SALUS RX10RF ZigBee Network Control Module Instruction Manual

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Contents

Introduction

The RX10RF control module is an external element in the SALUS Smart Home system which turns ON when a heating signal is received from thermostats in the same network. It can replace a wired connection between the KL08RF wiring center and the boiler. In a system with TRV heads it is a optional device that activates the heat source. For the RX10RF to work together with wireless SALUS Smart Home series thermostats, it must be used with a CO10RF coordinator (in Offline mode) or internet gateway UGE600 (in Online mode) and the SALUS Smart Home application. This module can work as a receiver:

- of all thermostats (RX1 mode) – reacts to any heating command from all SALUS Smart Home thermostats in the ZigBee network

- of one thermostat (RX2 mode) – reacts to the heating command from one SALUS Smart Home thermostat in the ZigBee network

⚠ **Note:** With one ZigBee network coordinator (CO10RF or UGE600) only two modules can be used, one in RX1 mode and one in RX2 mode.

Product Compliance

Directives: Electromagnetic Compatibility EMC 2014/30/EU, Low Voltage Directive LVD 2014/35/EU, Radio Equipment Directive RED 2014/53/EU and RoHS 2011/65/EU. Full information is available on the website **www.saluslegal.com**

Safety Information

⚠Use in accordance to national and EU regulations. Use the device as intended, keeping it in dry condition. Product for indoor use only. Installation must be carried out by a qualified person in accordance to national and EU regulations. The device must remain disconnected from power supply before removing the housing. In emergency situation disconnect a single component or the entire SALUS Smart Home system from the power supply. During installation, the device must be disconnected from the 230 V power supply.

Switches and LED diodes description

- **AUTO MODE** – When the top switch of RX10RF receiver is set to AUTO, it means that the heating device will be switched ON/OFF in accordance to the request of a transmitter (thermostat).

ⓘ The bottom slider ON/OFF is inactive in automatic mode.

- **MANUAL MODE** – When the top switch is set to MANUAL, it means that the heating device is switched ON/OFF manually by the bottom ON/OFF switch.

ⓘ In a case of a communication failure or a transmitter malfunction, you can use manual mode to control the heating device until the problem is solved.

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Switch	LED diode	Description
Auto/ Manual	Blinks in red	Receiver is powered 230 V and is prepared for pairing with the ZigBee network
	Solid red	Receiver is powered 230 V and is connected to the ZigBee network
On / Off	Solid green	The heating device is turned ON
	Off	The heating device is turned OFF

Terminals description

Terminal	Function
L, N	230 V AC power supply
	Earth
COM, NO	Volt-free output, normally open contacts

Installation

The RX10RF receiver should be mounted in a place where 230 V power supply is available and wireless connectivity can not be disrupted.

The receiver's power supply should be protected by a fuse (max 16 A). The receiver's installation place should not be exposed to moisture. There are several options for connecting the receiver to the heating device. All wires should be connected inside the receiver's housing, to the proper inputs. The ground connection is not necessary for the correct receiver operation, but it is recommended, if it is possible.

- Loosen the screws from the receiver bottom housing, then open the housing

- Mount the back housing of the receiver, and then connect wires according to the appropriate schematic for your heating device.
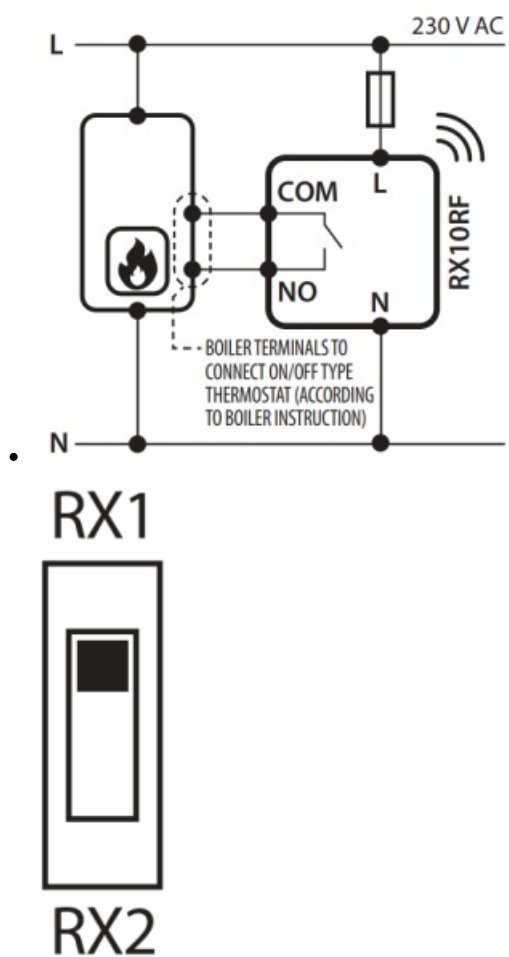

- Remount the front housing. Tighten the screws located on the bottom of the housing receiver.
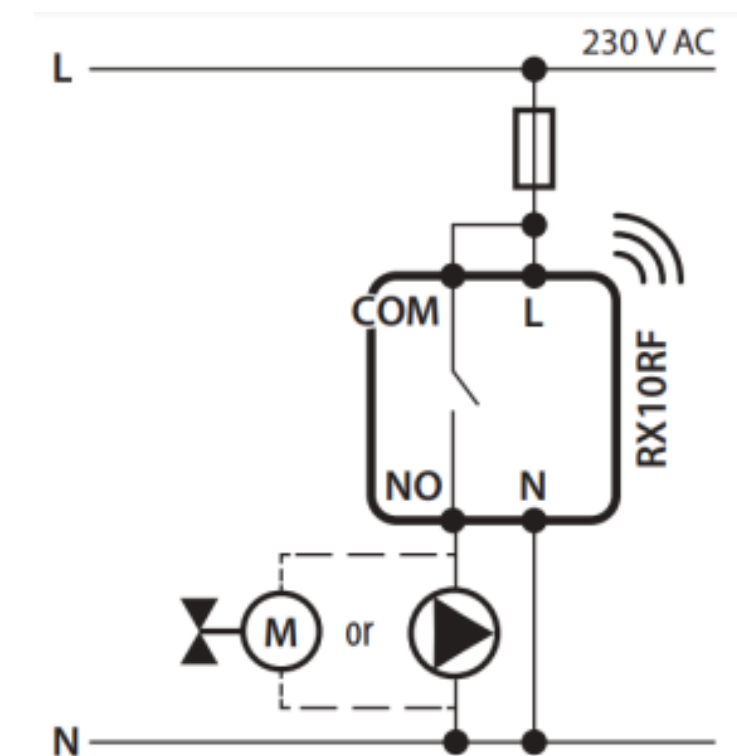

Wiring diagrams

Receiver configured in the RX1 mode

(wireless boiler control module)

230 V AC

COM L

NO N

RX10RF

BOILER TERMINALS TO CONNECT ON/OFF TYPE THERMOSTAT (ACCORDING TO BOILER INSTRUCTION)

N

RX1

RX2

Receiver configured in the RX2 mode

(individual control for separate heating zone)

230 V AC

L

COM L

NO N

RX10RF

M or

N

Module configuration in RX1 mode (default option)
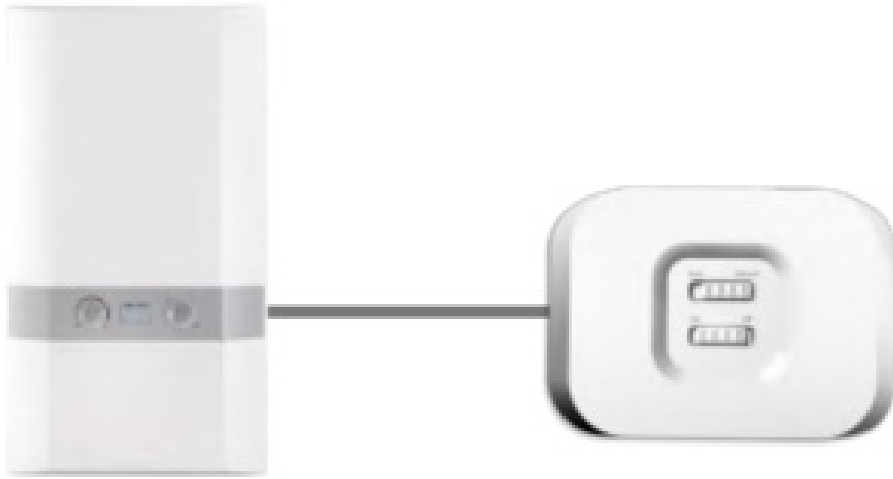
 Note: Before opening the case, disconnect the device from the power supply 230V~.

Inside the module there is a switch selector for operating mode. The RX1 position means that the module responds to a heating signal from any SALUS Smart Home thermostat in the ZigBee network (from many heating zones).

Module configured in RX1 mode – will NOT turn ON the other RX10RF receiver (configured in mode RX2) in the same network.

Receiver configured in the RX1 mode – as a remote boiler control module.
Receiver is connected to the boiler according to the proper wiring diagram.

Module configuration in RX2 mode

⚠️ **Note:** Before opening the case, disconnect the device from the power supply 230V~.

Inside the module there is a switch selector for operating mode. The RX2 position means that the module responds to a heating signal only from one SALUS Smart Home thermostat in the ZigBee network (from one heating zone).

The SALUS Smart Home series thermostat have to be configured during installation to work with the module in RX2 mode. (More information is in the user manual of the SALUS Smart Home series thermostat).

Module configured in RX2 mode – will turn ON the other RX10RF receiver (configured in RX1 mode) in the same network.
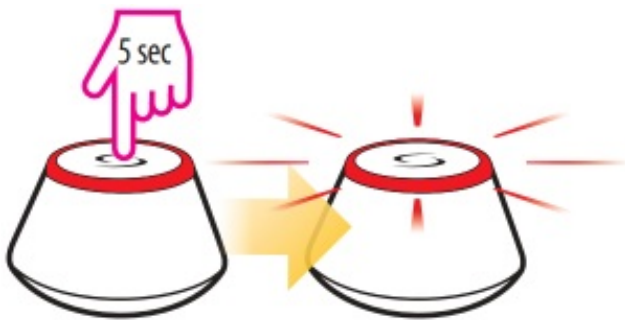
Receiver configured in the RX2 system – for individual control heating zone.
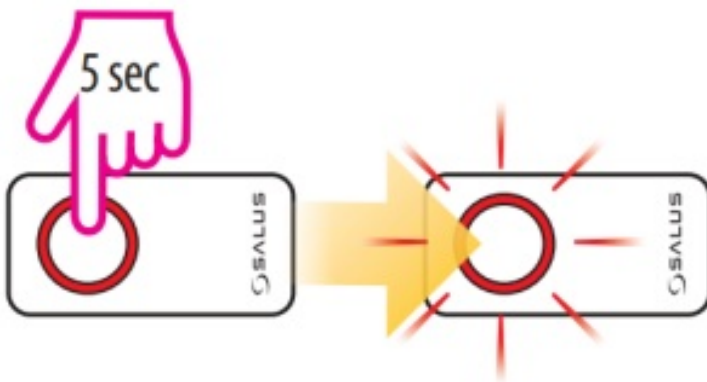Receiver is connected to the valve/pump according to the proper wiring diagram.

Pairing in local mode (Offline)

(with UGE600 gateway or CO10RF coordinator, without Internet connection)
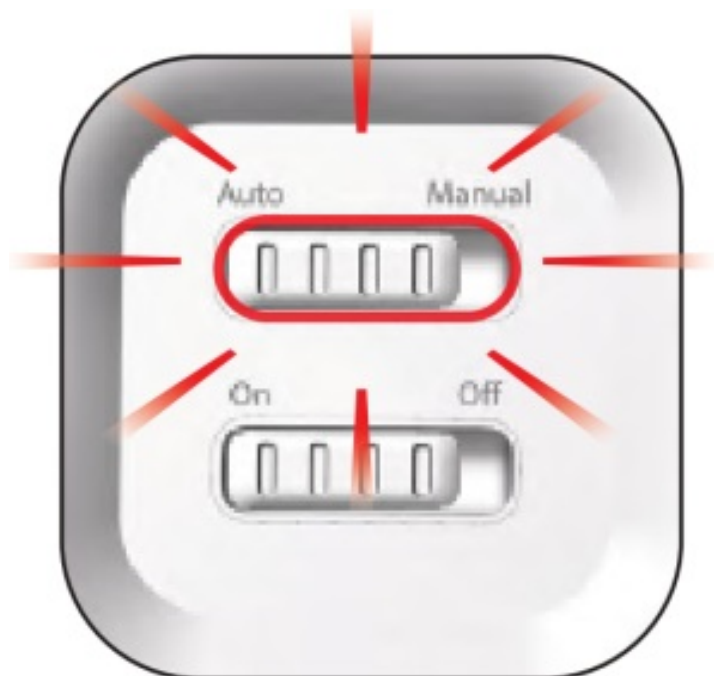
1. Open the ZigBee network.

OR

Note: Do not use the CO10RF coordinator with UGE600 gateway!

2. Just connect the receiver to the power supply and set the bottom switch to ON position – the red LED will start flashing
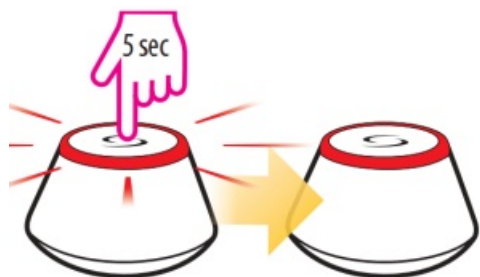
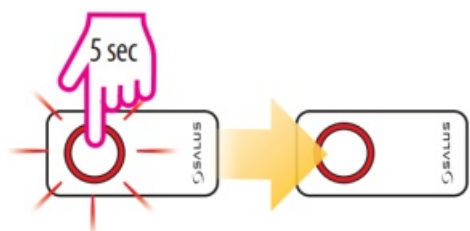ⓘ If the system does not want to detect module, press the „RESET" button in order to „refresh" module.

3. When the pairing process of the receiver is successful, the **red** LED light will stop flashing. RX10RF pairing with the ZigBee network is automatic, it is not necessary to press any additional buttons.

4. To pair other SALUS Smart Home devices – read the appropriate model's manual instructions.
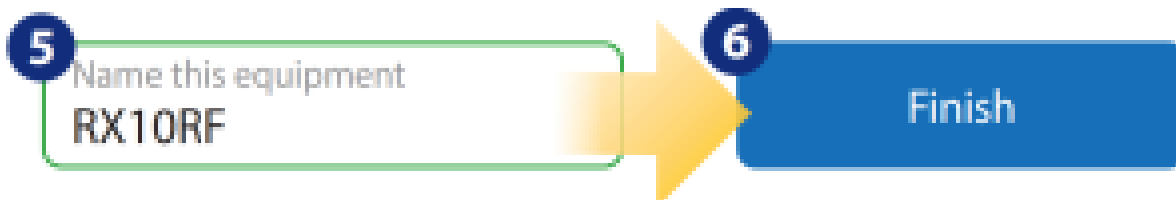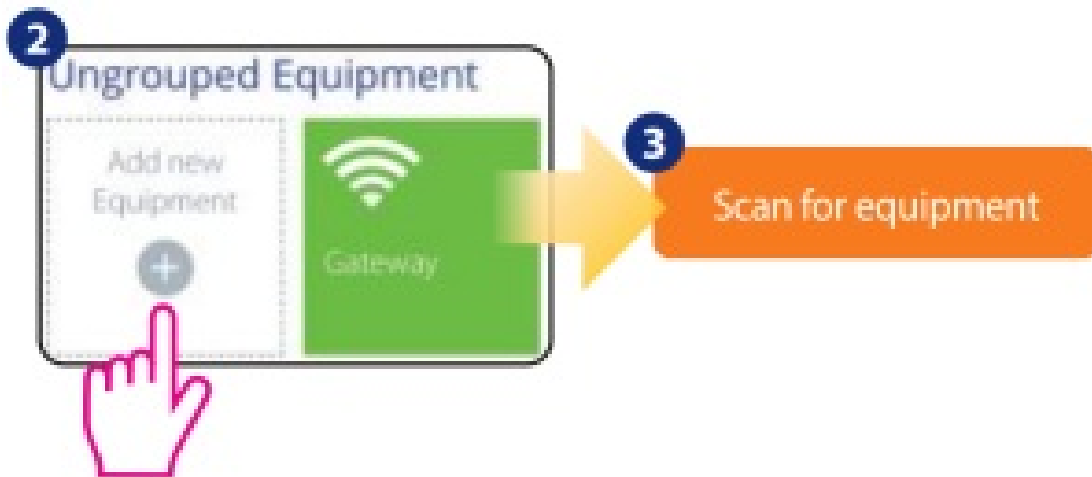5. Close the ZigBee network.

OR

Pairing via application (Online)

(with UGE600 gateway and Internet connection)

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-

 If the system does not detect module, press the „RESET" button in order to „refresh" module.

