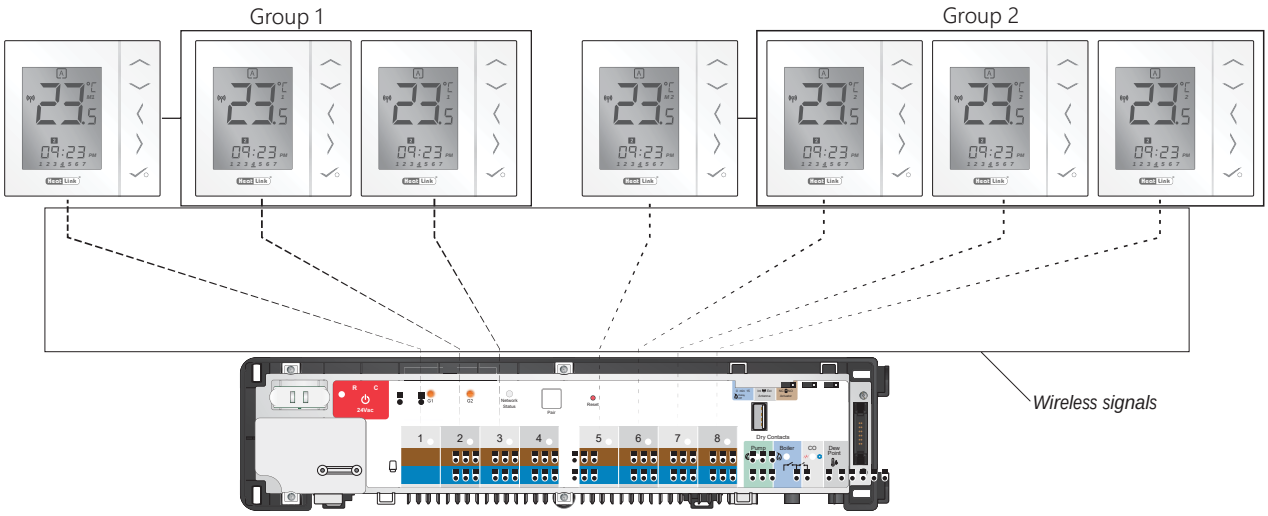
Offline - Thermostat Groups

Groups are used in underfloor heating applications to set up master/slave relationships between thermostats for situations requiring multiple zones to be on the same heating schedule.

Each StatLink® 8 Zone Wireless Module can be set up with 1 or 2 Groups, with a minimum of one master (programmable thermostat) and a maximum of seven slaves (digital thermostats), in almost any combination.

eg. Group 1 = 1 master + 2 slaves, and Group 2 = 1 master + 3 slaves for a total of seven thermostats.



All thermostats default to the "Programmable Thermostat" (ie. Master) setting. To change a thermostat to "Digital Thermostat" (ie. Slave), see "Systems and Settings" on page 17.

When pairing the Underfloor Heating system, pair the Group 1 Progammable Thermostat first, followed by the Group 1 Digital Thermostats; then Pair the Group 2 Programmable Thermostat, followed by the Group 2 Digital Thermostats.

See "Offline - Setting Heating Schedules" on page 36.

In Online applications, thermostats can easily be given the same schedule, eliminating the need to set Groups during the Pairing process.

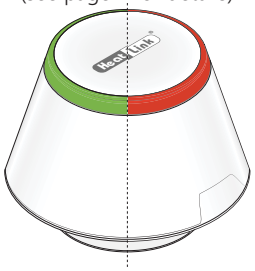
See page xx for wiring diagrams.

Set Up - Radiator System

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

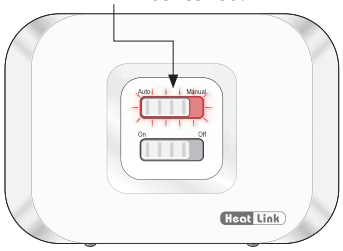
Step 1 Ensure that all components are plugged in/powered up, and ready to be paired.

LED is solid green or red (see page 7 for details)

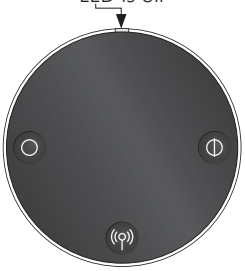


Default status screen

LED flashes red.

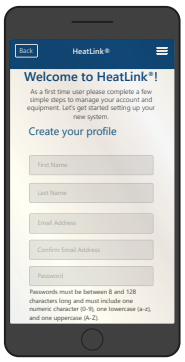


LED is off



Online

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



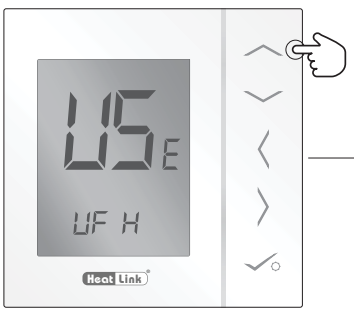
Offline

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

The Wireless Internet Gateway LED will flash red.

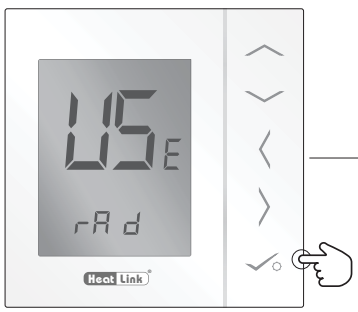
Step 3 Put the thermostat into "Join" mode.

a)



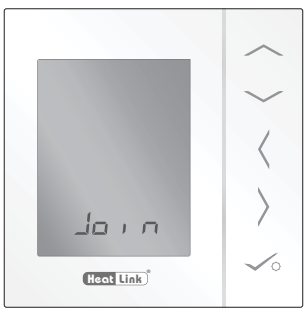
The thermostat starts on the default start up screen. Use the Up arrow to select rAd.

b)



Press ✓ to accept.

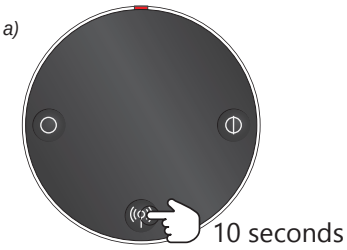
c)



The thermostat searches for the Zigbee network.

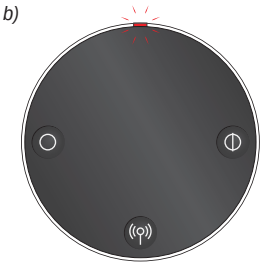
Step 4 Put the Wireless Valve Actuator into pairing mode.

a)



Hold the pair button for 10 seconds

b)

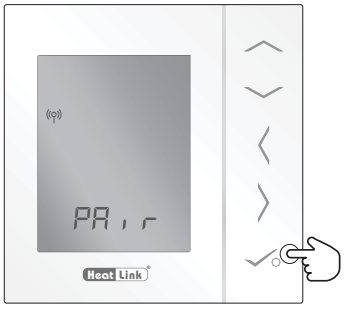


The LED will flash red.

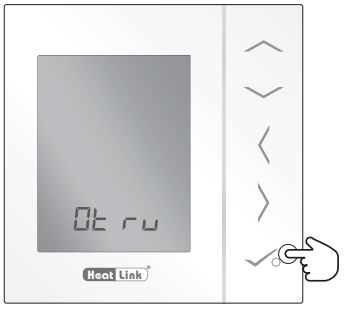
c)

The LED will flash red.

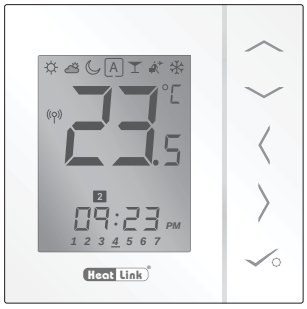
Step 5 Pair the thermostat with the Wireless Valve Actuator.



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



The thermostat recognizes the Wireless Valve Actuator.* Press ✓ to accept.

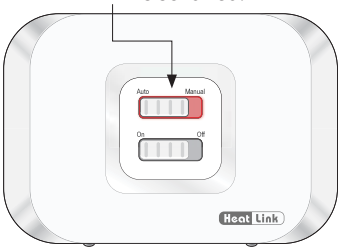


User interface screen.

Step 6 The thermostat, wiring center, and Wireless Relay RX1 (if applicable) are now paired.

User interface screen

LED is solid red.



LED is off

Online

Step 7 To add more Wireless Valve Actuators repeat steps 1-7. Each thermostat can be paired with up to six.

Step 8 Use the app to name your valve for easy reference, and to set your heating programs and preferences.

Offline

Step 6 To add more Wireless Valve Actuators repeat steps 1-7. Each thermostat can control up to six.

Step 7 Exit pairing mode by pressing the Multi-Button on the Wireless Internet Gateway.

Step 8 See page 36 for heating program set up instructions.

**Note: If connecting more than one wireless valve actuator to a single thermostat (up to six), the thermostat will automatically assign a number to the valve in the order of pairing.*

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 - this is normal, and your boiler will return to your programmed activity once the system is fully learned.

During this period CAL appears on your thermostat.

Systems *without* the Wireless Relay will be put into Adaptive Learning Mode automatically.

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

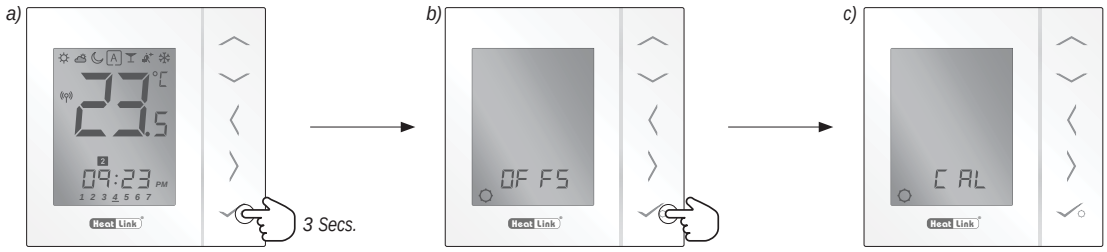
You can change the control method using the app, or manually (see below).

Changing the Control Method with App

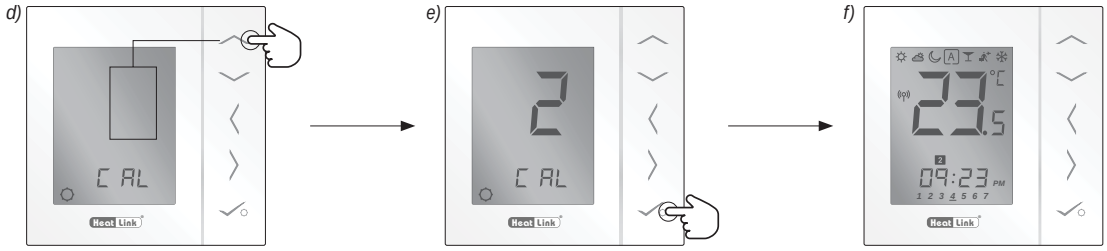
Open the app and select the thermostat that you want to change the settings on.

