

# Installation Guide:

for the Warmup 3iE Programmable Thermostat

# Warmup®

## Introduction:

The 3iE thermostat is designed to aid in the comfort of your home by providing timed regulation of your Warmup underfloor heating system. The thermostat is designed to receive temperature input signals from the following sensors:

1. Air sensor located inside thermostat
2. Floor sensor installed in floor to be heated (see Warmup heater instructions for details)
3. Optional 2nd sensor (either installed in floor or outside house)

The thermostat is not a safety device and should only be used with Warmup heating products. In order to avoid damaging your flooring the correct floor type should be selected during the thermostat programming process.

## Electrical Specification:

- Supply voltage: 230V +/-15% at 50Hz
- Thermostat is not designed for use with intermittent power supply.
- Maximum Switch Load: 16A resistive
- Insulation Class : II
- Housing : IP20 (IP32 when used with gasket- see fitting instructions)
- Standards: EN60730-1 & EN60730-2-9 standards

## WARNING – important safety note

This product uses mains voltage electricity and work should only be carried out by a qualified electrician. You should always isolate the power supply before attempting to install or repair the 3iE thermostat. The thermostat should not be put into operation unless you are certain that the entire heating installation complies with current general safety requirements for electrical installations. Electrical installation to be in accordance with latest IEE Wiring Regulations and appropriate Statutory Regulations.

## Location of Thermostat:

The thermostat should be installed inside a single gang electrical wall box that is at least 30mm deep. For optimal performance the thermostat should be located in an area with good ventilation. It should not be beside a drafty window/ door, in direct sun-light or above another heat generating device (e.g. radiator or TV).

The thermostat is designed for operation between 0°C and 55°C with relative humidity less than 80%.

## Location and installation of floor sensor:

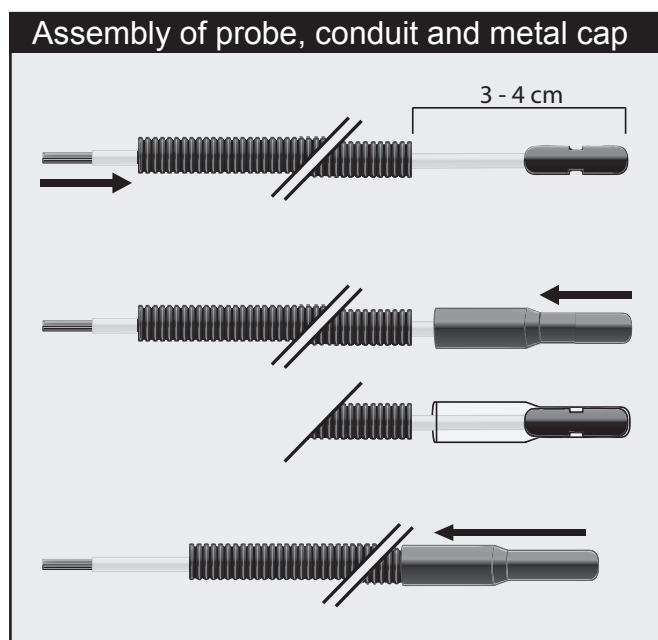
The optimum location of the floor sensor is described in each Warmup heater installation manual. Refer to that manual when selecting floor sensor location.

A conduit has been provided with this 3iE thermostat and must be used as part of the warranty. The use of this conduit will protect the sensor and will allow easier repair of the sensor in the case of sensor damage after flooring has been laid.

When installing the floor sensor, it is recommended to use the following process:

1. Work out the desired locations of the thermostat and floor sensor. Measure distance of conduit required and cut conduit to correct length. The end of the conduit should be located somewhere easily accessible even after all flooring material has been fixed. It is recommended to minimize the length of conduit and avoid sharp corners.
2. Straighten both sensor cable and conduit. Push sensor all the way through conduit and ensure the sensor protrudes from the protective conduit by 3-4 cm.
3. Place metal cap over the sensor and then push back ensuring a firm fit between conduit and metal cap

Warning: Do not attempt to cut conduit with sensor installed. This could lead to irreparable damage to your sensor.



