Cosy

Installation guide

Safety Notices

It is important to observe some simple safety precautions when installing and using this product. Read this important information before continuing. Safe operation of the unit is impaired if not used or installed in a manner specified by the manufacturer.

- Do not immerse in water or any other liquid.
- If any component appears damaged or faulty do not use device.
- In-line Switch must not be used to isolate connected equipment from the mains supply during any activity which requires connected equipment to be safety isolated from the mains suppy.
- Do not cover any device.

Isolate mains supply before removing the switch cover. When connected to a live mains supply, all internal parts are at mains potential. No user serviceable parts inside.

For use in dry, indoor environments only.

At the end of its life please recycle at a suitable recycling factory. Do not place in general waste.

Pre-Installation Survey

Before an installation takes place a survey of the property should be undertaken to ascertain the following:

- The address of the property
- Is there broadband access and the router has a spare Ethernet port.
- If a heat pump is to be included in the system, ensure that there is WIFI available and that the WIFI password is known.
- Inspect each of the customers existing heat sources: Panels, Underfloor Heating, Air Source Heat Pumps and Hot water are all working. (This is to protect the installer if something is found to be defective after the installation)
- Ensure that all devices to be controlled are 230V
- Working with the customer, decide how many devices are required for the installation. To do this the installer should assign a controller to every heating and hot water device, either an In-line Switch, Underfloor Heating Controller or an IR controller. Each Zone will require a Sensor to measure the Zone temperature, with the exception of hot water zones that do not need a Sensor. It should be remembered that a zone can contain multiple heating devices but only one Sensor and that there are limits to the number of Zones and devices as follows:
  - Max Number of Zone = 13
  - Maximum number of devices per Zone is 12, this includes the Sensor as well as heating controllers
  - The total number of devices in any one system is 50 made up from:
    - In-line Switch
    - Underfloor Heating Controller
    - IR Controllers
    - Sensors
    - Displays

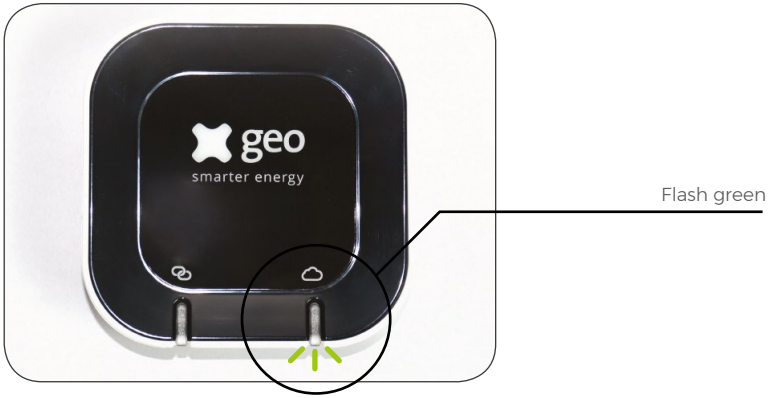
NOTE: the pre install survey should result in a documented configuration

Installation

Each of the devices can be installed in accordance with the installation guides below:

Hub

On arrival at site the installer should ask the customer to download the “geo Cosy” App from either the App store or Google Play. It’s available in both Android and iOS versions. Whilst this takes place install the Hub by connecting its power and connecting the supplied Ethernet cable between the Hub and the customers Internet router. Once connected the Cloud LED should turn Green.



Once the Hub is installed, ask the customer to create a geo account via the App and link it to the Hub by following the instructions in the App. Whilst the customer does this, install all of the heating controllers and sensors in accordance with the pre-install survey.

In-line Switch

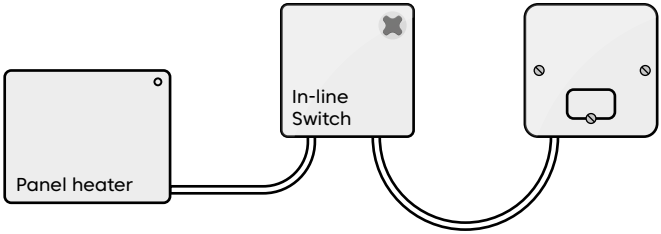
Compatibility

The In-line Switch is a mains-powered wireless controlled switch, suitable for any domestic 230V mains powered application up to 16A. It is fitted in line with the device power cable. It may also have a plug and socket wired in and be used between a plug and socket. If placing in the power cable, it must only be used in fixed installations and the In-line Switch must be fixed to the wall using the bracket supplied.

