or where condensation will drip on the user as this will present a scald hazard.

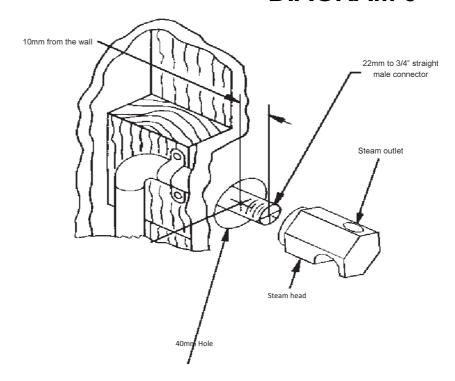
The steam pipe entry and any other entry into the steam room must be caulked to avoid damage caused by steam leakage into the wall.



# **DIAGRAM 4**



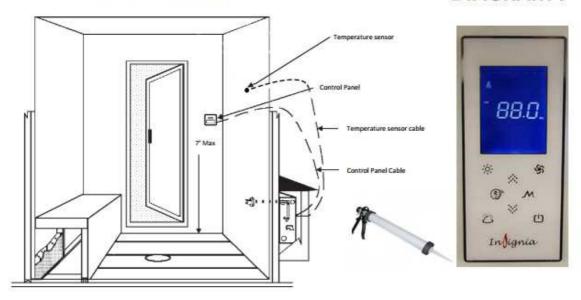
# **DIAGRAM 5**



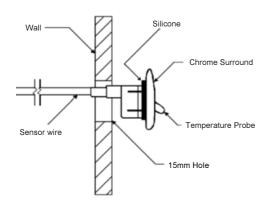


### **DIAGRAM 6**

### DIAGRAM 7



# **DIAGRAM 8**



## **DIAGRAM 9**

3 Phase 380v



Connect 3 x live wires in to (L1) then (L2) and (L3). Connect the 1 neutral Cable in to position (N) & finally 1 x Earth Cable to the earth screw on the plate.

Single Phase 220/240v



Connect 1 x live wire in to (L1) then bridge (L1+L2) and (L2 + L3) as show in the picture above. Connect the 1 neutral Cable in to position (N) & finally 1 x Earth Cable to the earth screw on the plate.



# **Plumbing Instructions**

All plumbing shall be installed by a licensed plumber and conform with local & national codes.

#### Materials (locally available):

- 15mm copper tube for the water supply to the generator.
- 15mm water supply shut-off valve.
- 22mm x 3/4" male connector
- 22mm x 3/4" female connector
- 22mm copper tube for the steam line between the steam generator and the steam room.
- 15mm copper pipe/flexible hose for the tank drain.
- Silicone
- Pipe compound.
- 90 degree copper bend(s). The amount depends on the exact run required to meet the requirements of the room setup.

# **Water Requirements**

IMPORTANT - Maximum recommend input water pressure not to exceed 100 PSI.

Run 15mm copper tube between the nearest cold water line and the WATER INLET fitting on the generator. Next locate a shut-off valve near the generator. Connect this line to the generator with a 15mm compression adapter. When tightening this fitting always use two wrenches so there will be no strain on the water inlet valve.

#### IMPORTANT!

If the generator is mounted in a place difficult for the owner to access, the water supply shut- off valve should be located where it can be quickly accessed in an emergency.

## Install Steam Line

- A. At the generator: Install a 22mm x 3/4" Male connector directly on to the steam tank.
- B. Run the 22mm copper steam line from the generator to the steam room. Refer to DIAGRAM 2: SELECT MOUNTING LOCATION. (this will need to be repeated twice for a 12KW installation)
- C. The steam line should enter the steam room 12" above the floor or at least 6" above a tub rim or ledge. See diagram 1.
- D. At the steam room: Drill/prepare a 40mm hole for the steam line entry. Centre the 22mm copper steam pipe in the 40mm hole. See diagram 5. - Terminate the steam line with a 22m x 3/4" female connector.

Once the steam line is fully installed it is a good idea to cover the pipework with pipe lagging.