Online - Changing the Control Method Manually

Step 1 Enter the Calibration Settings menu on the thermostat.



Step 2 Select the required option:
0 - Standard On/Off control
1 - Auto Selection
2 - Advanced Self Learning control



Use the Up/Down arrows to select your option.

Press ✓ to accept.

Offline - Changing the Control Method Manually

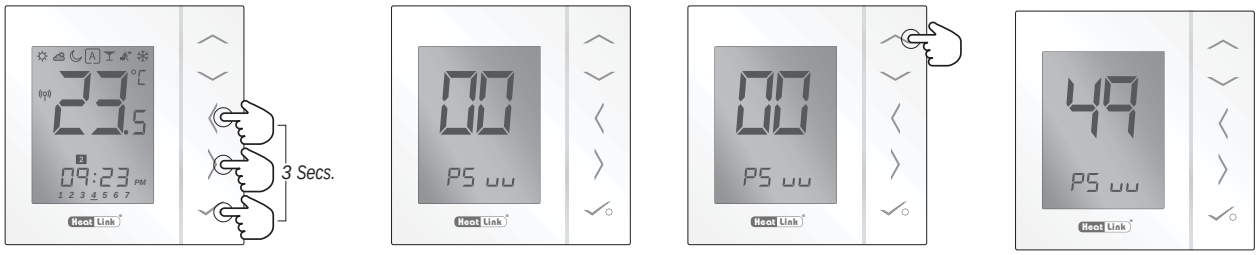
For details on Adaptive Learning Mode, see page 24.

Below are the steps needed to change the control method manually on a system without an internet connection.

Step 1 Hold ✓ and right and left arrows for 3 seconds.

Step 2 PS (program selector) comes up.

Step 3 Use the Up arrow to select menu 49.



Step 4 The "Select Program" (SEL Prog) screen comes up, press ✓ to access the configuration menu.

Step 5 Use the right arrow to select d05.

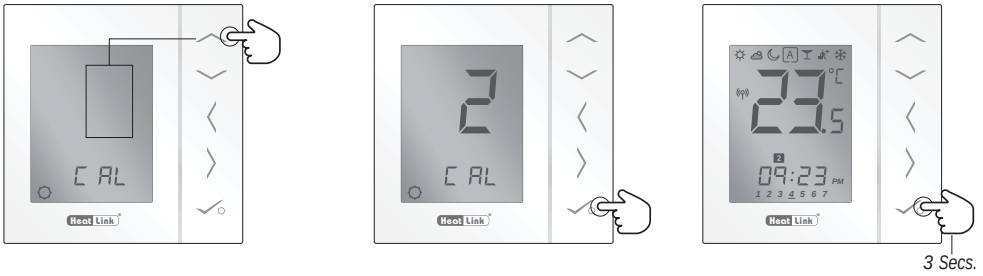
Step 6 Press ✓ four times.

Step 7 CAL comes up.

Step 8 Press up arrow to select:
0 - Standard On/Off control
1 - Auto Selection
2 - Advanced Self Learning control

Step 9 Press check to confirm selection.

Step 10 Press and hold ✓ button for 3 seconds to exit the configuration menu.



Setup - Boiler Switching

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

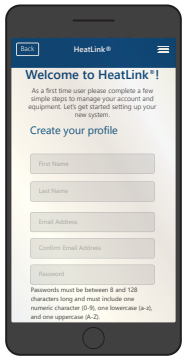
The Wireless Relay (RX1) can be paired with one of the following systems: Underfloor Heating System (page xx), Radiator System (page xx), or for standalone boiler switching (below).

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

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

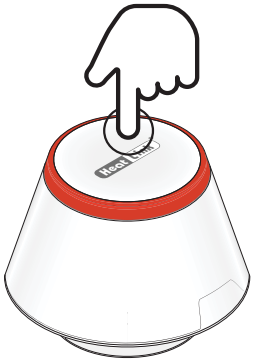
Online

Step 1 Put your system in Pair Mode. On the HeatLink App open the drop down menu, select Equipment, All Equipment, Add Equipment, Scan For Equipment.



