Heat Link®

SMART SYSTEM

Installation and Set Up Manual

2021



Table of Contents

Product Compliance & Safety Information..... 3
Introduction - The HeatLink Smart System 5
Overview 5
System Components 5
Smart System Installation Quick Guide..... 6
HeatLink App 7
Installation - Wireless Internet Gateway..... 8
Wireless Gateway LED Indications 9
Wireless Gateway Functions..... 9
Installation - Wireless Digital Thermostat 10
Thermostat Power Up Sequence..... 11
Thermostat Icons & Functions 12
Installation - StatLink® 8 Zone Wireless Module 13
Installation - External Antenna (Optional)..... 15
StatLink® 8 Zone Wireless Module Buttons, and Jumpers 16
StatLink® 8 Zone Wireless LED Indications..... 16
Installation - Wireless Valve Actuator..... 17
Wireless Valve Actuator LED Indications 18
Installation - Wireless Relay 19
Wireless Relay LED Indications 20
Installation - Wireless Door/Window Sensor..... 21
Offline System Setup 22
Online System Setup - Wireless Internet Gateway & App..... 22
Systems and Settings..... 24
Set Up - Underfloor Heating System 25
Offline - Thermostat Groups..... 28
Set Up - Radiator/Baseboard Systems..... 29
Wireless Valve Actuator Functions..... 31
Adaptive Learning Mode..... 32
Changing the Control Method with App 32
Online - Changing the Control Method Manually 33
Offline - Changing the Control Method Manually 34
Wireless Receiver Mode Configuration Diagrams 35
RX1 - Boiler Switching 35
RX2 - Single Room..... 35
Setup - Wireless Receiver (RX1 - Boiler Switching) 36
Set Up - Wireless Relay (RX2 - Single Room) 38
Set Up - Door/Window Sensor..... 40
Set Up - Smart Plug..... 40
Device Parameters 41
Offline - Thermostat Set Up..... 41
Offline - Setting the Time..... 41
Offline - ID Mode 42
Offline - Setting Mode Temperatures..... 42
Manual Set Point Temperature Override..... 42
Other Heating Modes..... 43
Offline - Heating Schedules 44
Offline - Setting Heating Schedules..... 45
Installer Parameters Menu 46
Offline - Select °F or °C..... 46
Set Up Remote Sensor..... 47
Thermostat Functions & Parameters 48
Wiring - StatLink® 8 Zone Wireless Wiring Center 50
Wiring - Wireless Relay (RX1)..... 51
Wiring - Wireless Relay (RX2) 51
Factory Reset..... 52
Reset the Wireless Internet Gateway 52
Reset Thermostats..... 52
Reset StatLink® 8 Zone Wireless Module..... 53
Reset Wireless Relay..... 53
Reset the Smart Plug..... 53
Reset Wireless Valve Actuator 54
Reset the Door/Window Sensor..... 54
Thermostat Error Codes 55

Find up to date information, videos, step-by-step system set up instructions and more online at www.heatlink.com/smartsystem, or scan the QR code with your iPhone camera or QR scanner app.

Product Compliance & Safety Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

About Us

HeatLink is a multi-system supplier of potable water and radiant hydronic heating/cooling and snow melt systems that began as a family-owned business servicing a number of industries, including HVAC.

The company grew to meet the needs of builders, contractors, and architects, and began designing and installing radiant heating systems in 1985. Since then HeatLink has grown into an industry leading manufacturer of radiant heating, cooling, and potable water systems for residential and commercial applications throughout the world.

HeatLink's radiant heating systems create a comfortable and energy efficient environment for living, while our snow melt systems create safer public and private spaces that reduce liability for property owners, reduce maintenance, and ensure accessibility. Our well engineered plumbing systems provide peace of mind for property owners through extensive warranty protection, and enable quick and efficient installations for builders and contractors.

HeatLink has developed and manufactured many industry firsts, such as the "TwistSeal" tool-less manifold in 1996. The company began manufacturing PEX-a tubing in 1998, and now supplies the highest quality PEX-a systems to customers throughout North America, and parts of Europe and Asia.

HeatLink works with a network of experienced and successful partner agencies to meet the design, system installation, and training needs of the construction industry, designers, and architects.

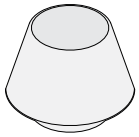
HeatLink was built on a strong family work ethic and value system that remains the foundation for our continuing growth and industry leadership role.

Overview

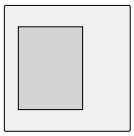
The HeatLink Wireless System uses the Zigbee protocol (see www.zigbee.org for more information) to connect all devices on a contained network, allowing them to communicate easily and securely without the need for an Internet connection (Offline).

Connecting the system to the Internet (Online) via a router allows the HeatLink app to monitor and adjust your system from anywhere in the world (after the initial setup is complete, see page 22). In an Online System the devices continue to communicate with each other via the Zigbee network, and will function as per your settings even if the Internet connection is severed.

System Components



43301 Wireless Gateway - required for all HeatLink® Smart Systems to function. Connects all devices to the Zigbee network, and to the internet (Online system configuration).



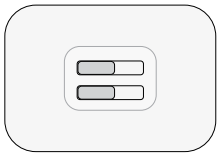
46801 Wireless Thermostat - has an easy to use interface, and a sleek modern design. It can be configured to work with a variety of radiant heating systems as a programmable thermostat, or digital thermostat.



40328 StatLink® 8 Zone Wireless Module - connects your wireless thermostats to the zone actuators, and controls the boiler, system pump, etc.

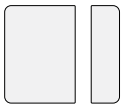


56401 Wireless Valve Actuator - is easily installed on a radiator valve to control heat supply to a room (requires a 46801 Wireless Thermostat). Can be used in Online or Offline systems.



43302 Wireless Relay - can be configured as a Boiler Relay (RX1), or Standalone Relay (RX2) depending on your system configuration.

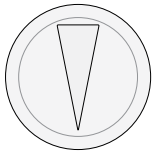
Additional Online System Components



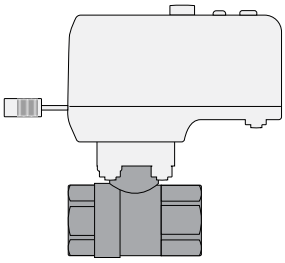
43303 Wireless Door/ Window Sensor - requires an Online system to operate, and allows you monitor your home windows and doors, as well as set custom programs for system operation (using the app).



43304 Wireless Smart Plug - requires an Online system to operate, and allows you to control the on/off function of lights and some electronics, and set custom programs for system operation (using the app).



43310 Water Leak Detector - Automated leak detection. Used with 43311.



43311 Water Shut Off Valve - Automatically shuts off water supply when leak is detected by 43310. Can also be controlled manually using the HeatLink app.

Additional Components by others



Router (from others) - required for an Online system. Connects the Wireless gateway to the internet.



HeatLink App (device from others) - Controls your Online Smart System, and allows you to monitor from anywhere.

Smart System Installation Quick Guide

1. Install HeatLink® app, and set up account (online only).

2. Install system components:

i. Wireless gateway
ii. StatLink® wireless module
iii. HeatLink® wireless thermostat
iv. Wireless relay
v. Wireless valve actuator
vi. Smart plug (online only)
vii. Door/window sensor (online only)

3. Connect wireless gateway to app.

4. Pair components:

i. Underfloor Heating (UFH)
- *StatLink® 8 zone wireless module*
- *wireless thermostats*

ii. Radiator/Baseboard systems
- *wireless thermostats*
- *wireless valve actuators*

iii. Boiler Switching (RX1)
- *wireless thermostat (REC1 mode)*
- *wireless relay (RX1 mode)*

iv. Individual Zone Relay
- *wireless thermostat (REC2 mode)*
- *wireless relay (RX2 mode)*

v. Peripherals
- *smart plug(s)*
- *door/window sensor(s)*

5. Set up heating programs

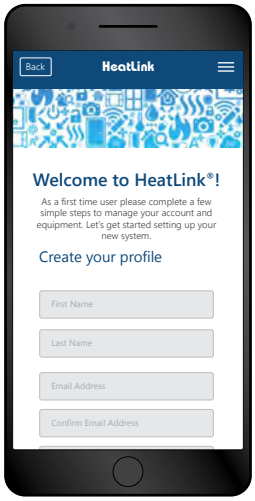
HeatLink App

If using a system connected to the Internet, you can download the HeatLink® app from Google Play or the App Store.

Download on the App Store

GET IT ON Google Play

In order to use the app you must first create a profile. Follow the in-app instructions to set up your profile, then proceed to "Device Pairing & System Set Up" on page 22



Apple, the Apple logo, iPhone, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc., registered in the U.S. and other countries.

Google Play and the Google Play logo are trademarks of Google LLC.

Device Installation

All components should be installed in their final operating location, if possible, before pairing with the wireless system. If the final operating location is unsuitable for the pairing process due to RF signals or other factors, the device(s) may need to be located in a common location for pairing.

Avoid installing devices in metal cabinets as this may interrupt the signals.

Please follow these instructions when installing your system components; the installation process for all wireless components is the same regardless of system configuration.

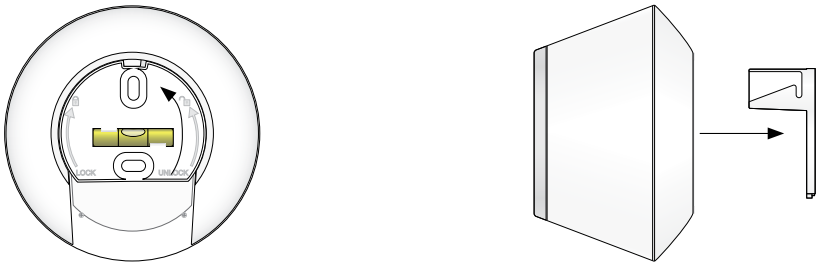
Turn to "Device Pairing & System Set Up" on page 22 when finished for system pairing instructions.

Installation - Wireless Internet Gateway

The Wireless Internet Gateway should be installed in a location free from radio signal interference, close to a 120V plug and your Internet router (Online installations).

Step 1 Confirm all included parts are present.

Step 2 Remove the port cover from the bottom of the Wireless Internet Gateway by twisting it ~⅛ turn counter-clockwise.

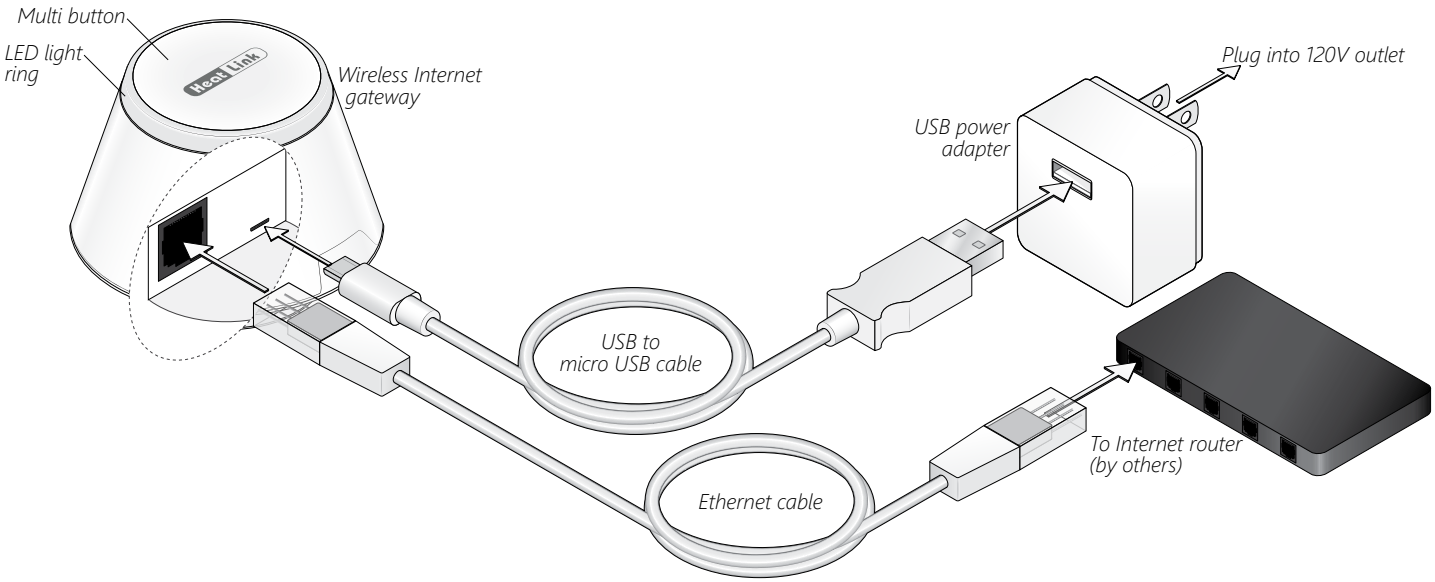


Step 3 If connecting to the Internet and app, attach the Ethernet network cable to the gateway, then to your router.

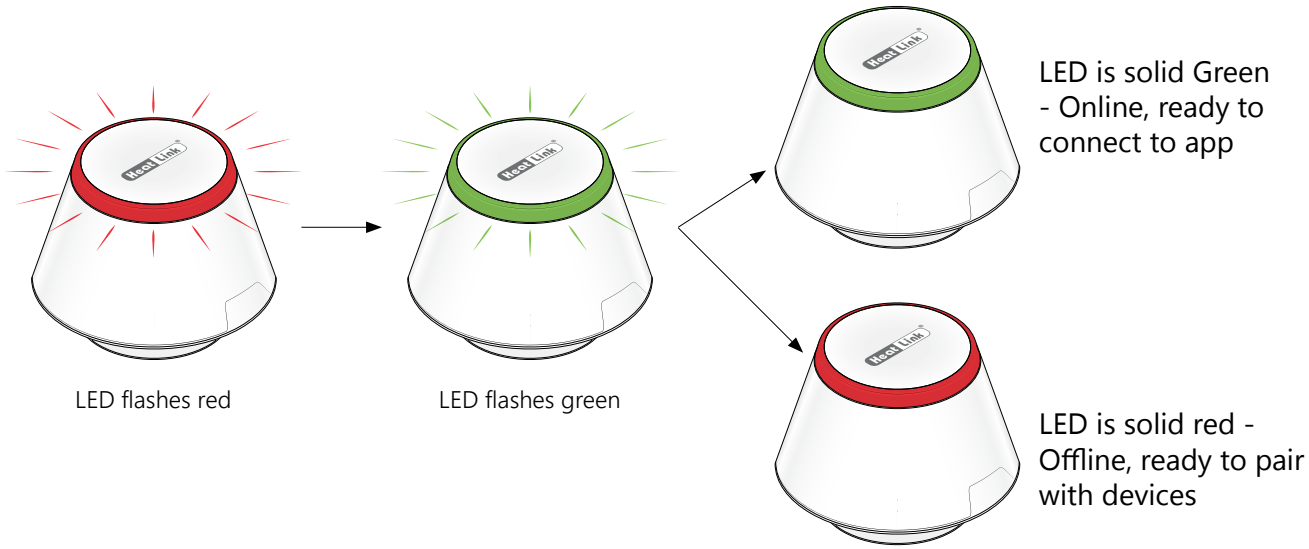
Step 4 Plug micro USB into the gateway, then plug the USB into the plug adapter.

Step 5 Plug the adapter into the wall.

Step 6 If desired, mount the port cover to a wall or other surface. Replace the port cover.

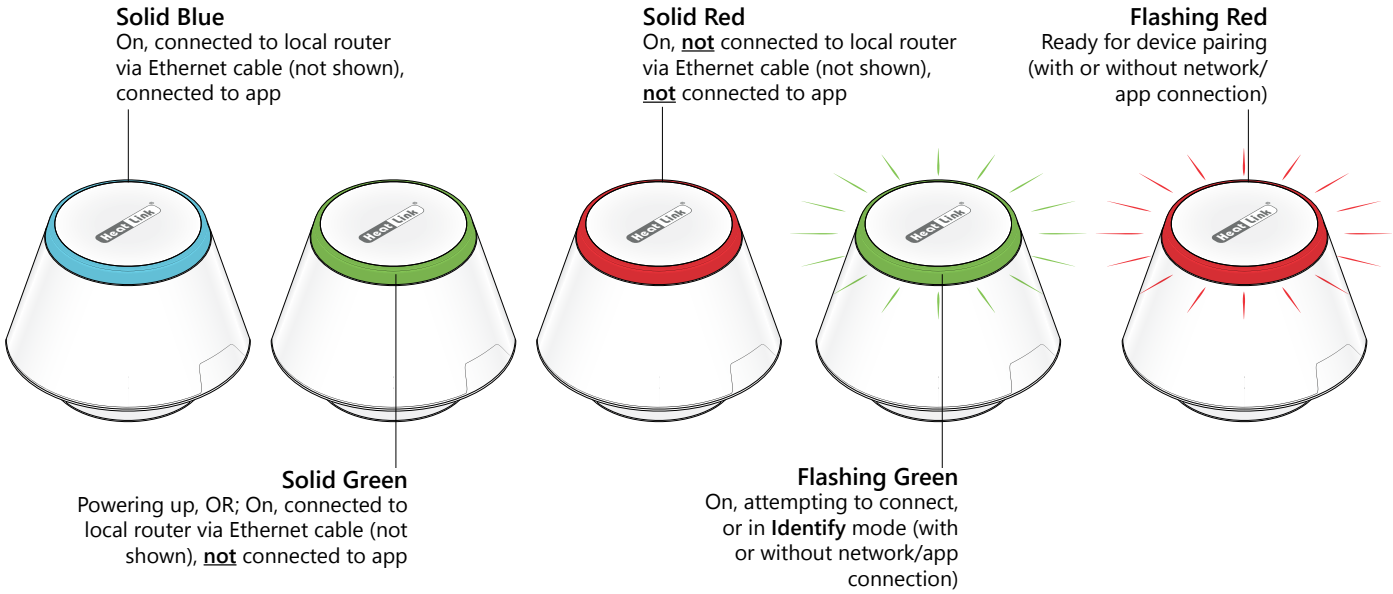


Step 7 Once plugged in, the Wireless Internet Gateway will go through the startup process.



If the gateway does not connect, see "Troubleshooting" on page 52.

Wireless Gateway LED Indications



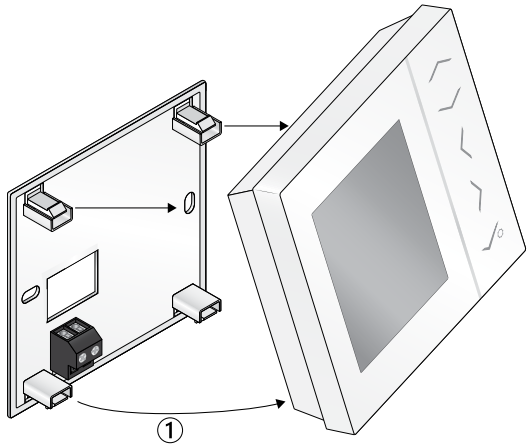
Wireless Gateway Functions

Function	Press	LED
Enter pairing mode	Press multi button for 3+ seconds	Flashes red
Exit pairing mode	Press multi button for 3+ seconds	Solid red (offline); solid blue (online)
Enter/exit ID mode*	Single press of multi button	Flashes green

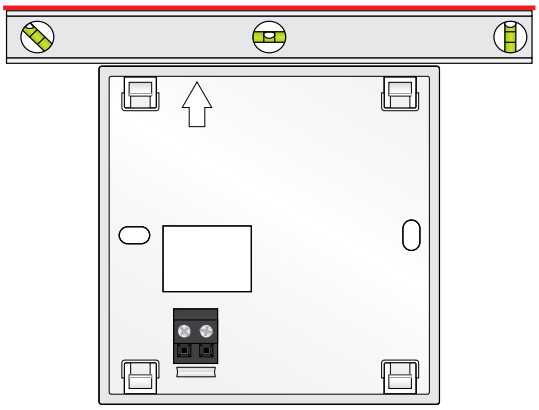
**ID mode is used to identify the components that are connected to your Smart System; each component will flash for 10 minutes, or until you exit ID mode with another single press of the multi button.*

Installation - Wireless Digital Thermostat

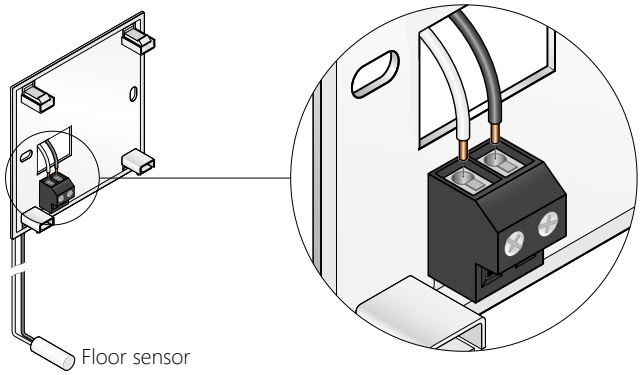
For best operation, the wireless thermostat should be installed in a draft-free area of the room, 4-5' from the floor, and away from direct sunlight, vents, radiators or other heat sources, or in high humidity areas.



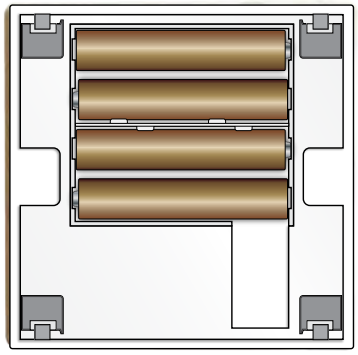
Remove the back mounting plate by pulling from the bottom, and out.



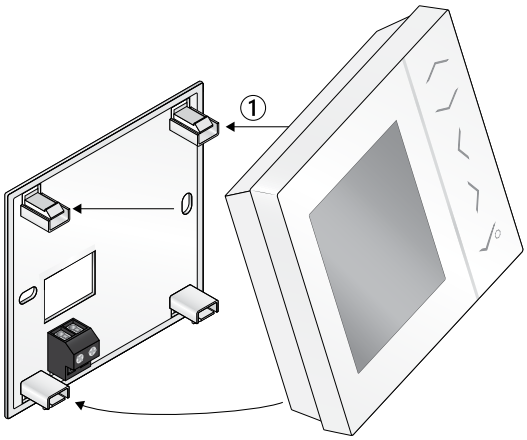
Attach the mounting plate to the desired spot on the wall using the included mounting screws, ensuring it is level.



If using a remote sensor (10K RTD only, sold separately) wire it into the terminal block on the mounting plate.



Install the included 4×AAA alkaline batteries into the thermostat.



Replace the thermostat onto the backplate, hinging from the top.

Thermostat Power Up Sequence

When the thermostat is first powered up, it will run through the following start up sequence that must complete before you are able to pair it with your gateway and devices.



Boot screen.





The MCU software version (example only).



The Zigbee software version (example only).

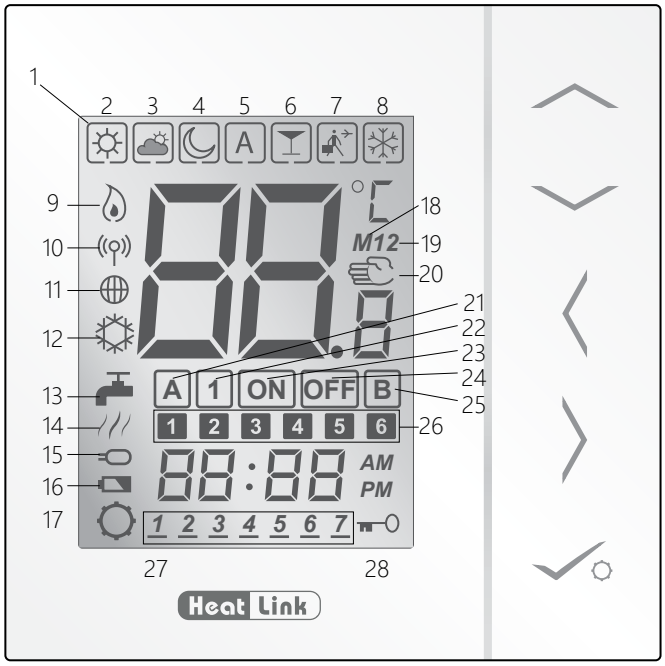


The Thermostat is ready to be paired.

See "Device Pairing & System Set Up" on page 22.

Thermostat Icons & Functions

The HeatLink® Wireless Programmable Thermostat has a number of different functions available to maximize comfort. The modes and heating programs can be easily managed through the app in Online systems, or programmed manually in Offline systems (for details see "Offline - Thermostat Set Up" on page 41).



Button	Press	Function
or	Short	Increase or decrease setpoint temperature.
	Short	Increase or decrease Day, Clock, Timer, Party, Holiday, and Boost.
	Short	Select installer parameter menu.
or	Short	Mode selection.
	Long	Long press (left) to return to home display without saving.
	Short	Short press (left) to return to the previous screen when it is in user/ installer setting mode.
	Short	Short press to confirm selection.
	Long	Save and exit.
	Long	Enter the user settings.
+	Long	Lock/Unlock (see below for details).
+ +	Long	Enter installer parameter settings (see "Thermostat Functions & Parameters" on page 48).

The Lock function allows the user to lock the thermostat to avoid tampering or accidental button pushes.

#	Icon	Function
1		Indicates active heating mode.
2		Sun: high comfortable temperature
3		Cloudy: middle comfortable temperature
4		Moon: low comfortable temperature
5	A	Programmable thermostat Program mode (Auto) indicator: Indicates program is running, Auto On or Auto Off.
6		Party mode indicator
7		Vacation temperature indicator
8		Frost temperature mode indicator (typically 5°C, used for extended periods of absence)
9		Heating is on
10		Wifi/network indicator: unit is connected to Zigbee network
11		Internet indicator: unit is linked to the Internet
12		Cooling mode; flashes when cooling is running
13		Hot water indicator - thermostat is in Hot Water mode
14		Hot water indicator - flashes when hot water is running
15		Floor protection indicator (d03 = 1; d04 = 1). The icon flashes when zone heating has been halted to protect the floor from overheating.
16		Low Battery indicator
17		Gear - indicates user setting mode is active
18	*M12*	Master 1 or Master 2 (for prog only)- indicates the current thermostat is a Master 1 or 2
19	*12*	Slave 1 or Slave 2 indicator (For Non-prog only) - Indicates the current thermostat is a slave with number 1 or 2.
20		Temporary manual override
21	A	HW Program mode(Auto) indicator: Indicates program is running, Auto On or Auto Off.
22	1	HW Mode indicator: Indicates turn on for 1 period a day, from Program 1 ON (start time) to Program 3 OFF (start time).
23	ON	HW Mode indicator: Indicates Continuously On.
24	OFF	HW Mode indicator: Indicates Continuously Off.
25	B	HW Mode indicator: Indicates Boost +1hr override.
26	1	Active schedule block
27	*1*	Current day of the week (1=Monday, 2=Tuesday, etc.)
28		Key lock indicator: Indicates the pressed key is locked.

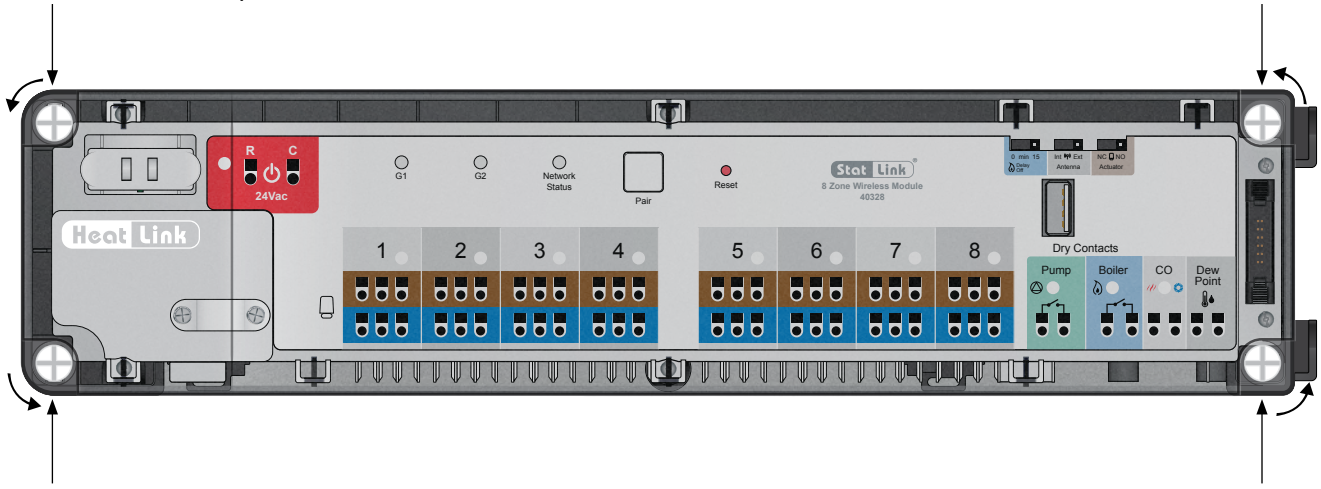
Installation - StatLink® 8 Zone Wireless Module

The HeatLink® StatLink® 8 Zone Wireless Module connects with your wireless thermostats using the Wireless Internet Gateway, allowing you to easily control up to 24 actuators in 8 zones (3 per zone).

StatLink® 8 Zone Wireless Modules should be installed in a location that is accessible, clean, and dry - *do not mount the StatLink® 8 Zone Wireless Module below your piping or manifolds! Any water could damage the Wireless Module and cause electrical shorts or fire.*

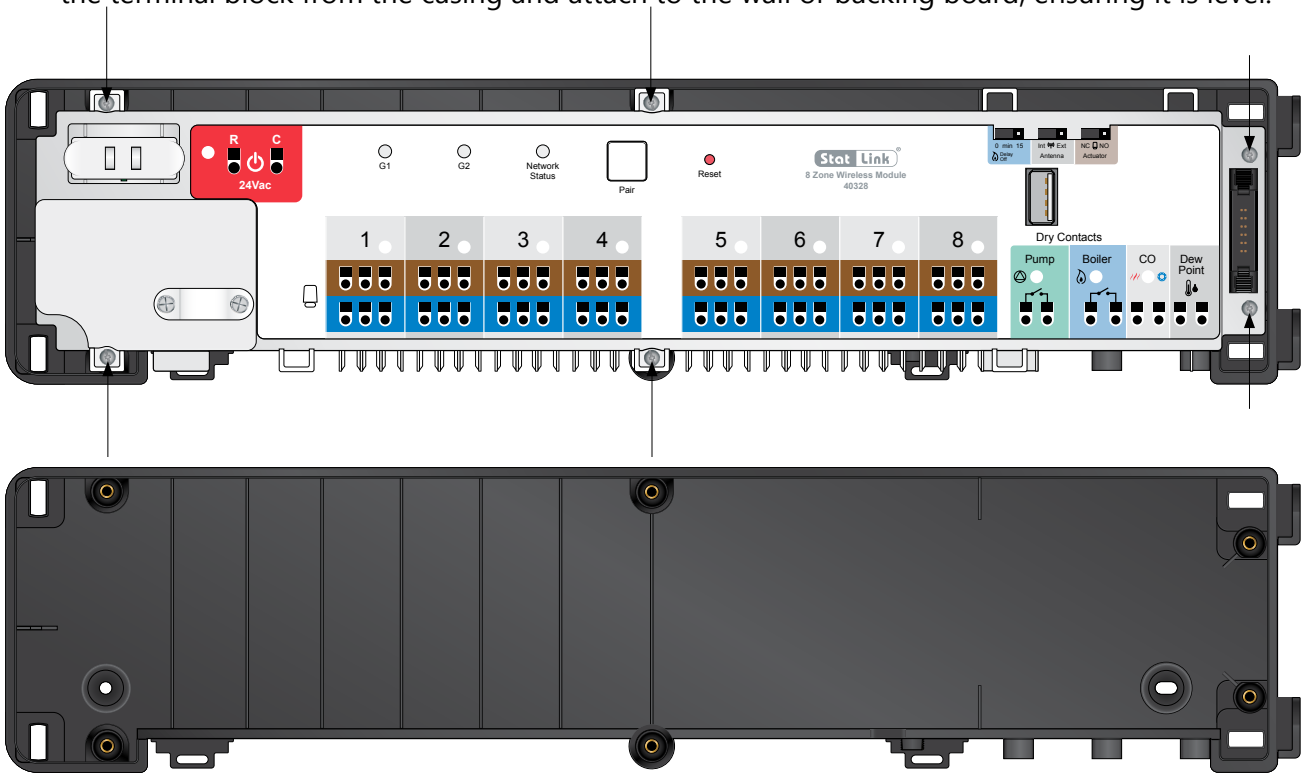
Step 1 Ensure that the wiring module is complete and not damaged.

Step 2 Remove the outer cover by using a large Phillips or flat heat screwdriver to turn each of the white screws one quarter turn counter-clockwise, then lift off.



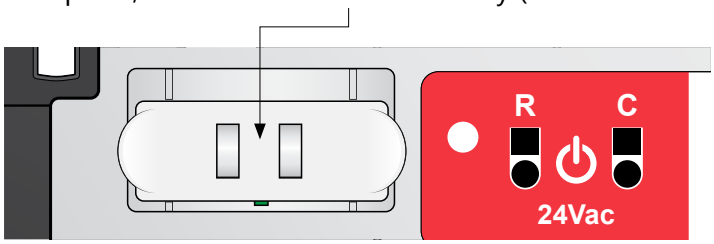
Step 3 If mounting using the included DIN rail, attach the DIN rail to the wall or backing board in an appropriate location, ensuring it is level.

Step 4 If mounting the StatLink® 8 Zone Wireless Module directly to the wall or backing board, unscrew the terminal block from the casing and attach to the wall or backing board, ensuring it is level.



Step 5 Replace the terminal block into the black casing, securing all screws.

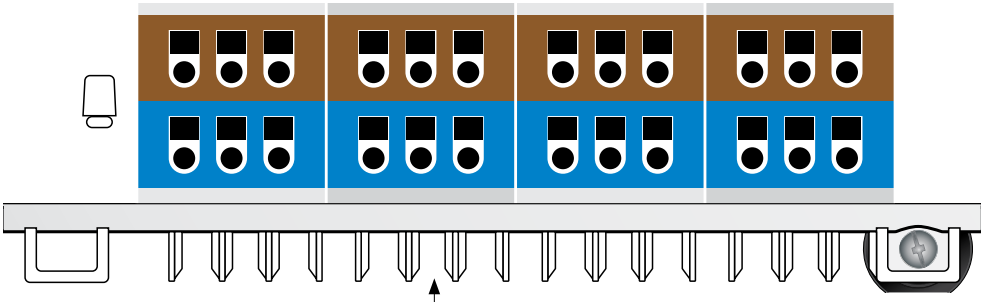
Step 6 Ensure the fuse is in place; remove fuse holder to verify (4A 5×20mm F4A4250VP).



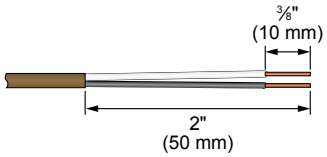
Step 7 Wire up to 3 actuators per zone (see page 50 for wiring diagrams), to a maximum of 12 per module.

Step 8 Wire your pump, boiler, change over valve and humidity sensor, if applicable (see page 50 for wiring diagrams).

Step 9 Wire the 24V plug-in transformer (sold separately) to the wiring module.

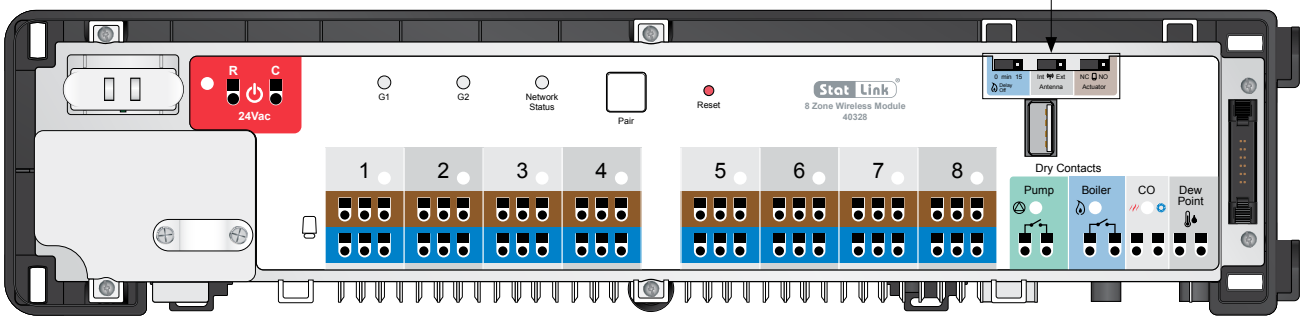


Note: Ensure wire ends are long enough (~⅜") to be held securely in the wireless module terminals.



Step 10 Clip all wires into the strain reliefs.

Step 11 Set the jumpers in the desired positions by carefully removing them, and reinserting them as necessary:



Switch	Function	Diagram	
Boiler On/Off Delay	Sets the delay time for switching the boiler off to 0 minutes (default), or 15 minutes. *Note: The Pump/Boiler on delay, and the pump off delay are fixed at 3 minutes.*	0 min 15 Delay Off	0 min 15 Delay Off
Wireless Connection	Sets the wireless connection to internal "INT" (default), or external "EXT" (optional external wireless antenna 43305)	Int Ext Antenna	Int Ext Antenna
Actuator Type	Selects the type of actuator being used - Normally Closed "NC" (HeatLink default), or Normally Open "NO"	NC NO Actuator	NC NO Actuator

Step 12 If connecting the optional external antenna see page 15.

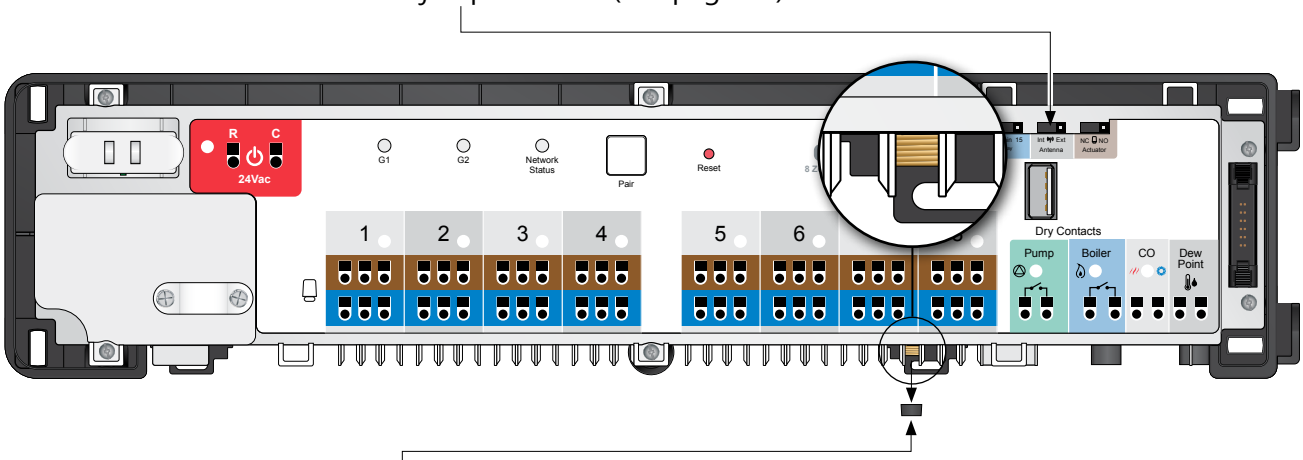
Step 13 Plug in the Wireless Module.

Installation - External Antenna (Optional)

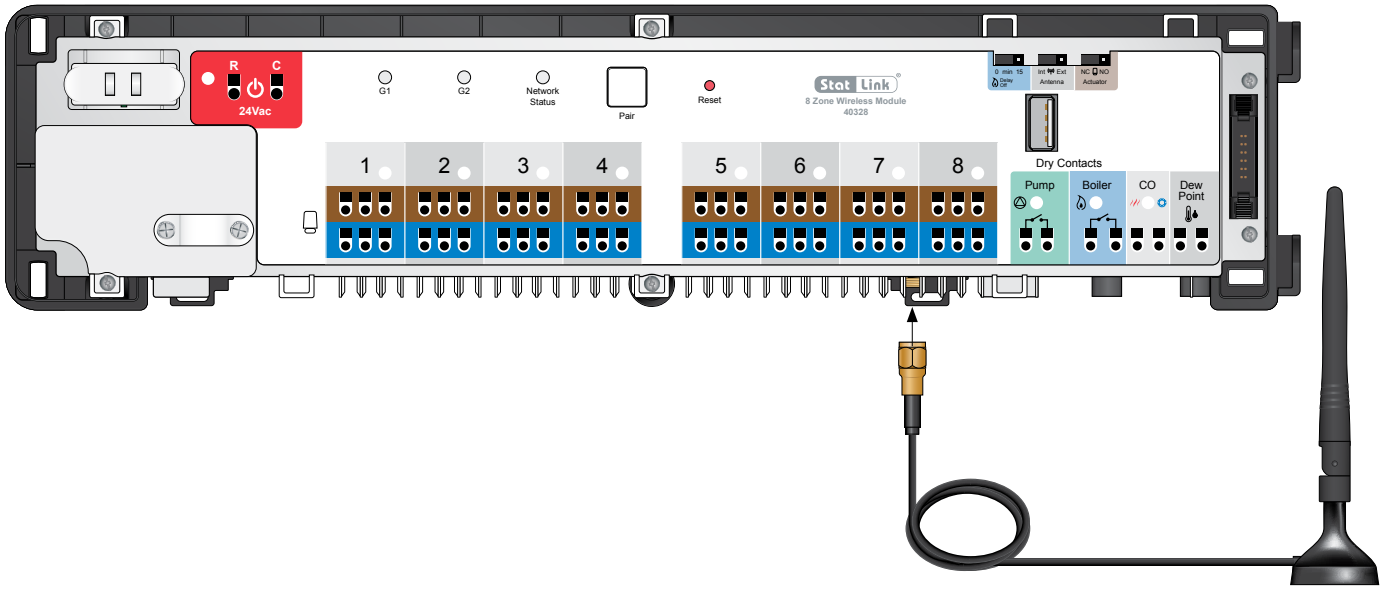
The StatLink® 8 Zone Wireless Module features an internal wired antenna which is suitable for most applications, but has an optional external antenna with magnetic base available, in order to extend the range or overcome radio interference, or can be used when the module is installed in a metal cabinet, which may interrupt the signal.

Step 1 Ensure the StatLink® 8 Zone Wireless Module is disconnected from the power source.

Step 2 Set the wireless connection jumper to EXT (see page 14).



Step 3 Remove the rubber cap from the external antenna port on the bottom of the StatLink® 8 Zone Wireless Module.



Step 4 Screw the antenna into the port.

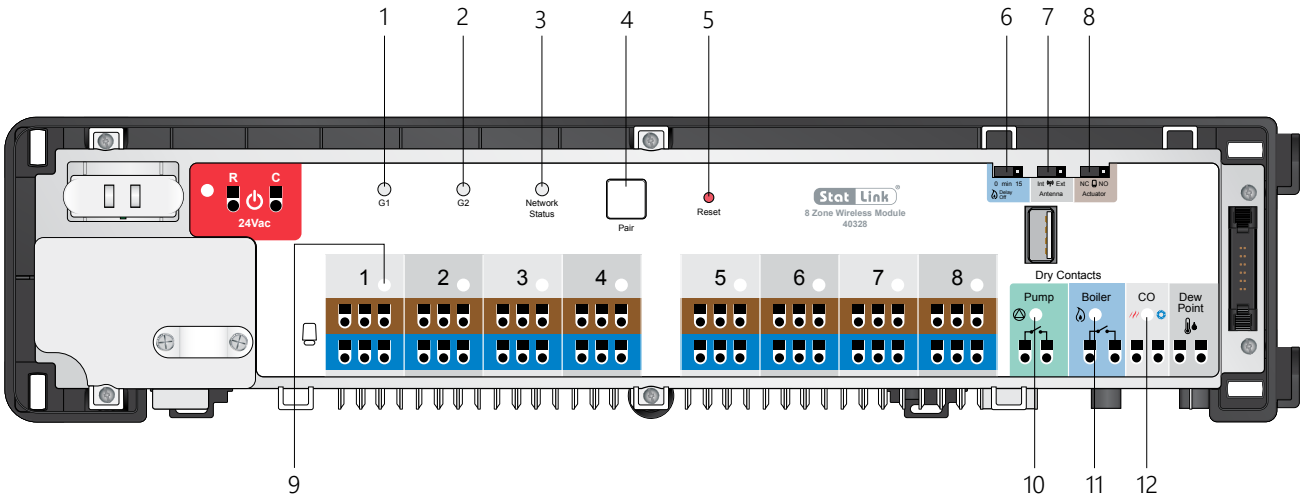
Step 5 Place the antenna in the desired location away from any possible causes of radio interference.

Step 6 Reconnect the power.

See "Device Pairing & System Set Up" on page 22.

StatLink® 8 Zone Wireless Module Buttons, and Jumpers

1	G1 LED - Indicates if there is activity in the Group 1 thermostats.
2	G2 LED - Indicates if there is activity in the Group 2 thermostats.
3	Network Status LED
4	Pair Button - Press to pair the module with the wireless system.
5	Reset Button - Power Cycle. See "Reset StatLink® 8 Zone Wireless Module" on page 53.
6	Sets the delay time for switching the boiler off to 0 minutes (default), or 15 minutes.
7	Sets the wireless connection to internal “INT” (default), or external “EXT” (optional external wireless antenna 43305)
8	Selects the type of actuator being used - Normally Closed “NC” (HeatLink default), or Normally Open “NO”
9	Zone LED - Indicates when there is a call for heat.
10	Pump LED - Indicates when the pump is running.
11	Boiler LED - Indicates when there is a call for heat.
12	CO (Change Over) LED - Indicates if the system is in heating mode (●), or cooling mode (●).



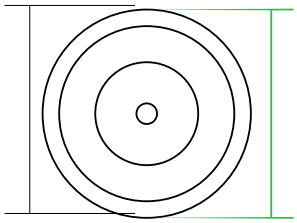
StatLink® 8 Zone Wireless LED Indications

Power	●	40328 is supplied with 24Vac
G1	✳	Wireless network activity on Group 1 thermostats
G2	✳	Wireless network activity on Group 2 thermostats
Network Status	✳	Single flash: waiting to pair / Double flash: left network
	●	40328 is connected to the wireless network
Zone 1 Actuator(s)	●	Actuator is activated
Zone 2 Actuator(s)	●	Actuator is activated
Zone 3 Actuator(s)	●	Actuator is activated
Zone 4 Actuator(s)	●	Actuator is activated
Zone 5 Actuator(s)	●	Actuator is activated
Zone 6 Actuator(s)	●	Actuator is activated
Zone 7 Actuator(s)	●	Actuator is activated
Zone 8 Actuator(s)	●	Actuator is activated
Pump	●	Pump is on
Boiler	●	Boiler is on
CO (Change Over)	●	Heating mode
	●	Cooling mode

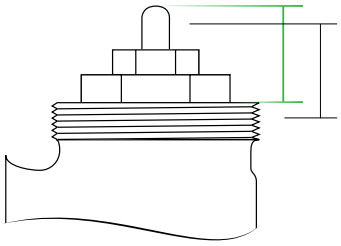
Installation - Wireless Valve Actuator

Up to six wireless valve actuators can be paired with one 46801 Wireless Digital Thermostat for precise radiator control and optimal room comfort.

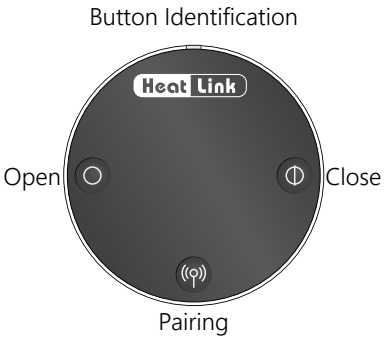
The wireless valve actuator is designed to be used on most thermostatic actuator valves - use the information below to determine if your valve is compatible before installation.



Thread diameter:
1.18" (30mm)



Pin length (open position):
0.51-0.62" (13-16mm)

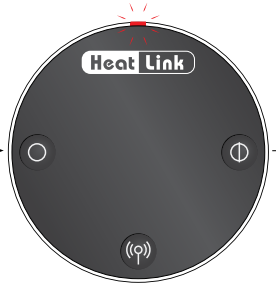


Step 1 Install the included AA batteries into the actuator, ensuring they are inserted correctly.

Step 2 The valve will take 1-2 minutes to go through the start up process.



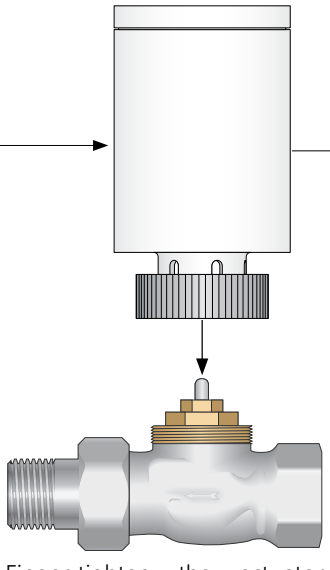
LED flashes green.



LED flashes red.



LED is solid red and ready to install on the valve.



Finger-tighten the actuator onto the valve.



Press the Open or Close button once. The LED will flash green for 1-2 mins then orange for 1-2 mins as the motor calibrates to the valve.



The calibration process finishes, the LED is off, and the valve is ready for pairing.

See "Set Up - Radiator/Baseboard Systems" on page 29.

Wireless Valve Actuator LED Indications

Event	Definition	LED	Valve
Power switched on, or after reset	Software version indicator	A sequence of red and green LEDs flashing displayed indicates the software version	
Unit adapting to valve		Red flashes then goes steady. Green flashes (or red flashes on failure to adapt) Green steady. Orange flashes (or red flashes on failure to adapt).	
Ready to Adapt to Valve		Solid red. To fix press open or close button to retry calibration.	
Unit has not joined network or has not paired to thermostat	Auto mode	Green and red flash alternately after a short press on open or close button	25% open
	Manual open	Green flashes twice after short press on open or close button	Fully open
	Manual close	Red flashes twice after short press on open or close button	Fully closed
Unit paired to thermostat and in auto mode		No LED	
Leaving network		Orange for one second	
Identifying the network		Green flashes for up to 10 minutes	
Wireless link to thermostat lost	Auto mode	Green and red flash alternately after short press on open or close button	
	Manual open	Green flashes twice after short press on open or close button	Fully open
	Manual close	Red flashes twice after short press on open or close button	Fully closed
Normal operation	Auto mode	Green flashes once after short press on open or close button	1 to 100% open
	Auto mode	Red flashes once after short press on open or close button	Fully closed
	Manual open	Green flashes twice after short press on open or close button	Fully open
	Manual close	Red flashes twice after short press on open or close button	Fully closed
	Window open mode active	Orange flashes twice every 10 seconds	Fully open
Battery low		Red flashes three times every 10 seconds (less if the battery is very low)	25% open
Error installing		Green and red flash alternately	

Fail Safe mode

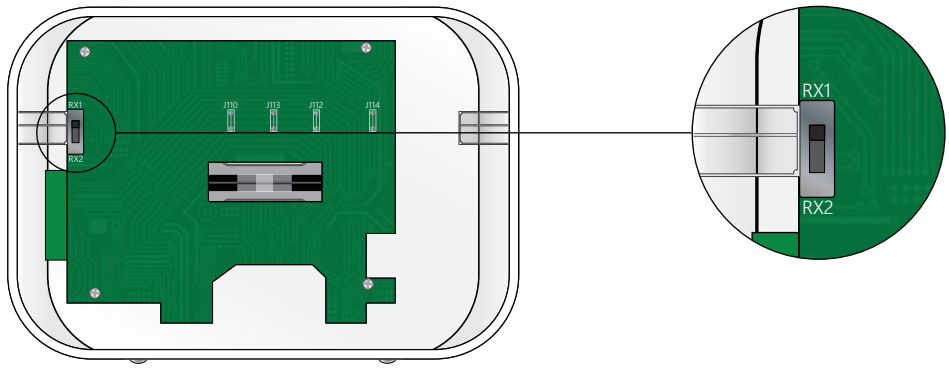
If the wireless valve actuator doesn't receive any command from the thermostat, it will enter Fail Safe mode. Then it will use its internal sensor and fixed setpoint of 15°C to control the temperature. The wireless valve actuator must be installed in the room it is serving for this function to operate properly.

Installation - Wireless Relay

The HeatLink Wireless Relay can be used as a boiler relay (RX1), or as a single room relay (RX2), and should be installed in a location that is appropriate to its function, and that allows for easy accessibility for wiring and maintenance.

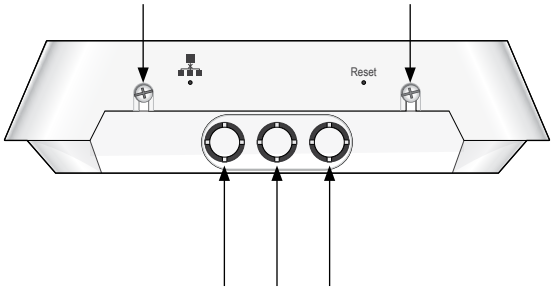
Before pairing the Wireless Relay with your system ensure that the RX1/RX2 switch is in the desired position.

Inside top

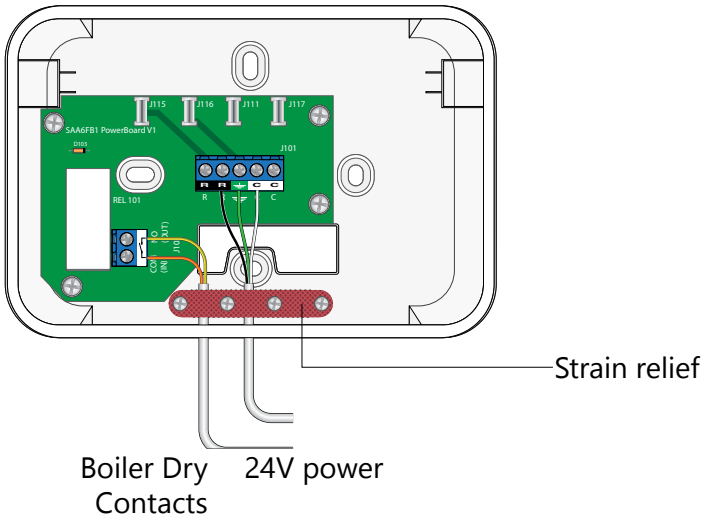


Step 1 Ensure that all necessary parts are included with the wireless receiver.

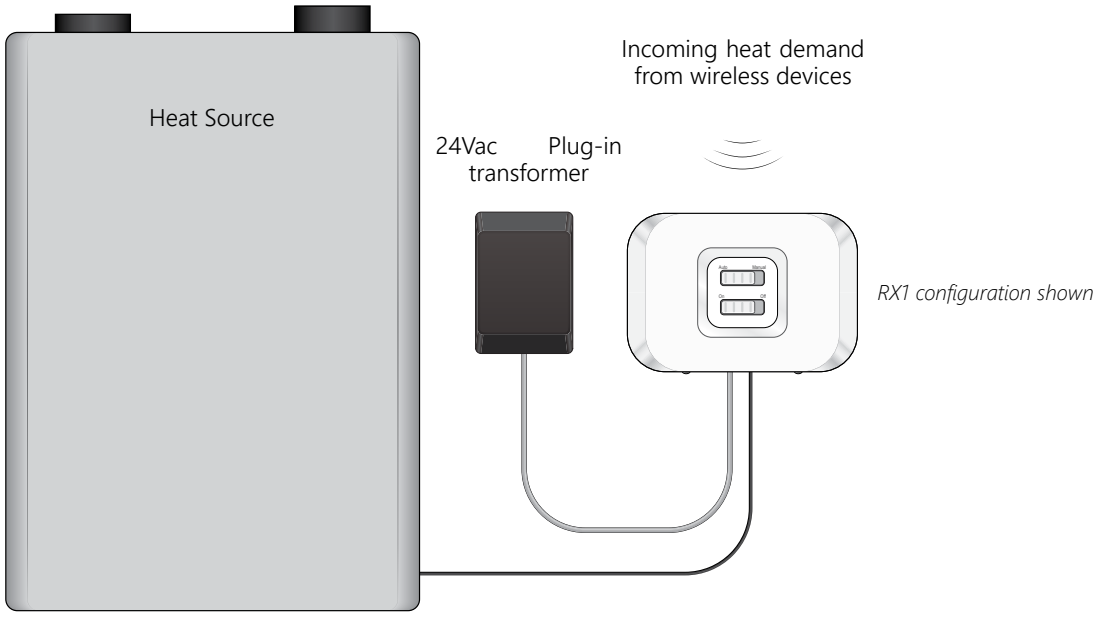
Step 2 Remove the cover by loosening the screws on the bottom of the wireless receiver.



Step 3 Remove the plastic knockouts on the bottom of the unit as necessary using wire snips, insert wires, secure wiring with the strain relief.



Step 4 Use the included screws and wall anchors to mount the receiver to the wall in the desired location, verifying that it is within reach of the power supply and wiring needed.



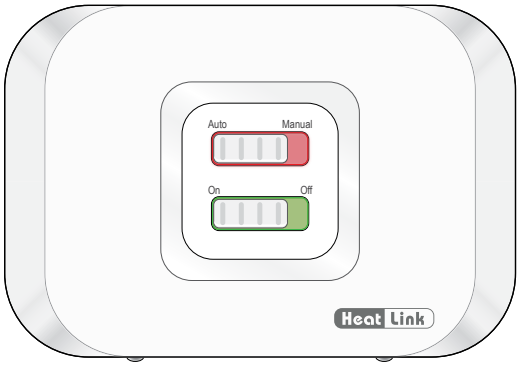
Step 5 See page 51 for wiring diagrams, according to desired function of the unit.

Step 6 Once wired to your boiler or other device, it is ready to be paired with the system.

Turn to "Setup - Wireless Receiver (RX1 - Boiler Switching)" on page 36, or "Set Up - Wireless Relay (RX2 - Single Room)" on page 38

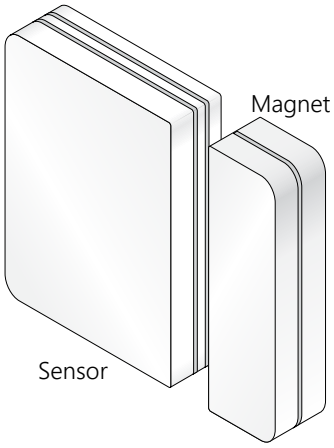
Wireless Relay LED Indications

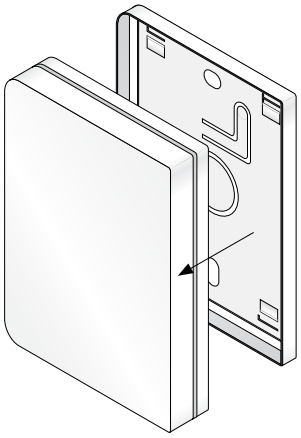
Switch/LED	Action
Auto	The relay output will switch on and off under command from the HeatLink Smart Home system.
Manual	The relay output is controlled by the On/Off slide switch.
Solid Red LED	No output from the relay.
Solid Red & Green LED	There is output from the relay; the connected device will be switched on.
Flashing Red LED	Relay is ready for pairing.



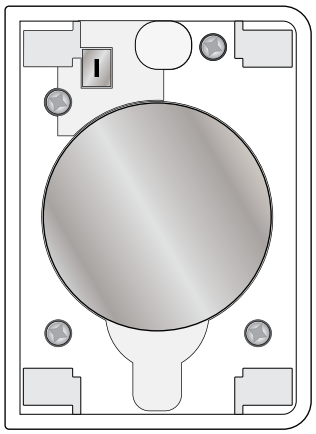
Installation - Wireless Door/Window Sensor

The wireless door/window sensor can only be used with Online systems. It is recommended that you pair the sensor with your system before installation; put your system into pair mode (see page 22) remove the sensor cover and pull the battery tab. The sensor will pair with the system.

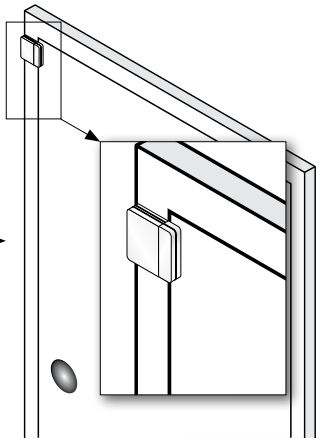




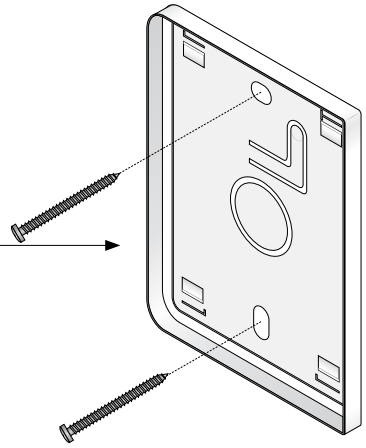
Remove sensor cover.



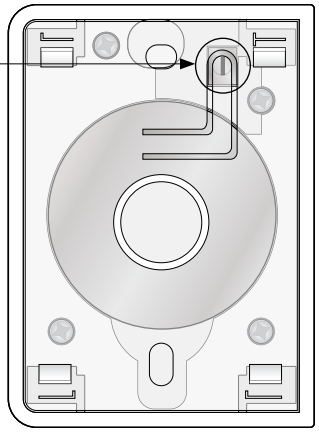
Pull battery tab.



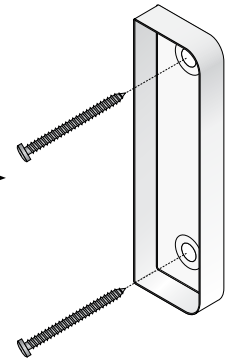
Mount the sensor on the handle side of the casing, and the magnet on the door or window as close as possible to the sensor.



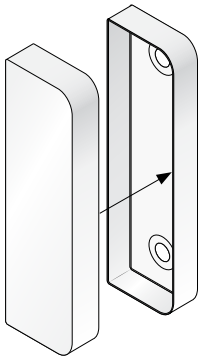
With the covered removed, attach the mounting plate to the door or window casing with the included screws.*



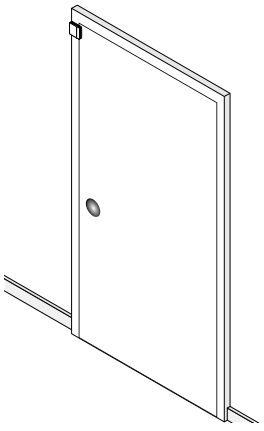
Replace the sensor cover on the mounting plate by snapping it into place, ensuring the tamper switch is properly aligned.



Remove the cover of the magnet and attach the mounting plate to the door or window using the included screws.*



Replace the magnet cover onto the mounting plate.



Check that the sensor works and does not affect the opening/closing of the door or window.

**If screws are not appropriate use the adhesive pad to attach the sensor and/or magnet*

Device Pairing & System Set Up

When first setting up the wireless system you have the option of configuring it for **Online** use (Zigbee network with connection to the Internet via your local network + app), or **Offline** use (Zigbee network only, no Internet connection, no app).

Ensure that you follow the correct set up instructions for your system configuration.

Offline System Setup

The HeatLink wireless gateway can be used for system setup in cases where Internet/app connectivity is not available or needed at the time of setup, but may be desired at a later time.



Led is solid red - The gateway is plugged in.



Press the multi button on top of the Gateway for five seconds to enter pairing mode.



The LED will flash red.



To exit pairing mode press and hold the multi button for five seconds.

Online System Setup - Wireless Internet Gateway & App

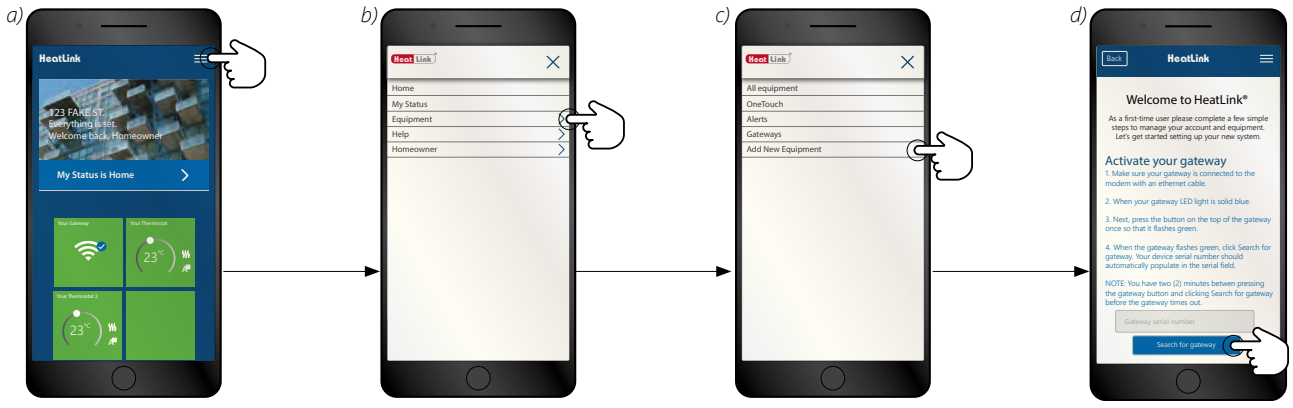
When using the HeatLink® wireless gateway to connect your system pair it with the app before setting up the rest of your components.

The Wireless Internet Gateway and your phone/tablet/computer must be on the same network during the set up/pairing process. Once the set up is complete the app can be used from anywhere to control and monitor the system.

See the help section of the app for more details.

Step 1 Open the app on your phone or tablet, or the portal on your computer.

Step 2 Scroll down to select Search for Wireless Internet Gateway.



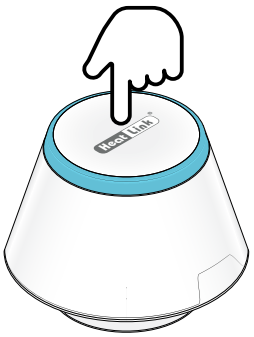
Step 3 Follow the steps on the app to connect your Wireless Internet Gateway.



The Gateway is connected to the network via a modem or router with the supplied ethernet cable.



Wait for the LED to turn solid blue. **This may take up to 10 minutes.**

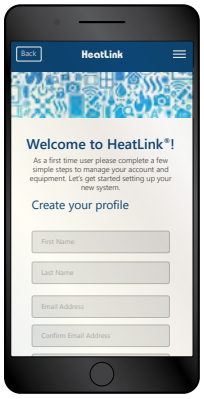


Press the multi button on top of the Gateway once.



The LED will flash green.

Step 4 On the App click Search for Wireless Internet Gateway. Your device serial number should automatically populate in the serial number field on the app.



Step 5 Scroll down to enter your location and timezone, address, options, and to name your gateway.

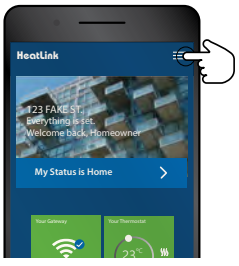
Note: You only have two (2) minutes to set up your gateway before it times out; if it times out you will need to repeat Steps 3-5.

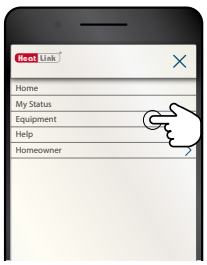
Step 6 Press Activate Wireless Internet Gateway.

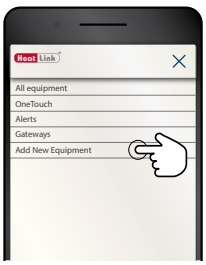
Step 7 You are now ready to begin pairing other components to your Smart System.

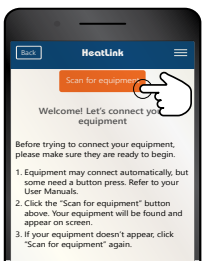
Device Name on App	HeatLink Part Name & Number
Universal Gateway	43301 Wireless Gateway
Zigbee Digital Control Battery Thermostat	46801 Thermostat
AKLO8RF 8 Zone Wireless Zone Control	40328 Wireless 8 Zone Module
Zigbee Receiver 24 VAC	43302 Wireless Relay
Zigbee Battery Operated TRV	56401 Wireless Valve Actuator
Smart Plug Light Grey	43304 Smart Plug
Door/Window Sensor	43303 Door/Window Sensor

Step 8 To add new equipment via the app, open the dropdown menu -> Equipment -> All Equipment -> Add New Equipment









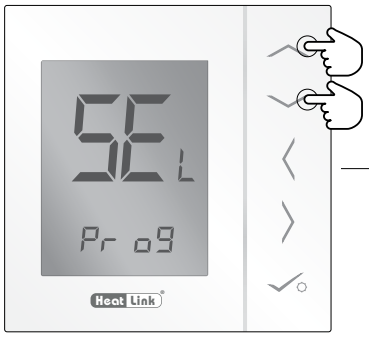
Notes on Wireless Internet Gateways: *Additional Wireless Internet Gateways can be added to your account for secondary systems/locations, such as a cabin, other office location, or basement suite.*

Devices can only be paired to one Wireless Internet Gateway; each Wireless Internet Gateway is a separate system.

Wireless Internet Gateways can only be linked to one account at a time. Adding it to a second account will remove it and all associated components from the first account.

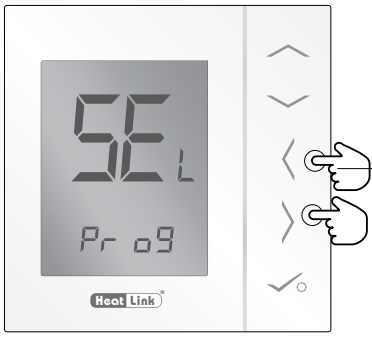
Systems and Settings

The HeatLink Wireless Digital Thermostat can be programmed for a variety of different heating applications. The factory default is Underfloor Heating (rlay). Follow the steps below to change the parameters for your system needs.

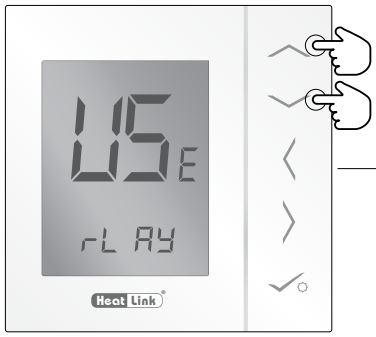


Use the Up/Down arrow buttons to select the thermostat designation.
Press ✓ to accept.

- Pr o9 *Programmable (master) thermostat*
- nP r9 *Non-programmable (slave) thermostat*
- uu tr *Hot Water Timer (not used)*

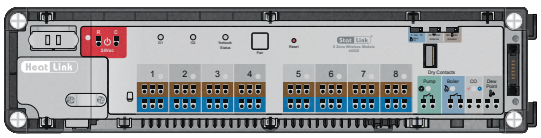


Use Left/Right arrow to navigate to the USE menu.



Use the Up/Down arrow buttons to select the heating application type (see below).
Press ✓ to accept.

rL AY



Underfloor Heating (default)
StatLink® 8 Zone Wireless Module - see page 25 for set up and pairing.

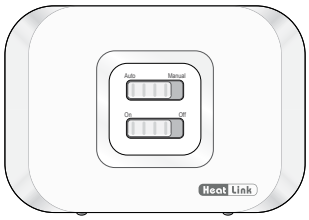
rAd



Radiator System

Wireless Valve Actuator - see page 29 for set up and pairing.

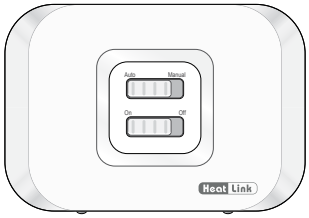
rEC1



Boiler Switching

Wireless Relay (RX1 setting) - see page 36 for set up and pairing.

rEC2



Single Room Switching

Wireless Relay (RX2 setting) - see page 38 for set up and pairing.

Set Up - Underfloor Heating System

Components: Wireless Digital Thermostat, StatLink® 8 Zone Wireless Module, Wireless Relay (RX1) for boiler switching (optional).

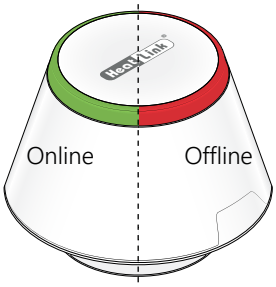
Note: Zones must be assigned when pairing with your thermostats - they cannot be assigned via the app.

If you are installing more than one wiring module - up to nine can be installed per system - press the Pair button once it has joined the Zigbee network to identify the StatLink® 8 Zone Wireless Module number. The Zone LEDs will flash to indicate the StatLink® 8 Zone Wireless Module number (ie. Zone 1 = StatLink® 8 Zone Wireless Module 1; Zone 2 StatLink® 8 Zone Wireless Module 2, etc. The Network Status LED will flash for module nine).

Make note of the StatLink® 8 Zone Wireless Module number for later in the pairing process.

Step 1 Ensure the components are plugged in/powered up, and ready to be paired.

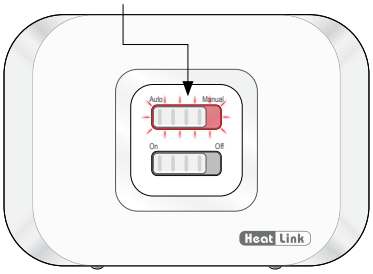
LED is solid green or red (see page 9 for details)



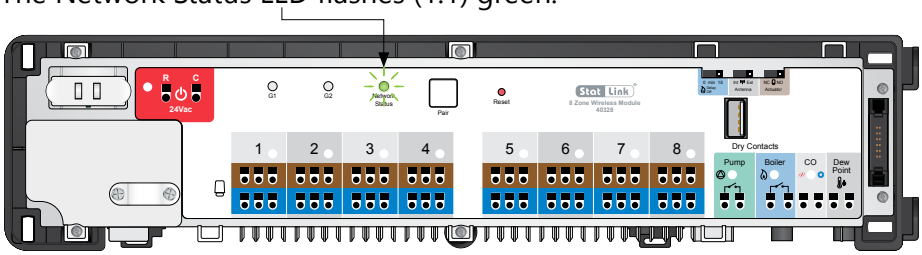
Ensure you select "rLay" mode



LED flashes red.

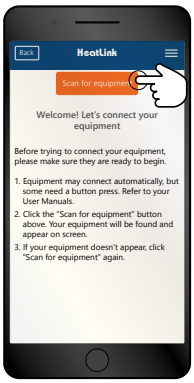


The Network Status LED flashes (1:1) green.



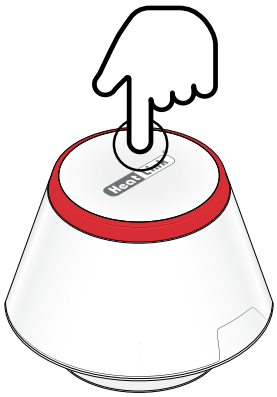
Online

Step 2 On the HeatLink App open the drop down menu, select Equipment -> All Equipment -> Add Equipment -> Scan For Equipment.



Offline

Step 2 Put the Wireless Internet Gateway into Pair Mode by pressing the multi button for 5 seconds.

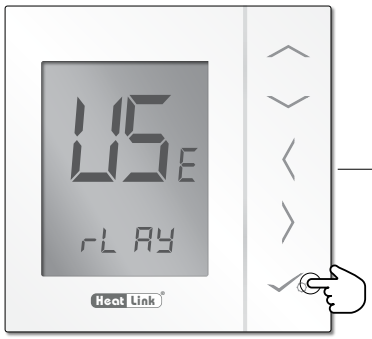




The Wireless Internet Gateway LED will flash red.

Online	Offline
Step 3 Follow the on-screen prompts of the app.	**Step 3** Continue to Step 4.

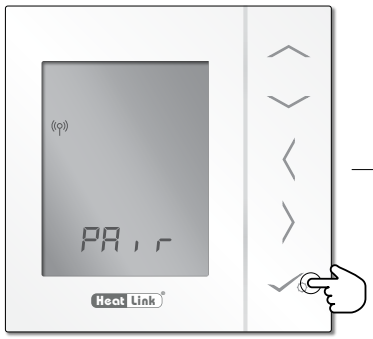
Step 4 Enter Underfloor Heating (rLay) Pair mode on the thermostat.



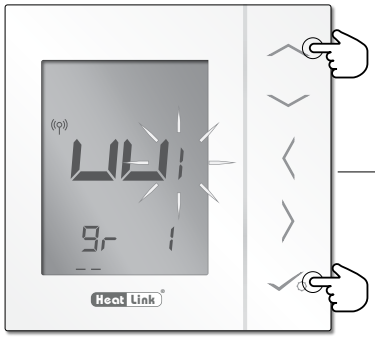
Press ✓ to accept.



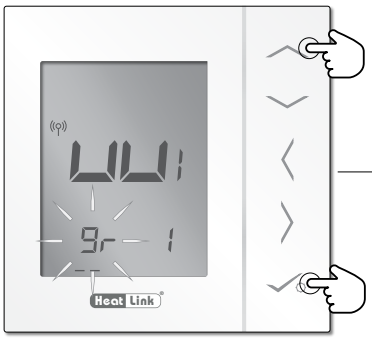
The thermostat searches for the Zigbee network.



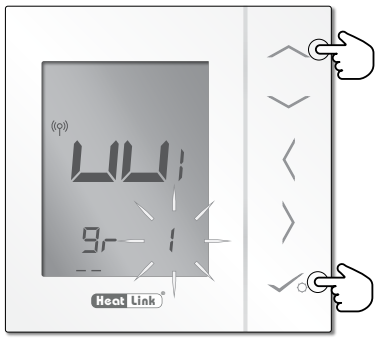
The thermostat is recognized by the Zigbee network.
Press ✓ to accept.



Use the Up/Down arrows to select the wiring center.
Press ✓ to accept.



Use the Up/Down arrows to select Group 1 or 2 if Groups are being used.*
Press ✓ to accept.



Use the Up/Down arrows to select the heating Zone (1-8).
Press ✓ to accept.

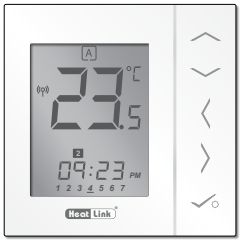
**The Group setting is not used in Online systems. See page 19 for information on using Groups in Offline systems for Underfloor Heating Applications.*

Note: If you select a zone that already has a thermostat assigned to it, the new thermostat will replace the first thermostat on the zone, and the first thermostat will automatically factory reset.

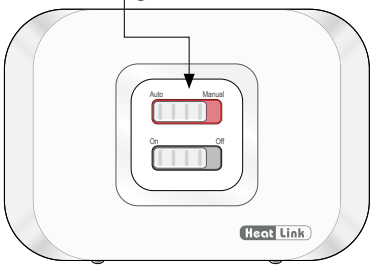


Step 5 The thermostat, wiring center, and Wireless Relay RX1 (if applicable) are now paired.

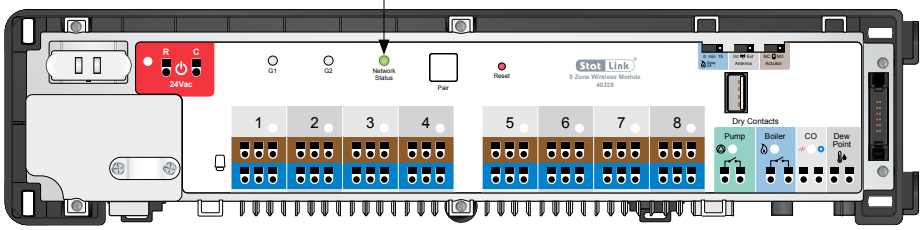
User interface screen



LED goes solid red.



The Network Status LED turns solid green.



Online

Step 6 Follow the on screen prompts of the app.

Step 7 Repeat steps 4 - 5 for additional thermostats and StatLink® 8 Zone Wireless Modules as required (see note).

Step 8 Use the App to set your heating programs and preferences.



Once Online pairing is complete, the LED ring on the Wireless Internet Gateway will be solid blue.

Offline

Step 6 Press the multi-button once to exit pairing mode, or repeat steps 4 - 5 for additional thermostats and StatLink® 8 Zone Wireless Modules as required (see note).

Step 7 See "Offline - Thermostat Set Up" on page 41

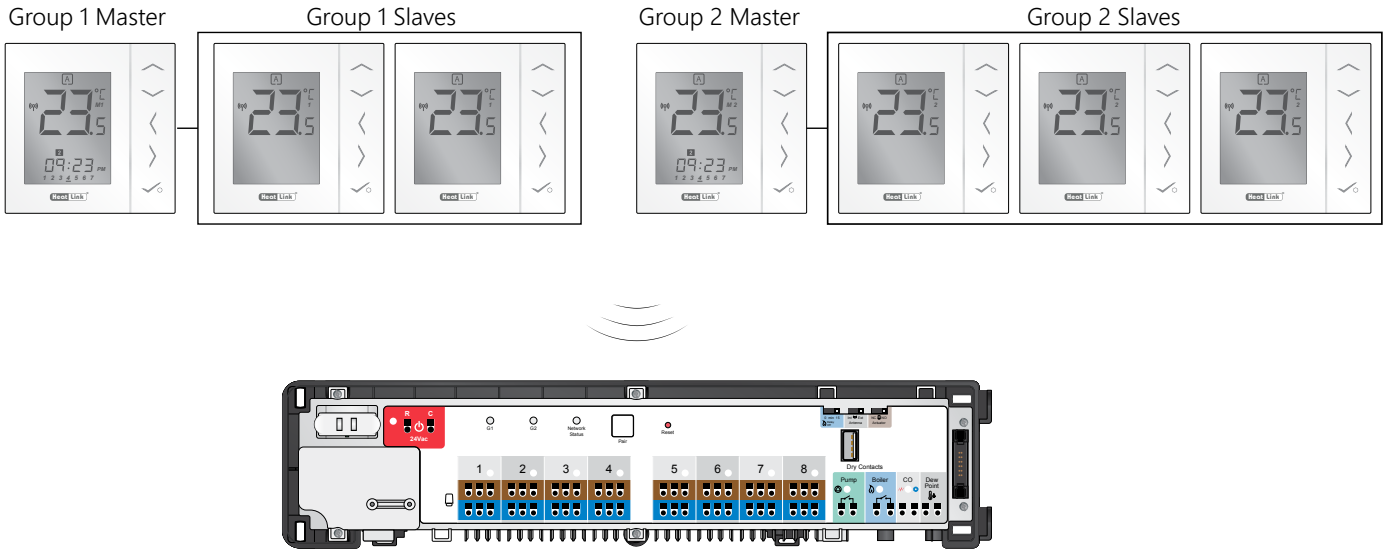


Once Offline pairing is complete, the LED ring on the Wireless Internet Gateway will be solid red.

Offline - Thermostat Groups

When setting up an Offline System with a Wireless Wiring Centre, the wireless thermostats can be configured into Groups, allowing for one thermostat to control up to seven others (see below for examples) using a maximum of two groups per wiring center. For Online systems use the app to easily set up all heating programs.

To set up a Group, you must designate which zone thermostat(s) will be the Group Control (Master) Thermostats, and which will be the Group (Slave) Thermostats before pairing them to the wiring center. The Group Thermostats must be configured as "Digt" in the set up menu (see "Systems and Settings" on page 24).



See page 50 for wiring diagrams.

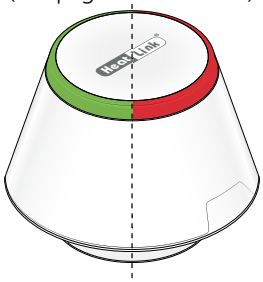
Set Up - Radiator/Baseboard Systems

Components: Wireless Digital Thermostat, Wireless Valve Actuator, Wireless Relay (RX1) for boiler switching (optional).

Note: If using more that one (1) wireless valve actuator in your system, you must pair each actuator separately.

Step 1 Ensure that all components are plugged in/powered up, and ready to be paired.

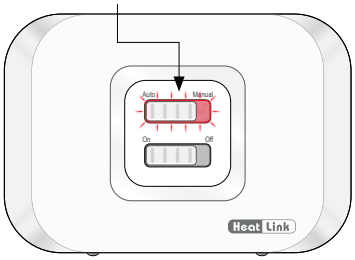
LED is solid green or red (see page 22 for details)



Default status screen



LED flashes red.

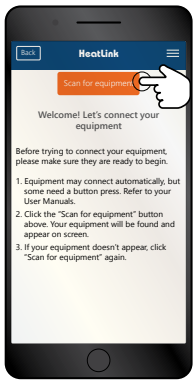


LED is off



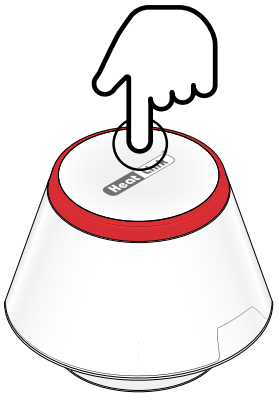
Online

Step 2 On the HeatLink App open the drop down menu, select Equipment -> All Equipment -> Add Equipment -> Scan For Equipment.



Offline

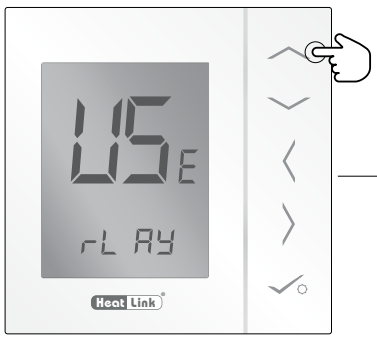
Step 2 Press the Multi-Button for 5 seconds to put it into Pairing Mode.



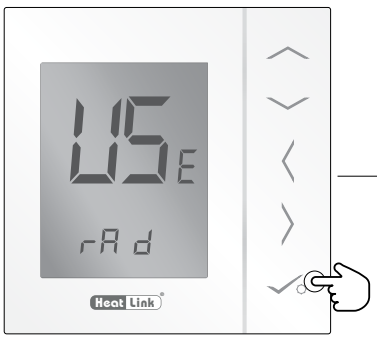


The Wireless Internet Gateway LED will flash red.

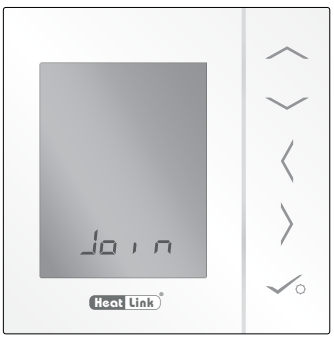
Step 3 Put the thermostat into "Join" mode.



Use the Up arrow to select rAd.

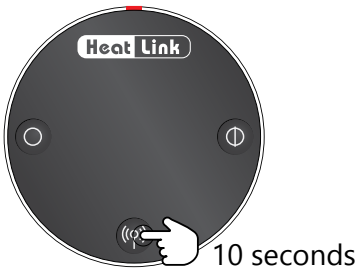


Press ✓ to accept.



The thermostat searches for the Zigbee network.

Step 4 Put the Wireless Valve Actuator into pairing mode.



Put the valve into pairing mode by holding the pair button for 10 seconds.

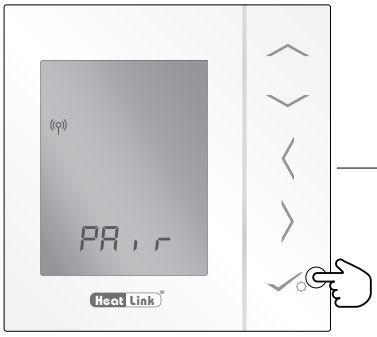


The LED will flash red.

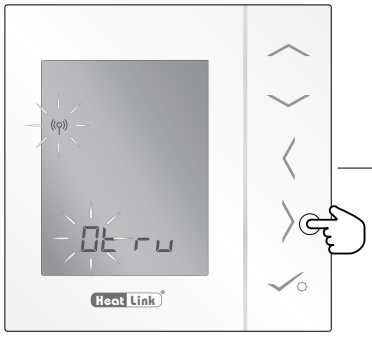


Note: Only one actuator can be in pairing mode at a time.

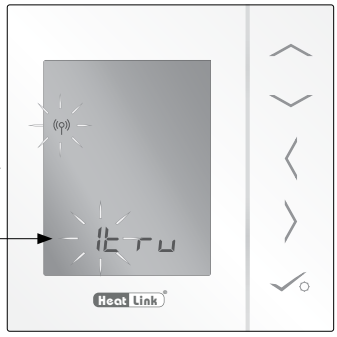
Step 5 Pair the thermostat with the Wireless Valve Actuator.



The thermostat is recognized by the Zigbee network. Press ✓ to accept.



Press the right arrow.



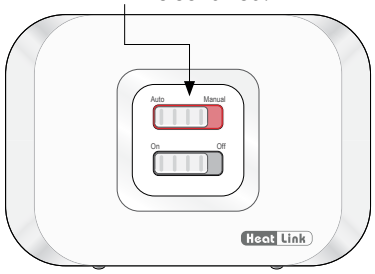
The prefix number will automatically change to the appropriate value. Repeat steps 4 and 5 for each additional actuator. Press ✓ when all actuators are paired.*

Step 6 The thermostat, wireless valve actuator, and Wireless Relay RX1 (if applicable) are now paired.

