# **Wiser Boiler Relay**

# **Device user guide**

Information about features and functionality of the device.

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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.

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

# 

**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

#### **A**WARNING

#### 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.

# 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<sup>®</sup>.

**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. Follow the steps below to pair the Boiler Relay:

- 1. On the Home page, tap 🔅 icon.
- 2. Tap **Devices** > **①** icon and tap **Climate** (tab) > **Boiler Relay**.
- 3. Tap Next.

< Boiler Relay Setup
Please make sure your Boiler Relay is wired and powered before proceeding.
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: In case the device is failed to join LED shows solid red.



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

< Boiler Relay Setup
Press and hold the setup button for 2 seconds until the LED flashes green and amber.
Device joined

- 6. Enter the Boiler Relay name and tap Next.
- 7. 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  $^{\textcircled{8}}.$ 

You can see the paired Boiler Relay name and location on the Home page under the  $\mbox{All}$  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 3 icon.
- 2. Tap **Devices > Boiler Relay > Device Name** (A) to rename the Boiler Relay.

< Device Details Boiler Relay		
OPTIONS	^	
Device Name Boiler Relay	<i>s</i> ,	(A)
Control type Relay		
Heat Source type Gas Boiler	ø	
ABOUT	^	
Firmware Version		
Identify		

#### Setting the device control

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

Follow the below steps to set the control type:

1. On the Home page, tap 🔅 icon.

- 2. Tap **Devices > Boiler Relay > Control Type** (A) to select given option:
  - Relay
  - OpenTherm

< Device Details		
Boiler Relay		
OPTIONS	^	
Device Name Boiler Relay	.**	
Control type Relay	, <b>s</b> ,	æ
Heat Source type Gas Boiler	ø	
ABOUT	^	
Firmware Version		
Identify		
Delete		

#### 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.

Follow the below steps to set the heat source type.

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

< Device Details	
Boiler Relay	
OPTIONS ^	
Device Name Boiler Relay	
Control type	
Heat Source type Gas Boiler	A
ABOUT ^	
Firmware Version	]
Identify	
Delete	

#### Identifying the device

Using the Wiser Home app, you can identify the Boiler Relay from the other available devices in the room. Follow the below steps to identify the Boiler Relay:

- 1. On the Home page, tap 🛱 icon.
- 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.

< Device Details Boiler Relay		
OPTIONS	^	]
Device Name Boiler Relay	.**	
Control type Relay	.*`	
Heat Source type Gas Boiler		
ABOUT	^	
Firmware Version		
Identify		A
Delete		

#### **Removing the device**

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

Follow the below steps to remove the Boiler Relay:

1. On the Home page, tap 🖓 icon.

2. Tap **Devices > Boiler Relay > Delete** (A).

< Device Details		
Boiler Relay		
OPTIONS	^	
Device Name Boiler Relay	ø	
Control type Relay	ø	
Heat Source type Gas Boiler	ø	
ABOUT	^	
Firmware Version		
Identify		
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 function will be inactive until recommissioning.



#### 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.



## **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 16 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 16 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).

#### **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/

#### Find compliance information for a Green Premium product

Click the link below to search for a product's compliance information (RoHS, REACH, PEP and EOLI).

**NOTE:** You will need the product reference number or product range to perform the search.

https://www.reach.schneider-electric.com/CheckProduct.aspx?cskey= ot7n66yt63o1xblflyfj

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