Model	IS1
Input and switching Capacity	16A 230V ~ 50Hz
Switch safety cut-out	>16A for Approx. 1s
Power Consumption (device only)	1W (typ)
Ingress protection rating	IP40
Operating temperature range	0˚C to +35˚C
Operating humidity range	5% - 90% (non-condensing)

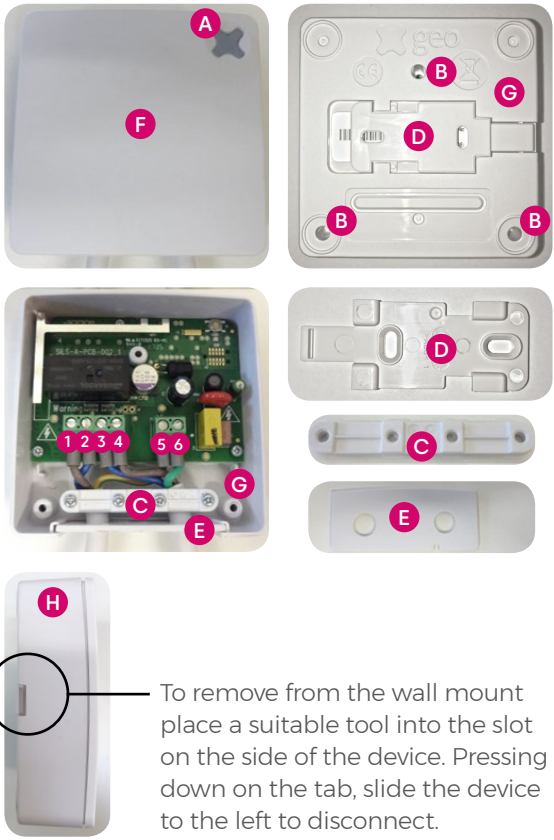
Installation

Example diagram of how the In-line Switch should be installed



In-line Switch Parts Description Diagram and Table

	Part
A	On/Off Button
B	Screws holes, screws hold case together
C	Cable clamp
D	Wall mount bracket
E	Cable end plate
F	Lid
G	Base
H	Side view
1	Live out
2	Neutral out
3	Neutral in
4	Live in
5	Earth
6	Earth



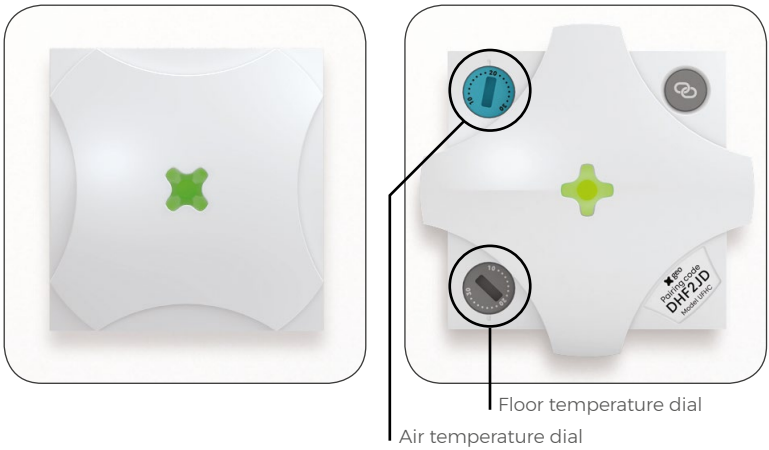
To remove from the wall mount place a suitable tool into the slot on the side of the device. Pressing down on the tab, slide the device to the left to disconnect.