User interface screen



LED is solid red.



LED is off



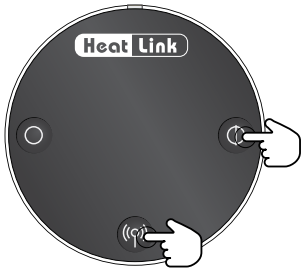
Online	Offline
Step 7 To add more Thermostats repeat steps 3-6.	**Step 7** To add more Thermostats repeat steps 3-6.
Step 8 Use the app to name your valve for easy reference, and to set your heating programs and preferences.	**Step 8** Exit pairing mode by pressing the Multi-Button for 5 seconds on the Wireless Internet Gateway.
Note: There is a 5 second response delay.	**Step 9** See page 23 for heating program set up instructions.

**Note: If the maximum number of actuators is reached the thermostat will automatically return to the main screen. Use ID mode to show the paired Wireless Valve Actuators, see page 42.*

Wireless Valve Actuator Functions

The HeatLink wireless valve actuator features a number of functions in order to operate correctly. Use the following to ensure proper valve function.

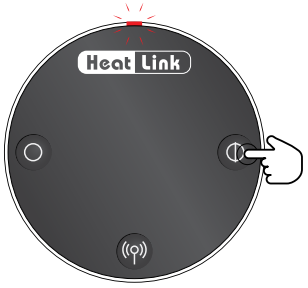
Auto Lock - The auto lock function is not available until after the valve has been paired. After pairing, the valve will lock all manual functions after five minutes without any button presses.



To unlock the buttons, press Pair & Close buttons for 3 seconds.

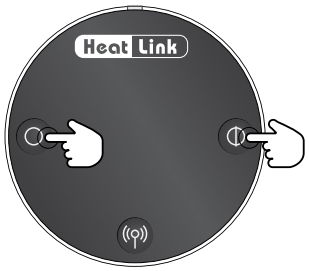


Manual open - Press the open button for 3 seconds. The LED flashes green once and the valve opens.



Manual close - Press the close button for 3 seconds. The LED flashes red once and the valve opens.

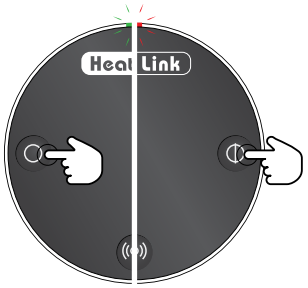
Entering fail safe mode - If the wireless valve actuator doesn't receive any command from the thermostat, it will enter Fail Safe mode. Then it will use its internal sensor and fixed setpoint of 15°C to control the temperature. The wireless valve actuator must be installed in the room it is serving for this function to operate properly.



To manually enter fail safe mode, press the open & close buttons for 3 seconds.



To exit fail safe mode press the pairing button to put the unit in automatic mode.



Or, the open **or** close button for 3 seconds to open/close the valve.

Protecting against Frost - When you have manually closed the valve, the unit automatically enables frost protection. Frost protection starts only when the temperature in the room drops below the frost temperature setpoint. The unit does all this automatically when connected to a thermostat and you don't have to do anything.

Detecting open windows - If there is a rapid temperature drop in the room, as monitored by the unit's internal sensors, it assumes a window has been opened. This only works if the unit is paired to the thermostat, is in automatic mode, is **located in the room being served**, and the battery is not low. The unit does this automatically when connected to a thermostat. It works between 32°F (0°C) and 104°F (40°C).

Protecting against Lime Scale - Leaving a valve open for a long time could cause a build up of lime scale, however, the unit has a lime-scale protection feature to help prevent this. The valve motor automatically starts once a week if no valve movement has been detected within a 14-day period. Lime-scale protection will continue to operate in automatic, manual open, and manual close modes as long as needed.

Auto Adaptation - Once the batteries are inserted into the unit, the red light will appear. If no buttons are pressed it will auto adapt to the valve.

Adaptive Learning Mode

When used with the Wireless Actuator, the HeatLink® Wireless Digital Thermostat can be put into Adaptive Learning Mode, allowing for minor adjustments within the first few days after installation to ensure that you get the best in comfort and efficiency from your HeatLink® devices.

During the Adaptive Learning Mode start up period of a few days, your boiler will occasionally be on for short periods outside of the heating schedule - this is normal, and will return to your programmed activity once the learning mode has completed.

During this period CAL appears on your thermostat.

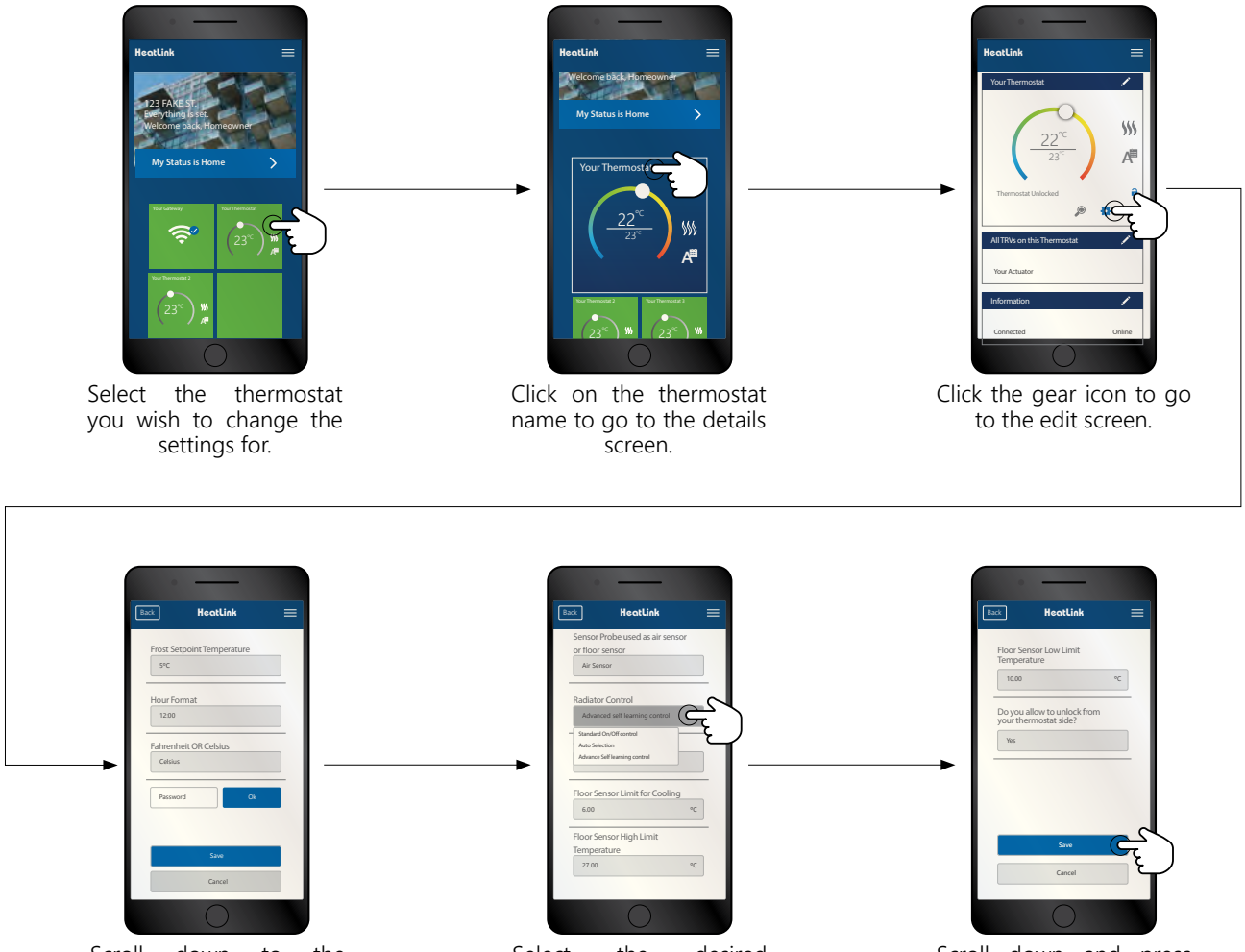
Systems *without* the Wireless Relay (RX1 mode) will be put into Adaptive Learning Mode automatically.

Systems *with* the Wireless Relay (RX1 mode) installed will use the standard On/Off mode.

You can change the control method using the app, or manually (see below).

Changing the Control Method with App

If you have an Online system you can use the app to access and change the Radiator Control options.



Select the thermostat you wish to change the settings for.

Click on the thermostat name to go to the details screen.

Click the gear icon to go to the edit screen.

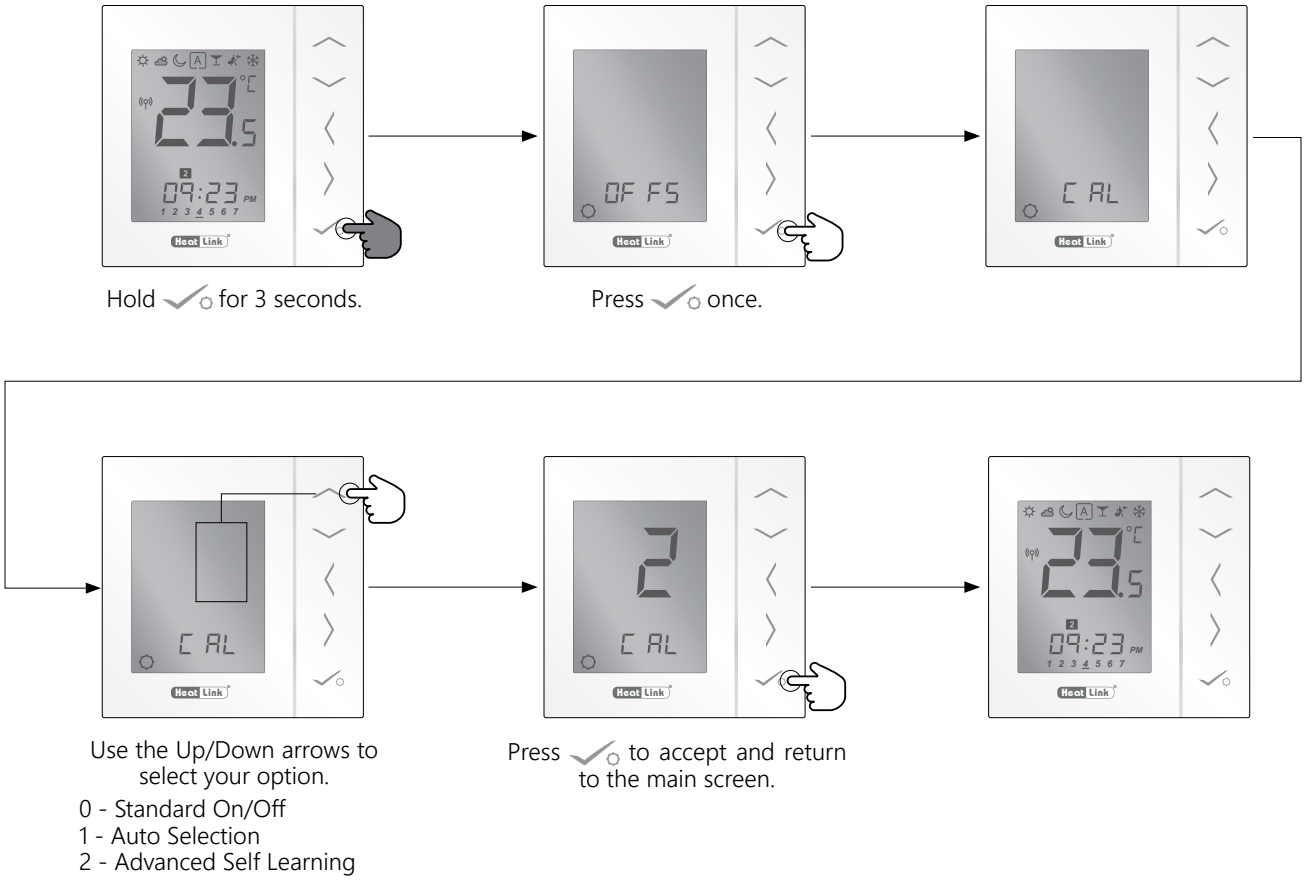
Scroll down to the password field and enter 49

Select the desired Radiator Control option.

Scroll down and press Save.

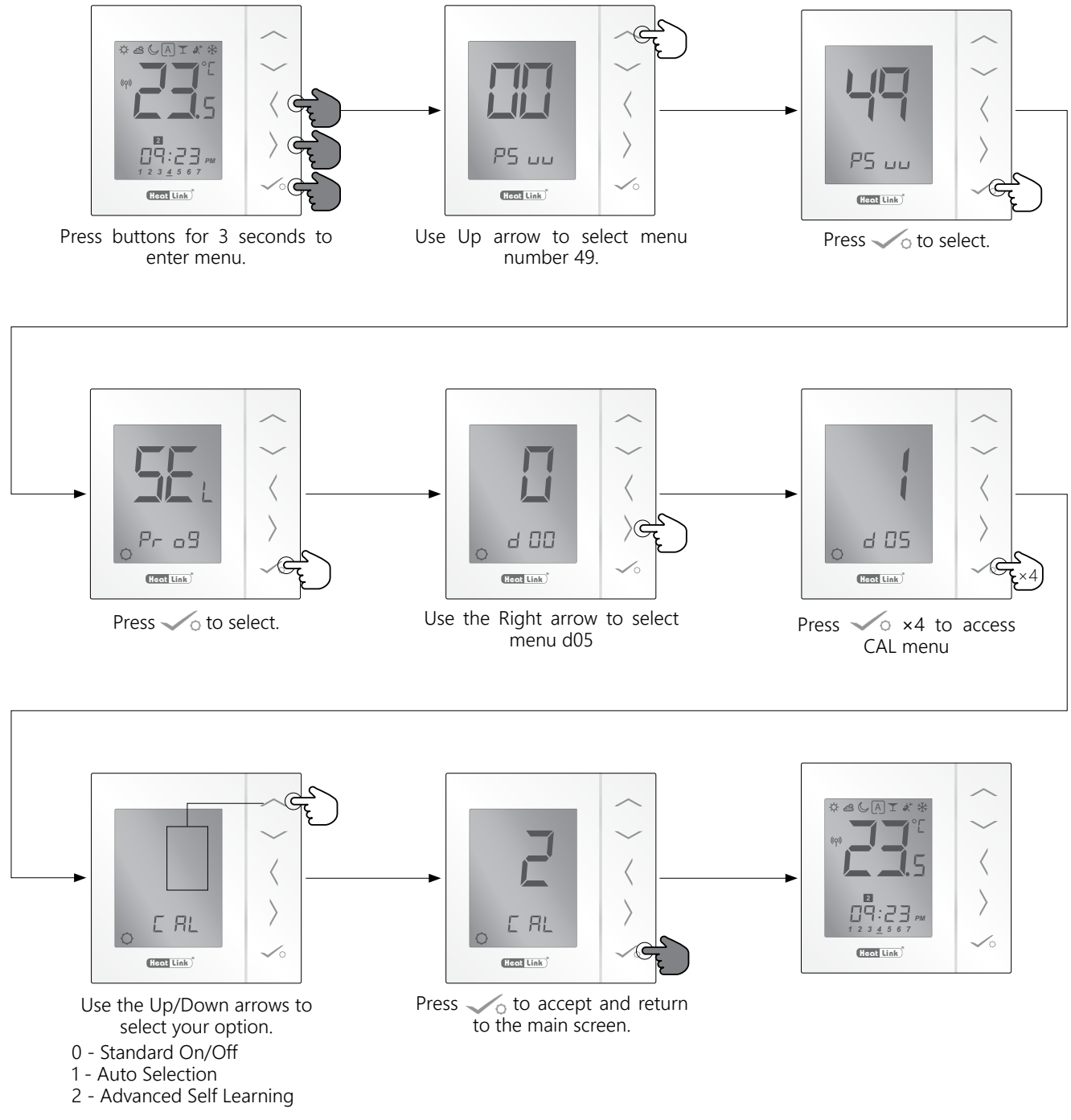
Online - Changing the Control Method Manually

The control method can be changed manually on the thermostat in an Online system.



Offline - Changing the Control Method Manually

To change the control method manually in an Offline system, follow the steps below.



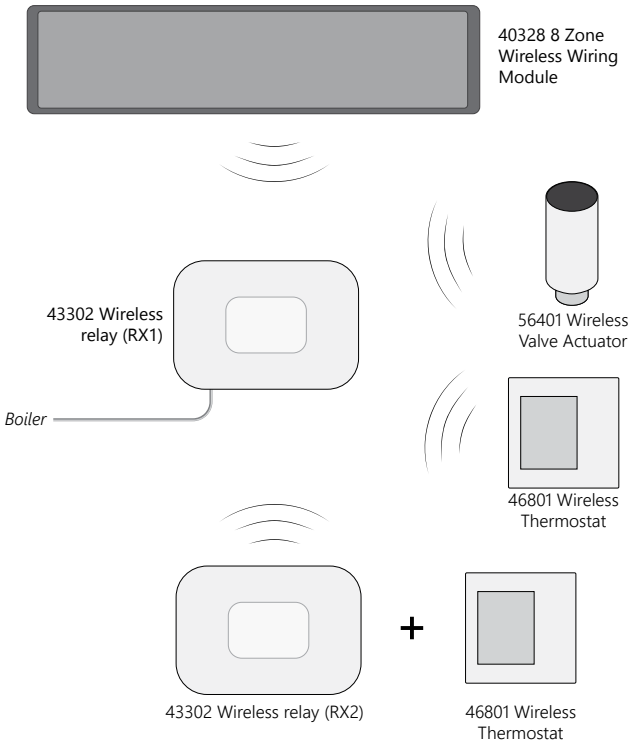
Wireless Receiver Mode Configuration Diagrams

A single Smart System supports only one wireless relay in RX1 (boiler switching) mode, and one in RX2 mode (single room).

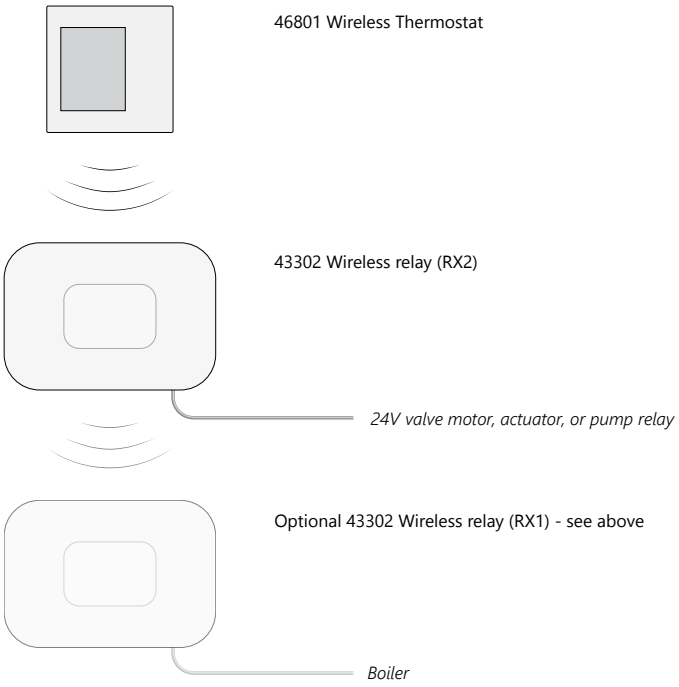
In RX1 mode the relay can be paired directly to a single thermostat, or receive signals from all connected devices when there is a call for heat. See page 36 for pairing instructions.

In RX2 mode the relay is paired directly to a single thermostat, and controls a 24V valve motor, actuator, or pump relay for single room heating control. See page 38 for pairing instructions.

RX1 - Boiler Switching



RX2 - Single Room



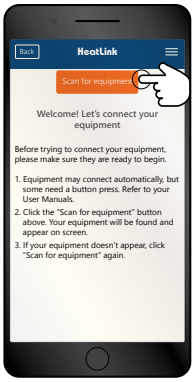
Setup - Wireless Receiver (RX1 - Boiler Switching)

To pair the Wireless Relay (RX1) with either the Underfloor Heating system, or the Radiator system, follow Steps 1-2 below as well as the pairing process steps for the system. For a dedicated RX1 system, continue with Steps 3-5.

If pairing with a Wireless Relay in RX2 mode, see page 38 to pair the RX2 receiver with the thermostat first.

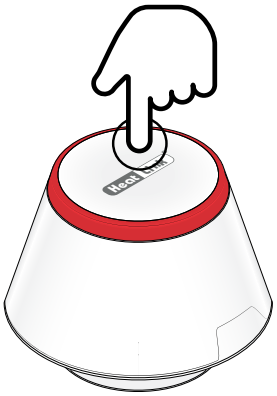
Online

Step 1 On the HeatLink App open the drop down menu, select Equipment -> All Equipment -> Add Equipment -> Scan For Equipment.



Offline

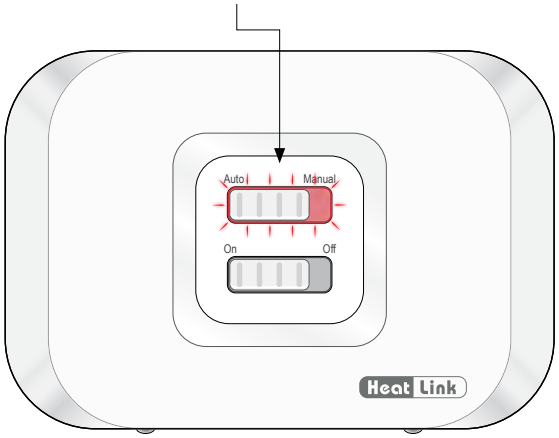
Step 1 Put your system into Pair Mode by pressing the Multi Button for 5 seconds.



