

Wiser Underfloor Heating Connection Strip

Device user guide

Information about features and functionality of the device.

10/2023



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Safety Information

Important Information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that accompany this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

Failure to follow these instructions will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Wiser Underfloor Heating Connection Strip



CCTFR6600 (Wiser UFH Connection Strip (Heat/Cool))

For your safety

NOTICE

RISK OF DAMAGE TO DEVICE

Always operate the product in compliance with the specified technical data.

Failure to follow these instructions can result in equipment damage.

About the device

The Wiser Underfloor Heating Connection Strip (hereinafter called **Underfloor Heating (UFH)**) is used to control thermal actuator valve heads to regulate the flow of hot water in the underfloor pipes.

The UFH Heat/Cool can also be used to control a heat pump or a boiler. The UFH should only be used with hydronic UFH systems. It works in conjunction with the Wiser Hub and Wiser room thermostats, and it controls the temperature for individual rooms/zones.

TIP: There are total 6 channels available on Underfloor Heating, based on your rooms/zones requirement select the channel:

- 1/2 channel: you can use it for a large room to control 4 thermal actuators valve heads to supply hot water.
- 3/4 channel: you can use it for a medium room to control 2 thermal actuators valve heads to supply hot water.
- 5/6 channel: you can use it for a small room to control a thermal actuator valve head to supply hot water.

With mixed systems (UFH and radiators) Wiser radiator thermostats can be added, and in this way a complete hydronic heating system can be controlled. The system is simple to expand: 2 further Wiser Connection Strips (and optionally radiator thermostats) can be added.

1x UFH max. 6 rooms/zones

2x UFH max. 12 rooms/zones

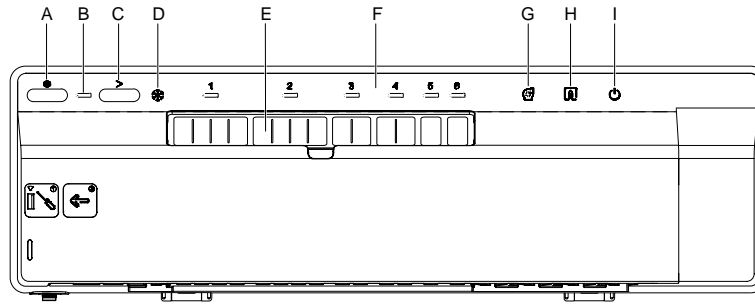
3x UFH max. 16 rooms/zones

Features of the Underfloor Heating:

- Remotely control Underfloor Heating using the Wiser Home app.
- Boost the room temperature using the Wiser Room Thermostat center button.

Diagram of operating elements

- A. Setup button
- B. Setup LED
- C. Channel button
- D. Cooling LED (not present on CCTFR6610)
- E. Room names
- F. Channel LEDs 1 to 6
- G. LED for pump contact
- H. LED for burner or boiler
- I. LED for 230 V / 24 V power supply





Installing the device

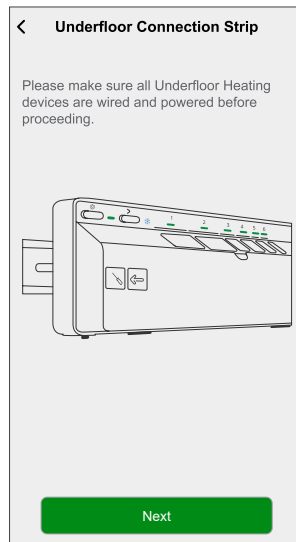
Refer to the installation instruction supplied with this product.

Pairing the device

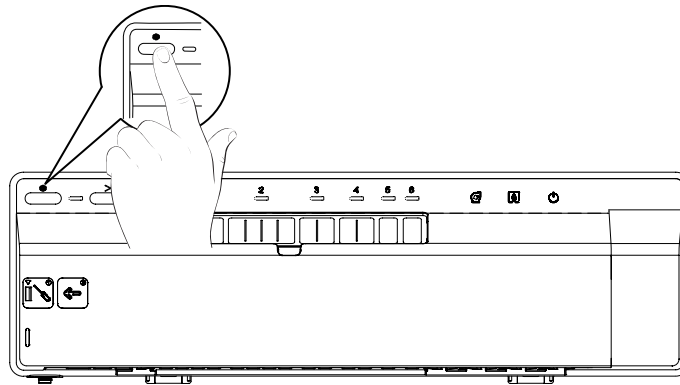
Using the Wiser Home app, pair your Underfloor Heating with the **Wiser Hub** to access and control the Underfloor Heating.

To pair the Underfloor Heating:

1. On the Home page, tap .
2. Tap **Devices** >  and tap **Climate** (tab) > **Underfloor Connection Strip**.
3. Tap **Next**.