- The equipment is to be installed in compliance with local wiring regulations, including a suitable means of disconnection from the supply.
- The In-line Switch must be installed in an easily accessible and dry indoor location which meets the requirements of IP40
- Identify the desired mains-powered device to be controlled, inspect the mains cable to be cut for any damage or degradation. If any is present, the install must be aborted, and the end user informed
- Open the In-line Switch enclosure by unscrewing the three screws (B)
- Remove the cable clamp (C)
- If wall mounting, select a mounting location for In-line Switch that allows easy connection of the mains cables. They must not be pulled tight. The installations must be located and carried out such that it does not present a hazard to the end user
- Using the drill guide on the reverse of the Safety Notice, secure the wall mount bracket (D) to the wall, using fixings provided
- Cut the power cable where you wish to place the In-line Switch
- Drill appropriately sized holes in the cable end plate (E) and thread the cables through
- Strip back the wires to the appropriate length – recommended strip length is 6-7mm
- Wire the cables into Live In, Live Out, Neutral and Earth terminal blocks (See 1,2,3,4,5 and 6 in Figure 2), recommended torque is 0.4 Nm.
- Use the cable clamp (C) to secure cables. The cable clamp is designed to clamp the outer sheath of mains flex cable, not the individual wires
- Securely screw the lid back on and either set the In-line Switch on the floor/surface, or attach it to the wall bracket
- Restore mains to the circuit and test the In-line Switch

NOTE: Use table on page 18 to take note of the pairing code of each device and location as it's installed. You'll need this for configuration of the system.

Once all devices are installed, the installer should follow the instructions in the App for pairing it to the Cosy system and configuring it for use. See the App recommendations section.

Underfloor Heating Controller

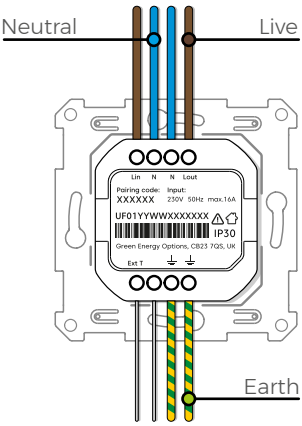


Compatibility

The Underfloor Heating Controller is a mains powered wireless controlled switch for underfloor heating systems. It is designed both to be used on new installs and as a replacement for existing installs. It is designed to fit an Elko style back box and surround. It is fitted in a wall with only the front part being accessible.

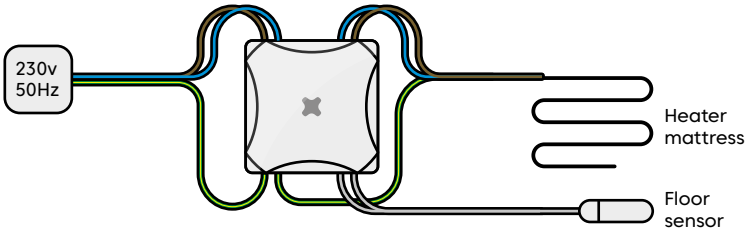
The buttons and temperature dials are accessed by rotating the front fascia as can be seen above:

Model	IS1
Input and switching capacity	16A 230V ~ 50Hz
Switch safety cut-out	>16A for Approx. 5s
Inrush current	25A for 3 seconds
Power consumption (device only)	1W (typ)
Ingress protection rating	IP30
Operating temperature range	0˚C to +40˚C
Operating humidity range	5% - 90% (non-condensing)



Installation

Example diagram of how the In-line Switch should be installed



NOTE: The device should be provided with an over current protection device compatible with the electrical load.

