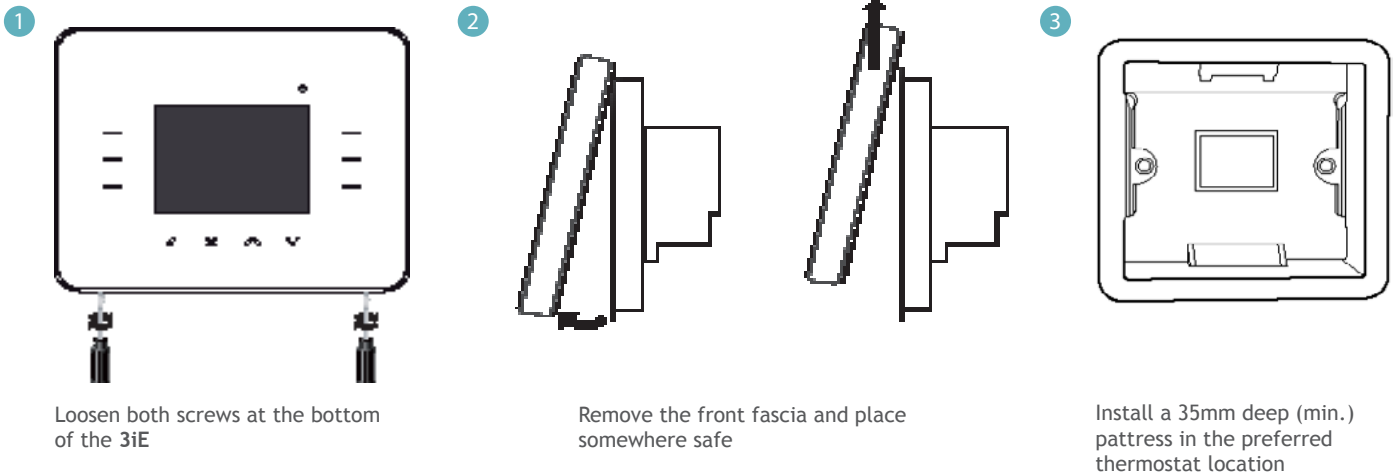## Step 1 - Identify Suitable Location

Before making any permanent fixtures Warmup recommends identifying your preferred location for the 3iE. It should be located in an area with good ventilation. It should not be beside a window/door, in direct sunlight or above another heat generating device (e.g. radiator or TV).
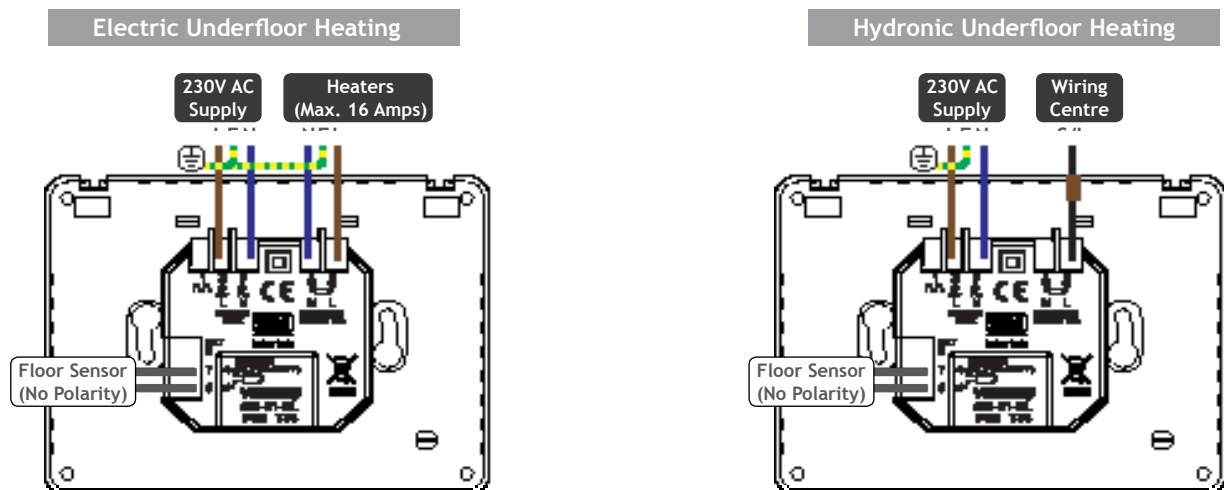
BATHROOM INSTALLATIONS: When installing a 3iE within a bathroom it MUST be mounted outside of Zone 2 in accordance with the Wiring Regulations. If it is not possible to identify a suitable location outside of Zone 2 within the bathroom, then it is recommended that the 3iE is installed in the adjacent room and set to control the heating by floor temperature only. When installed in this way, it is not possible to directly control the heating based on the room air temperature, only the floor surface temperature.