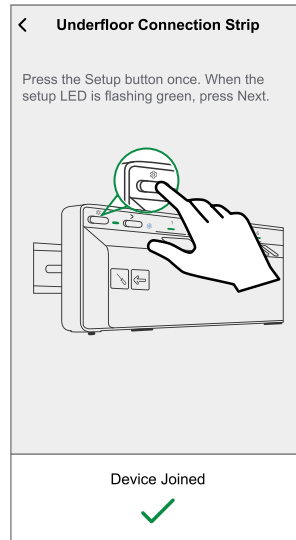


4. Press and hold the setup button until the LED flashes green/amber.



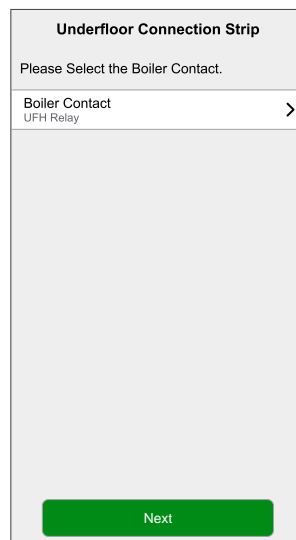
TIP: The next screen shows the process of joining the Underfloor Heating.

5. Please wait for a few seconds until Underfloor Heating is successfully joined.
In the app, you can see the Underfloor Heating is successfully joined.



6. Enter the Underfloor Heating name and tap **Next**.
7. On the **Underfloor Heating Setup** page, select the **Boiler Contact: UFH Relay / Wiser Hub Relay** and tap **Next**.

TIP: If UFH is directly controlling the boiler, select "UFH Relay" for the Boiler Contact option. In case the boiler is controlled by a Wiser Hub with relay, then select Wiser Hub Relay for this option.



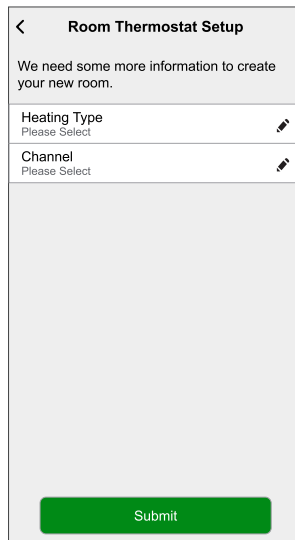
You can see the added Underfloor Heating on the Home page under the room tab or under **ALL** devices.

Configuring the device

Assigning a channel to the room

Using the Wiser Home app, you can assign Underfloor Heating channel to the room. Select one or several channels based on your room size (such as for a small room: channel 5 or 6, a large room: channel 1 or 2).

1. Add a Room Thermostat
2. Select a new room, and then choose:
 - **Heating Type: Underfloor Heating**
 - **Channel: 1, 2, 3, 4, 5, 6.**
3. Tap **Submit**.



< Room Thermostat Setup

We need some more information to create your new room.

Heating Type
Please Select

Channel
Please Select

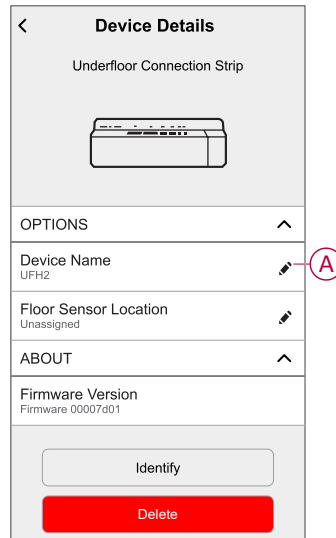
Submit

4. Repeat steps above for each Underfloor Heating room.

Renaming the device

Using the Wiser Home app, you can rename the Underfloor Heating.

1. On the Home page, tap .
2. Tap **Devices > Underfloor Heating > Device Name (A)** to rename the Underfloor Heating.




Setting Floor Sensor Location

Using the Wiser Home app, you can set the floor sensor location.

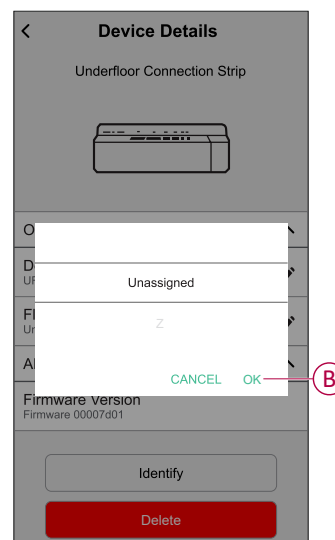
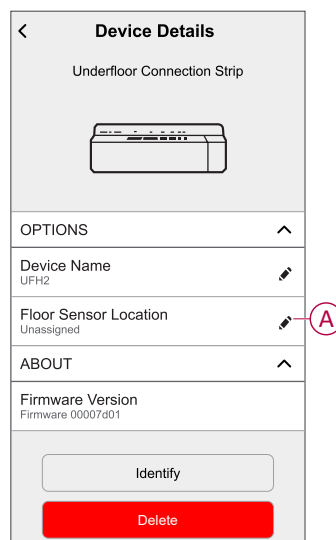
Precondition: Assign channel to the room, page 9.