#### **IMPORTANT**

If the steam line is in an area where the temperature will be below 40 degrees Fahrenheit or if the line is more than 20 feet long, best results can be obtained by insulating the steam pipe.

INSTALL STEAM HEAD INSULATOR: Apply silicone to the finished wall side of the steam head insulator and screw on hand tight until it is flush with the wall with the opening pointing down. If a hand tight fit does not align with the opening pointing down, use PTFE tape on the steam line threads to adjust the fit.

# WARNING

Do not mount outdoors. Protect from freezing.

Unit must be located as to allow access for service.

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Centering the steam pipe is critical in rooms made of plastic, acrylic, resin, fiberglass or similar materials. Allowing the steam pipes to touch materials not rated for 212 degrees Fahrenheit or higher will result in damage to these materials.

Do not install the steam head near bench(es) or where steam may spray or where condensation will drip on the user as this will present a scald hazard.

The steam pipe entry and any other entry into the steam room must be caulked to avoid damage caused by steam leakage into the wall.



#### IMPORTANT

Check all of the standard fixtures in the steam room. All fixture penetrations must be sealed with 100% silicon caulk to avoid moisture damage within walls.

## **Drain Valve**

Install 15mm male adapter with flexible hose directly on to the tank as shown in diagram 2. Do not run the drain uphill. The drain must be connected in accordance with local and national codes.

# Temperature Sensor Installation

It is recommended that the sensor be mounted 3/4 the way up in the middle of the room and no further than the length of cable supplied (Diagram 6), Never cut the cable to increase the length as this will damage the operation of the unit and is not covered under your terms of warranty. Never install it directly over the steam dispersion head. String the sensor cable from the sensor location through 10mm holes in the wall studs or ceiling joists to the generator location. Leave 3-4" of slack at the sensor location. Note: Do not staple through.

# **Control Panel Installation**

The low voltage control can be mounted directly to a finished wall either inside or outside the steam room. Simply locate your position and mark out the area you need to cut. Now cut out the area and ensure you have a nice smooth finish to be able to locate the control panel in to. Next loosen of the wing nuts on the back of the panel and put the panel in to the wall. Tighten up the wing nuts until the panel is securely located in to position. Finally run a bead of silicone around the perimeter on the front of the control housing and behind where the cable housing goes through the cavity wall. Please see Diagram 7.

#### **IMPORTANT—Please take note!**

When you connect the male lead from the control panel to the female lead from the electric box , you <u>MUST</u> ensure you align the arrows on the connectors. Failure to do this will result in bending the connector pins and the unit will be non-operational and a new panel will be required. These are not replaced under warranty.

## **Electrical Connection**

All connections <u>MUST</u> be carried out by an approved part P electrician and a minor works certificate must be issued upon completion. This product is NOT designed for DIY install and improper installation could be fatal.

Please use correct size and type to meet electrical codes. Leave 2 feet of slack wire at generator location for finish hookup. Connect the generator to a dedicated circuit breaker.

#### **ELECTRICAL FINISH**

- A. Route the supply wire through the hole marked POWER.
- B. Connect the supply wires to terminals marked L1, L2 & L3 and N. Please see Diagram 9 for 240v Conversion
- C. Connect the ground to the ground screw marked accordingly.



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#### **IMPORTANT**

Check all of the standard fixtures in the steam room. All fixture penetrations must be sealed with 100% silicon caulk to avoid moisture damage within walls.

# **Speaker Installation**

The speaker can be located anywhere in the room, however you may have to purchase extension wire in order to meet your exact requirements. To mount the speaker simply mark out the holes and screw the speaker in to position. The speaker does not come with a cover, however you can either adapt your own method or you can purchase one from Insignia directly.

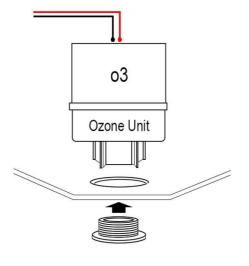
### **Fan Installation**

This is not a necessity to install, however we provide it should you wish too. Following the same rules as the speaker you can locate this anywhere in the room to exhaust the steam out.

