Homely System Installation Manual

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

CRIMP TOOL

SCREWDRIVERS

MULTIMETER

Pre-Installation Checks

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

Installer's Notes

Use this space to record any observations about the installed system.

STEP 1:

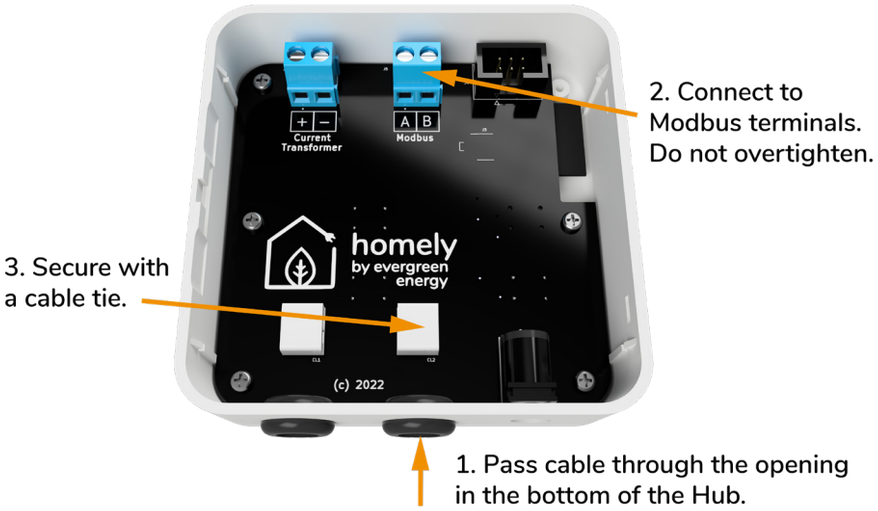
Complete Connections

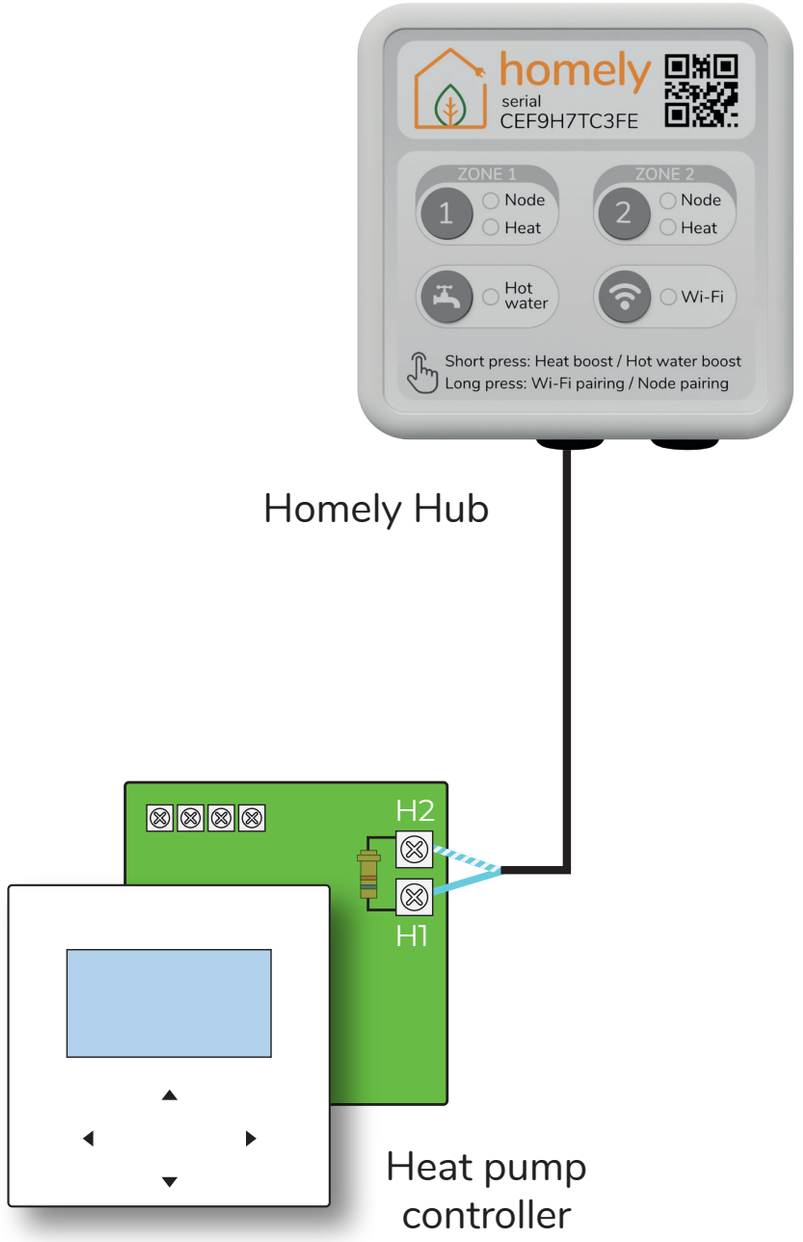
Connect the Homely Hub to the heat pump controller with data cable. Belden 8723 or stranded Cat-5 are recommended.

Remove the back of the Homely Hub and identify the terminals for Modbus connection.

A single twisted pair must be used. Connect the A terminal in the Homely Hub to H2 in the heat pump controller. Connect the B terminal in the Homely Hub to H1 in the heat pump controller. Only one wire should be connected to each terminal.

The supplied 120-ohm resistor must be placed between the controller terminals as shown.





STEP 2:

Connect the Power Supply

Connect the power supply to the 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 3:

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:

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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:

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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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

Standard	Description
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