Step 2 - Positioning

Loosen both screws at the bottom of the **3iE**

Remove the front fascia and place somewhere safe

Install a 35mm deep (min.) pattress in the preferred thermostat location

Step 3 - Wiring Connections

IMPORTANT INFORMATION: Installation should only be carried out by a qualified and competent electrician. The 3iE requires a permanent 230V supply from a 30mA RCD protected circuit in accordance with the current edition of the BS7671 Wiring Regulations. The 3iE and its power supply should be isolated from the mains supply throughout the installation process. Ensure that wires are fully inserted into the terminals and secured. Any free strands should be trimmed, as they could otherwise cause a short-circuit.

Electric Underfloor Heating

230V AC Supply

Heaters (Max. 16 Amps)

Floor Sensor (No Polarity)

Hydronic Underfloor Heating

230V AC Supply

Wiring Centre

Floor Sensor (No Polarity)

MASTER/RELAY FUNCTION (Electric underfloor heating only)

This feature allows you to control loads greater than 16A. The heaters will be split across two 3iE's, one being the master and the other being the relay (slave). Only one floor sensor is required which is wired into terminals 7 & 8 of the master 3iE.

Wiring Connections - Use low voltage electrical cables for the wiring
• 1st Cable - Link Terminal 6 of the Master to Terminal 6 of the Relay
• 2nd Cable - Link Terminal 7 of the Master to Terminal 7 of the Relay

Thermostat Setup
• Go to Advanced Settings, Heater settings and Mater/Relay. Set the Relay 3iE to Relay Mode **FIRST**
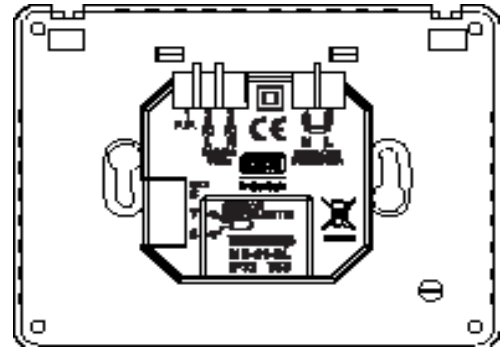• Next set the Master 3iE to Master

FIL PILOTE

Connect fil pilote (F.P.) to terminal 1 (only for use in France)

Gasket Installation

The 3iE has a Ingress Protection rating of IP20 but this rating can be increased to IP32 when used in conjunction with the Gasket (supplied separately). This Ingress Protection can be increased to IP32 by following these instructions.

FITTING THE GASKET
Remove backing from the gasket 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.
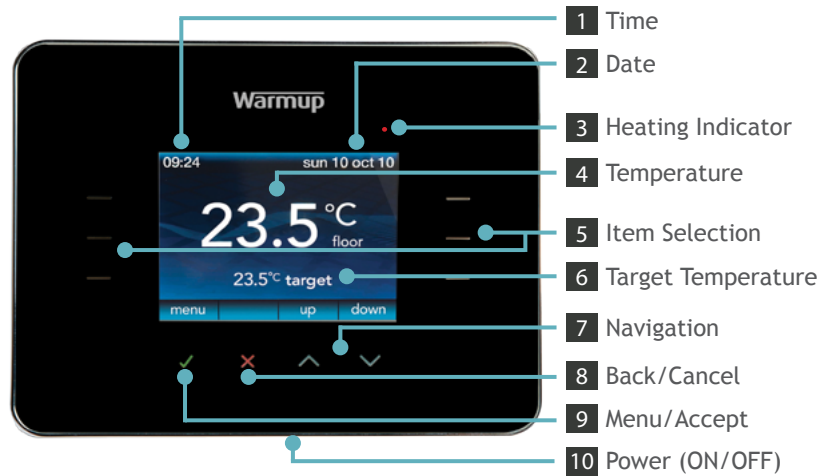
Technical Specifications

