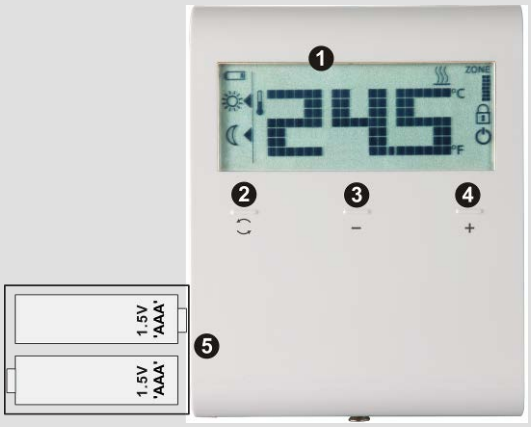
SIEMENS

Operating Instructions

RDD100.1RFS

The RDD100.1RFS consists of a wireless room thermostat RDD100.1RF and an RCR100RF receiver. These units allow you to set the ideal room temperature at the time you want.

RDD100.1RF



1 Display

- Indicates that batteries need to be replaced
- Comfort mode
- Economy mode
- Frost protection (heating) active
- Room temperature, setpoint, etc.
- °F Room temperature in degrees Fahrenheit
- °C Room temperature in degrees Celsius
- