SIEMENS

Connected Home Receiver

RCR110.2ZB

Quick Start Guide

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1 About this document

1.1 Revision history

Edition	Date	Changes	Section
1	February 2022	First edition.	All
2	January 2023	• Added minimum output on/off time in "Minimum output on/off time [→ 7]". • Added a note in "Upgrading firmware [→ 8]".	6.2 7
3	February 2024	Revised information in sections "LED indication [→ 6]" and "Upgrading firmware [→ 8]".	5 7

1.2 Reference documents

Ref.	Document title	Document number
[1]	Connected Home Receiver mounting instructions	A6V12680334
[2]	Connected Home Receiver datasheet	A6V12680327

Download the above documents from http://siemens.com/bt/download by searching the document numbers listed above.

1.3 Before you start

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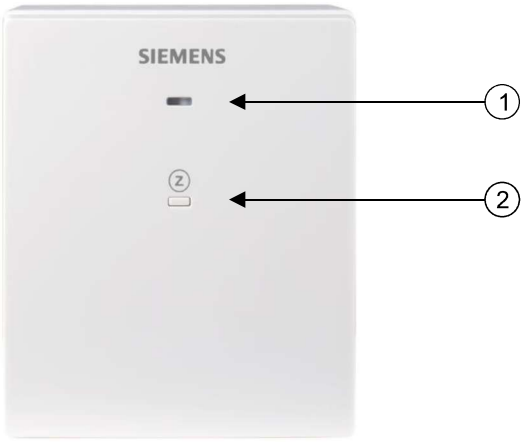
Symbol identifications

NOTICE	
!	This symbol identifies an important notice that you should be aware of when you are using the product.

The 'i' symbol identifies supplementary information and tips for an easier way of working.

2 Product overview

Connected Home ReceiverRCR110.2ZB is a wireless receiver that can be used either as a wireless relay or as a Zigbee repeater. When used as a relay, the receiver is wired to the heating equipment and/or domestic hot water (DHW) and receives wireless control signals from mobile application "Connected Home" via the hub GTW100ZB. When connecting to no heating equipment and purely working as a Zigbee repeater, it extends reach of the Zigbee signal and connects to other devices on the Zigbee network. When used as a relay, the receiver also acts as a Zigbee repeater.



No.	Description
1	LED for operating state indication
2	Button for user operation

3 Mounting and installation

NOTICE	
!	We recommend hiring licensed installers to mount and install the device. See document A6V12680327 for more information about mounting and wiring notes.

1. Switch off power to the heating system by using either your home's breaker box or the system's power switch.
2. Label the wires according to terminal designations, using the stickers provided with the device.
3. Loosen the screw at the bottom of the device using a screwdriver to separate the front panel from the mounting plate.
4. Screw the mounting plate tightly on the conduit box.

5. Connect tightly the labeled wires to the terminals on the back of the front panel and tighten all inserted wires by screwing down the screws. Note that wiring is different for different applications.
6. Attach the front panel and tighten the screw at the bottom.
7. Switch on power to the heating system. The device powers on too.

4 Adding the device to the hub (GTW100ZB)

Add the device to the hub from the mobile application based on its field application (heating equipment controller (boiler, circulating pump, etc.), DHW or Zigbee repeater).

If the hub is factory reset, the RCR110.2ZB is removed from the mobile application. Re-add it in the app based on its field application.

5 LED indication

Device state	LED state
Idle	Solid orange
Joining the Zigbee network	Flashes green rapidly
Successful connection	Solid green
Zigbee network failure[1)2)3)]	Flashes red slowly
Hardware error	Solid red[4)]
Factory reset	Alternates red and green
Firmware upgrade in process	Flashes orange rapidly
Manually overwriting	Flashes green slowly
Output state change[5)]	Flashes green rapidly for three times (0.5 Hz), and then changes back to the previous state.

1. Relay outputs are turned off when Zigbee network fails.
2. Check if the hub is powered on and try to reduce distance between the device and the hub.
3. Try network reconnection.
   – Remove the device from the mobile application, press and hold down button ▭ on the device for 10 seconds to perform factory reset, and then press and hold down the same button for 5 seconds to re-add the device to the network.
4. The LED indication of hardware error is only supported in product version A. See the product version on the label (the number after "2PFS") on the back of the device.
5. Output state change can be done either on the device or through the mobile application. However, frequent switching is not recommended as the device and mobile application might not be synchronized in a timely manner. The relay outputs maintain their previous states after a reboot and firmware upgrade.

Priority of LED state indication (high to low)

Zigbee network failure > manual override > normal operation (including firmware upgrade).

For example, if you perform manual override when there is a Zigbee network failure, the LED flashes red rather than green slowly.

6 Operation on the device

There is one physical button on the device for user operation.

Operation	Device action
Long press (time > 5 s)	Join network
Long press (time > 10 s)	Factory reset to idle
Double press (within 1 s)	Manual override: Change output state. See Manual override behavior [→ 7] for more details. Upon manual override, switching on/off relay outputs in the mobile application does not take effect within 15 minutes. After that, the previous operating mode resumes. If network fails, manual override continues until network is resumed.

6.1 Manual override behavior

If both relays are wired to corresponding equipment, pressing the operation button twice switches on/off the first relay output (Q1). The second relay output (Q2) follows the first relay output's changed state.

Output Q1	Output Q2	After manual override	Output Q1	Output Q2
On	On		Off	Off
On	Off		Off	Off
Off	On		On	On
Off	Off		On	On

6.2 Minimum output on/off time

Upon manual override, pressing the operation button twice switches on/off relays immediately without any minimum on/off time. However, if the device is in automatic mode and follows programmed schedules in the mobile application, the minimum output on/off time is 1 minute. Having this limit of on/off switching cycle is to protect the HVAC equipment and reduce wear and tear.

7 Upgrading firmware

Firmware version of the device is displayed in the mobile application. Once a new firmware version is available, you can upgrade the firmware via the mobile application.

NOTICE	
!	If upgrading firmware from v1000x to v20007 or higher, perform a factory reset on the RCR110.2ZB, remove the device from the mobile application, and then re-add it based on its field application.

NOTICE	
!	The firmware upgrade may not be notified in the mobile application at the same time if product versions are different. See the product version on the label (the number after "2PFS") on the back of the device.

8 Cyber security disclaimer

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