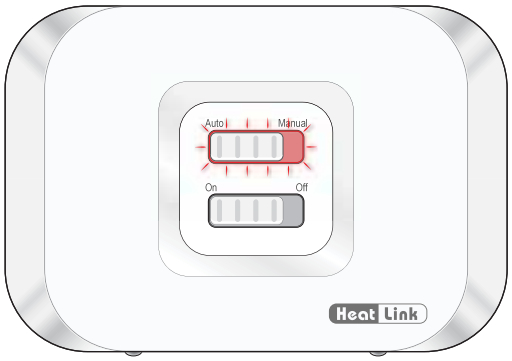
Offline

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

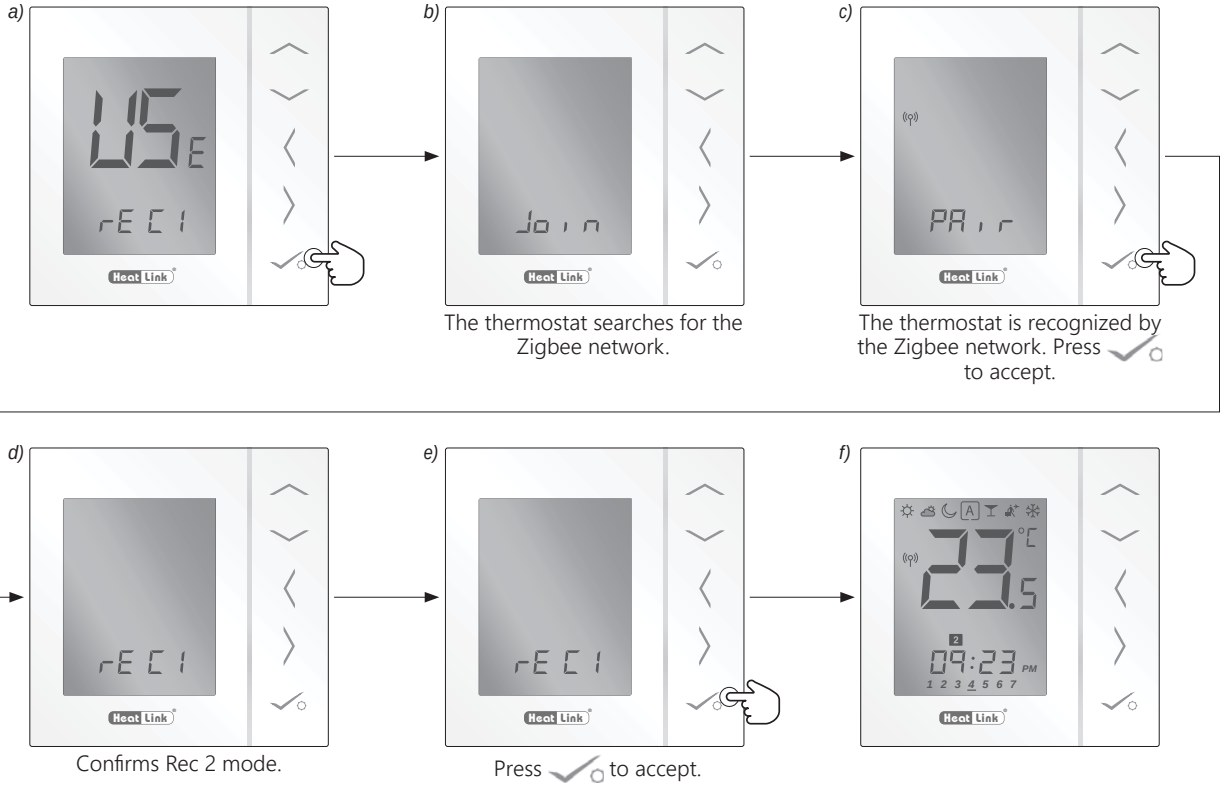


The Wireless Internet Gateway LED will flash red.

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 14). The red LED will flash.



Step 3 Put the Thermostat into REC 1 mode (see page 19), then Pair with the system.



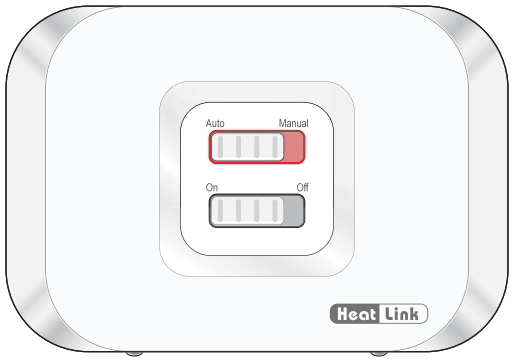
Online

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.



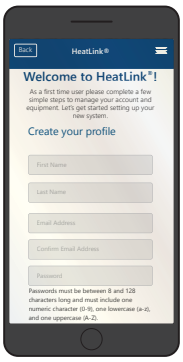
Pairing a Wireless Relay for Use as a Single Room Relay (RX2)

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.

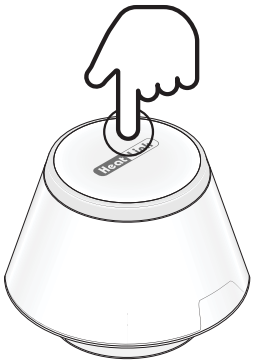
Online

Step 1 Put your system in Pair Mode. On the HeatLink App open the drop down menu, select Equipment, All Equipment, Add Equipment, Scan For Equipment.