To set the floor sensor location:

1. On the Home page, tap .
2. Tap **Devices > Underfloor Heating > Floor Sensor Location (A)** to select **Unassigned** or **Z** if the floor sensor is connected.

TIP: Z is the name of the room where the Room thermostat is located (you can give any name while assigning the Room thermostat to the room).


3. Tap **Ok**



Identifying the device

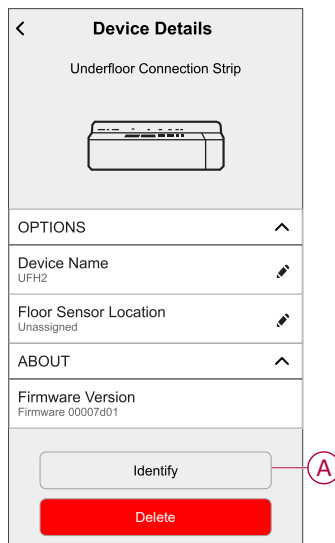
Using the Wiser Home app, you can identify the Underfloor Heating from the other available devices in the room.

To identify the Underfloor Heating:

1. On the Home page, tap .
2. Tap **Devices > Underfloor Heating > Identify (A)** to rename the Underfloor Heating.

NOTE:

- This feature flashes the Underfloor Heating LEDs, so you can identify the actual device.
- The Underfloor Heating LEDs will continue to flash until you tap **OK**.



Using the device

Setting the room temperature using the app

Using the Wiser Home app, you can adjust, set or boost the room temperature.

Precondition: Add a Wiser Room Thermostat in the same room where 16A Relay is located.


To adjust, set or boost the room temperature:

1. On the Home screen, tap  from the room tab or **All** tab.


TIP: The orange flame shows the heating is on.

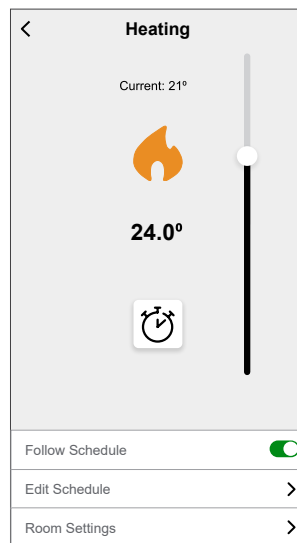
- a. Use the slider control on the right of the screen to adjust the temperature.

NOTE: The flame shows that the room temperature is lower than the desired temperature (set point) and so the heating is ON.

- b. Tap  to set the boost time.

TIP: You can Boost the room temperature using the Wiser Room Thermostat center button.

NOTE: Boost can be stopped at any time by tapping the  and selecting it **off**.

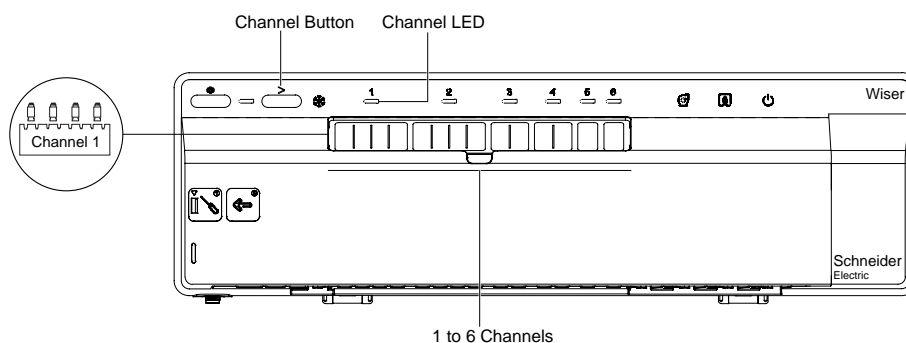


Emergency Heating

You can do emergency heating manually by pressing the channel button if the Hub is not working or when the Wiser Home app is not responding. Follow the steps below to do an emergency heating.




1. Press and hold the Channel Button for >2 seconds.
2. Press Channel Button again to select further channels.
The selected channel LED will start flashing.
3. When the required channel LED is flashing, press and hold for >2 seconds. This LED will be solid green and the next channel LED will flash. You can select and channel combination, e.g., Channels 1, 3 and 5.
4. Pressing on channel 6 activates the selected channels. The relevant LEDs will flash green and the actuators open to allow water flow.