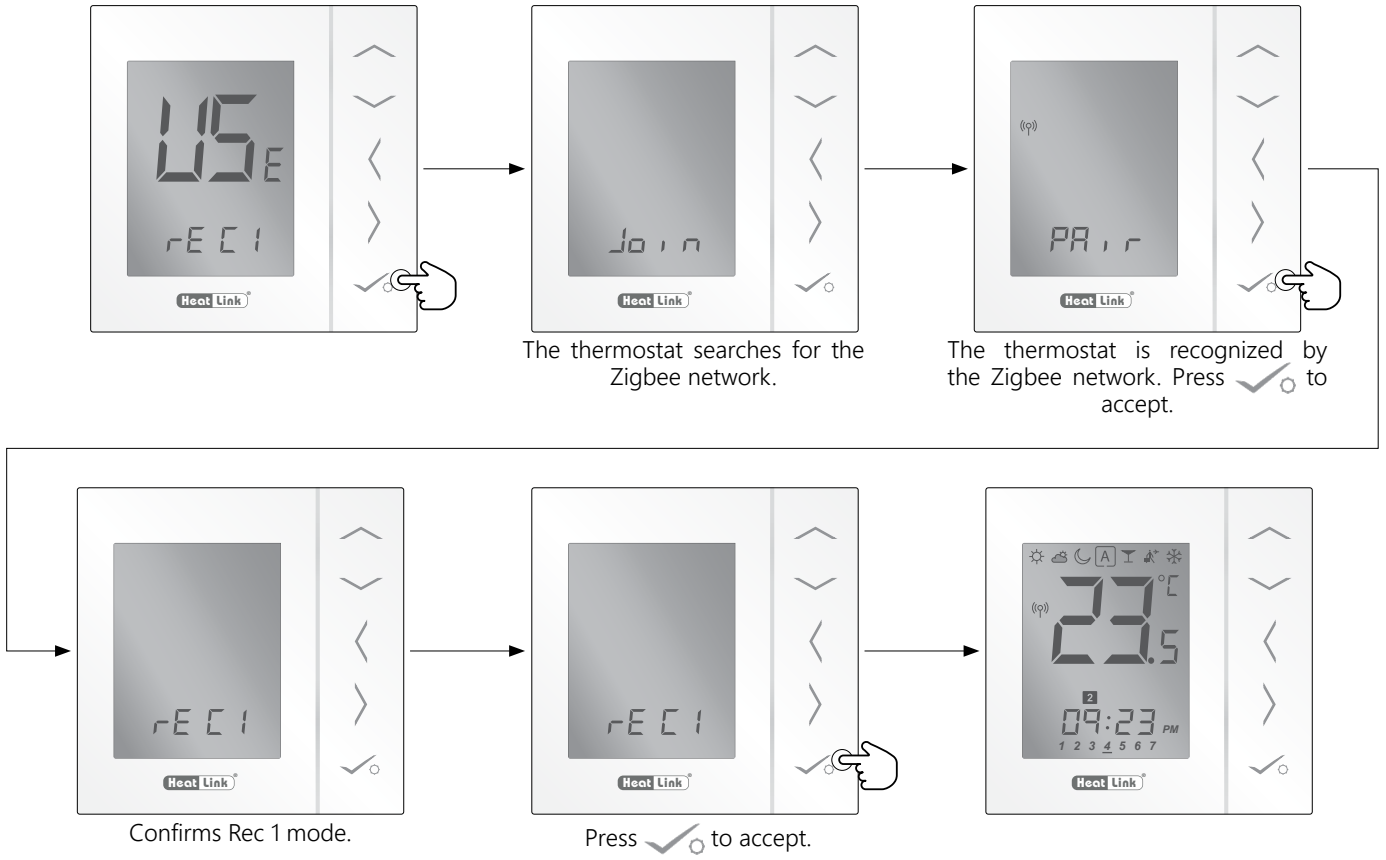


The Wireless Internet Gateway LED will flash red.

Step 2 Ensure the Wireless Relay is On, in Auto mode, wired to your boiler, and with the switch in the RX1 position (see page 26). The red LED will flash.



Step 3 Put the Thermostat into REC 1 mode (see page 24), then Pair with the system.



The thermostat searches for the Zigbee network.

The thermostat is recognized by the Zigbee network. Press ✓ to accept.

Confirms Rec 1 mode.

Press ✓ to accept.

Online

Step 4 Select the Relay on the app, and give it a descriptive name. The Wireless Internet Gateway LED will turn solid blue.

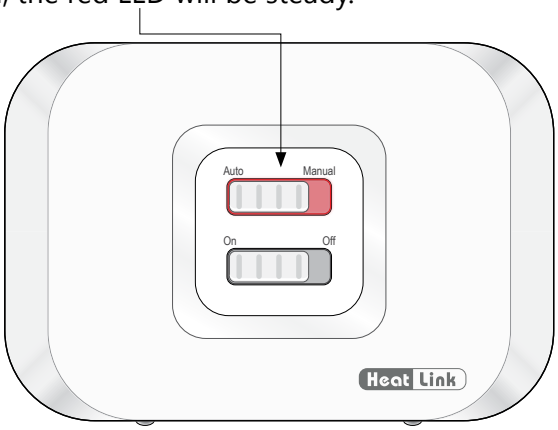


Offline

Step 4 Exit Pairing Mode by pressing the Multi Button on the Wireless Internet Gateway. The LED will turn solid red.



Step 5 Once the Relay is paired, the red LED will be steady.



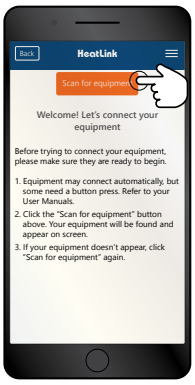
Set Up - Wireless Relay (RX2 - Single Room)

Each system supports only one receiver in RX1 mode, and one in RX2 mode.

The Wireless Relay (RX2) can be used with another Wireless Relay (RX1) to operate the motorized valve, and the boiler switching, respectively.

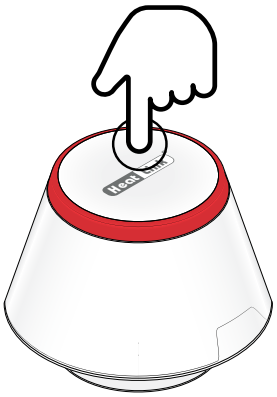
Online

Step 1 On the HeatLink App open the drop down menu, select Equipment -> All Equipment -> Add Equipment -> Scan For Equipment.



Offline

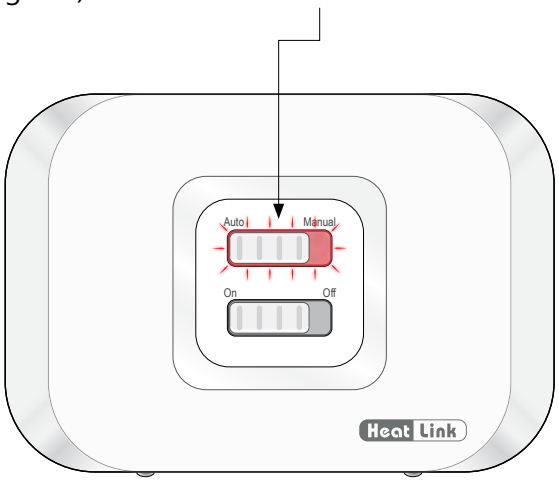
Step 1 Put your system into Pair Mode by pressing the Multi Button for 5 seconds.



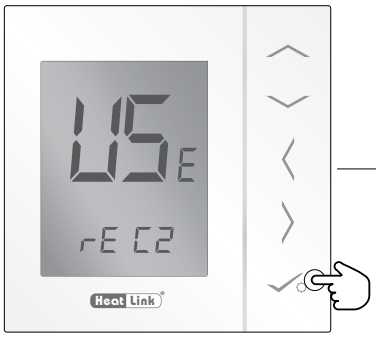


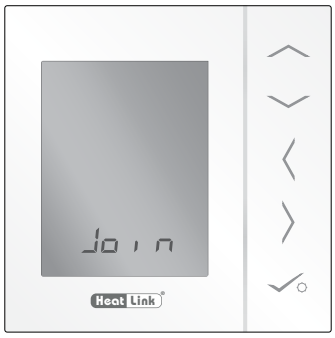
The Wireless Internet Gateway LED will flash red.

Step 2 Ensure the Wireless Relay is On, in Auto mode, wired to your desired device, and with the switch in the RX2 position (see page 28). The red LED will flash.

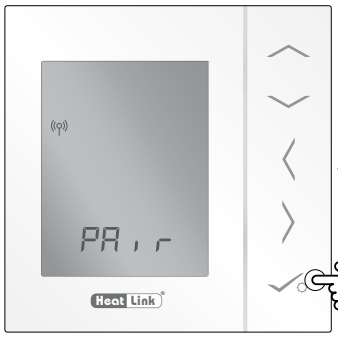


Step 3 Put the Thermostat into REC 2 mode (see page 24), then Pair with the system.

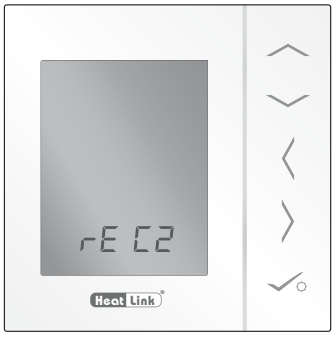




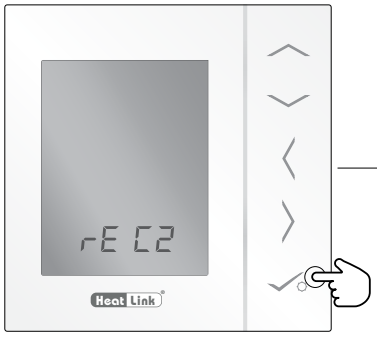
The thermostat searches for the Zigbee network.



The thermostat is recognized by the Zigbee network. Press ✓ to accept.



Confirms Rec 2 mode.



Press ✓ to accept.



Online

Step 4 Select the Relay on the app, and give it a descriptive name. The Wireless Internet Gateway LED will turn solid blue.

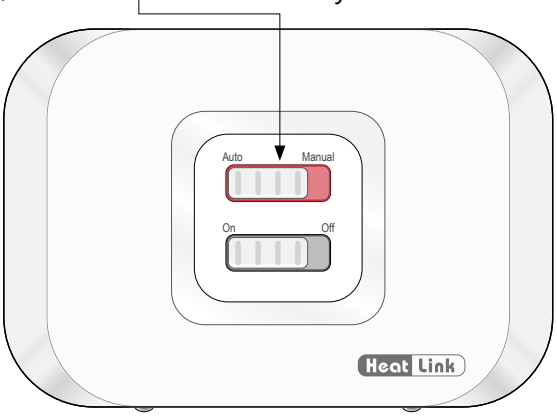


Offline

Step 4 Exit Pairing Mode by pressing the Multi Button on the Wireless Internet Gateway. The LED will turn solid red.



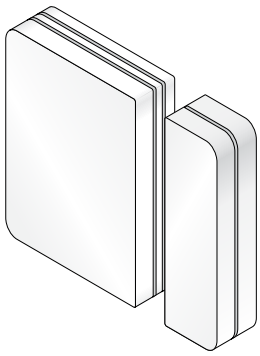
Step 5 Once the Relay is paired, the red LED will be steady.



Set Up - Door/Window Sensor

To put the door/window sensor into pair mode, put your system into pair mode, remove the sensor cover, and pull out the battery tab. The sensor will pair with the system (see page 21).

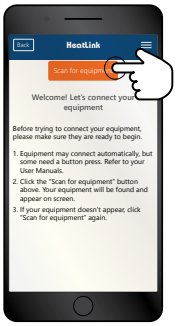
Use the app to create your settings. The door/window sensor can only be used with Online systems.



Set Up - Smart Plug

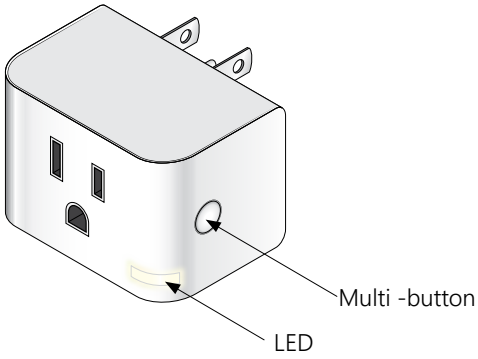
The Smart Plug can only be used in an Online system, and allows you to control the on/off function of some devices through the HeatLink app, and/or via programmed commands. It is is also a Repeater, adding functionality over the standalone repeater. See the app for more details.

Step 1 On the HeatLink App open the drop down menu, select Equipment -> All Equipment -> Add Equipment -> Scan For Equipment.



Step 2 Plug the Smart Plug into an outlet. It may take several seconds for the system to recognize the device.

Step 3 The Smart Plug is now paired, and can be programmed/controlled using the app.



Smart Plug LED Indications

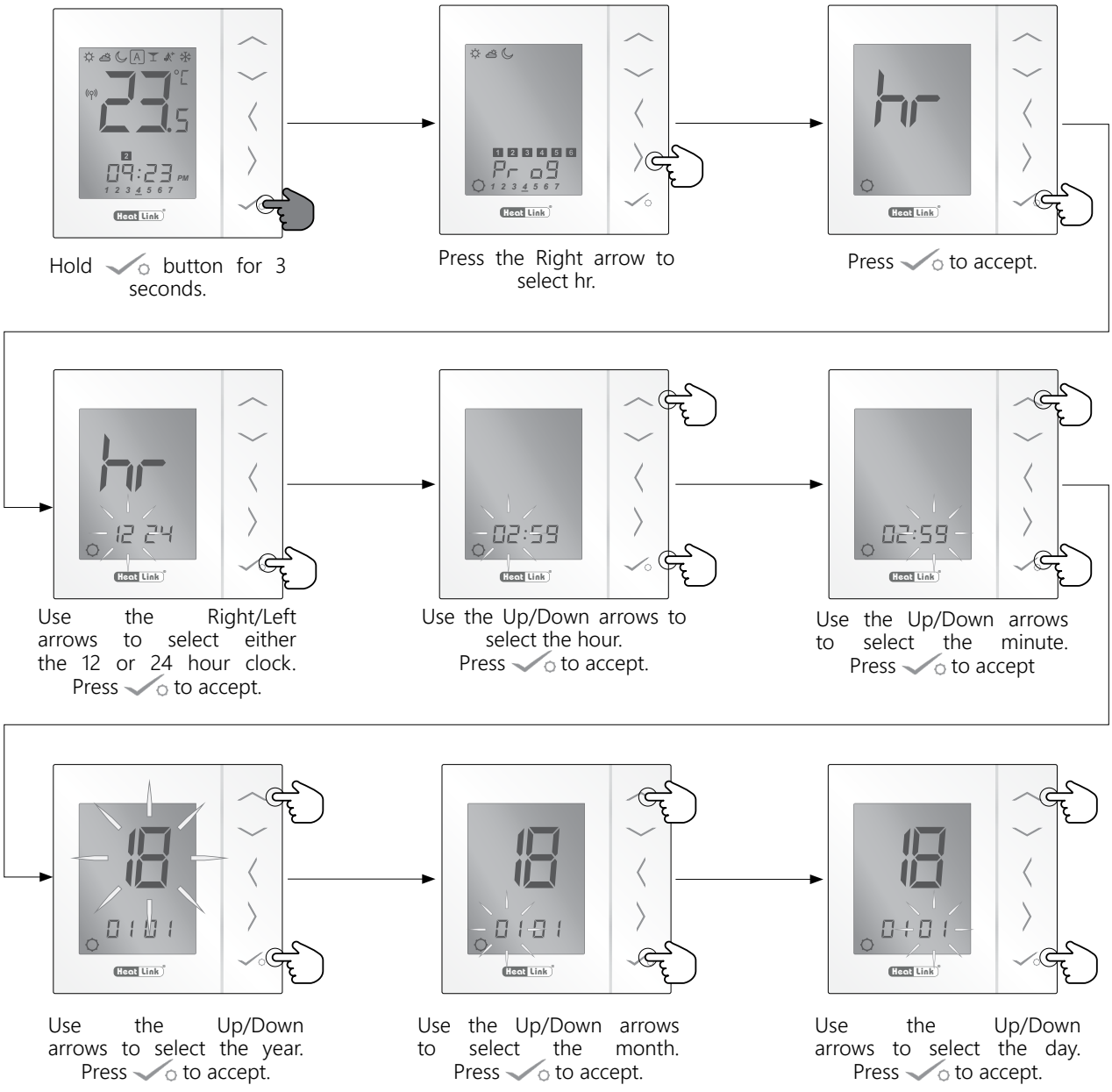
ON for 2 - 4 sec., then OFF	Switch power up, Switch is OFF
3 flashes	Searching for network to join
Steady ON	Switch is ON
Steady OFF	Switch is OFF
ON, flash OFF every 2 sec	Switch is ON, no network
OFF, flash ON every 2 sec	Switch is OFF, no network

Note: In an Online configuration the thermostat settings must be changed in the app. In order to manually change settings the wireless Gateway must be poerwed down (unplugged) to fully disconnect it from the network.

Offline - Thermostat Set Up

If you are using the Smart System in Offline mode, you will need to set the time, heating schedules, and temperature on the thermostat. Other parameters can also be accessed to customize your heating programs.

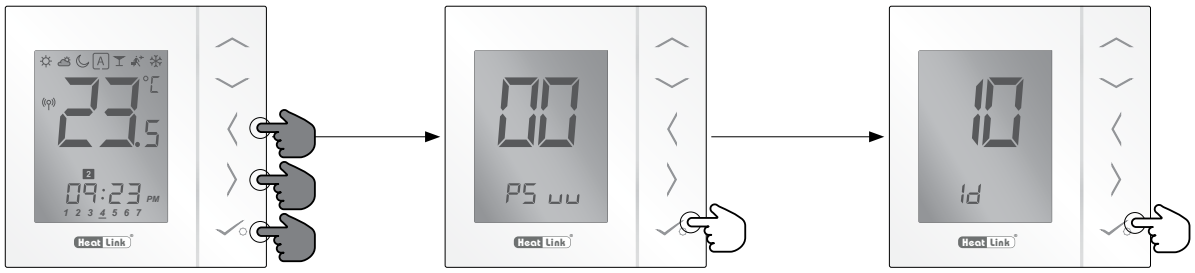
Offline - Setting the Time



Note: Once all thermostats are paired, setting the time and date on one device will populate the time and date on all others.

Other settings, such as clock format, ºC or ºF, and heating settings still need to be set individually on each thermostat.

Offline - ID Mode



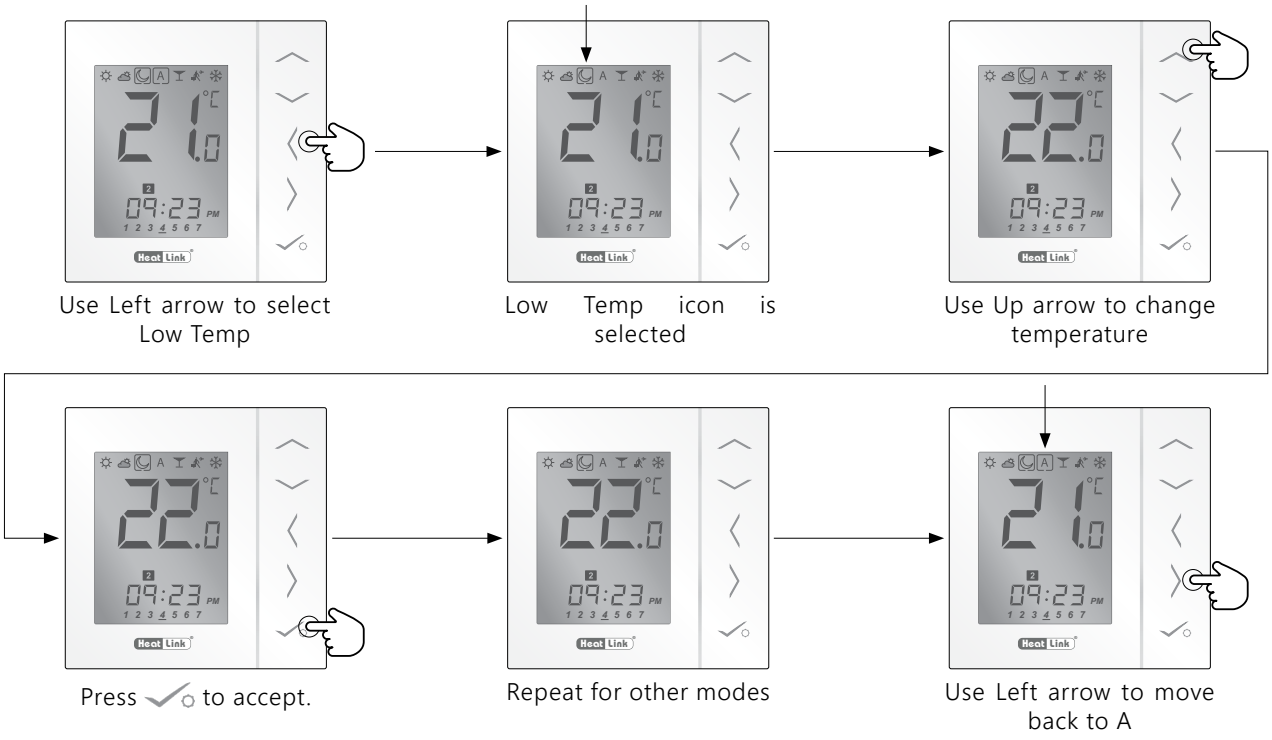
Press buttons for 3 seconds to enter menu.

Press ✓ to enter ID mode. All devices paired to the thermostat will flash their LEDs.

Devices will stay in ID mode for 10 minutes, or until ID mode is exited by pressing ✓ once.

Offline - Setting Mode Temperatures

The HeatLink wireless thermostat includes several different preprogrammed heating modes (see page 12) that can be customized to suit your heating needs. To set the temperature for each mode in an Offline system, follow the steps below. For customization of the heating schedule see "Offline - Heating Schedules" on page 44.



Use Left arrow to select Low Temp

Low Temp icon is selected

Use Up arrow to change temperature

Press ✓ to accept.

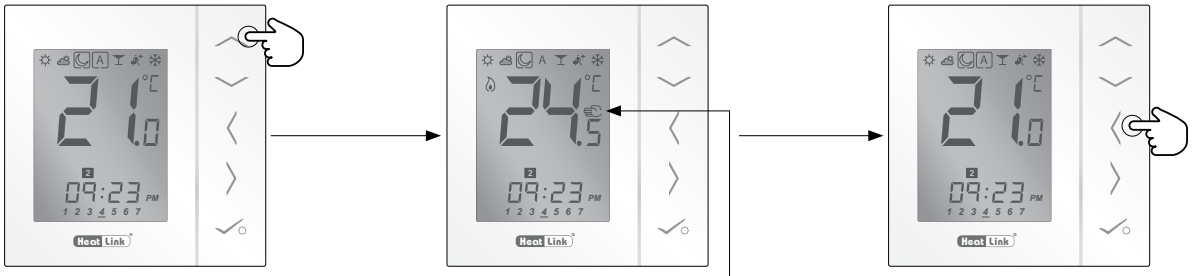
Repeat for other modes

Use Left arrow to move back to A

Manual Set Point Temperature Override

To change the set point temperature for a given zone, use the following procedure.