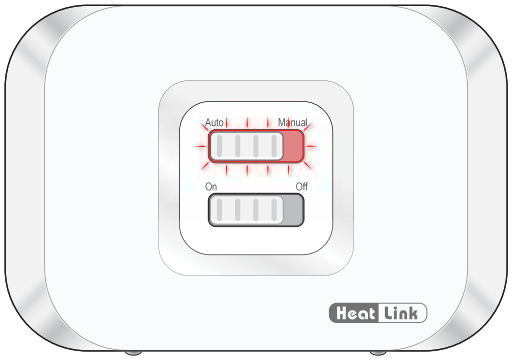
Offline

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

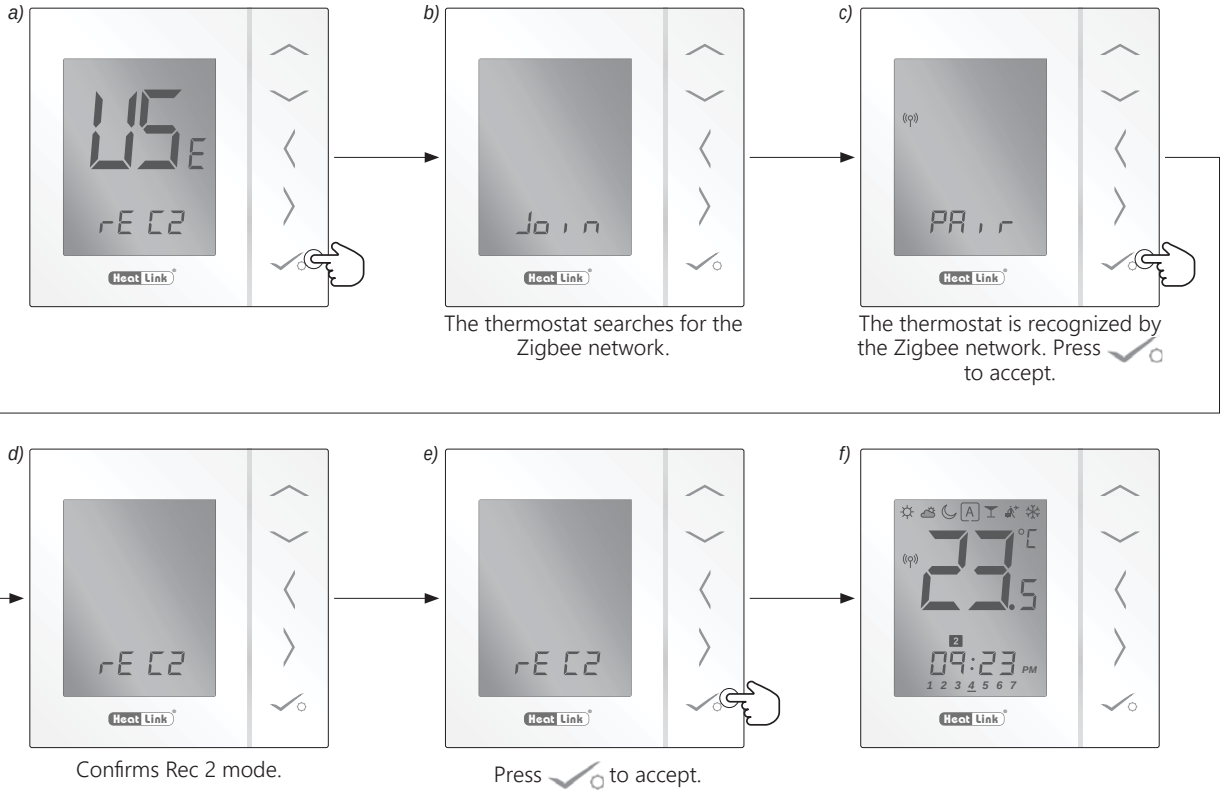


The Wireless Internet Gateway LED will flash red.

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 14). The red LED will flash.



Step 3 Put the Thermostat into REC 2 mode (see), 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.

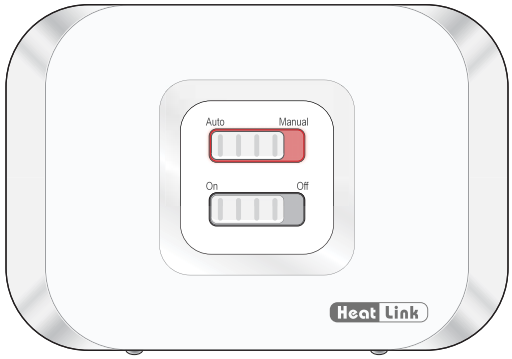
Online

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.



Device Parameters

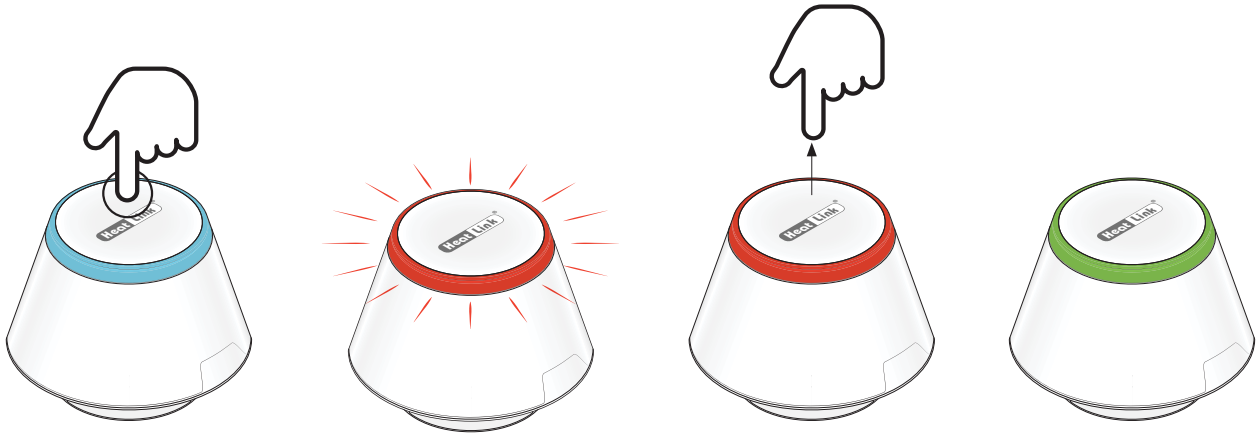
Reset Wireless Internet Wireless Internet Gateway

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.