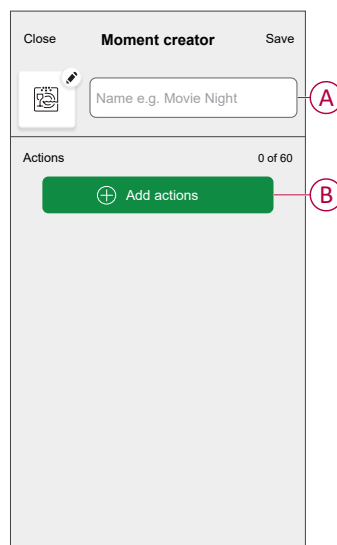
After 4 hours an emergency heating stops. The emergency heating can also be stopped by pressing channel button. If multiple Wiser UFH Connection Strips are being used this test can be carried out on all connection strips.



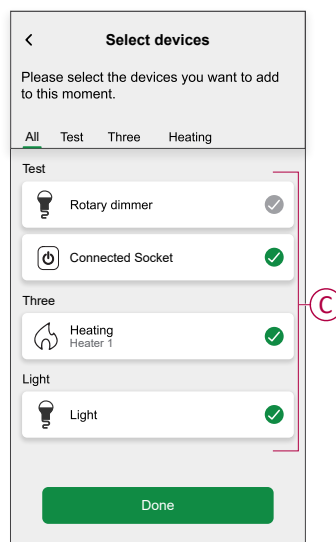
Creating a moment

Moment allows you to group multiple actions that are usually performed together. By using the Wiser Home app, you can create moments based on your needs. To create a moment:

1. On the **Home** page, tap .
2. Go to **Moments** >  to create a moment.
3. Enter the name of the moment (A).
TIP: You can choose the cover image that best represents your moment by tapping .
4. Tap **Add actions** (B) to select the list of devices.

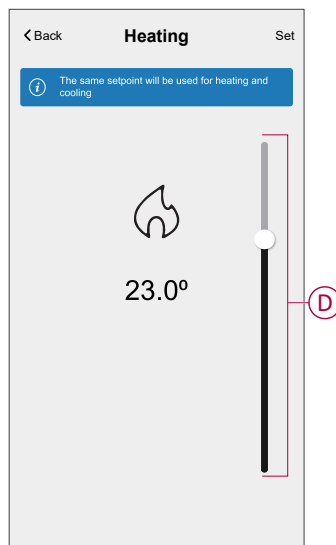


5. In the **Add actions** menu, you can select the devices (C).



6. Once all the device are selected, tap **Done**.

7. On the **Moment creator** page, tap the device to set the condition. For example, select heating.
 - Set the required temperature using sliding bar (D).








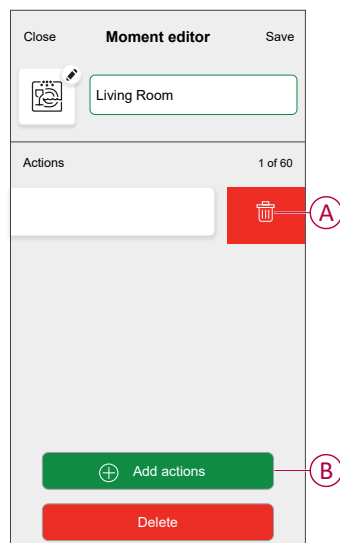
When the desired condition is set, tap **Set**.

8. Once all conditions are set, tap **Save**.

Once the moment is saved, it is visible on the **Moments** tab. You can tap on the moment to enable it.



Editing a moment

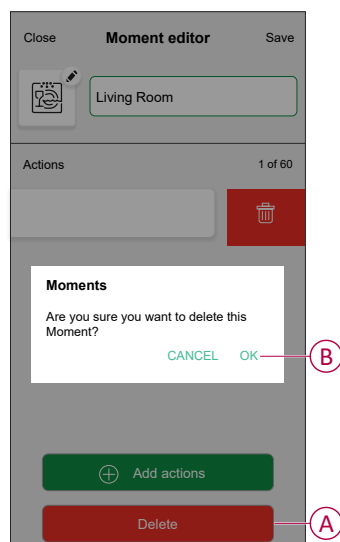
1. On the **Home** page, tap .
2. Go to **Moments**, locate the moment you want to edit and tap .
3. On the **Moment editor** page, you can perform following changes:
 - Change the icon .
 - Rename the moment.
 - Tap each action to change the settings.
 - Slide an action towards left and then tap  (A) to delete an action.
 - Tap  **Add actions** (B) to add new action.



4. Tap **Save** , to save the changes.

Deleting a moment



1. On the **Home** page, tap .
2. Go to **Moments**, locate the moment you want to delete and tap .
3. On the Moment editor page, tap **Delete** (A) and then tap **Ok** (B).