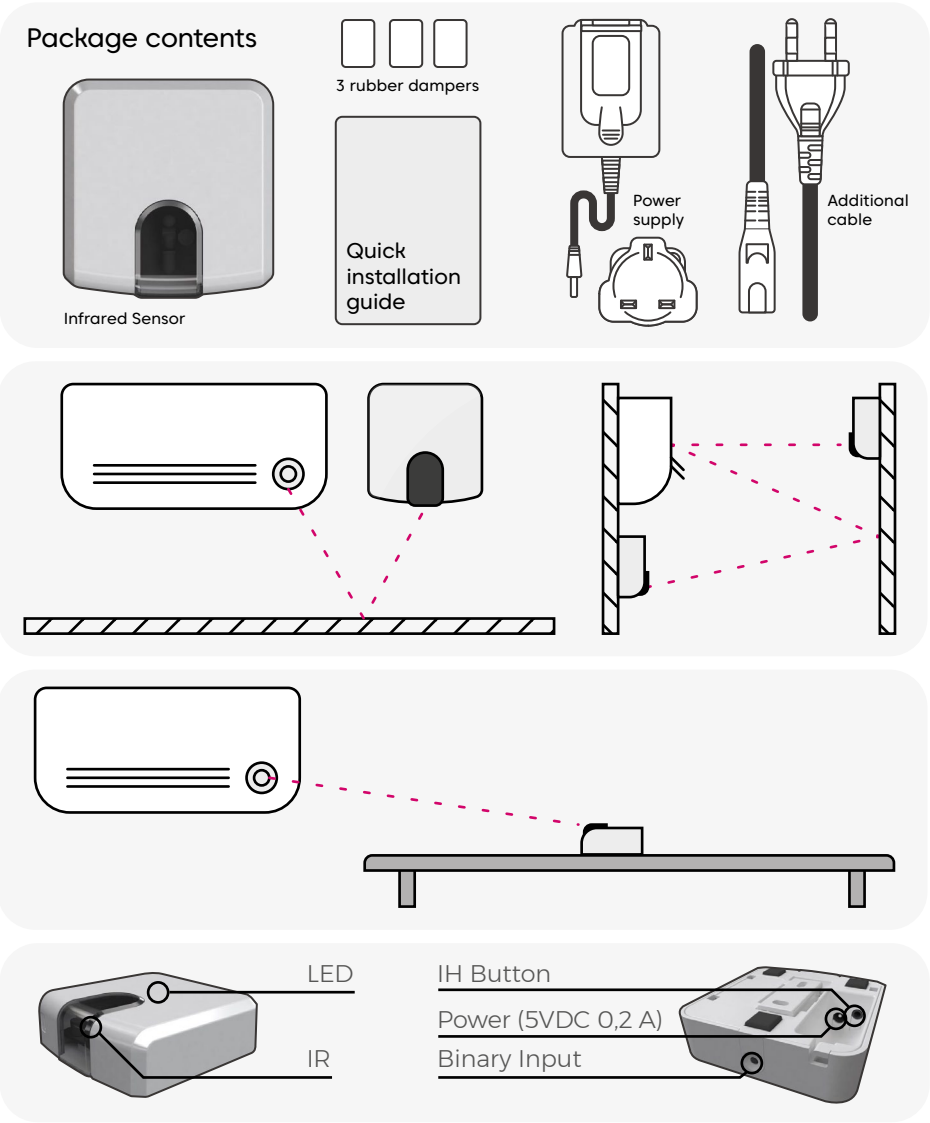
- Equipment is to be installed in compliance with local wiring regulations, including suitable means of disconnection from the supply
- The unit must be installed in an easily accessible and dry indoor location which meets the requirements of IP30
- The unit must only be installed in the appropriate back-box with surround (Not supplied with the unit)
- Un-clip the front plate from the back plate using a flat headed screwdriver. Undo the ribbon cable from the top PCB
- Connect the supply Live, Neutral, Earth as labelled
- Connect the underfloor heating load as labelled
- Connect the external thermistor (if installed) wires as labelled, be sure to ascertain the type of thermistor installed and note it down. You will need this information during configuration
- Set the desired maximum floor temperature using the floor temperature dial, if no thermistor is fitted this can be ignored
- Set the desired ambient temperature to be used when the device is in manual mode
- Screw backing plate into the wall
- Replace surround
- Install front plate, connecting the ribbon cable to the connector on the front PCB
- Restore mains to the circuit and test the Underfloor Heating Controller

Once the Underfloor Heating Controller is installed the installer should follow instructions in the App for pairing it to the Cosy system and configuring for use.

NOTE: Please take note of the pairing code of each device and location as it is installed as you will need this for configuration of the system.

