Homely System Installation Manual

LG

homely
by evergreen energy

Safety Symbols

The following symbols are used in this manual.

Hazards or unsafe practices that may result in electric shock and severe personal injury or death.

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Safety Information

Before proceeding, ensure that all power supplies in the property are isolated. Failure to isolate the power supply may result in electric shock, fire or death.

All electrical works must be conducted by a qualified technician and must comply with local regulations.
Installation by unqualified persons may result in product malfunction, electric shock or fire.

The installation must be performed in accordance with the installation instructions before energising.
Incorrect installation of equipment may result in electric shock or fire.

About this Manual

This manual has been developed to make installation of the Homely system a straightforward process.

Follow the steps illustrated in the following pages to ensure that the Homely device is installed safely and correctly.

Scan the QR code below to visit our YouTube channel where you will find further information about Homely, as well as various installation how-to videos.

YouTube

We welcome your feedback! Please send all comments to **homely@evergreenenergy.co.uk**.

Contents

Installation Requirements

Items Supplied

HOMELY HUB

HOMELY NODE

POWER SUPPLY

2 X CRIMP FERRULE

NODE STICKER

120-OHM RESISTOR

STICKY PAD

Items Required But Not Supplied

DATA CABLE

BELDEN 8723 OR STRANDED
CAT-5 RECOMMENDED

HOMELY INSTALLER APP

Tools Required

WIRE STRIPPERS

PLIERS

MULTIMETER

CRIMP TOOL

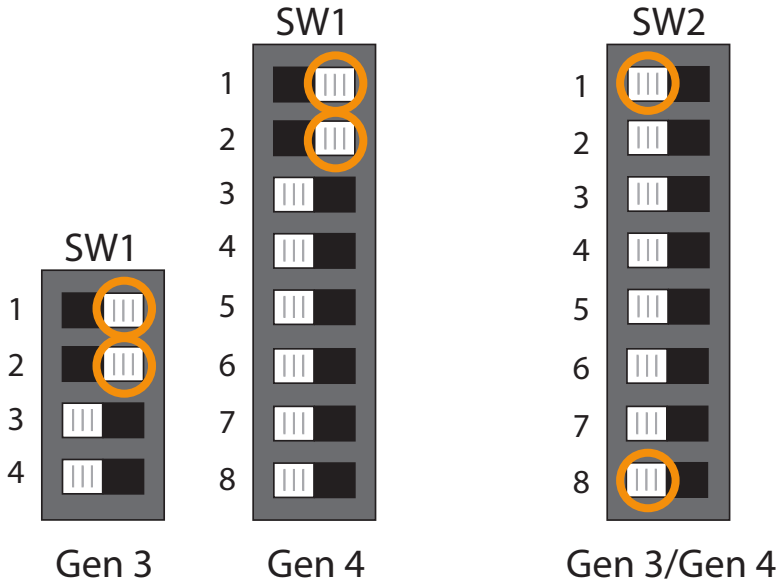
SCREWDRIVERS

Pre-Installation Checks

Before starting the Homely installation, ensure that the heat pump has been installed in accordance with the manufacturer's instructions.

STEP 1:

Set DIP Switches



Open the outdoor unit and locate the two DIP switches labelled SW1 and SW2. Switches for circuit board Generations 3 and 4 are shown above.

Ensure that on SW1 switches 1 and 2 are ON by moving to the right as shown above.

Ensure that on SW2 switches 1 and 8 are OFF by moving to the left as shown above.

The other switches may be left in their original positions.

STEP 2:

Complete Connections

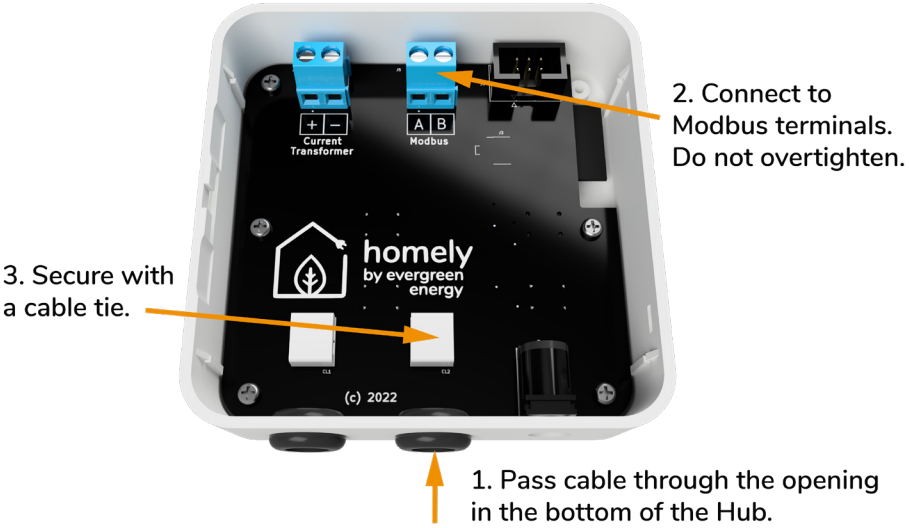
Mount the Homely Hub indoors and connect it to the outdoor unit with data cable. Belden 8723 or stranded Cat-5 cable are recommended. A single twisted pair must be used.