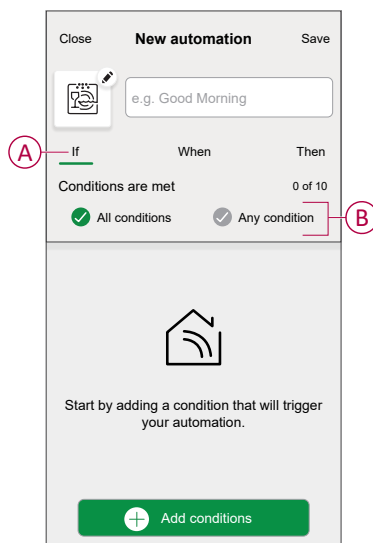


Creating an automation

An automation allows you to group multiple actions that are usually done together, triggered automatically or at scheduled times. By using the Wiser app, you can create automations based on your needs.

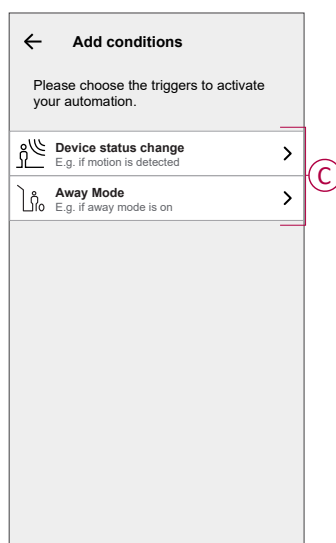
To create an automation:

1. On the **Home** page, tap .
2. Go to **Automation** >  to create an automation.
NOTE: Max. 10 automations can be added.
3. Tap **If** (A) and select any of the following conditions (B):
 - **All conditions:** This triggers an action only when all conditions are met.
 - **Any condition:** This triggers an action when at least one condition is met.

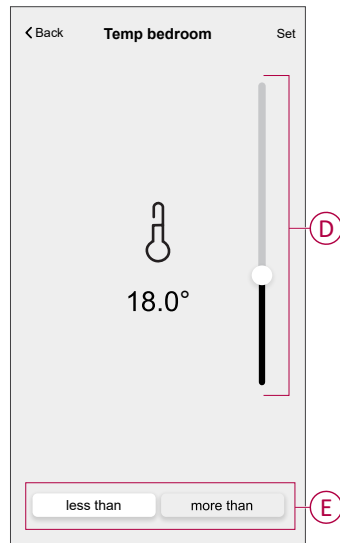


4. Tap **Add conditions** and select any of the following (C):
 - **Device status change:** Select a device to enable automation.
 - **Away Mode:** Enable/Disable away mode to trigger an action.


TIP: Away mode can also be used as a trigger to turn off the lights, dimmer or closing the shutter etc. For more information refer to [Away mode](#).



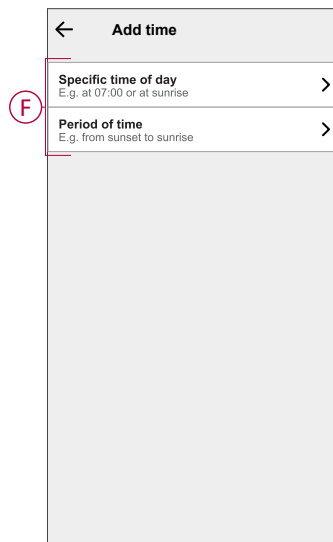
5. Tap **Device status change > Temperature/Humidity Sensor > Temperature**. Set the temperature using sliding bar (D) and select the condition (E) (less than / more than), then tap **Set**.




NOTE:

- Max. 10 conditions can be added.
- To remove an added condition, swipe left and tap .

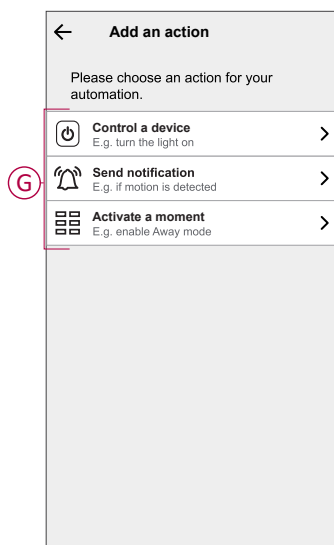
6. To set a specific time for your automation, tap **When > Add time** and select any of the following (F):
- **Specific time of the day: Sunrise, Sunset, Custom.**
 - **Period of time: Daytime, Night time, Custom.**



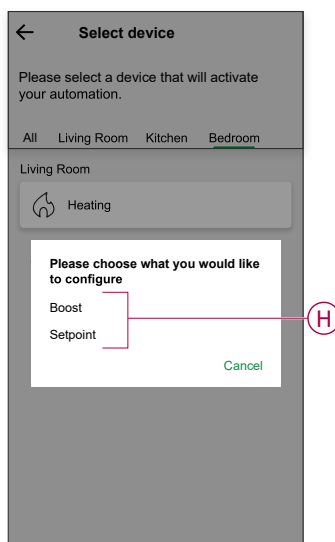
NOTE:

- Max. 10 entries can be added
- To remove a specific time, swipe left and tap .