Infrared Controller

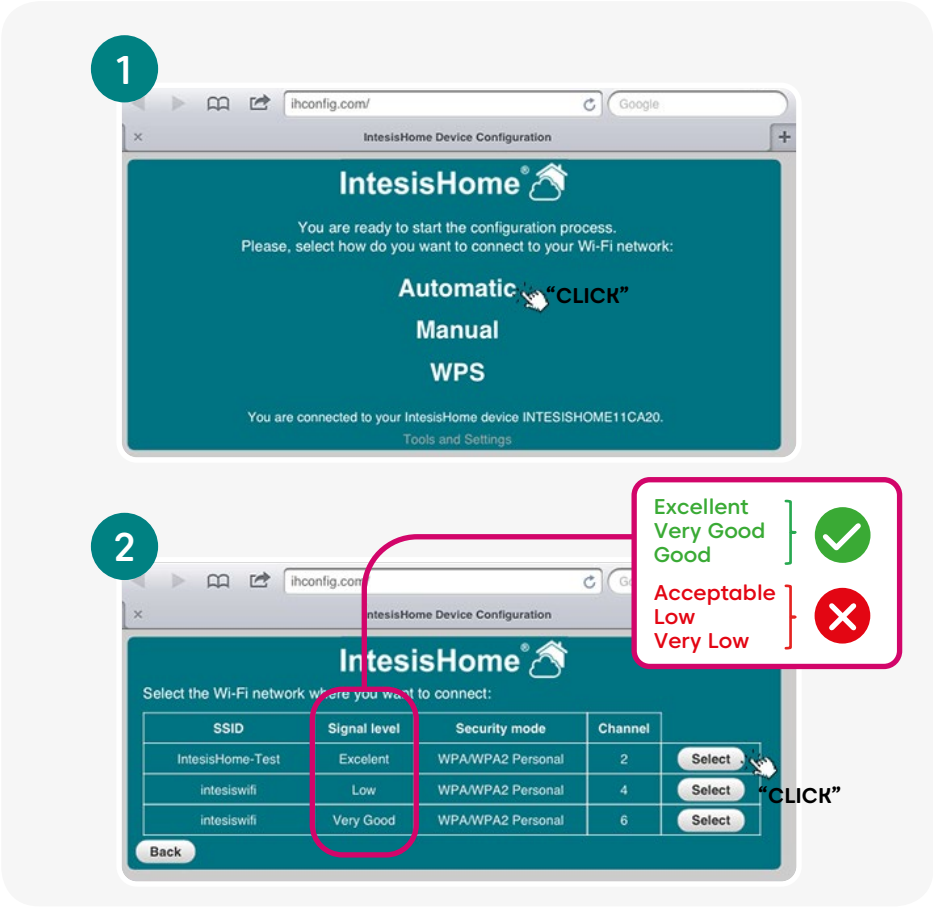
This device is used to control the Air Source Heat Pump.
Firstly install the device as follows:

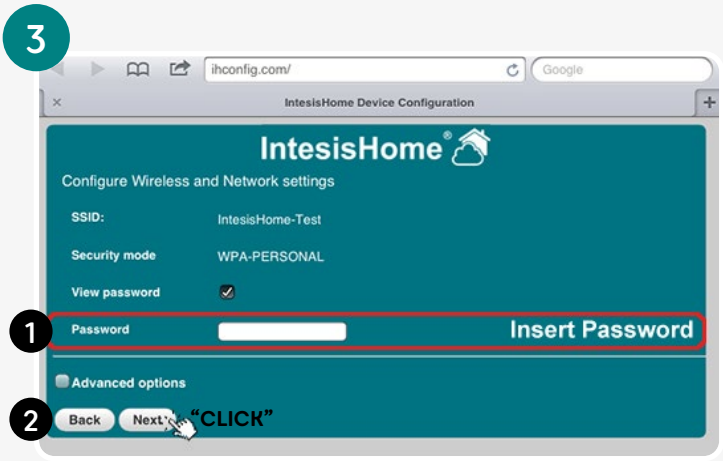


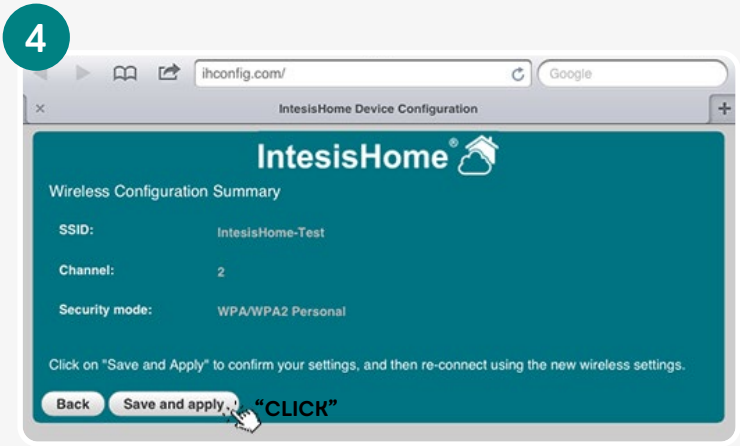
Once the device is powered on it must be connected to the users home wireless network. This can be done via a mobile phone or by another wireless computer

Before starting, ensure you have the name and password of the wireless network that the IR Controller will connect to. Using a phone or other device connect to the IR Controllers WIFI by searching for WIFI networks. The IR device will have a Network name something like “INTESISHOME....”