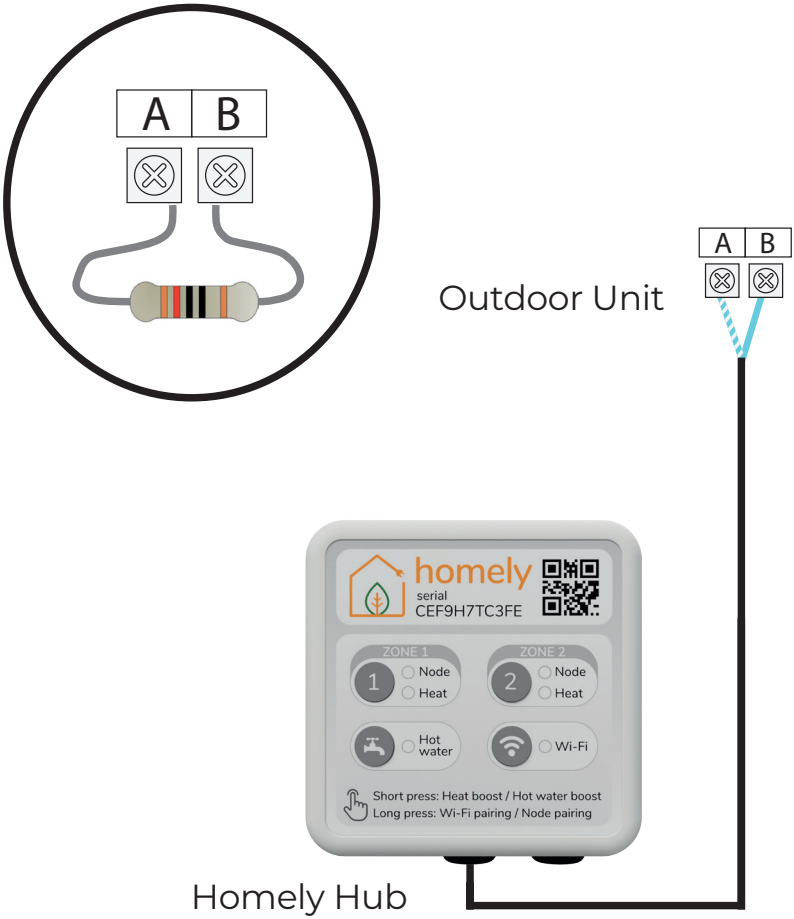
In the outdoor unit, locate terminals A and B. Remove the plastic cover if there is one.

Connect the A terminal in the Homely Hub to terminal A in the outdoor unit. Connect the B terminal in the Homely Hub to terminal B in the outdoor unit. Only one wire should be connected to each terminal.

Fit the supplied 120-ohm resistor between terminals A and B in the outdoor unit as shown.

Don't forget to refit the plastic cover.




A
B
Outdoor Unit
A
B
homely
serial
CEF9H7TC3FE
ZONE 1
1
Node
Heat
ZONE 2
2
Node
Heat
Hot
water
Wi-Fi
Short press: Heat boost / Hot water boost
Long press: Wi-Fi pairing / Node pairing
Homely Hub

STEP 3:

Connect the Power Supply

Connect the power supply to the Homely Hub as shown and plug into a power outlet.