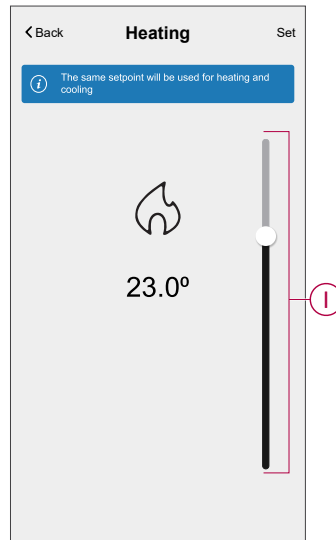
7. To add an action, tap **Then > Add an action** and select any of the following (G):
- **Control a device:** Select a devices that you want to trigger.
 - **Send notification:** Turn on the notification for the automation.
 - **Activate a moment:** Select the moment that you want to trigger.




8. Tap **Control a device > Heating** and select any of the following (H):
- **Boost:** Set the duration to increase the temperature by 2° C.
 - **Setpoint:** Set the desired temperature.




9. Tap **Setpoint**, set the required temperature using vertical sliding bar (I), then tap **Set**.

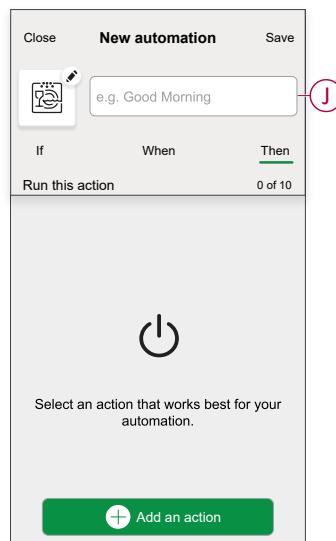


NOTE:

- Max. 10 actions can be added.
- To remove an action, swipe it left on the action and then tap .

10. Enter the automation name (J).

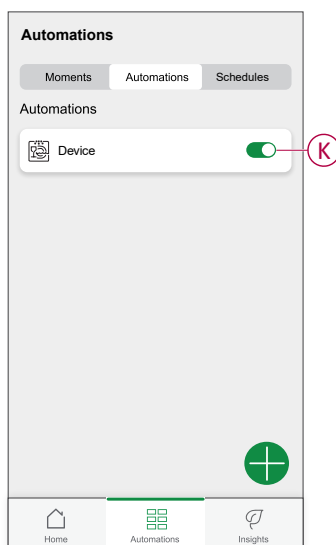
You can choose the cover image that represents your automation by tapping .



11. Tap **Save**.

Once the automation is saved, it is visible on the **Automation** tab.

Using the  (K) you can enable and disable the automation.




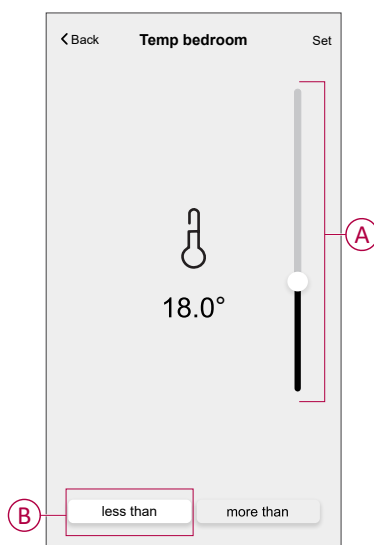
Example of an automation

This demonstration shows you how to create an automation to turn on the Heating to 20 °C when the temperature is less than 18 °C.

NOTE: It is mandatory to create two automations. First, switch on the heater at 22 °C when the room temperature is at 17 °C or lower. Second, switch off the heater when the room temperature is at 25 °C or above.

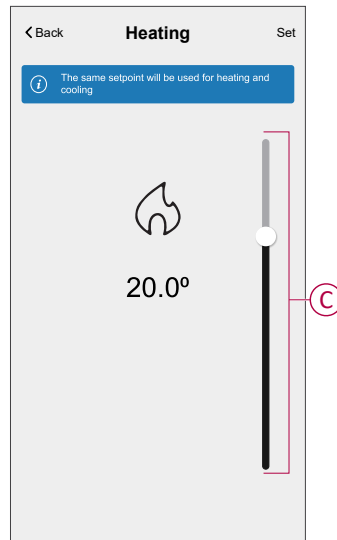
The room heater will not turn off automatically until you create another automation.


