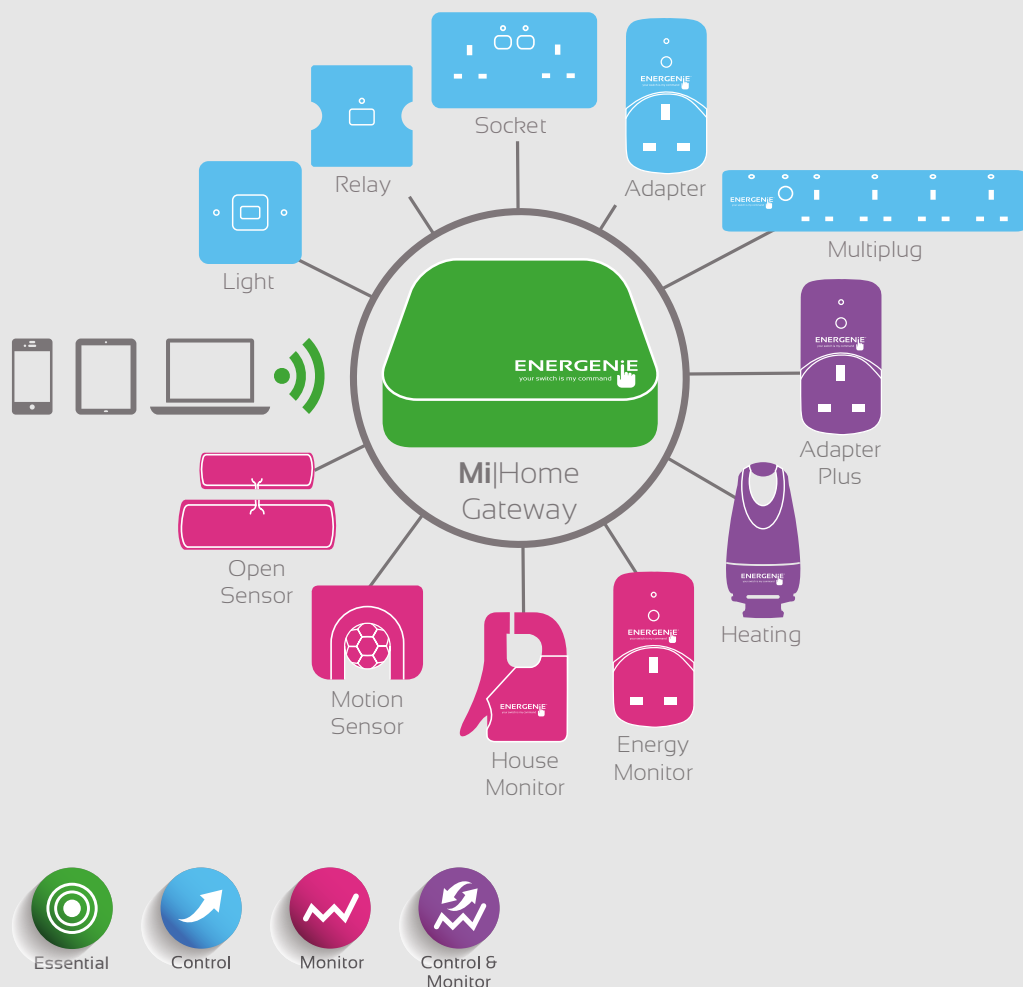


MiHOME INSTALLATION AND INFORMATION GUIDE

www.mihome4u.co.uk



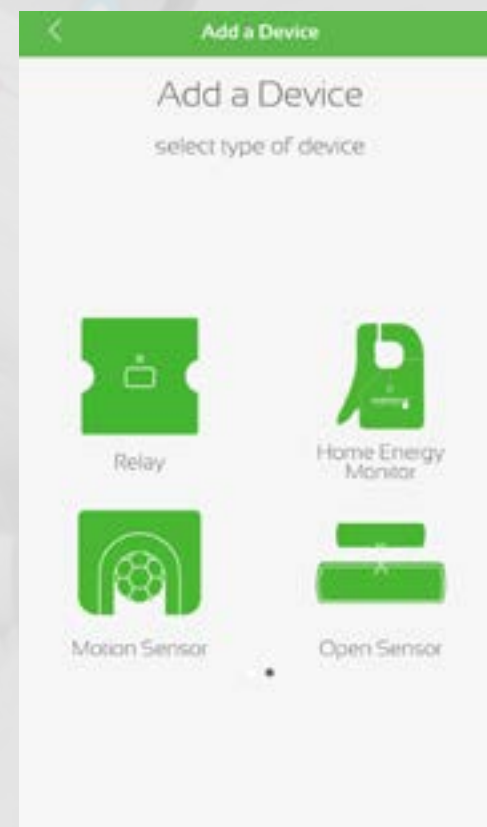
MiHome System Overview

The MiHome system integrates control and monitoring of lighting, heating, mains power switching and sensor devices for the home using the MiHome App (iOS & Android) or from any web browser. The devices incorporated into the MiHome system include: light switches, mains switching devices, power monitors, heating controllers and sensors. The user can manually control these devices and also set up timers and use simple logic triggers for control including the IFTTT system available on the internet. This guide will walk you through the elements of the system.

Set-Up

The Gateway is very simple to set up. Once you have downloaded the appropriate MiHome App from either the Google Play Store or App Store you will be walked through some simple steps and then asked to scan the QR code on the back of the Gateway with the in-built QR reader in the App. Once this is done you are complete. It should take less than 2 minutes.

The devices are just as simple to set up; just select the product that you wish to set up. These are simply depicted on the App. Once selected, the App walks you through the pairing process which consists of pressing the pairing button on the device.





MiHome Gateway (MIH0001)

The Gateway is central to the system and provides connection to the MiHome server over the internet for your MiHome connected products. Each system needs at least one Gateway. The Gateway requires power and connection to a router using a power supply and an Ethernet cable, both of which are included with the product.

FAQs about the Gateway:

What is the range? The range of the Gateway is at least 30m in all directions (in free space).

What is the frequency of the Gateway? The Gateway and whole system works at 433Mhz.

Can I have two Gateways or more in the system? Yes, you can have multiple Gateways per account.

How many products does a gateway support? 32.



MiHome Sensors

The MiHome system supports the Motion Sensor, Door/Window Sensor, Smoke Alarm and Whole House Energy Monitor. These can be used as triggers for actuators as well as used to report events for security and information to the customer. Sensors are battery powered.

Whole House Monitor (MIH0006)

Is a current clamp that clamps around the incoming mains on a domestic consumer unit and reports the total amount of energy being used.

Motion Sensor (MIH0032)

Is a PIR motion sensor that can be linked to any of the MiHome actuators to make them switch on or off. It can also send an alert if motion is detected.

Open Sensor (MIH0033)

Is a two-part magnetic sensor that can be installed on a door or window and can be linked to any of the MiHome actuators to trigger them to switch on or off. It can also send an alert if a door or window is opened.

FAQs about Sensors:

Where should I install the motion sensor?

The Motion Sensor is ideally situated at head height or ceiling mounted.

How do I change the sensitivity of the motion sensor?

This can be done with the small red jumper on the circuit board. You may want to use the lower sensitivity setting if you are experiencing unwanted triggering e.g. by pets.

How do I secure the open sensor?

The Open Sensor is suitable for frame mounting and may be screwed or stuck in place with suitable fixtures.

MilHome Lighting Controls (MIHO008, MIHO024, MIHO025, MIHO026)

The MilHome lighting range consists of a single switch, master and slave switch, double wall switch and a dimmer. All switches are available in White, Polished Chrome, Brushed Steel and Black Nickel. The range includes screwless replaceable face plates. All switches are retrofit in suitably deep pattress boxes (25mm depth or deeper).



FAQs about the Light Switches

Are the switches retrofit? Yes

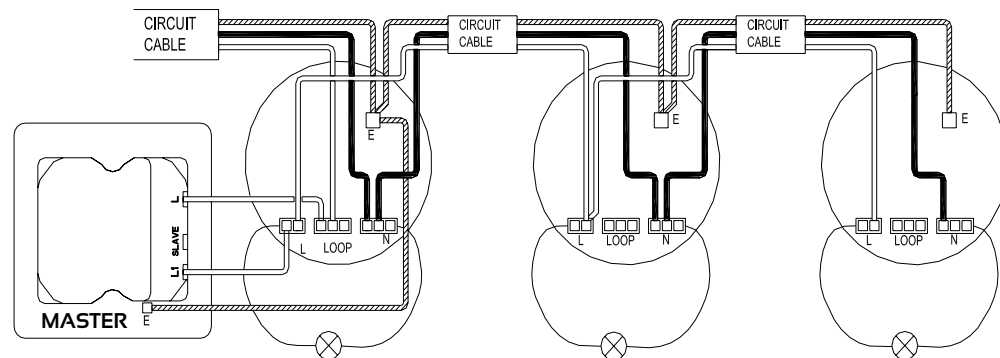
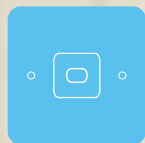
What is the maximum load they can switch? The switches are capable of switching up to 250W.

Do the switches work with LED bulbs? Yes, however we recommend that you have at least two LED bulbs in series and use quality, dimmable LED bulbs with the system. We have tested leading UK brands successfully.

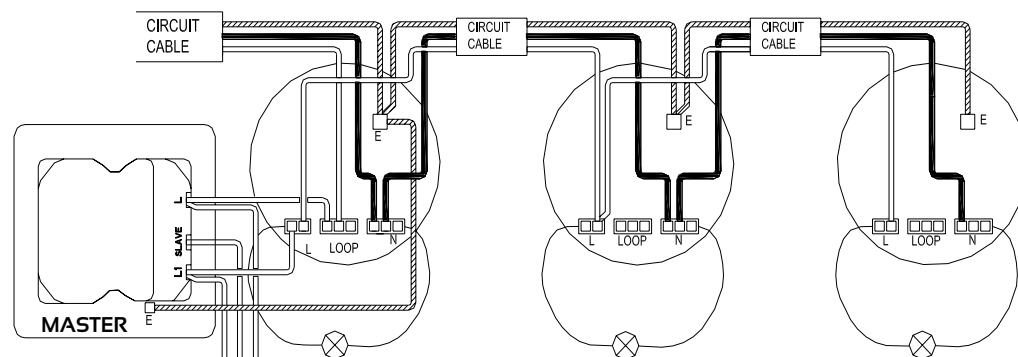
Do the switches fit in 25mm pattress boxes? Yes, though top and bottom lugs must be removed.

Do the Switches require a neutral wire? No, they switch live only.

Do the switches feedback status? No



**Typical Application 1 Way Switching
250W RF Switch**



**Typical Application 2 Way Switching
(Appropriate RF Slave switch
must be wired for this application)
250W Switch**

— RED OR BROWN
— BLACK OR BLUE
— GREEN/YELLOW SLEEVING

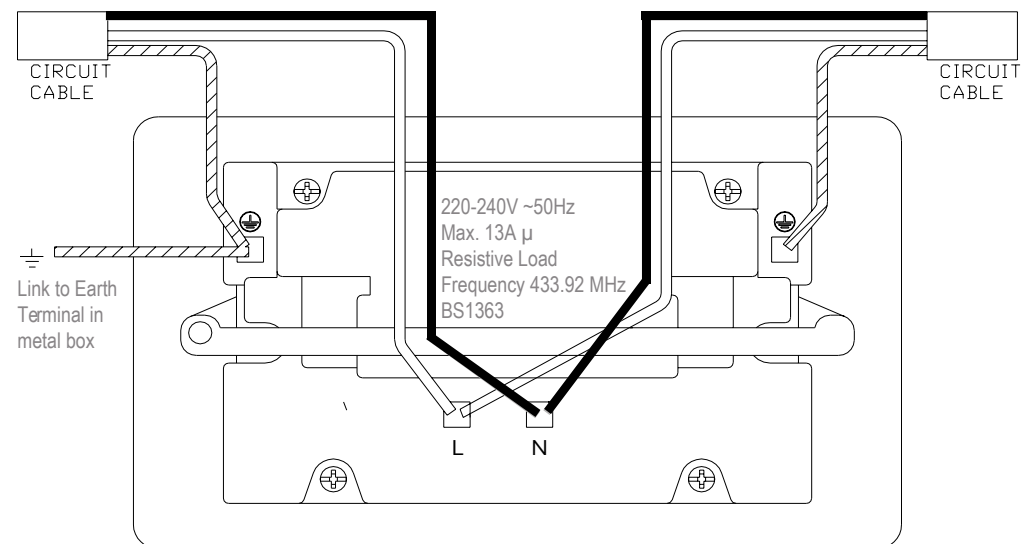
MIHO008 Light Switch & Slave Switch

Fitting and Wiring Instructions

- 1). Before commencing work, isolate the mains power supply and remove the fuse in the fuse box or switch off the circuit breaker in the consumer unit.
- 2). If unit is to be used as a replacement for an existing product, remove existing unit from its location and disconnect the wiring.
- 3). This item will not fit into a 4 lug box. If such a box has been previously installed the top and bottom lugs should be removed or bent back to avoid contact with the interior.
- 4). Connect the wires as shown in appropriate wiring diagrams above. Use green/yellow sleeving on earth conductors that are not insulated. Ensure terminals are properly tightened and no bare wire is visible. Push back unit into mounting box making sure conductors are not trapped.
- 5). Screw the unit module to the mounting box, please ensure screws are sufficiently tight to support the product but please do not over tighten as this may cause some deformation.
- 6). If the product has a decorative front cover plate over the module, place the cover plate over the module and press firmly top and bottom until all retaining clips have fully clipped into position. To remove the decorative front cover plate, carefully insert a 3mm terminal screwdriver into the bottom slots and lift upward until all the retaining clips disengage from the plastic module moulding. Please ensure the decorative plate is held as it is released to avoid it being dropped and damaged.
- 7). To reduce the risk of discolouration or tarnishing, avoid installation on damp plaster.
- 8). These products must be installed in accordance with the latest Building and IET wiring regulations. If in any doubt, please contact a qualified electrician.



Typical Installation



MiHome Double Wall Sockets

Fitting and Wiring Instructions

- 1). Before commencing work, isolate the mains power supply and remove the fuse in the fuse box or switch on the circuit breaker in the consumer unit.
- 2). If unit is to be used as a replacement for an existing product, remove existing unit from its location and disconnect the wiring. The back box will need to be at least 35mm deep otherwise the original will need to be replaced.
- 3). This item will not fit into a 4 lug box. If such a box has been previously installed the top and bottom lugs should be removed or bent back to avoid contact with the interior.
- 4). Connect the wires as shown in appropriate wiring diagrams above. Use green/yellow sleeving on earth conductors that are not insulated. Ensure terminals are properly tightened and no bare wire is visible. Push back unit into mounting box making sure conductors are not trapped.
- 5). Screw the unit module to the mounting box, please ensure screws are sufficiently tight to support the product but please do not over tighten as this may cause some deformation.
- 6). If the product has a decorative front cover plate over the module, place the cover plate over the module and press firmly on the top and bottom until all retaining clips have fully clipped into position. To remove the decorative front cover plate, carefully insert a 3 mm terminal screwdriver into the bottom slots and lift upward until all the retaining clips disengage from the plastic module moulding. Please ensure the decorative plate is held as it is released to avoid it being dropped and damaged.
- 7). To reduce the risk of discolouration or tarnishing, avoid installation on damp plaster.
- 8). **These products must be installed in accordance with the latest Building and IET wiring regulations. If in any doubt, please contact a qualified electrician.**

MiHome Installed Wall Sockets (MIHO007, MIHO021, MIHO022, MIHO023)

The MiHome sockets come as a double wall socket in four different finishes. All switches are available in White, Polished Chrome, Brushed Steel and Black Nickel. All metal finished units are screwless replaceable face plates. The sockets are all retrofittable.

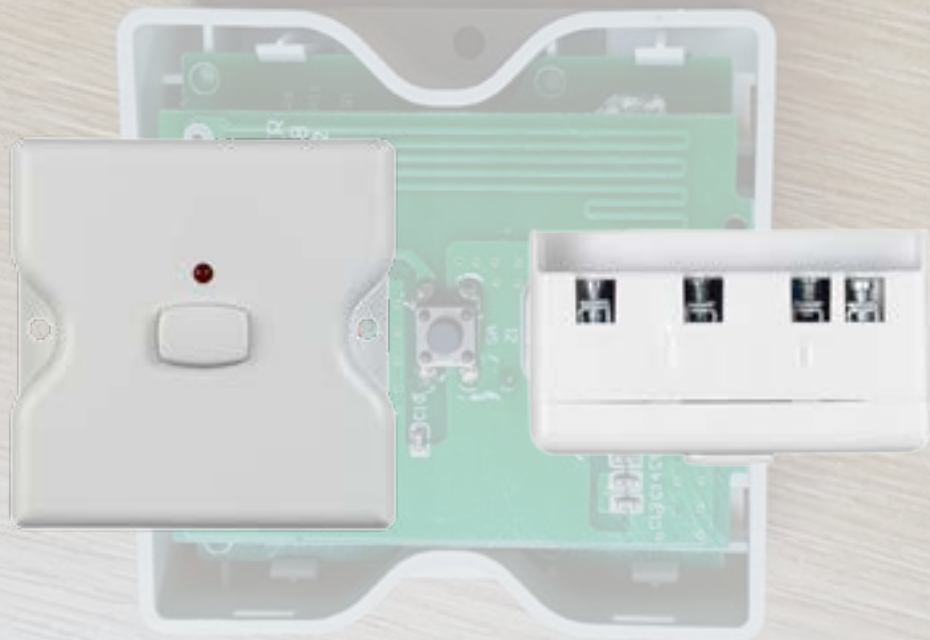
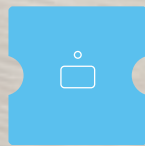
FAQs about the Wall Sockets:

Are the sockets retrofit? Yes.

How deep should the pattress box be? At least 25mm.

Are each of the sockets individually controllable? Yes.

Do the sockets feedback status? No.



MilHome Relay (MIHO014)

The MilHome system includes a 3Kw single pole relay. Appliances are directly wired into the unit.

FAQs about Relays:

How do I switch the unit?

It can be switched manually by pressing the button on the front of the unit and remotely via radio control.

What can this unit switch?

It will only switch appliances up to 13A. It will switch the live wire only. Suitable for UK domestic appliances.

Are there any special requirements to wire this unit?

Yes. This should be installed on a suitably fused spur by a competent electrician.

Where should the unit be located/installed?

The unit should be located where casual access cannot be made, such as behind a panel.

What type of relay switch is this unit?

It is a single pole single throw relay switch, which is normally off and does not latch.

How is the unit secured?

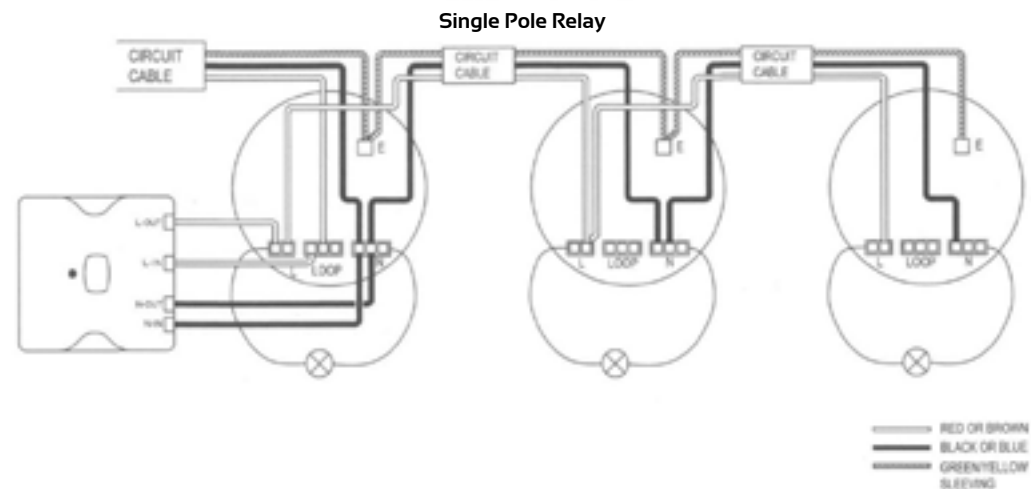
There are two screw holes on the sides of the unit.

Does it work in concealed locations and behind walls?

As it uses radio control it will work through walls, though its range will be reduced depending on the material and the thickness of the wall.

What is the range of the unit?

The unit can achieve 25m in free space. You may wish to check range of operation before final installation.



MiHO014 Single Pole Relay

Fitting and Wiring Instructions

- 1) Before commencing work, isolate the mains power supply and remove the fuse in the fuse box or switch off the circuit breaker in the consumer unit.
- 2) Connect the wires as shown in the wiring diagram attached. Ensure the cables are stripped to an appropriate length of between 6mm and 10mm. Ensure the cables are fully inserted into the terminals and that the terminals are properly tightened and no bare wire is visible.
- 3) Screw the unit to a suitable flat vertical surface at least 400mm above the adjacent floor.
- 4) **This product must be installed in accordance with the latest Building and IET Wiring Regulations by a suitable competent person. If in any doubt, please contact a qualified electrician.**

For indoor use only



MiJHome Plug Sockets (MIH0002, MIH0004, MIH0005, ENER010)

The MiJHome system consists of three plug-in adapters and a 4 Gang Extension lead.

Adapter (MIH0002): Controls any product plugged into it. It does not feedback status.

Monitor (MIH0004): Monitors the amount of power used by the appliance which is plugged in to it. This information reports to the App.

Adapter plus (MIH0005): Controls and monitors any appliance plugged in to it and reports to the App.

4 Gang Extension Lead (ENER010): Controls each of the 4 sockets individually.

FAQs about Adapters:

Can I use them with an Energenie hand controller?

You can only use the MIH0002 adapter and ENER010 4 gang extension with the Energenie hand controller.

What appliances can I use these for?

As they are 13A rated, they can be used with any household device. They are most suitable where access is restricted and for those with restricted movement.

What type of battery does the hand controller use?

It uses battery type CR2032. The battery is pre-installed but needs the protective tag removed before first use.

What information is available from the adapters that monitor power?

The monitor will transmit the following data every 10 seconds over the OpenThings interface:

- Active(real) power, P, (Watts)
- Reactive power, Q, (VAr)
- Voltage, V (Volts)
- Frequency Hz (Hertz)

From this information the apparent power and hence the Power Factor $\cos \phi$ etc. can be calculated.



MiJHome Heating Control (MIH0013)

The MiJHome heating controls consist of retrofit radiator valve controllers which allow the user to control each radiator individually. The radiator valves heads are a retro-fit solution which do not require any plumbing, they just replace most existing TRV controllers. Available in single, two, three and four packs.

The benefits of a system controlled at the radiator level are:

The ability to control the temperature in each room via the MiJHome smart phone App.

FAQs about Radiator Valves:

Do you have a boiler controller?

We currently do not offer a MiJHome boiler control solution. The boiler will need to be on in order to control the heating in each room with the smart radiator valve.