ⓘ When the pairing process of the receiver is successful, the RX10RF module will appear in the application and the light on the module will stop flashing

Two modules in one ZigBee network

Note: Two RX10RF modules (receivers) can be paired with one UGE600 gateway:

- first in RX1 mode
- second in RX2 mode
- **START RX1**

  Any of thermostat can turn ON RX10RF module configured in RX1 mode.

- **START RX2**

  Just one thermostat can turn ON RX10RF module configured in RX2 mode…

- **RX2**

  …when the RX10RF (configured as RX2) is turned ON, then the RX10RF (configured as RX1) will turn ON too.

- **RX1**

PAIR / IDENTIFICATION button

 button is used for pairing/removing the module, as well as for identification in the ZigBee network.

If the module is paired with ZigBee network, holding the pairing button for 5 seconds will remove the device from the network. When the device is removed from the ZigBee network the red LED light will blink two times every 1 second.
To add the module to the network again, press the RESET button to refresh the module.

To check whether the device is in the ZigBee network (identification mode), please press the button for 1 sec. the green LED light on the receiver and lights on the CO10RF coordinator or UGE600 Internet gateway will
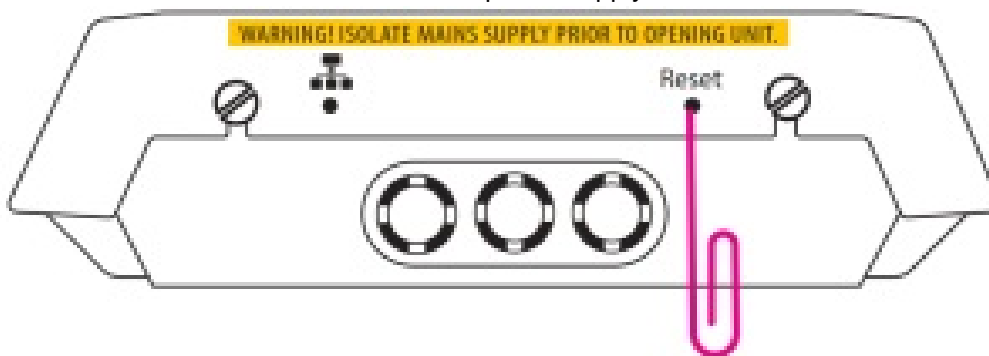
start to flash. To exit the identification mode, press the button again.
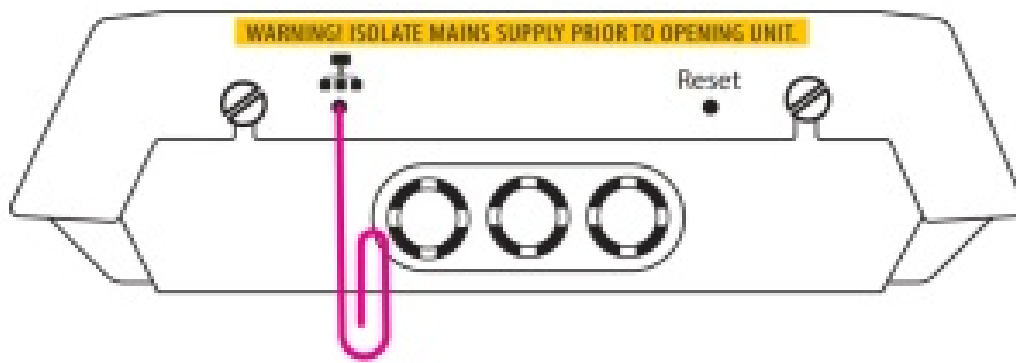
RESET button

At the bottom of the RX10RF there is a RESET button. Use it to refresh the module.

If for some reason the RX10RF module does not work properly, press the RESET button as shown on the picture below, then disconnect the module from power supply for few minutes.

Technical data

Model	RX10RF
Power supply	230 V AC 50 Hz
Type	RX10RF is designed to work with the SALUS Smart Home system
Type of control	ON/OFF
Operation temperature	0°C to + 50°C
Storage temperature	-20°C to + 60°C
Maximum allowable humidity	5-95% RH (not condensed)
Max load	16 (5) A
Communication	ZigBee 2.4 GHz
Dimensions [mm]	145 x 100 x 35

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Documents / Resources

	[SALUS RX10RF ZigBee Network Control Module](#) [pdf] Instruction Manual RX10RF, ZigBee Network Control Module
	[SALUS RX10RF ZigBee Network Control Module](#) [pdf] User Manual RX10RF, ZigBee Network Control Module

Manuals+,