1. Go to **Automation** >  to create an automation.
2. To add a condition, tap **Add Condition** > **Device status change** > **Temperature/Humidity Sensor** > **Temperature**.
3. Set the temperature as 18 °C (A) and the condition as **less than** (B) and tap **Set**.

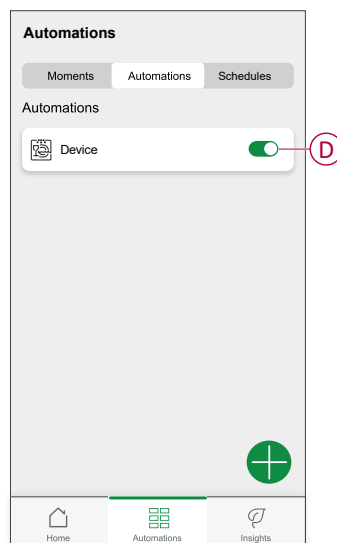


4. Read the information and tap **OK**.

5. To add an action, tap **Then** > **Add an action** > **Control a device** > **Heating** > **Setpoint**. Set the temperature to 20 °C (C), then tap **Set**.







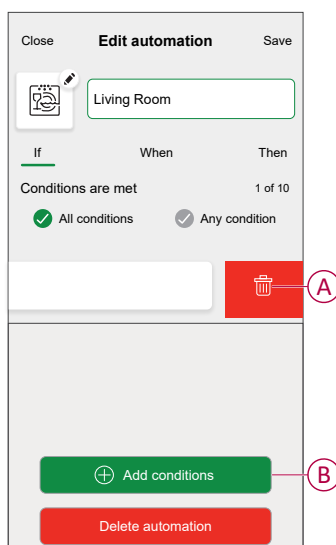
6. Read the information and tap **OK**.
7. Enter the name of the automation.
- TIP:** You can choose the cover image that represents your automation by tapping .
8. Tap Save.
- Once the automation is saved, it is visible on the Automation tab.



NOTE: You can enable or disable saved automations on the **Automations** tab by using  (D).


Editing an automation

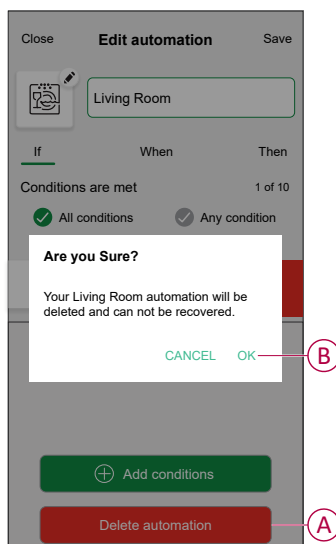
1. On the **Home** page, tap .
2. Go to **Automation**, tap the automation you want to edit.
3. On the **Edit automation** page, you can perform following changes:
 - Change the icon .
 - Rename the automation.
 - Tap each condition to change the settings.
 - Slide a condition towards left and then tap  (A) to delete.
 - Tap  **Add conditions** (B) to add new condition.



4. Tap **Save** , to save the changes.

Deleting an automation

1. On the **Home** page, tap .
2. Go to **Automation**, tap the automation you want to delete.
3. On the **Edit automation** page, tap **Delete automation** (A) and read the confirmation message and then tap **OK** (B).

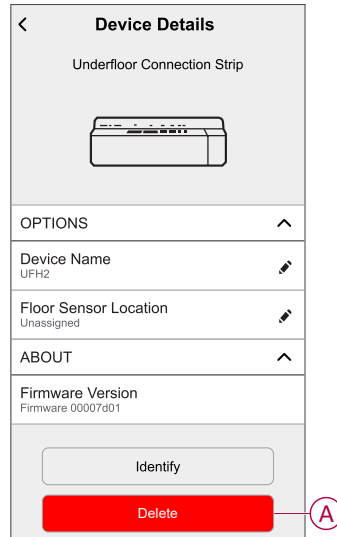


Removing the device from the Wiser system

Using the Wiser home app, you can remove the Underfloor Heating from the Wiser system.

To remove the Underfloor Heating:

1. On the Home page, tap .
2. Tap **Devices > Underfloor Heating > Delete (A)**.



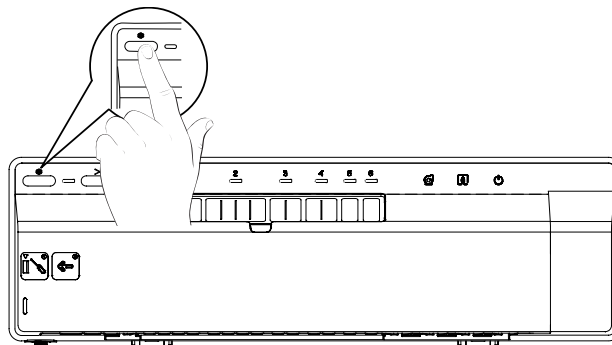
Resetting the device

You can reset the Underfloor Heating to the factory default.