How do you work the radiator valves with an existing system?

If you already have a boiler control solution you may be able to integrate our MiJHome Smart Radiator Valves through IFTTT, provided your current boiler control solution is IFTTT approved.

Where should I put the Radiator valves?

The Radiator valves should be installed on a TRV before pairing to your MiJHome Gateway.

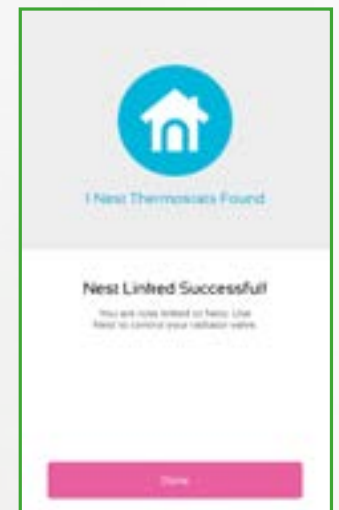
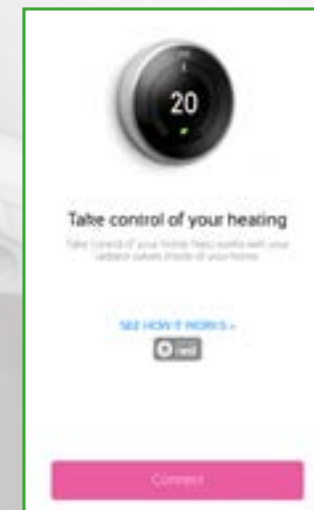
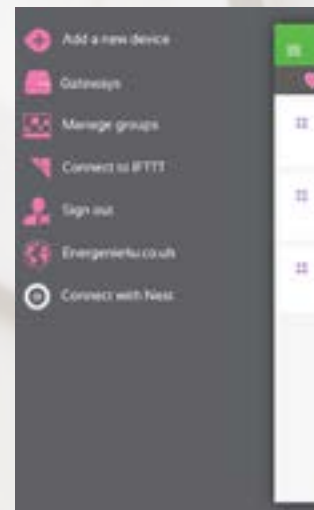
How long do the batteries last?

With normal use, they last more than one year.

Nest users will be delighted to know that they will now be able to control their Nest thermostat directly through our MiJHome App.

Additional features for Nest users:

- Set the target temperature of their Nest Thermostat.
- Read the status of the Nest Thermostat.
- Set their TRVs to follow their Nest Thermostat in temperature.
- Overrides (exemptions to the follow rule).



MiFavourites
Pick your favourite or most used products, groups or scenes for quick access

MiDay
A quick link to your scheduled activities allowing you to pause timers with one press

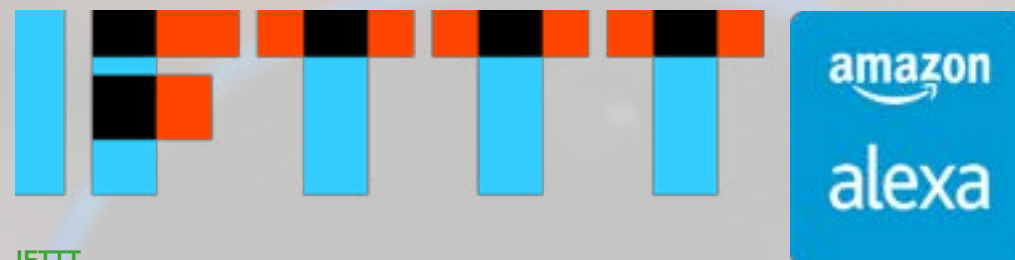
MiRoutines
Set up timers for individual products, groups or scenes

MiEnergy
Monitor the energy usage in real time or over time of individual sockets, groups or scenes

MiHome App features

The MiHome App is available for Apple iOS and Android devices from the appropriate App store. It has a variety of features these include the following:

- Simple Switching:** Switch actuators from anywhere in the world and set them on the move.
- Timers and Programmes:** Set up timers and programmes for actuators to turn on and off at different times and days of the week. It also allows you to set heating by temperature and time.
- Energy Monitoring:** Display accumulated historical energy data from both the Monitor adapter and Whole House Monitor.
- Geofencing:** Control actuators via the location of your phone. For example, automatically turn off lights when you leave home or switch on your heating when you get close to home.
- Linking:** Link sensors to actuators so that a motion sensor can automatically switch on lighting when you enter a room or turn off radiators when a window opens.
- Alerts:** Receive an alert when your smoke alarm sounds, when motion is detected or a door is opened for example.



IFTTT

What is IFTTT

IFTTT stands for IF THIS THEN THAT. It is an online platform that enables users to connect two channels to create interesting recipes. Recipes are made up of two key ingredients. A trigger and an action. When something happens with one service, a trigger goes off and an action takes place automatically on the other. This can be used to switch lighting through dusk to dawn information for a postcode or change the temperature of radiators using the external temperature.

Amazon Echo

Alexa

You can now use your voice to communicate with Alexa to control all your MiHome switching devices. By hooking your MiHome Gateway up to the Echo, you can now make your smart home even smarter and it will continue to get even smarter with the Echo's ability to automatically and continually update through the cloud. This will make it learn new skills and features related to your home.

System FAQs:

How do I update my Gateway with the latest version of firmware?

Mandatory firmware updates to the Gateway are done automatically from the MiHome server. These will include fixes and other required features. Optional updates are indicated in the "manage device" screen and can be uploaded by user confirmation.

How can I ensure the device timers stored on my Gateway are not still active?

You can press the reset button on the front of the housing with a paper-clip or similar pointed device to clear all timers and devices.

My Gateway has crashed and is not working at all. How can I revert to original factory state?

With the Gateway power switched off, press the reset button on the front of unit housing with a paper-clip or similar pointed device and hold. Then apply power via the USB to the unit. Keep holding the button down for 10 seconds or so after powering on.

Can I use a Power Line adapter to connect my MiHome Hub to the internet?

Yes, your MiHome gateway can establish a connection to the network via power line communication. This will allow you to move the location of your Gateway away from the router.

MiHome Gateway

Gateway	MIHO001
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MiHome Sensors

Whole House Monitor	MIHO006
Motion Sensor	MIHO032
Open Sensor	MIHO033

MiHome Lighting Controls

White	MIHO008
Black Nickel	MIHO024
Polished Chrome	MIHO025
Brushed Steel	MIHO026

MiHome Double Wall Sockets

White	MIHO007
Black Nickel	MIHO021
Polished Chrome	MIHO022
Brushed Steel	MIHO023

MiHome Relays

Single Pole Relay	MIHO014
Double Pole Relay	MIHO015

MiHome Plug Sockets

Adapter	MIHO002
Monitor	MIHO004
Adapter Plus	MIHO005
4 Gang Extension Lead	ENER010

MiHome Radiator Controls

Radiator Control	MIHO013
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Service Model

Service model for installers: Providing a fully working handover, beyond installing.

The system should be looked at as a service opportunity and offered as more than just an installation:

This would include but not be exclusive to:

- Setting up of user account, credentials, tariff information and Gateway
- Pairing of all devices
- Naming of all devices
- Grouping of all devices [if specified by customer]
- Walk-through of timer setting
- Walk-through of Geofencing setting
- Tour of browser, including password recovery, change password, change tariff etc.

Due to the simplicity of the system this will be start forward but will give you the confidence that there will be no post install calls and will give the user confidence that the system is working and has been installed correctly. This should be seen as a chargeable service.

There is also the opportunity to offer an annual maintenance visit. This will also offer an opportunity to up-sell new additions to the MiHome range, but as a minimum cover:

- Renaming of any devices
- Modification of any timer-related issues
- Modification of tariff info if required
- Fully open/close each valve
- Change valve batteries
- Test any sensors [door/PIR/smoke]