# **Wiser Boiler Relay**

## 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.

#### **AADANGER**

**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.

#### **AWARNING**

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

### **ACAUTION**

**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 Boiler Relay**



CCTFR6001

## For your safety

### **AWARNING**

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

The wallplate terminals may carry electrical current even when the device is not working. When working on the device always disconnect the device from the supply using the fuse in the incoming circuit.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

#### **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.

DUG\_Boiler Relay\_WH-02

#### About the device

The Wiser Boiler Relay (hereinafter referred to as **Boiler Relay**) allows control of a domestic boiler in water based central heating applications. The Boiler Relay contains a 2 A relay that can be connected to a boiler directly or to auxiliary control equipment such as a motorised valve.

The Boiler Relay also contains a digital boiler interface that can be used to provide direct control of the boiler demand using the OpenTherm ®.

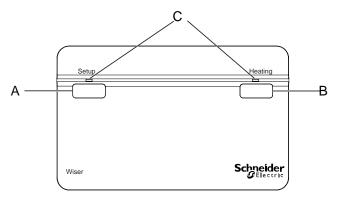
**NOTE:** A Wiser Radiator thermostat or Room thermostat is mandatory for the Boiler Relay to work.

#### Features of the Boiler Relay:

- Controls the heat source (boiler, heat pump, motorized valve, or circulating pumps).
- You can manually override heating.

#### **Operating elements**

- A. Setup button
- B. Heating button
- C. Status LEDs



## Installing the device

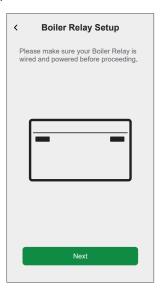
Refer to the installation instruction supplied with this product.

## Pairing the device

Using the Wiser Home app, pair your Boiler Relay with the Wiser system to access and control the Boiler Relay.

To pair the Boiler Relay:

- 1. On the Home page, tap 🐯.
- 2. Tap Devices > and tap Climate > Boiler Relay.
- 3. Tap Next.

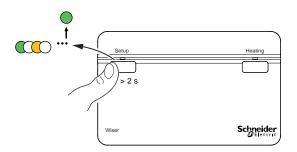


**TIP:** The next screen shows the joining process of the Boiler Relay.

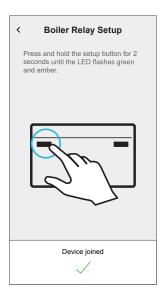
4. Press and hold the Setup button for > 2 s.

The Boiler Relay's LED flashes green and amber, then turns to solid green after successful joining to the Wiser system.

**TIP:** If the device fails to join, then the LED glows red.



In the app, you can see the Boiler Relay is successfully joined.



- 5. Enter the Boiler Relay name and tap Next.
- 6. On the Boiler Relay Setup page, select the Control Type:
  - Relay , If Relay is selected, choose one of the following Heat Source Type:
    - Gas Boiler (Default)
    - · Electric Boiler
    - Oil Boiler
    - Heat Pump
  - OpenTherm, If selected OpenTherm (interfacing cable between Boiler Relay and Boiler) then the setup is completed.

**TIP:** Depending on the boiler interface choose the correct Relay or OpenTherm®.

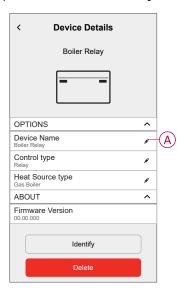
You can see the paired Boiler Relay name and location on the Home page under the **All** devices or room tab.

## Configuring the device

### Renaming the device

Using the Wiser Home app, you can rename the Boiler Relay.

- 1. On the Home page, tap .
- 2. Tap Devices > Boiler Relay > Device Name (A) to rename the Boiler Relay.

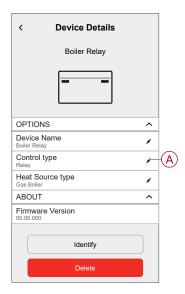


### **Setting the device control**

Using the Wiser Home app, you can set the control type such as Relay or OpenTherm.

To set the control type:

- 1. On the Home page, tap 🕏.
- 2. Tap **Devices > Boiler Relay > Control Type** (A) to select given option:
  - Relay
  - OpenTherm



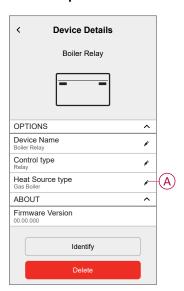
### **Setting heat source type**

Using the Wiser Home app, you can set the heat source type such as Gas Boiler, Oil Boiler, Electric Boiler, or Heat Pump.

NOTE: Heat source type only required for relay channel.

To set the heat source type.

- 1. On the Home page, tap .
- 2. Tap **Devices > Boiler Relay > Heat Source Type** (A) to select given option:
  - Gas Boiler (Default)
  - Oil Boiler
  - Electric Boiler
  - Heat Pump



#### Identifying the device

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

To identify the Boiler Relay:

- 1. On the Home page, tap
- 2. Tap Devices > Boiler Relay > Identify (A).

#### NOTE:

- This feature flashes the Boiler Relay LEDs, so you can identify the actual device.
- The Boiler Relay LEDs will continue to flash green until you tap OK.