Note: Radiant systems do not react the same way as forced air, and will take time to adjust to the new setting.



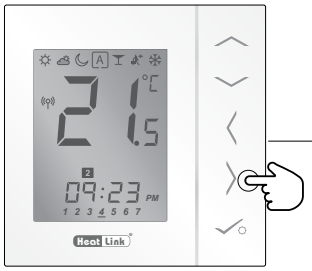
Use Up/Down arrows to adjust temperature. Press ✓ to accept.

Heat source will turn on, and the manual override icon will appear.

To return to the current heating program, press the left arrow once.

Other Heating Modes

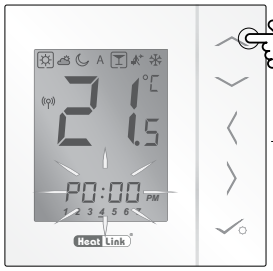
Party Mode - Enables high comfortable temperature for a period of up to 9hrs and 50 minutes, allowing the user to bypass heating schedules for extended periods of comfort outside of the normal heating schedule.



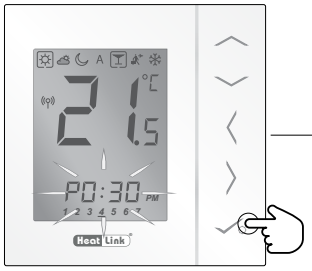
Press right arrow to select Party mode



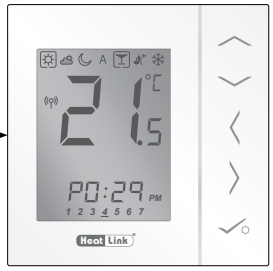
You will now be able to select the duration.



Use the Up arrow to select duration, up to 9hrs 50 mins.

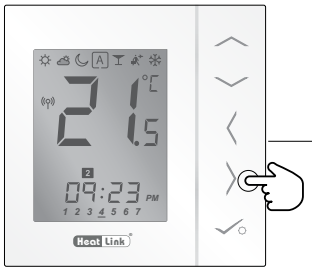


Press check to accept the duration.



The timer will countdown to the end of Party Mode.

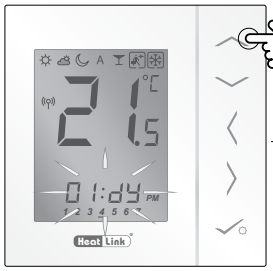
Vacation Mode - Enables frost protection mode for periods of extended absence. Typically this is set to 5ºC, but can be changed as needed (see "Offline - Setting Mode Temperatures" on page 42).



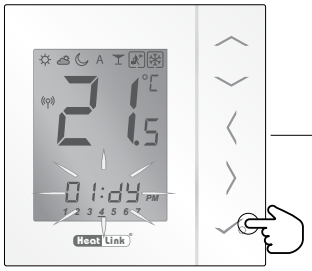
Press right arrow to select Vacation mode



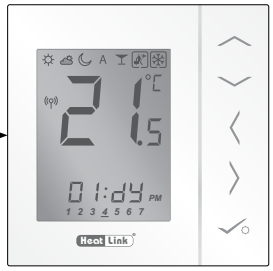
You will now be able to select the duration (days).



Use the Up arrow to select the number of days.



Press check to accept the duration.



The timer will countdown to the end of Vacation Mode.

Offline - Heating Schedules

The HeatLink® Wireless Programmable Thermostat is factory programmed with a default 5/2 heating schedule (see below for details), which can be customized or changed to suit your heating needs. Each schedule is divided into four schedule blocks (a fifth and sixth block can be added to each heating schedule, or blocks can be removed by setting the time to --:-- during heating schedule set up - see page 45).

Default Weekday Schedule

Heating Mode	Default Temp.	Active Heating Mode				
Schedule Block		1	2	3	4	
☼	22		■		■	
☁	19					
☾	17	■		■		■
Time (24hr clock)		00:00	07:00	09:00	17:00	23:00

Default Weekend Schedule

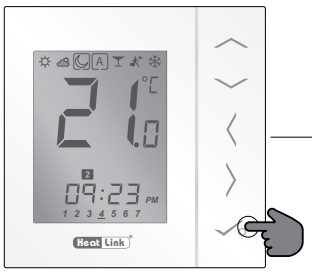
Heating Mode	Default Temp.	Active Heating Mode				
Schedule Block		1	2	3	4	
☼	22		■		■	
☁	19			■		
☾	17	■				■
Time (24hr clock)		00:00	08:00	09:00	17:00	23:00

Heating Programs

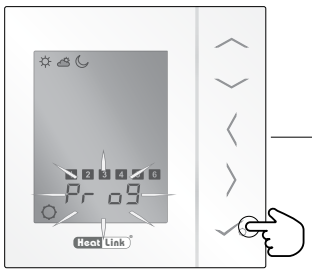
Icon	Type	Description
	5/2	Program separate heating schedules for weekdays, and the weekend.
	7 days	Program a single heating schedule for all days of the week.
	Daily	Program individual heating schedules for each day of the week.

Offline - Setting Heating Schedules

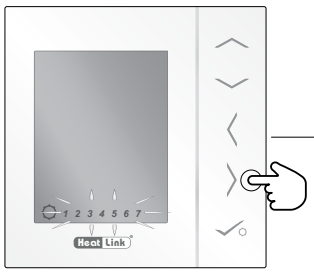
Use the following steps to set the heating schedule on your HeatLink® Wireless Programmable thermostat. To set the desired temperature for each mode see"Offline - Setting Mode Temperatures" on page 42.



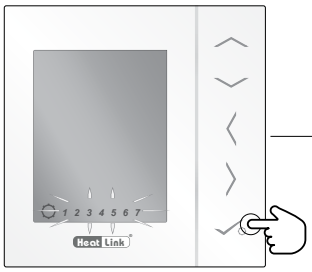
Press and hold the ✓ button for 5 seconds.



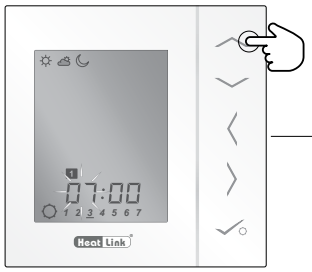
Press the ✓ button to select "Prog".



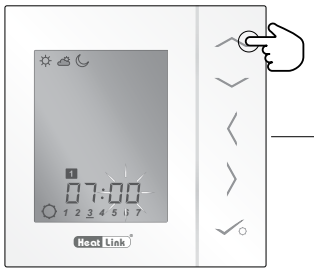
Use the Left/Right arrow buttons to select program schedule (see "Heating Schedule Programs" on page 44).



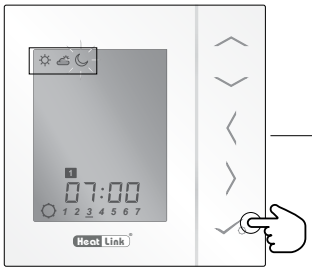
Press ✓ to confirm.



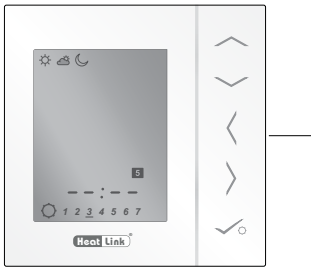
Use the Up/Down arrows to enter the program start time hour. Press to ✓ confirm.



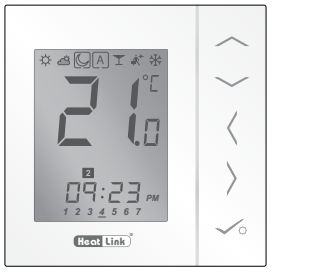
Use the Up/Down arrows to enter the program start time minute. Press ✓ to confirm.



Select the desired heating mode. Press to ✓ confirm.
Repeat for all programs.



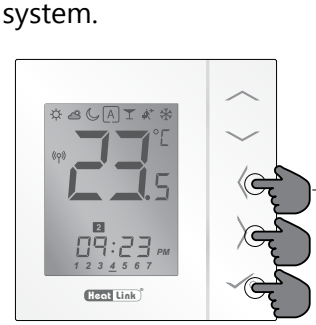
Add extra program blocks as needed (up to 6 total), or remove blocks by setting time to "--:--".



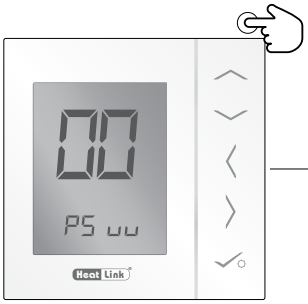
Installer Parameters Menu

The installer parameters menu can be used to further customize the system settings, and should only be used by a qualified installer. See "Thermostat Functions & Parameters" on page 48.

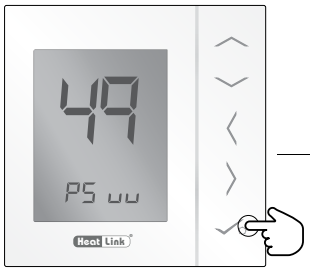
Note: Only available for an Offline System. Use the HeatLink Smart System app to change the parameters for an Online system.



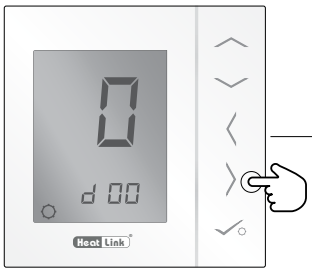
Hold buttons for 3 seconds.



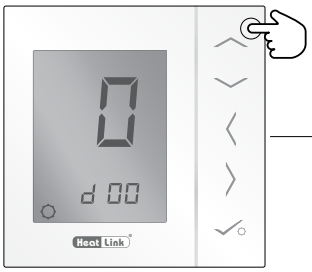
Use the Up arrow to select menu 49.



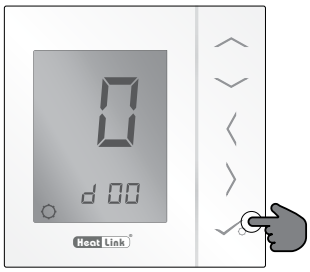
Press ✓ 5 times to reach the d00 screen.



Use the Left/Right arrows to select the parameter you wish to change (see page 48).

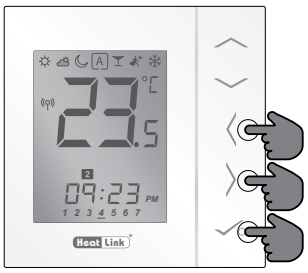


Use the Up/Down arrows to change the parameter (see page 48).

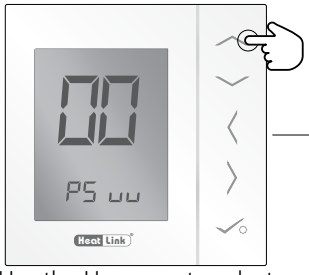


Once you have completed your changes, hold ✓ for 3 seconds to exit to the main screen.

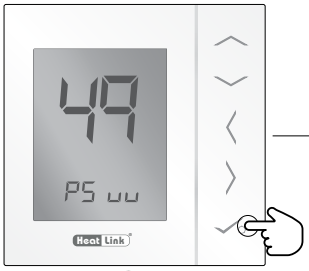
Offline - Select °F or °C



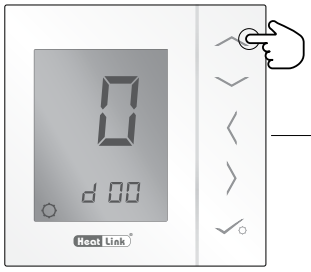
Hold buttons for 3 seconds.



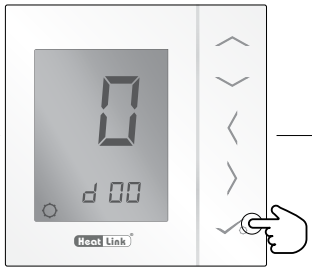
Use the Up arrow to select menu 49.



Press ✓ 5 times to reach the d00 screen.



Use the Up/Down arrow to select 0 for °C or 1 for °F.

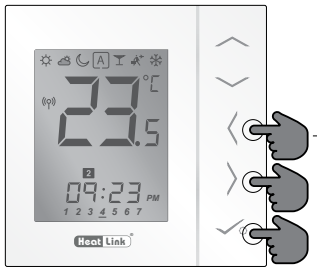


Accept by pressing ✓ to return to the main screen.

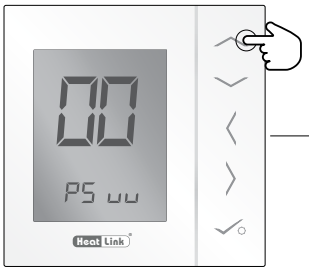


Set Up Remote Sensor

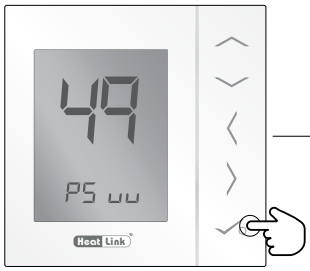
Use these steps to set up the remote sensor for your thermostat. For sensor installation instructions see "Installation - Wireless Digital Thermostat" on page 10.



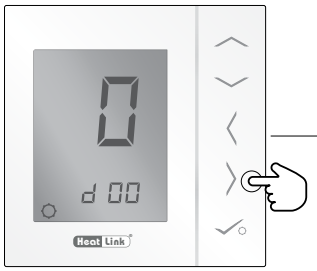
Hold buttons for 3 seconds.



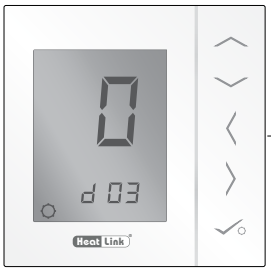
Use the Up arrow to select menu 49.

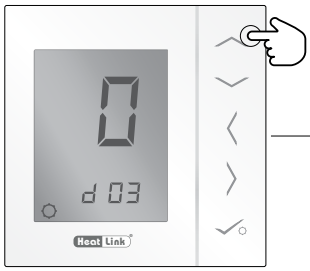


Press ✓ 5 times to reach the d00 screen.



Use the Right arrow to select d03



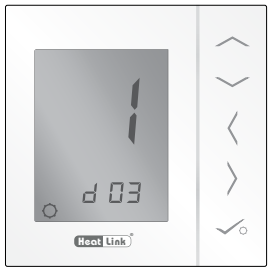


Use the Up/Down arrows to change the parameter:



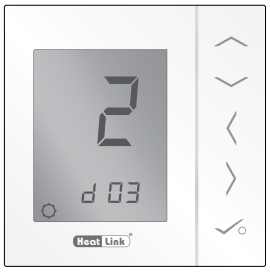
0 = no sensor
Skip to the last step.

Or



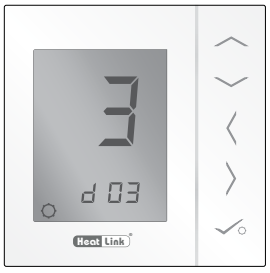
1 = remote sensor connected
Press Right arrow to select d04.

Or

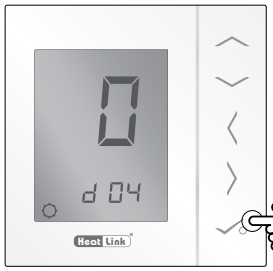


2 = DEW point sensor
Skip to the last step.

Or

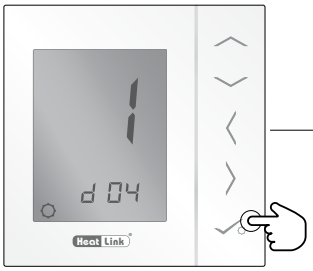


3 = Occupancy Sensor
Skip to the last step.

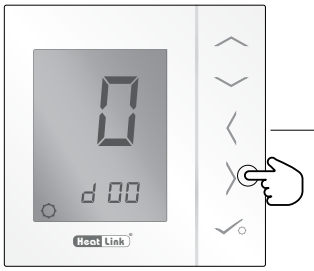


Select 0 to set the remote sensor as an air sensor. The thermostat's internal sensor will no longer operate.

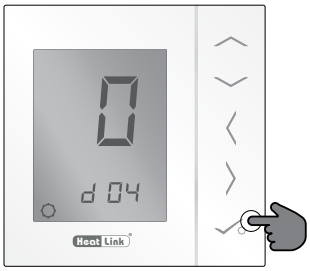
Or



Select 1 to set the remote sensor for floor protection. The air temperature will be measured by the thermostat's internal sensor.



To set the Floor Sensing Protection limits use menus d14, d15, and d16 (see table on pg 49 for details).



Once you have completed your changes, hold ✓ for 3 seconds to exit to the main screen.

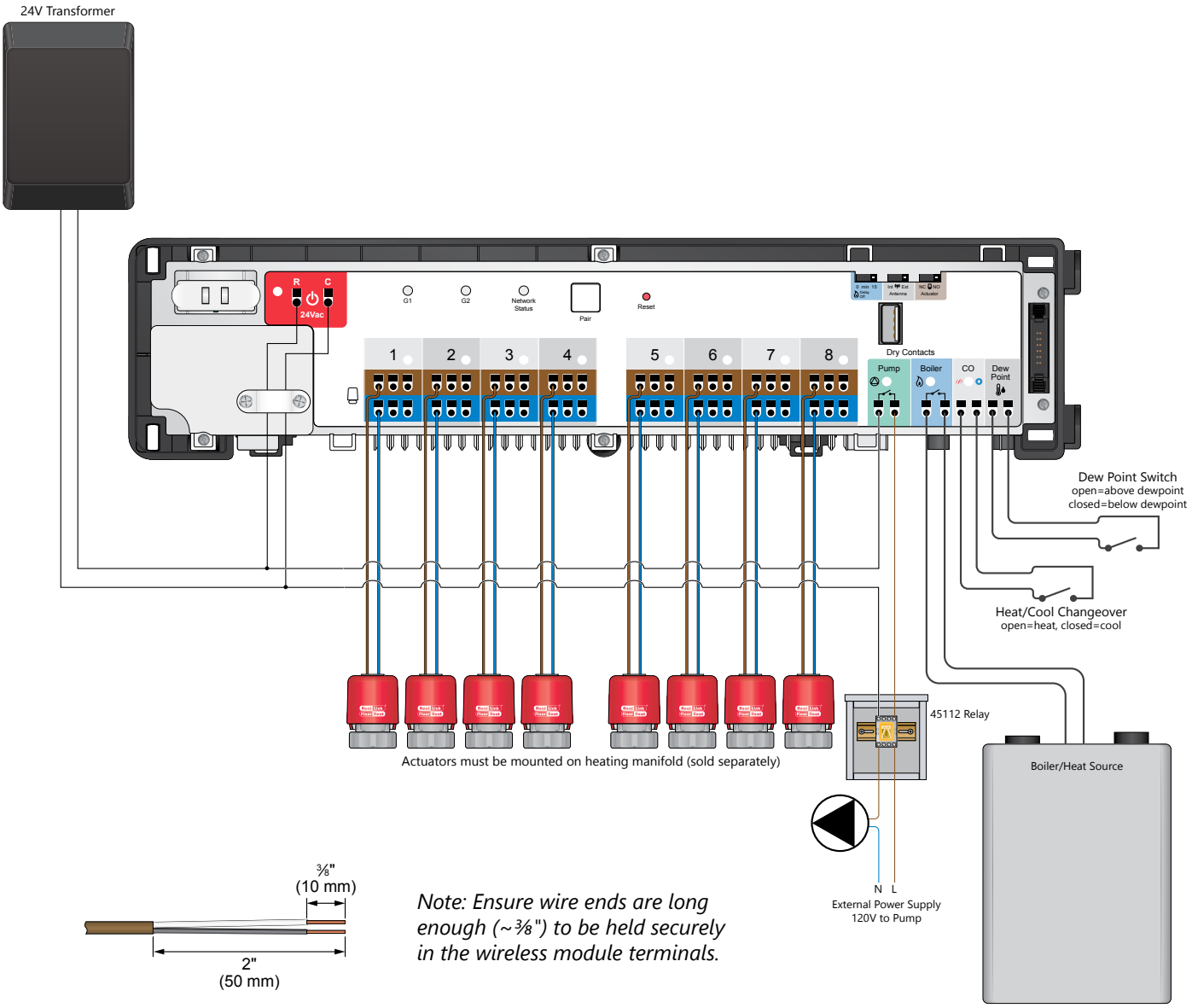
Thermostat Functions & Parameters

Note: When using an Online System, all parameters must be set in the HeatLink app.

dxx	Function	Parameter/ Values	Details	Default Value	Availability			
					rlay	rad	rec1	rec2
d00	Select °C/°F	0	Select °C	0	•	•	•	•
		1	Select °F					
d01	Heating Control	0	PWM (Pulse-Width Modulation)	0	•		•	•
		1	ON-OFF: 0.5°C (±0.25°C) / 1°F (±0.5°F)		•	•	•	•
		2	ON-OFF: 1.0°C (±0.5°C) / 2°F (±1°F)		•	•	•	•
d02	Room Temp. Offset	-3.0°C to +3.0°C (-6°F to +6°F)	Offset room temperature	0.0°C (0°F)	•	•	•	•
d03	Remote sensor probe (S1/ S2)	0	Remote sensor probe not connected	0	•	•	•	•
		1	Remote sensor probe connected		•	•	•	•
d04	Remote Sensor Type (d03 must be set to 1)	0	The remote sensor is used to read the air or floor temperature. The thermostat's internal sensor will no longer operate.	0	•	Fixed to 0 if d03=1 n/a if d03≠1		
		1	The remote sensor is used for floor protection, and the air temperature is measured by the thermostat's internal sensor.		•			
d05 (rlay)	Cooling Control	1	ON-OFF: 0.5°C (±0.25°C) / 1°F (±0.5°F)	2	•			
		2	ON-OFF: 1.0°C (±0.5°C / 2°F (±1°F)		•			
d05 (rad)	Radiator Control	0	On/Off	1		•		
		1	Auto			•		
		2	Auto-adapt			•		
d06	N/A	N/A	N/A	N/A				
d07	Valve Protection	0	VP disabled	1	•	•	•	•
		1	VP enabled		•	•	•	•
d08	Frost Setpoint	5.0°C - 17°C (41°F - 63°F)	Adjustable	5.0°C (41°F)	• (heat mode only)	•	•	•
d09	Hour Format	0	12hr clock	1	•	•	•	•
		1	24hr clock					
d10	Time Zone		Select Time Zone from list	0	•	•	•	•