### **O3** Installation

This is not a necessity to install, however we provide it should you wish too. The idea behind the o3 is to kill off Bactria which can build up in the steam after use. To install:

- 1. Unscrew the chrome pepper pot end from the module.
- 2. Using a core drill, drill a 29mm hole in the steam room (preferably in the roof or high up on a wall)
- 3. Locate the o3 module in to the hole
- 4. Screw the chrome end in to the module
- 5. Connect the wire to the corresponding wire on the control panel.



### **WARNING**

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# **Control Panel Operation**

Your new steam unit has the option to add LED 12/V lights to it. To install, simply attach the extension wire and locate the furthest position it reaches. Once done you can add on the optional lights on to this. Whilst the unit does not come with lights please refer to an Insignia approved reseller for assistance. To operate the light feature simply press and button on the control panel to activate the on/off feature.



### **Button 1 (Lights)**

Press x1 for lights (Pressing button again turns them off)

### **Button 2 (Extractor Fan)**

On/Off.

### **Button 3 (Up Arrow)**

Radio Search Up, music track select up or Volume increase.

### **Button 4 (Audio select)**

Press to activate the Bluetooth or radio functionality.

### **Button 5 (Mode)**

Press to convert the up and down arrows to volume control. This button can also set the steam time and temperature.

### **Button 6 (Steam)**

Control the steam outlets from the control panel.

### **Button 7 (Down Arrow)**

Radio Search Down, music track select down or Volume decrease.

### **Button 8 (Power Button)**

On/Off. Hold in for three to five seconds to unlock the automatically locking control panel.

#### **PLEASE NOTE:**

When the Control Panel is locked, none of the buttons will work, with the exception of the power button, which will unlock the control panel.



# **Steam Operational Test**

- 1. Assure power and water are turned on.
- 2. Press the power button on the control panel. The control should light-up.
- 3. Press the steam button (button 6) and wait for the steam to start. Usually this will take around 2-3 minutes
- 4. Once the steam starts let in run for five minutes to ensure it's working correctly and calling for water. Now press the steam button to power of the unit. The steam should stop; there shouldn't be any water flow.
- 5. Press the steam button again and almost immediately the unit should power up and produce steam. It should call for water once every two minutes or more depending on its power rating. It's normal for the flow of steam out the steam head to slow for up to 10 seconds each time the unit calls for water.
- 7. The unit is designed to shut down automatically after 90 minutes. When the time runs out the steam will stop and there should not be any water flow. The control should also not be lit. This unit is **NOT** designed to be run for more than 90 minutes without a hour pause between use. These units are designed for heavy domestic/light commercial use only and MUST not be continually run for long periods at time (i.e 8 hours) as the unit MUST have time to cool down.
- 8. If the unit does not operate as described above, please refer to the insignia customer services for advice and assistance.

#### THE UNIT IS NOW READY FOR OPERATION.

# **Bluetooth Operation**

- To activate the Bluetooth simply press the button (4) and BR should show up on the display screen.
  - Active the Bluetooth setting in your device and look for model: B018BT
  - 3. Pair up the device to the Bluetooth and you will hear a beep once connected
  - 4. You can operate your playlist by pressing the up and down arrows on the control panel

# O3 Operation/water draining process

To activate this feature it's automatic. Once you finished steaming, turn the control panel off and the o3 will now be displayed on the control panel. The module omits a very slight noise almost heard to hear, however it will be working. This feature will turn itself off after 15 mins and with that the entire steam unit/control will completely power down. It's at this point the steam generator will dump all it's remaining water left in the tank in to the drain

In ignia

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# **Typical Set up**



The set up above is only a mock up to give you an idea of how the installation should be made.

# Service / Maintenance

To prolong the life of the unit we highly recommend the use of an inline water softener to prevent build up of scale. Regular checks to ensure the steamer is operating correctly and run at least once a month for 20 mins if not in regular use. Remember when the unit is not in use close of the water valve to ensure a calcium build up is not made during long periods of non use which could cause the inlet valve on the steamer to malfunction.



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