### Using the device

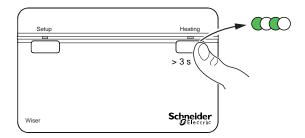
#### **Emergency heating**

You can do an emergency heating by pressing the heating button on the Boiler Relay when the Hub is not working, or the Wiser Home app heating control is not responding.

Press and hold the Heating button for > 3 s.

When the heating override is active, the heating LED flashes green.

**TIP:** The heating is manually turned on for 2 hours. In this state, the boiler self-regulates its temperature. To turn off the override, press and hold the heating button for > 3 s the heating returns to system control.



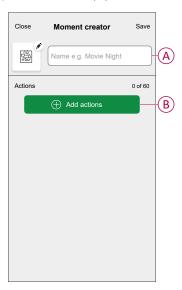
### **Creating a moment**

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:

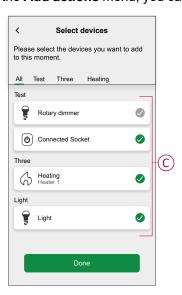
- 1. On the **Home** page, tap
- 2. Go to **Moments** > to create a moment.
- 3. Enter the name of the moment (A).

**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.

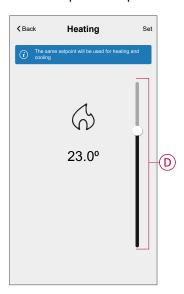


5. In the Add actions menu, you can select the devices (C).



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).



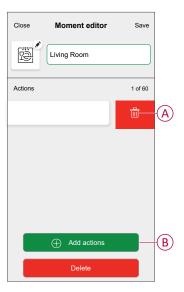
When the desired condition is set, tap Set.

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**

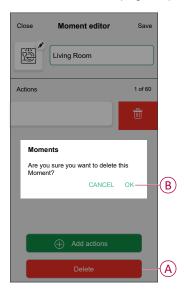
- 1. On the **Home** page, tap \( \begin{array}{c} = \b
- 2. Go to **Moments**, locate the moment you want to edit and tap .
- 3. On the Moment editor page, you can perform following changes:
  - Change the icon
  - · Rename the moment.
  - Tap each action to change the settings.
  - Slide an action 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  $\stackrel{\square}{=}$ .
- 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**

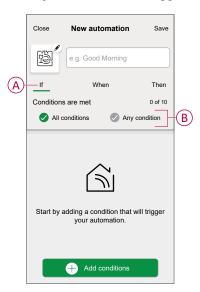
An automation allows you to group multiple actions that are usually done together, triggered automatically or at scheduled times. By using the Wiser app, you can create automations based on your needs.

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.

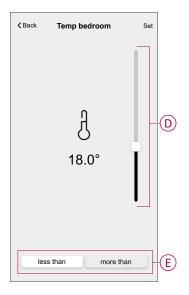


- 4. Tap **Add conditions** and select any of the following (C):
  - Device status change: Select a device to enable automation.
  - Away Mode: Enable/Disable away mode to trigger an action.

**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.

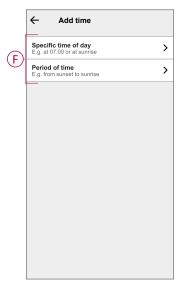


5. Tap **Device status change** > **Temperature/Humidity Sensor** > **Temperature**, Set the temperature using sliding bar (D) and select the condition (E) (less than / more than), then tap **Set**.



#### NOTE:

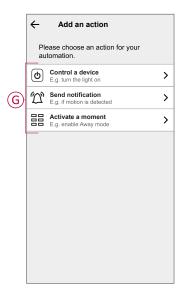
- · Max. 10 conditions can be added.
- 6. To set a specific time for your automation, tap **When > Add time** and select any of the following (F):
  - Specific time of the day: Sunrise, Sunset, Custom.
  - Period of time: Daytime, Night time, Custom.



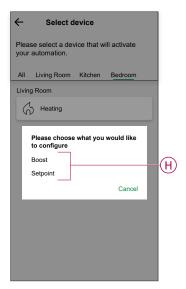
#### NOTE:

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

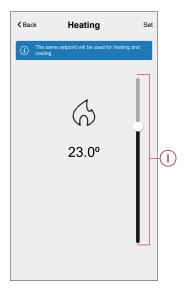
- 7. To add an action, tap **Then > Add an action** and select any of the following (G):
  - Control a device: Select a devices that you want to trigger.
  - **Send notification**: Turn on the notification for the automation.
  - Activate a moment: Select the moment that you want to trigger.



- 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.



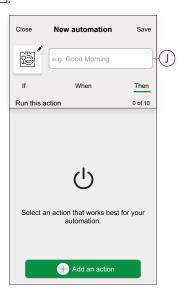
9. Tap **Setpoint**, set the required temperature using vertical sliding bar (I), then tap **Set**.