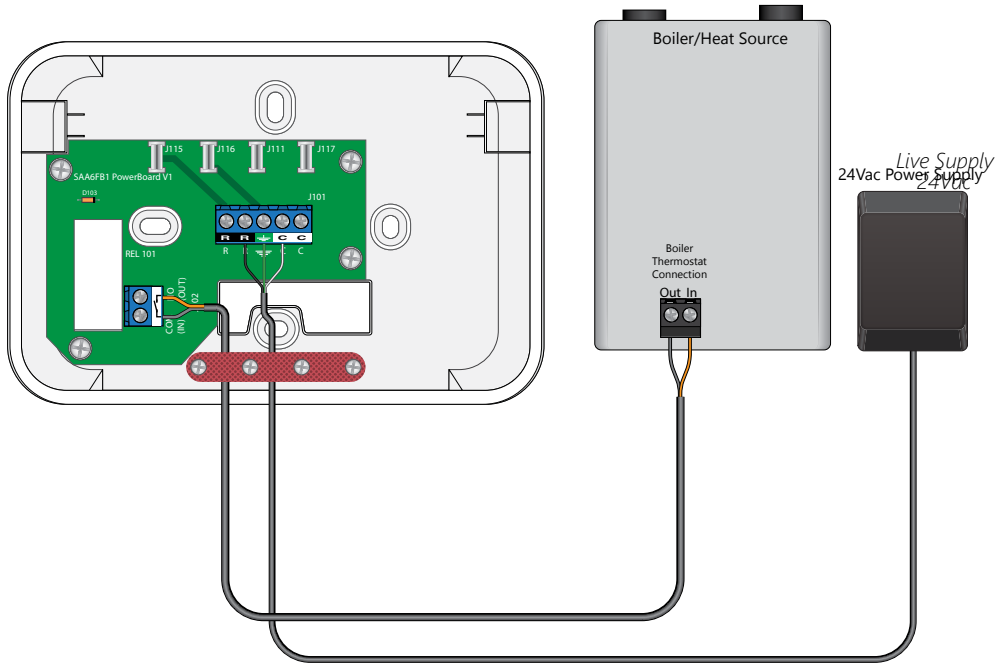
dxx	Function	Parameter/ Values	Details	Default Value	Availability			
					rlay	rad	rec1	rec2
d11	Daylight Saving Time (DST)	0	Off	1	n/a	n/a	n/a	n/a
		1	On					
d12	Heating Setpoint Max.	17.5°C - 35.0°C (42°F - 95°F)		35°C (95°F)	•	•	•	•
d13	Cooling Setpoint Max.	5.0°C - 40.0°C (41°F - 104°F)		5°C (41°F)	•	•	•	•
d14	Floor Sensor Protection Limit (heating high limit - HL	15.0°C - 45.0°C (59°F - 113°F)	Turn off relay output when flow sensing temperature is above protecting limit - step is 0.5°C (1°F)	27°C (81°F)	• (if d04=1 and d03=1)	•	•	•
d15	Floor Sensor Protection Limit (heating low limit - LL)	6.0°C - 40.0°C (43°F - 104°F)	Turn on relay output when flow sensing temperature is below protecting limit - step is 0.5°C (1°F)	10°C (50°F)	• (if d04=1 and d03=1)	•	•	•
d16	Floor Sensor Protection Limit (cooling)	6.0°C - 45.0°F (43°F - 113°F)	Turn off relay output when flow sensing temperature is below protecting limit - step is 0.5°C (1°F)	6°C (43°F)	• (if d04=1 and d03=1)	•	•	•
d17	Enable Unlock from Thermostat	0	No	1 (Yes)	•	•	•	•
		1	Yes					
d18	Heat/Cool Mode Selection	0	No connection	0	n/a	n/a	n/a	n/a
		1	Connection					
d19	Delay Start				n/a	n/a	n/a	n/a
d20	Min. Turn Off Time (Only when d01=0)	1	Heating 1 ~ 300	Heating: 1	• (if d01=0)	n/a	• (if d01=0)	• (if d01=0)
		180	Cooling 180 ~ 300	Cooling: 180				
d21	Allow Adjustment of Setpoint when Device Buttons are Locked	0	No	0 (No)	•	•	•	•
		1	Yes					

Wiring - StatLink® 8 Zone Wireless Wiring Center

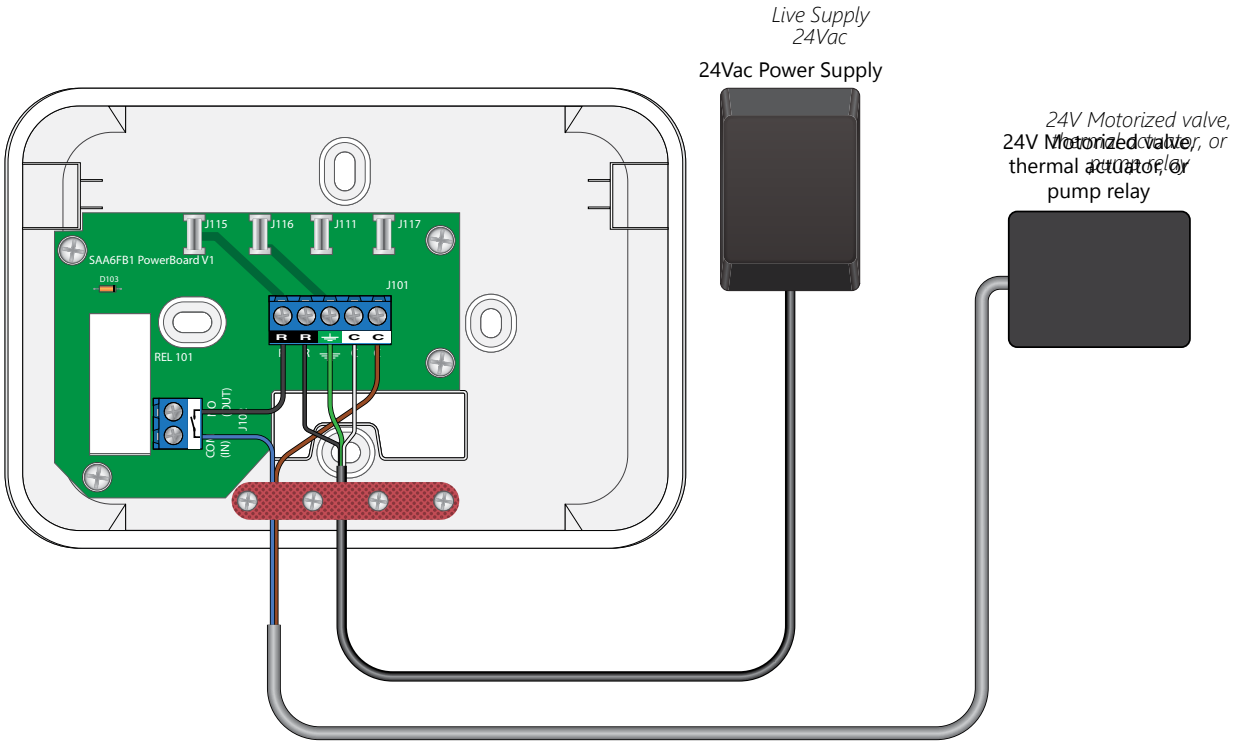


Drawing not to scale

Wiring - Wireless Relay (RX1)



Wiring - Wireless Relay (RX2)



Drawings not to scale

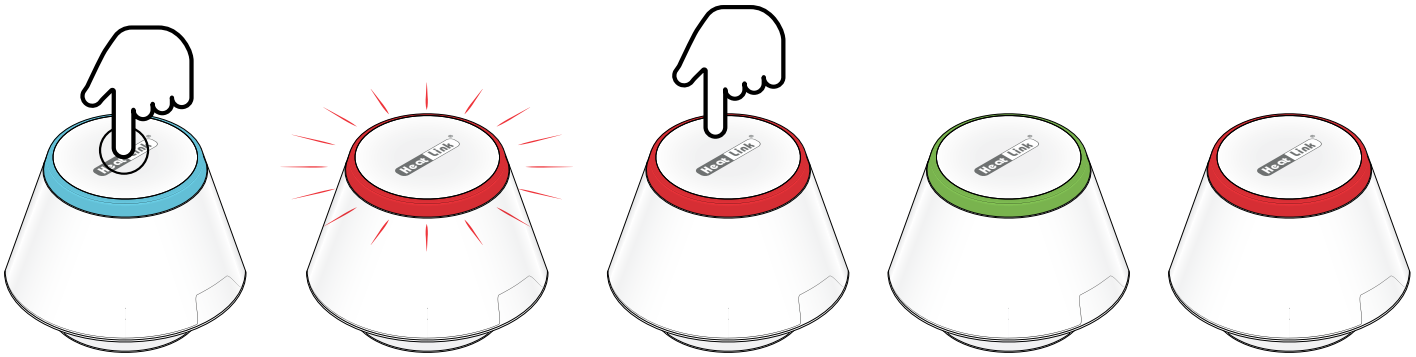
Factory Reset

If system issues cannot be resolved using other means it may be necessary to reset some or all components to their factory defaults.

Note: Before resetting any component from an Online system you must remove it from the app. Resetting the gateway or wiring module requires that all other components it is paired to also be reset - failing to do so may result in component errors.

Reset the Wireless Internet Gateway

If you need to reset your Wireless Internet Wireless Internet Gateway to the factory defaults, follow the steps below. Doing this will wipe any devices from your system, and you will have to go through the pairing process again to set up your system from the start.



Press and hold the multi button.

The LED ring will flash red. Release the multi button

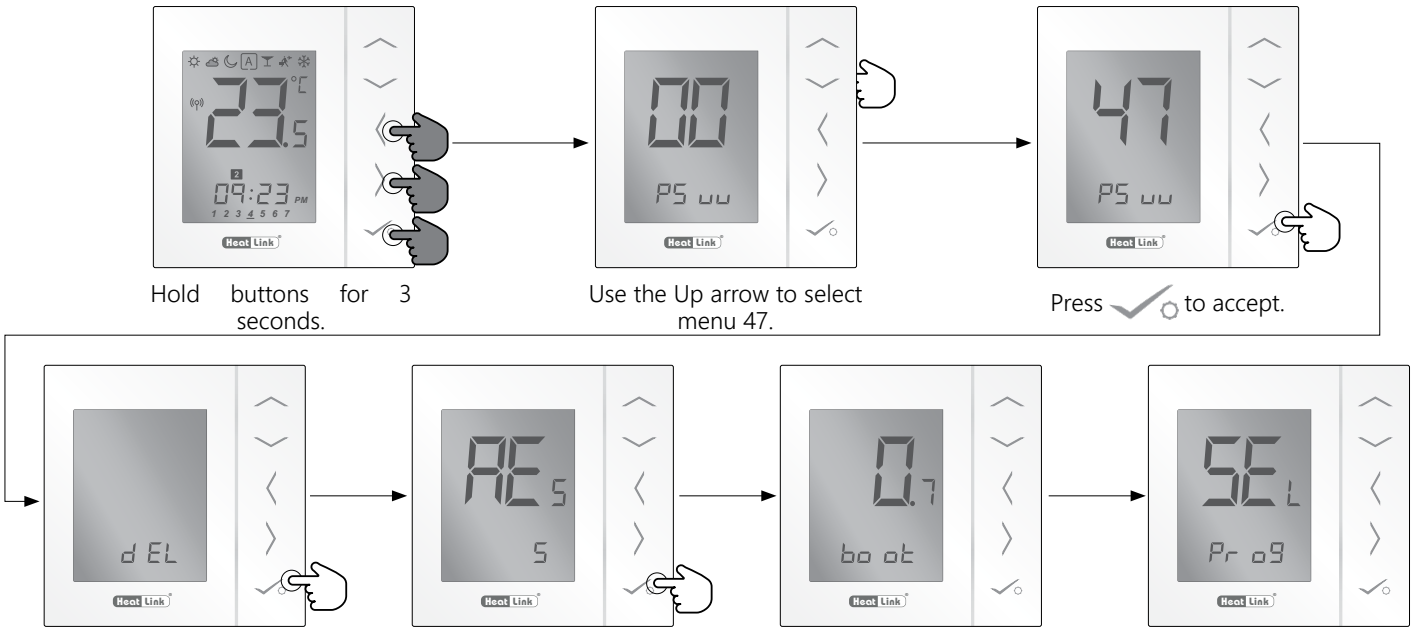
when the LED ring turns solid red (~10 seconds). Once the factory defaults are loaded the

LED ring will turn solid green.

The LED will turn solid red when it is fully reset and ready to be put into pairing mode.

Reset Thermostats

This process will remove the thermostat from your Smart System and reset it to it's factory defaults, at which point it can be re-paired with the system in whichever configuration is needed.



Hold buttons for 3 seconds.

Use the Up arrow to select menu 47.

Press ✓ to accept.

Press ✓ to accept.

Press ✓ to accept.

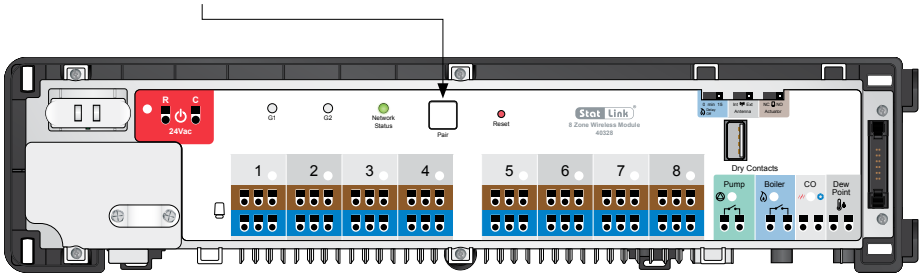
The thermostat will go through the boot process.

The thermostat is now ready to pair.

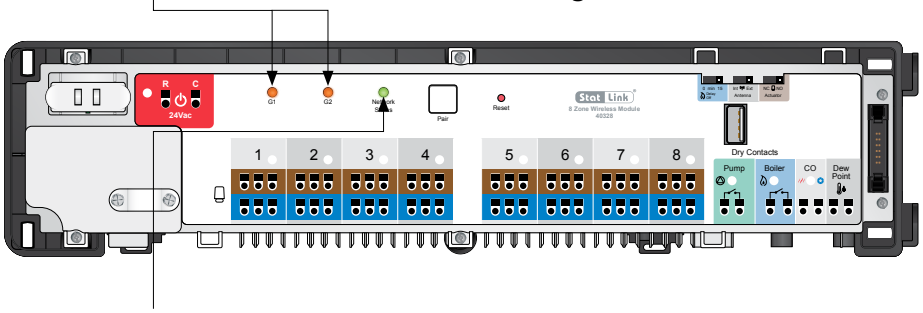
Reset StatLink® 8 Zone Wireless Module

Note: When deleting devices from the wireless network, you must delete all connected devices first. ie. Before deleting the StatLink® 8 Zone Wireless Module be sure to delete the thermostats and Wireless Relays connected to it first.

Step 1 Press and hold the Pair button for 20 seconds.



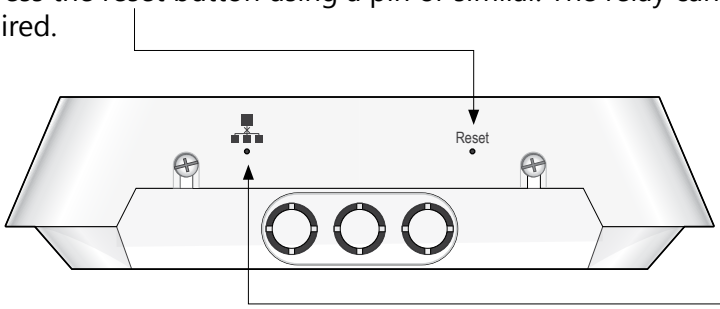
Step 2 The G1 and G2 LEDs will flash red, turn solid red, then go off (~15 seconds).



Step 3 When the Network Status LED flashes 1:1 unplug the device to complete the reset process.

Reset Wireless Relay

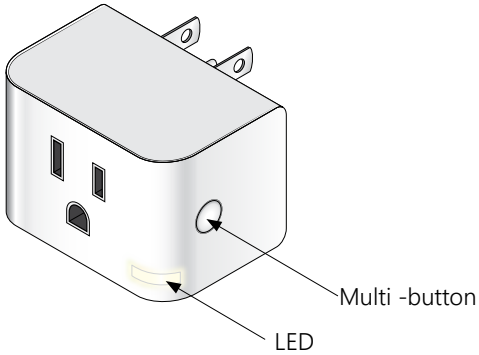
If the relay stops operating, press the reset button using a pin or similar. The relay can then be inspected, and re-paired to the system if desired.



If the relay needs to be removed from your Smart System or replaced, press the "delete from network" button for 10 seconds using a pin or similar.

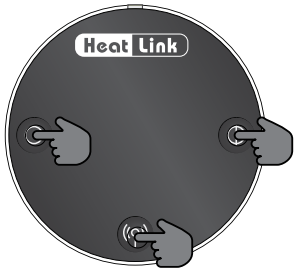
Reset the Smart Plug

To reset the Smart Plug to its factory settings, hold the multi-button down while plugging in the switch, and release it when the LED comes on.

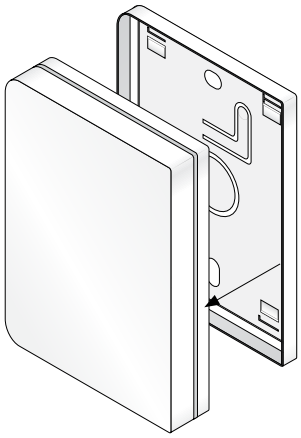


Reset Wireless Valve Actuator

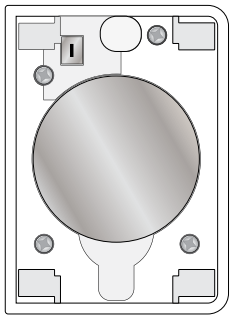
To reset the wireless valve actuator press the Open, Close, and Pairing buttons together for 20-25 seconds until it flashes red, then remove the batteries for 5 seconds.



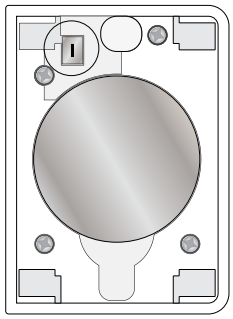
Reset the Door/Window Sensor



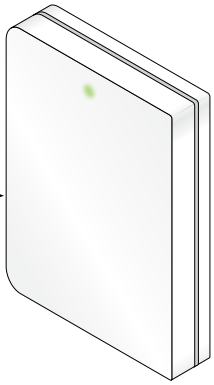
To reset the door/window sensor, remove the cover of the sensor.



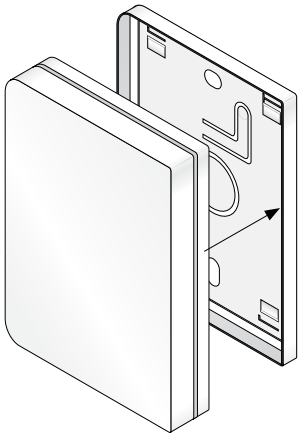
Remove the battery.



Replace the battery while pressing the tamper switch.



Release the tamper switch when the LED comes on.

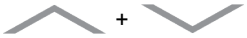


The door/window sensor is now ready to pair.
After pairing replace the sensor cover on the mounting plate.

Thermostat Error Codes

Code	Meaning	Details
01	Comm connection link failure	
02	Floor sensor overheated or overcooled	
03	Floor sensor open	
04	Floor sensor short	
05	Lost link with coordinator (not used)	
06	Lost link with StatLink® 8 Zone Wireless Wiring Module	
07	Lost link with Wireless Valve Actuator	The gateway may have lost power; if upon powering up the gateway the error code persists it means the thermostat couldn't create a connection with the wireless actuator valve. Put the system in ID mode to force a reconnection with the valve. Note that the valve will try to rejoin every 5 minutes for the first 30 minutes, then every 10 minutes for 1 hour, then every 30 minutes. If it is unable to reconnect, you may need to reset the valve and pair it again.
08	Lost link with Wireless Relay (RX1)	
09	Lost link with Wireless Relay (RX2)	
10	Lost link with hot water timer	
11-18	StatLink® Wireless Wiring Module lost link with zone, displayed on all connected thermostats. 11=Zone 1, 12=Zone2, etc.	
19	StatLink® Wireless Wiring Module lost link with coordinator (not used)	
20	StatLink® Wireless Wiring Module lost link with Wireless Relay (RX1)	
21	Wireless Valve Actuator lost connection with coordinator/gateway	If the gateway is offline, but an AC device, like the wireless module, relay or smart plug is online, the valve may communicate with the thermostat through these devices, but still cannot connect with the gateway.
22	Wireless Valve Actuator low battery, displayed on all connected thermostats.	
23	Invalid Wireless Valve Actuator	
24	Unit is rejected by StatLink® Wireless Wiring Module	
25	Thermostat lost link with parent	One of the thermostats couldn’t find any AC device (Gateway, Wireless Module, Relay or smart plug). Put the thermostat in ID mode to see if the the other device flashes.
26-29	Not applicable	
30	Wireless Valve Actuator gear issue	
31	Wireless Valve Actuator adaptation issue	
32	Reserved for future use	
33	Wireless relay lost link with devices	

FAQ - Frequently Asked Questions

Issue	Resolution
My Wireless Gateway doesn't show up in my app.	Your device and the gateway must be connected to the same network during the pairing process. Double check that the device is logged into the correct network and the ethernet cable is attached securely to your router and the gateway.
I accidentally set my RAD thermostat to 0Trv - how do I add my Wireless Actuator Valve?	On your thermostat go to menu 49 (see page 46) and press the check button until you get to the Trv selection(see page 33), press the right arrow, and wait for it to pair (note: the gateway and wireless valve actuator must be in pair mode).
My thermostat has stopped responding to button pushes.	Your thermostat may be "locked". The  indicator will flash when buttons are pressed in this mode. To unlock the thermostat long press  +

www.heatlink.com

Find up to date information, videos, step-by-step system set up instructions and more online at www.heatlink.com/smartsystem, or scan the QR code with you iPhone camera or QR scanner app.

HeatLink® and StatLink® are either registered trademarks or trademarks of HeatLink Group Inc.

L3715

Printable PDF

January 2021

Copyright © 20180-2021 HeatLink®