Step 1 Press the multi button for more than 10 seconds.The LED ring will flash red.

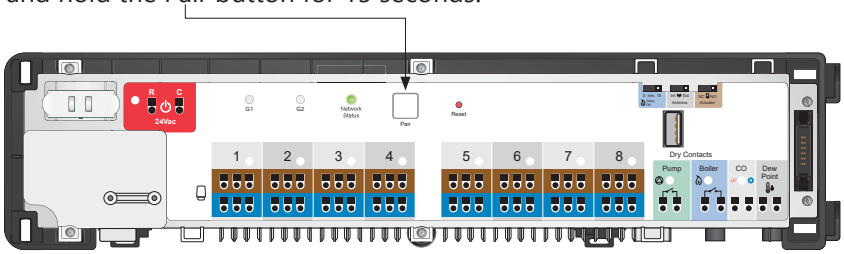
Step 2 Release the multi button when the LED ring turns solid red.

Step 3 Once the factory defaults are loaded the LED ring will turn solid green.

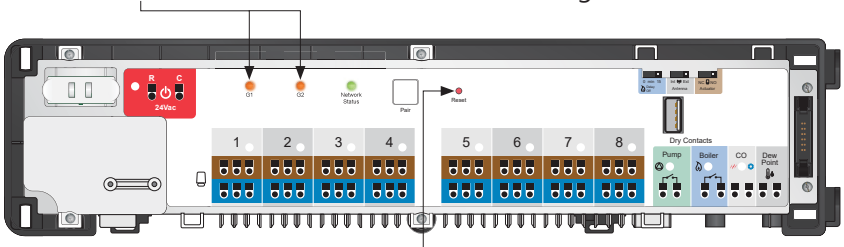


Reset StatLink® 8 Zone Wireless Module

Step 1 Press and hold the Pair button for 15 seconds.



Step 2 The G1 and G2 LEDs will flash red, turn solid red, then go off.



Step 3 Release the Pair button, and press the Reset button.

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. Failure to do so may result in the thermostats becoming locked, and unable to be re-paired with the reset StatLink® 8 Zone Wireless Module or Wireless Internet Wireless Internet Gateway.

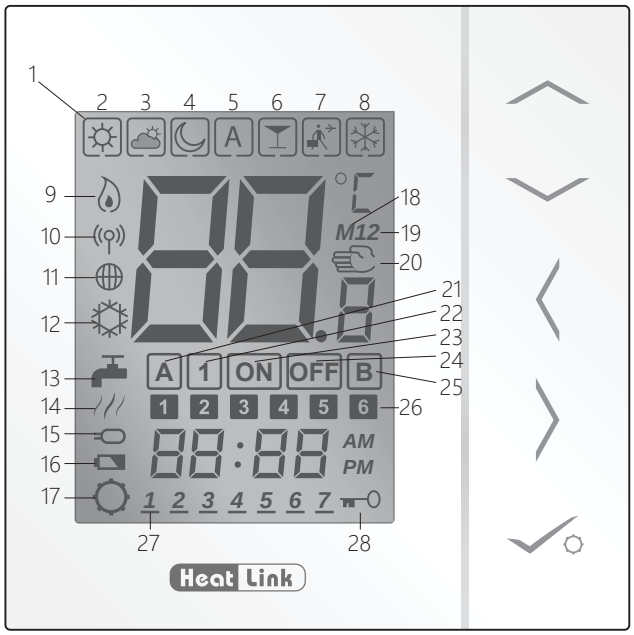
Wireless Valve Actuator LED Indications

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. Green and red flash (or red flashes on failurew to adapt).	
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		Red and green on together 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	Green and red flash 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	

Offline - Thermostat Set Up

The HeatLink® Wireless Programmable Thermostat features a wide range of settings to serve your radiant heating needs.