#### 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).

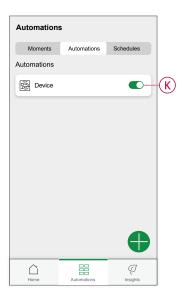
You can choose the cover image that represents your automation by tapping



#### 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.



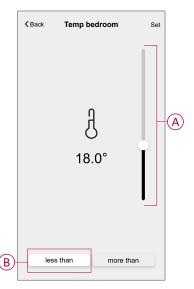
#### **Example of an automation**

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  $^{\circ}$ C when the room temperature is at 17  $^{\circ}$ C or lower. Second, switch off the heater when the room temperature is at 25  $^{\circ}$ C or above.

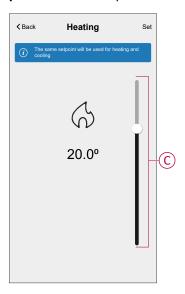
The room heater will not turn off automatically until you create another automation.

- 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  $^{\circ}$ C (A) and the condition as **less than** (B) and tap **Set**.



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

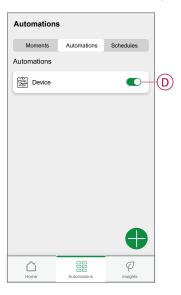
5. To add an action, tap Then > Add an action > Control a device > Heating > Setpoint. Set the temperature to 20 °C (C), then tap Set.



- 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.

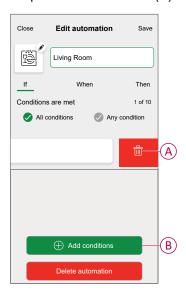


**NOTE:** You can enable or disable saved automations on the **Automations** tab by using **(**D).

#### **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 

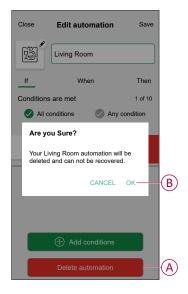
    Add conditions (B) to add new condition.



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).

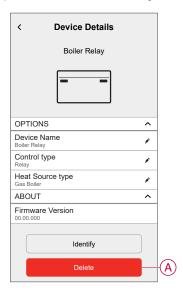


## Removing the device

Using the Wiser Home app, you can remove the Boiler Relay from the Wiser system.

To remove the Boiler Relay:

- 1. On the Home page, tap
- 2. Tap Devices > Boiler Relay > Delete (A).



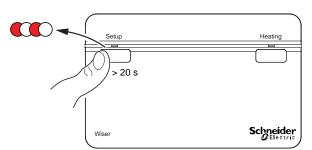
3. In the next screen read the warning and tap **Delete**.

## Resetting the device

You can reset the Boiler Relay to factory default mode.

Press and hold the setup button for >20 s. After 15 seconds, the LED flashes red.

**NOTE:** The Boiler Relay is removed from the Wiser system and all its function will be inactive until you recommission the device..



## **LED** indications

#### **LED Indications**

State	LED Indication	Status	
Identify	All LEDs flash green	The Boiler Relay is connected to the Wiser system.  NOTE: This function is initiated from the app.	
Joining to the Wiser system (Press and hold Boiler Relay setup button for >2 s)	Cycle between green and amber	Initiates joining the Boiler Relay to a Wiser System.	
Normal: Boiler ON	Solid green	The Boiler Relay is powered On and heating is currently active.	
Normal: Boiler OFF	0	The Boiler Relay is powered OFF and heating is currently inactive.	
RF error	Solid amber	The Boiler Relay is unable to communicate with the Wiser system. Refer to the Troubleshooting, page 23 to clear the RF error.	
Digital boiler interface error	Solid red	This indicates that the Boiler Relay is unable to communicate with the boiler via the digital interface. Refer to the Troubleshooting, page 23 to clear the digital boiler interface error.	
Factory reset (Press and hold Boiler Relay setup button for >20 s)	Flashing red	The boiler relay is in reset mode. The boiler relay then restarts and the LED blinks green and amber indicating that it is ready for pairing.	
Emergency Heat / Test (Press and hold Boiler Relay setup button for >3 s)	Flashing green	The heating is manually turned On for 2 hours.	

## **Troubleshooting**

Symptom	Possible cause	Solution
LED turns solid amber.	RF error in the Wiser System. The Boiler Relay is unable to communicate with the Wiser system.	Check that the Wiser Hub is powered On and in range of the Boiler Relay.
LED turns solid red.	Interface error in the Wiser System. The Boiler Relay is unable to communicate with the boiler via the digital interface.	Check that the boiler is powered On and that cables are connected between the boiler and the Boiler Relay.

## **Technical Data**

Mains voltage:	AC 220-240 V, 50 Hz	
Switch rating:	2 (1) A, AC 230 V total load max. 2,5 A	
Wiring:	Fixed wiring only	
User interface:	2x push button / LED	
Wired interfaces:	1x Relay output, 1x Digital boiler interface, 1x Wiser Boiler Relay power supply	
RF interface:	2.4 GHz (Bi-directional, Mesh)	
Maximum RF power transmitted:	+17 dBm (50 mW)	
Radio signal range:	30 m (free space)	
Ambient temperature:	0 °C to 45 °C	
Storage temperature:	-10 °C to 55 °C	
Without mains power:	Display: LEDs off Interfaces: off	
Mounting:	Industry standard wallplate	
Dimensions (WxHxD):	93x148x31 mm	

## **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/



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