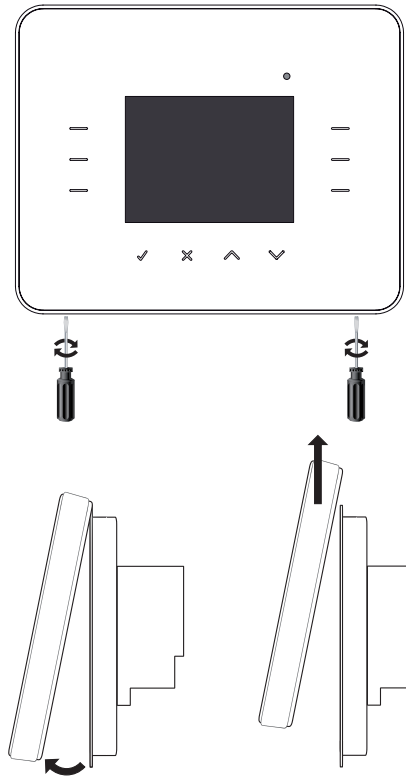
## Installation:

Separate the front housing of thermostat from wall module:

1. Unscrew both closing screws (bottom of stat) until they will not turn any further.
2. Release front housing by gripping lower half of outer frame and pulling outwards then upwards
3. Place front housing somewhere safe
4. Run all wires to the wall box. Check to ensure that you have included the following:
  - Power (Live and Neutral)
  - Heater (Live and Neutral)
  - Floor sensor
  - Fil pilote (if necessary)
  - External/ 2nd floor Sensor (if necessary)
5. Pull wires through wall box and complete terminal wiring.

**IMPORTANT:** Ensure that multi strand wires are fully inserted into the terminals and secured tightly. Any loose strands should be trimmed as they could cause a short-circuit.

If connecting more than two heaters, an electrical junction box will be required.



### Normal electrical installation (see numbering on diagram to right)

2. Connect to Power Supply (Live – MAX 240V)
3. Connect to Power Supply (Neutral – MAX 240V)
4. Connect to Warmup heater(s) (Neutral – MAX 3600W/ 16 Amps)
5. Connect to Warmup heater(s) (Live – MAX 3600W/ 16 Amps)
7. Connect to 1st wire of floor sensor (colour not important)
8. Connect to 2nd wire of floor sensor (colour not important)

### Special installations:

(should only be performed under the supervision of Warmup)

#### Fil Pilote installation: (only for use in France)

1. Connect to fil pilot (F.P.)

#### Second sensor installation: (2nd floor probe or exterior probe)

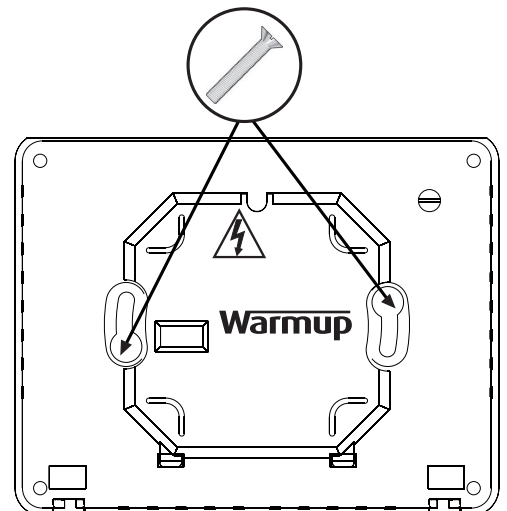
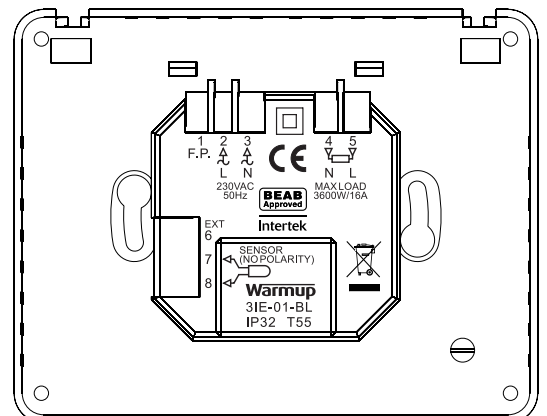
6. Connect to 1st wire of external sensor/ 2nd floor sensor
7. Connect to 2nd wire of external sensor/ 2nd floor sensor