- **Operating Voltage -** 230V AC +/-15% 50Hz
- **Max. Load -** 16A (3680W)
- **Dimensions -** (H/W/D): 90 x 113 x 19mm (from wall)
- **Sensors -** Air & Floor
- **Sensor Type -** NTC10K 3m long (can be extended to 50m)
- **Insulation Class -** II

- **IP Rating -** IP20/(IP32 with optional gasket)
- **Installation Depth -** 35mm back box
- **Display Size -** 2.4" Full colour
- **Compatibility -** Electric and Hydronic UFH
- **Er-P Class -** IV
- **Standards -** EN60730-1 & EN60730-2-9

3iE
OPERATING INSTRUCTIONS

Warmup

Getting Started

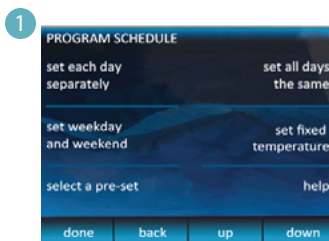On initial power up the 3iE will guide you through set up procedure for the following:

• Language
• Time Preference & Settings
• Date Preference & Settings
• Daylight Savings
• Temperature Unit Preference
• Theme
• Brightness
• Standby Brightness
• Heating Indication (Heating indicator light Active/Inactive)
• Audio Feedback (Turn selection Audio ON/OFF)
• Floor Type (Sets heating limits depending on floor type)
• Heating Target (Control heating using floor or air sensor)
• Program Schedule (Select a program schedule for your 3iE)
• Energy Monitoring (Set tariff type & cost per kWh)
          Set Power Source - Electric or Hydronic
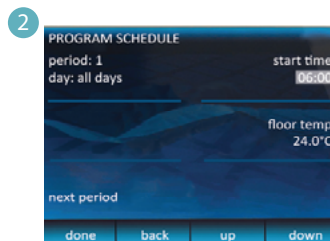   System Power - Wattage of your system)

1 Time
2 Date
3 Heating Indicator
4 Temperature
5 Item Selection
6 Target Temperature
7 Navigation
8 Back/Cancel
9 Menu/Accept
10 Power (ON/OFF)

Programming

Set each day separately	Select if you would like to program heating periods for each day of the week
Set all days the same	Select if you program the heating periods to be identical for all the days of the week
Set weekday and weekend	Select if you would like to program heating periods for Mon-Fri as a block and Sat-Sun as a block
Set fixed temperature	Select to set a fixed temperature for the 3iE to achieve and maintain. (To switch OFF the heating press and hold the button at the bottom of the 3iE)
Select a pre-set	Select a pre-set heating schedule designed by Warmup according to your room type. To view/edit this schedule go to program and view/edit schedule

NOTE: The screens below are an example of how to program. For this example it shows how to program when setting all days the same.
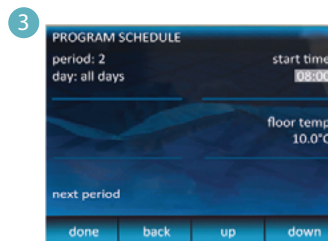
1

> Press menu
> Select set program
> Set all days the same

2

You will now be setting the start time and temperature for the first period
> Select start time
> Set start time using ∧ ∨
> Select floor temp
> Set heating target using ∧ ∨
> Select next period

NOTE: There are 10 periods available however you do not have to program all 10 periods.

3

You will now be setting the start time and temperature for the second period
> Select start time
> Set start time using ∧ ∨
> Select floor temp
> Set heating target using ∧ ∨
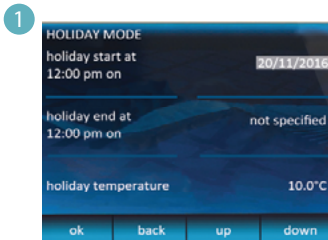> Select next period or done to complete

IMPORTANT: If you want to switch the heating OFF or set a setback temperature press ∨

4

Once finished you will see a summary graph
> Press ok to apply your program or back to re-program

Holiday Mode

HOLIDAY MODE allows you to override your schedule with a fixed temperature for a prolonged period of time. This can help save energy if you know that you will be out of the house and require minimal heating.