To reset the Underfloor Heating:

1. Press and hold the Setup button for more than 15 seconds.

After 15 seconds, the LED flashes red.















2. When the LED stops flashing red, release the setup button.









The LED stops flashing upon successful reset of the Underfloor Heating.

LED indications

Normal use

LED	LED status	Behaviour
LED		Power plant under voltage
Channel 1-6 LEDs	off	Relay open (no call for heat)
		closed (call for heat)
	 dimmy lit	Delay in relay activation
		System test / emergency operation
Configuration LED		Connected to the WiFi gateway
		Attempting to link with the gateway
		No connection with the WiFi gateway
	Blinking red	Floor temperature exceeded
LED of a channel		Channels activated
Heating / cooling LED		Cooling mode
		Dew sensor activated
Pump LED		Pump activated
Boiler LED		Boiler activated

Settings

User action	LED	LED status	Behaviour
Connection of the control unit for configuration LED from hydraulic floor to the Wifi gateway. Press and hold the configuration button for more than 2 s.	valves	Turn signal  / 	The link is implemented. Follow the instructions of the application.
Resetting the control unit for hydraulic floor valves. Press and hold the configuration button for more than 20 s.	Configuration LED	Red until that all LEDs are flashing   	The control unit for hydraulic floor will be removed from the Wiser platform.
Identification of the control unit for valves All the hydraulic floor LEDs from the application.		  	Identification

Troubleshooting

Symptom	Possible cause	Solution
The orange setup LED is flashing.	<ul style="list-style-type: none"> Weak or no signal between the Wiser Hub and the underfloor heating. Connection has been lost. 	<ul style="list-style-type: none"> Check Hub is online. Check signal strength.
The red setup LED is flashing.	Floor temperature limits exceeded.	<ul style="list-style-type: none"> Check floor temperature limits. Check the temperature sensor connection.
Heat/Cool LED flashing blue	Dew detected on manifold	<ul style="list-style-type: none"> Check dew sensor fitting Wait for moisture to evaporate.
Output channel LED (S) flashing Green	Emergency heat is active on those channels.	Cancel emergency heat.

Technical Data

Versions:	UFH Heat/Cool (CCTFR6600) UFH Heat (CCTFR6610) UFH Heat/Cool 24 V (CCTFR6620)
Power supply:	230 V / 24 V AC \pm 10% 50 Hz
Zones and devices per system:	Max 6 per zone, max 16 per system, max 32 devices per system
Ambient temperature:	Operating 0 °C to 50 °C, Storage -10 °C to 55 °C
Ambient humidity: (non condensing)	Operating 25 % to 85 %, Storage 15 % to 85 %
Remote sensor temperature resolution:	1 °C
Without power:	Relays normally open
Wireless:	2.4 GHz (Bi-directional, Mesh)
Signal Range:	30 m Free space
Maximum signal strength:	14 dBm (25 mW)
Pollution class:	2
Energy class:	IV = 2%
Software class:	A
Fuse rating:	3.15 A
Relays:	Normally open 2(1)A
Number of 3 W actuators per channel:	Zones 1 and 2.....4 Actuators Zones 3 and 4.....2 Actuators Zones 5 and 6.....1 Actuators
Number of 3 W actuators per device:	14
Rated surge voltage:	4 kV
Terminals (green):	Screwless for type Y 0,08-1,5 mm ² , AWG 16-28
Protection class:	Class II
Ingress protection:	IP30
Antenna:	External antenna (supplied)
Automatic function:	Not applicable: the thermostat controls the temperature
Method of earthing control basic version:	Device in not earthed. Double insulated.
Method of earthing control full version:	The device is not earthed. A terminal is provided for an external earth cable. Double insulated.
Dimensions:	305 x 90 x 65 mm (LxHxD)

Compliance

Compliance information for Green Premium products

Find and download comprehensive information about Green Premium products, including RoHS compliance and REACH declarations as well as Product Environmental Profile (PEP) and End-of-Life instructions (EOLI).

<https://checkaproduct.se.com/>



General information about Green Premium products

Click the link below to read about Schneider Electric's Green Premium product strategy.

<https://www.schneider-electric.com/en/work/support/green-premium/>



EU Declaration of Conformity

Hereby, Schneider Electric Industries, declares that this product is in compliance with the essential requirements and other relevant provisions of RADIO DIRECTIVE 2014/53/EU. Declaration of conformity can be downloaded on se.com/docs.

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As standards, specifications, and design change from time to time,
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DUG_Underfloor Heating Connection Strip_WH-02