#### Master/Relay installation: (connecting 2 stats together)

6. Connect to terminal 6 on other thermostat
7. Connect to terminal 7 on other thermostat

### Mounting thermostat into the wall box:

1. Push excess wire back through the wall box and insert thermostat back module into wall box.
2. Put fixing screws through mounting holes and tighten.
3. Ensure that thermostat is straight before tightening completely.
4. Replace thermostat front housing;
  - i) align and sit front housing on to hinges,
  - ii) push lower half of front housing until a 'click' is heard.
5. Ensure front housing is securely fixed.
6. **IMPORTANT:** Tighten both retaining screws



## Powering-up:

You can now power up the thermostat and begin the programming process. An easy to follow menu will guide you through the rest. If you want to turn on / off the thermostat and heating system then hold down the recessed button on the bottom of the stat for 3 seconds

When you have ensured that both the floor sensor and heating elements are working correctly you can complete the installation of floor covering and remove the protective cover on the front of the thermostat.

## Error Messages:

Your thermostat can give you four error indications:

1. "heater error": This will occur if the heater is not correctly connected to the thermostat or the heater is open circuit.
2. "overload": This will occur if more than 3.6kW (16 Amps) has been connected to the thermostat
3. "er1": This will occur if no floor sensor is detected
4. "er2": This will occur if the floor sensor has a short circuit

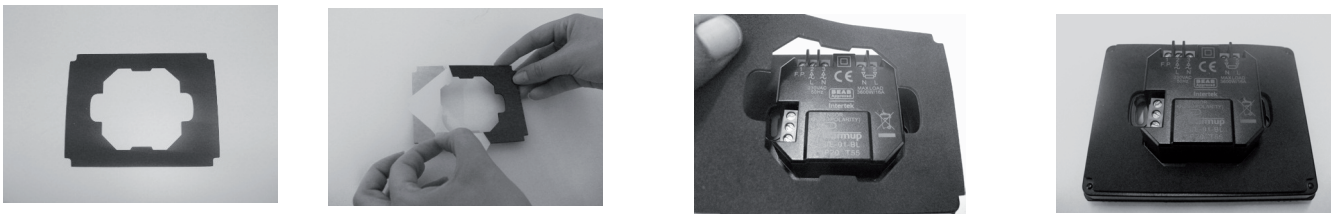
## Using the Gasket with the 3IE

The 3IE has a Ingress Protection rating of IP20 but this rating can be increased when used in conjunction with the Gasket supplied with the thermostat, in which case it is ingress Protection rated to IP32 but only when used in accordance with these instructions.

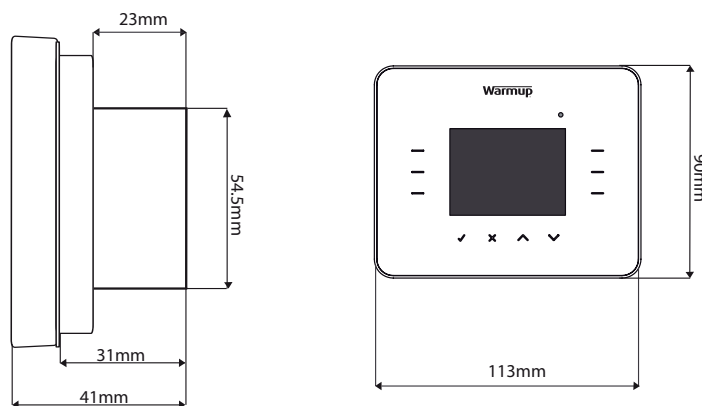
### Fitting the Gasket

Remove backing from seal and attach to the back of the thermostat ensuring that there is a tight bond between the seal and the back of the thermostat.

Once fitted do not remove or attempt to refit the seal as this may affect the protection against ingress of water if the not fixed correctly.



## Dimensions :



Dimensions (mm)