1

> Press menu
> Select holiday mode
> Set the start date using ∧ ∨
> Select end date
> Set the end date using ∧ ∨
> Select holiday temperature
> Set the temperature using ∧ ∨
> Press ok to confirm

NOTE: To run holiday mode indefinitely set the end date as not specified
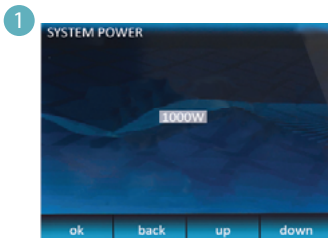
2

During the HOLIDAY MODE you will have a modified home screen. To cancel HOLIDAY MODE at any time just press "cancel".
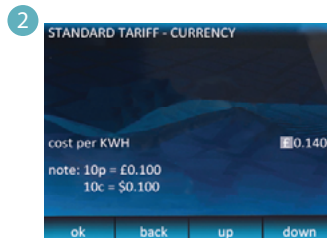
Energy Monitor

Your 3iE monitors the amount of energy your underfloor heating system is using. Energy monitor allows you to view the amount of energy used and the cost of that energy based on the cost per kWh you set.
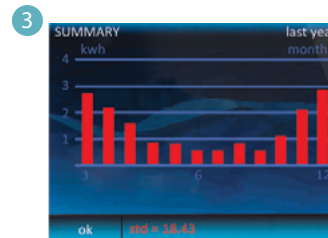
ENERGY MONITOR SETUP

1

> Press menu
> Select energy monitor
> Select system power
> Set the wattage using ∧ ∨
> Press ok to confirm

NOTE: If you do not know the system power contact your installer

2

> Press tariff type
> Select your tariff type
> Press ok to select £ as currency
> Press ok to skip to pence
> Set your cost per kWh using ∧ ∨
> Press ok to confirm

3

To view how much energy you have used
> Press "view energy use"
> Select the time period you would like to review
Each red bar indicates a time period and amount of energy in KWH used during that period. The total amount of energy used is displayed in the bottom bar.

NOTE: If you are using "standard / low energy tariff" then the amount/cost of energy used in the standard period will be displayed in red and the amount/cost used in the low period will be displayed in white.

Settings

Time
Set time	manually set time
Set date	manually set date
Daylight savings	set daylight savings (europe/n.america/australia/off)
Time preferences	12/24 Hr
Date preferences	MM/DD/YYYY or DD/MM/YYYY

Language
Select your chosen language

Temperature preferences
Celsius or Fahrenheit

Display/Audio
Theme	select a preferred theme for the homescreen
Standby brightness	change the screen brightness when in standby mode
Display brightness	change the screen brightness for normal use
Heating indication	switch the red heating indicator light ON/OFF
Audio feedback	turn the audio feedback when making a selection ON/OFF
Child lock	Switch child lock ON/OFF

Set heating target
Target floor temperature	uses floor temperature to control the heating
Target floor temperature with air limit	uses floor temperature to control the heating but if air temperature exceeds the limit it will switch the heating off
Target air temperature	uses the air sensor to control the heating

Advanced Settings

Heater Settings
Floor type	set the temperature limits for your floor type. User Defined lets you set custom limits
Regulator	controls the heating in 10 minute cycles. The number you enter is the number of minutes in a 10 minute cycle that the heating will be on
Fil Pilote	This is a feature specifically for France
Master/relay	This allows one thermostat to control another
Probes	Set the specification of the probe installed. 10K is default
Offset	Set the offset of the sensors to improve accuracy
Reset	This will restore all the factory default settings

Warranty

Warmup plc warrants this product, to be free from defects in the workmanship or materials, under normal use and service, for a period of three (3) years from the date of purchase by the consumer. If at any time during the warranty period the product is determined to be defective, Warmup shall repair or replace it, at Warmup's option.

If the product is defective, please either,
 (i) return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it, or
 (ii) contact Warmup. Warmup will determine whether the product should be returned, or replaced.

This warranty does not cover removal or reinstallation costs, and shall not apply if it is shown by Warmup that the defect or malfunction was caused by failure to follow the instruction manuals, incorrect installation or damage which occurred while the product was in the possession of a consumer.
Warmup's sole responsibility shall be to repair or replace the product within the terms stated above.
WARMUP SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. THIS WARRANTY IS THE ONLY EXPRESS WARRANTY WARMUP MAKES ON THIS
PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE THREE-YEAR DURATION OF THIS WARRANTY.
This Warranty does not affect your statutory rights.

PLEASE REGISTER YOUR WARMUP PRODUCT AT: www.warmup.co.uk

Extended lifetime warranties are available for the Warmup 3iE Energy Monitoring thermostat. For further information, enquire at your local 3iE retailer, check online at www.3iE-warranty.co.uk or contact Warmup directly on 0345-345-2288

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