Once your device is connected to the WIFI, open a web browser and navigate to “ihconfig.com” . Please follow the screens to connect the IR controller to the home WIFI using the information collected in 1 above.







Full instructions can be found here:
https://www.intesishome.com/docs/IntesisHome_DeviceConfig.pdf

5

Green blinking < 2min Yellow blinking < 2min Red blinking < 2min OFF

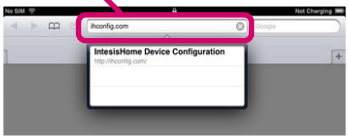
Not OK

OK

Select IntesisHome Device

Open Web browser

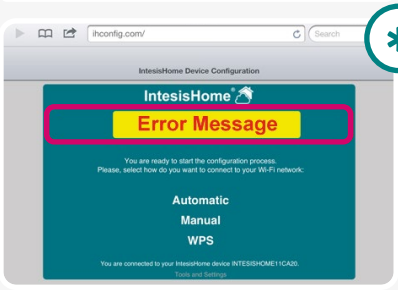
ihconfig.com



Open Configuration Site

user.intesishome.com

Open Registration Site



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Following connection to the WIFI the IR Controller will need to be configured so that it can communicate with the heat pump.

Push the IH button on the rear of the IR Controller for 3 seconds and then the LED on the top of the device will turn white.

Using the Heat Pump remote control, point it at the IR controller and push the on/off button. Once successful the LED will blink Green. If not successful please repeat and if still unsuccessful please check the compatibility list here: **https://www.intesishome.com/compatibility**

When the IR Controller is connected to the home network and the heat pump, please follow the instructions in the App to pair and configure the device for use.

NOTE: Please take note of the pairing code of each device and location as it is installed as you will need this for configuration of the system

Sensor

Compatibility

The Sensor is a battery powered wireless sensor

Model	PCK-WL-001 (THAW)
Input	1 good quality Alkaline AA Battery, typically 2200mAh or better
Ingress protection rating	IP30
Operating temperature range	0˚C to +35˚C
Operating humidity range	5% - 90% (non-condensing)

Installation

The Sensor is designed to be wall mounted via a hanging hole on the rear of the device although it can equally be mounted anywhere that is out of the Sun and away from draughts. Once mounted please follow the instructions in the App. Do not pull the rear tab out of the device until the device is ready to pair. This will save you time during the installation.

When everything is installed use the App to add and pair the devices and then to configure it for use.

NOTE: Please take note of the pairing code of each device and location as it is installed as you will need this for configuration of the system

Display

The Display is used to inform the user of the temperature of the Zone that it's in without the need to look at the App. In time, additional functions will be added to the Display. Additionally the Display can be used as the source for temperature in a zone, this means that a Sensor won't be necessary in that Zone.

Installation

The Display is battery powered and sits on a recharging dock. Unpack the Display and dock and plug in the power cord to the dock. The Display only supports manual pairing to the Cosy system. Once you have added the pairing code into the App, press the left hand button on the Hub until its LED flashes Orange.

Then follow the instructions on the Display (a Zone can be selected on the Display) to complete the pairing. Once paired return to the App to configure the system and allocate the Display to a zone.

App recommendations

- Enter all pairing codes first then switch on all devices and pull out battery tabs on Sensors. Make sure all devices have appeared in the App. If not please use the search again button. This can take up to three minutes.

NOTE: Ensure that any Underfloor Heating Controllers have their correct thermistor type set. This is important as the wrong setting could damage the floor.

- It is recommended that each device is renamed at this point in the process.
- Using the App, create Zones and assign your devices to them, ensuring any device role has been set correctly.
- If you wish to group your Zones, now is the time to do it.
- Continue to the live screen ensuring the system is fully working
- Train the customer on the App.
  - Setpoints
  - Profiles
  - Schedules
  - Away Mode

Device type (Hub, Sensor...)	MAC Address (Starts BC6E7601...)	Pairing Code (Six digit code on label)	Location

Device type (Hub, Sensor...)	MAC Address (Starts BC6E7601...)	Pairing Code (Six digit code on label)	Location

Zone	Group	Connected device (Pane, UFH, Hot Water...)

Zone	Group	Connected device (Pane, UFH, Hot Water...)

Notes

Notes

COSY-ZN-USG-101_3

www.geotogether.com

For any help or support visit:
cosynordics.support.geotogether.com

geo