Thermostat - Legend

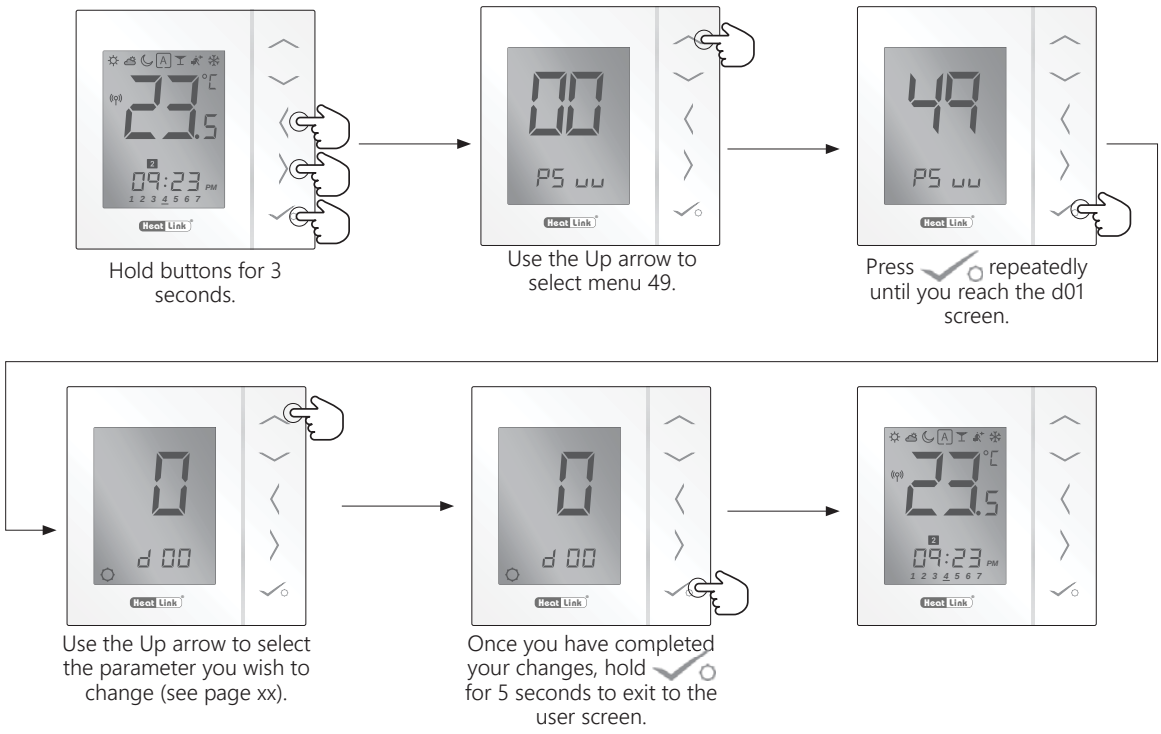


#	Icon	Function
1		Indicates program (icon) is selected
2		Sun: hi comfortable temperature
3		Cloudy: middle comfortable temperature
4		Moon: low comfortable temperature
5	A	Programmable thermostat Program mode (Auto) indicator: Indicates program is running, Auto On or Auto Off.
6		Party mode active
7		Vacation temperature indicator
8		Defrost temperature mode indicator
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 sensor is connected
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 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	Program number
27	1	Day of the week
28		Keylock indicator: Indicates the pressed key is locked.