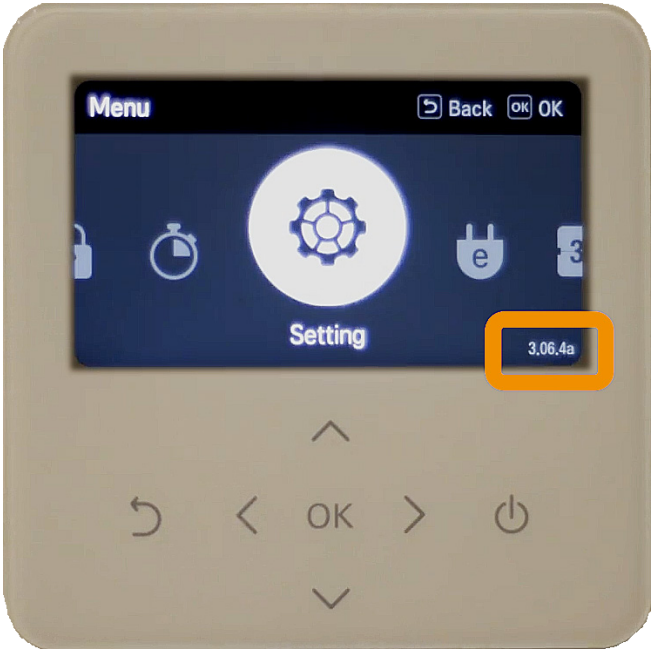
NOTE

It may be necessary to install a new outlet on a spur if there is not one within range.

STEP 4:

Controller Configuration

Power the controller and use the left and right arrows to navigate to the Menu icon and press OK.

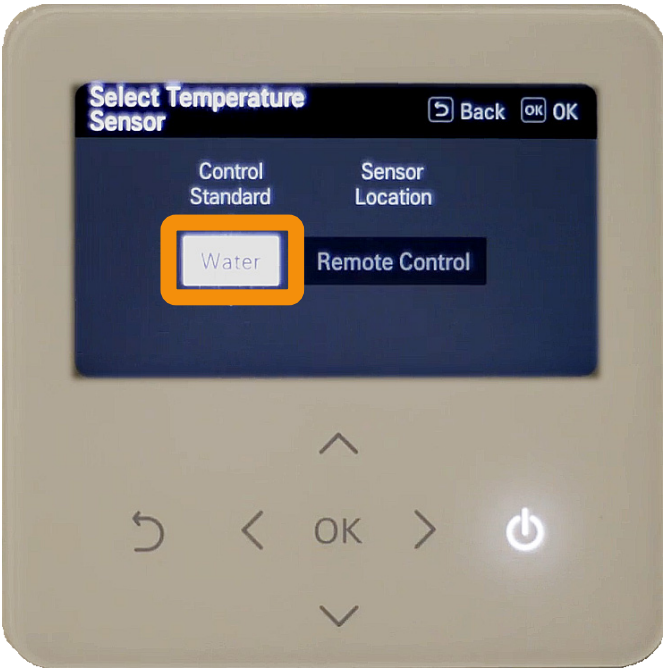


With the Setting icon displayed, make a note of the version number in the lower right corner: this forms the default installer password. In the example above, the default password is 3064.

Now press and hold the up arrow to enter Installer mode.

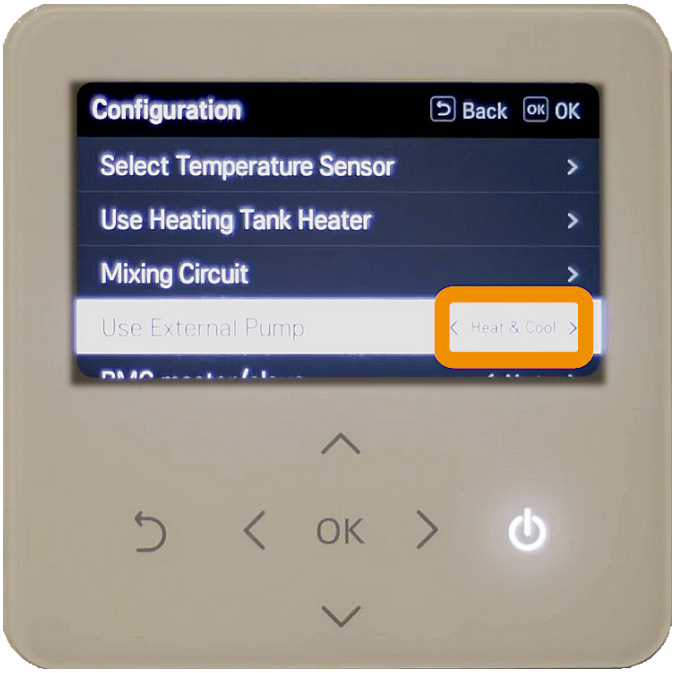
Enter the password when prompted to reveal the Installer menu.

Navigate to **Configuration** > **Select Temperature Sensor** and ensure that the **Control Standard** entry reads **Water** as shown below.