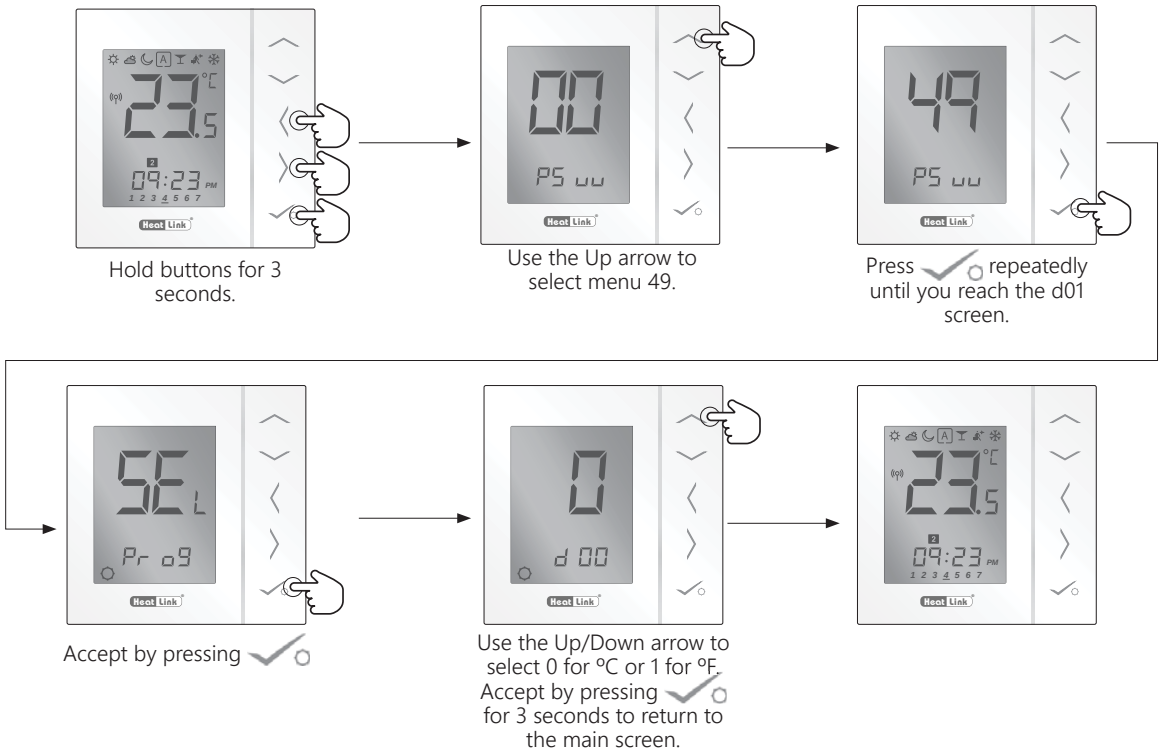
Thermostat Functions & Parameters

dxx	Function	Parameter/Values	Definition	Default Value
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) / 32.9°F (±32.45°F)	
		2	ON-OFF: 1.0°C (±0.5°C) / 33.8°F (±32.9°F)	
d02	Room Temp. Offset	-3.0°C to +3.0°C (26.6°F to 37.4°F)	Offset room temperature measuring error (in 0.5°C / 32.9°F)	0.0°C (32°F)
d03	OUT sensor probe (S1/S2)	0	Outdoor sensor probe not connected	0
		1	Outdoor sensor probe connected	
d04	Air Sensor, or Floor Sensor	0	A: if d03 = 0, IN sensor controls Tr A: if d03 = 1, IN disabled and OUT controls Tr	0
		1	F: if d03 = 0, IN sensor controls Tr A: if d03 = 1, IN disabled and OUT controls Tr floor protection	
d05	Cooling Control	1	ON-OFF: 0.5°C (±0.25°C) / 32.9°F (±32.45°F)	2
		2	ON-OFF: 1.0°C (±0.5°C / 33.8°F (±32.9°F)	
d07	Valve Protection	0	VP disabled	1
		1	VP enabled	
d08	Frost Setpoint	5°C - 17°C (41°F - 62.6°F)		5.0°C (41°F)
d09	Hour Format	0	12hr clock	1
		1	24hr clock	
d11	Daylight Saving Time (DST)	0	Off	1
		1	On	
d12	Heating Setpoint Max.	5°C - 35°C (41°F - 95°F)		35°C (95°F)
d13	Cooling Setpoint Max.	5°C - 40°C (41°F - 104°F)		5°C (41°F)
d14	Floor Sensor Protection Limit (heating high limit - HL	11°C - 45°C (51.8°F - 113°F)	Turn off relay output when flow sensing temperature is above protecting limit - step is 0.5°C (32.9°F)	27°C (80.6°F)
d15	Floor Sensor Protection Limit (heating low limit - LL)	6°C - 40°C (42.8°F - 104°F)	Turn on relay output when flow sensing temperature is below protecting limit - step is 0.5°C (32.9°F)	10°C (50°F)
d16	Floor Sensor Protection Limit (cooling)	6°C - 45°F (42.8°F - 113°F)	Turn off relay output when flow sensing temperature is below protecting limit - step is 0.5°C (32.9°F)	6°C (42.8°F)
d17	Preset Program Selection	1-5	Select one of the five default programs. Once selected, the default program will overwrite the present program. Selected default program can be edited by the user in the User Setting Mode (page xx).	1
d18	Heat/Cool Mode Selection	0	No connection	0
		1	Connection	
d19	Cooling Blocked	0	Cooling allowed	0
		1	Cooling disabled	
d20	Actuator loading selection for different temperature compensation	1	×1 actuator loading	1
		2	×2 actuators loading	
		3	×3 actuators loading	
		4	×4 actuators loading	
		5	×5 actuators loading	

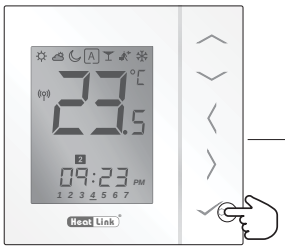
Installer Parameters Menu



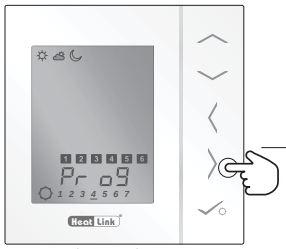
Offline - Select °F or °C



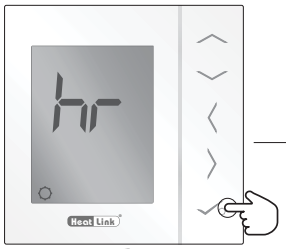
Offline - Setting the Time



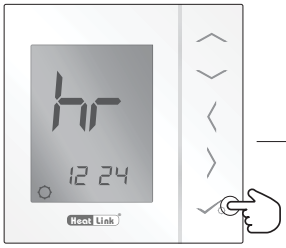
Hold button for 3 seconds.



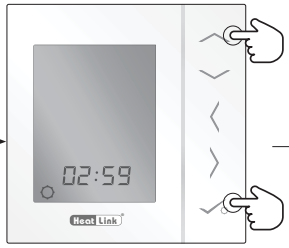
Press the Right arrow to select hr.



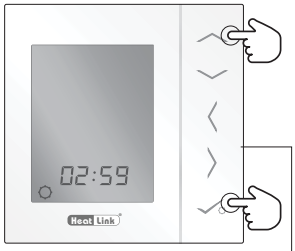
Press ✓ to accept.



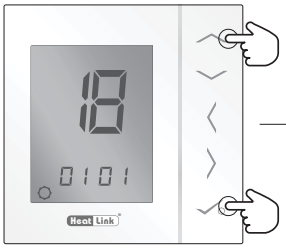
Use the Right/Left arrows to select either the 12 or 24 hour clock.
Press ✓ to accept.



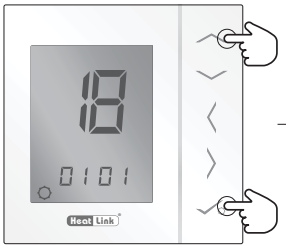
Use the Up/Down arrows to select the hour.
Press ✓ to accept.



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



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



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

Use the Up/Down arrows to select the day.
Press ✓ to accept and return the user screen.

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.

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

The distance between user and products should be no less than 20cm

Note: 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.

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. The distance between user and products should be no less than 20cm

Cet appareil est conforme aux CNR exemptes de licence d'Industrie Canada . Son fonctionnement est soumis aux deux conditions suivantes :

(1) Ce dispositif ne peut causer d'interférences ; et

(2) Ce dispositif doit accepter toute interférence , y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil. la distance entre l'utilisateur et les produits devraient être au moins 20 cm

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