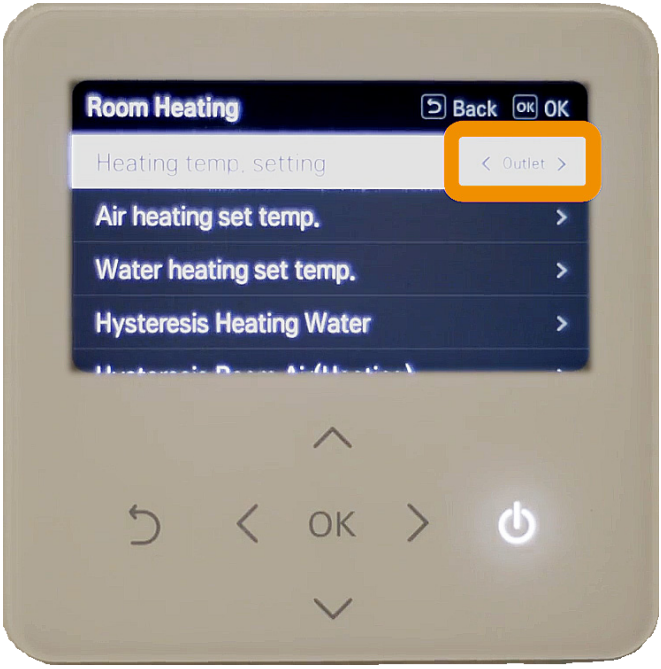
Navigate to **Configuration** > **Use External Pump** and ensure that the entry reads **Heat & Cool**.

Press OK to confirm selection.



Navigate to **Room Heating** > **Heating temp. setting** and ensure that the entry reads **Outlet** as show below.

Press the back arrow to return to the Installer menu.



Finally, navigate to **Connectivity** > **Modbus Address** and modify the entry to **01**.

Press OK and then use the back arrow to return to the top menu.

STEP 5:

System Configuration

Follow the in-app instructions to connect the Node to the Hub, connect the Hub to a WiFi network and complete the Homely configuration.

Contact homely@evergreenenergy.co.uk if you do not have a login for the Homely Installer App.

Specifications

Homely Hub

Dimensions:
86 x 86 x 25mm

Communication protocols:
Proprietary 868MHz
Bluetooth v4.2
WiFi 802.11 b/g/n

Power:
5V ⎓ 1.0A

Recommended operating conditions:
10 to 35 °C

Homely Node

Dimensions:
43 x 43 x 14mm

Communication protocols:
Proprietary 868MHz

Power:
Internal: CR2450 battery

Temperature Sensor Accuracy:
Internal: 0.4 °C (max), 10 to 85 °C

Humidity Measurement:
Accuracy: 2% Relative Humidity (RH)
Range: 0% to 100% RH

Recommended operating conditions:
10 to 35 °C

UK Declaration of Conformity

This UK Declaration of Conformity is issued under the sole responsibility of Evergreen Energy Limited. Registered address: Evergreen Energy, The Edge Business Centre, The Edge, Clowes Street, Manchester M3 5NA. Contact details:

Email: homely@evergreenenergy.co.uk
Web: www.homelyenergy.com
Phone: 0161 818 9005

Evergreen Energy Limited declares that the Homely system consisting of Homely Hub and Homely Node v2 is in compliance with the essential requirements of the following:

Radio Equipment Regulations 2017
Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

UK CA

Signed for and on behalf of Evergreen Energy Ltd:

Name:	**Steve Elliott**
Function:	**Technical Director**
Place of issue:	**United Kingdom**
Date of issue:	**07/03/2023**

Standards applied

Standard	Description
ETSI EN 301 489-1 V2.1.1	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
ETSI EN 301 489-3 V2.1.1	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz
ETSI EN 301 489-17 V3.1.1	ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems
EN 55032:2012	Electromagnetic compatibility of multimedia equipment – Emission requirements
EN 55035:2017	Electromagnetic compatibility of multimedia equipment – Immunity requirements
EN 61326-1:2013	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements
EN 62368-1:2020	Audio/video, information and communication technology equipment – Part 1: Safety requirements

EU Declaration of Conformity

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Web: www.homelyenergy.com
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Evergreen Energy Limited declares that the Homely system consisting of Homely Hub and Homely Node v2 is in compliance with the essential requirements of the following:

Directive 2014/53/EU (Radio Equipment)
Directive 2011/65/EU (RoHS)

CE

Signed for and on behalf of Evergreen Energy Ltd:

Name:	**Steve Elliott**
Function:	**Technical Director**
Place of issue:	**United Kingdom**
Date of issue:	**07/03/2023**

Harmonised standards applied

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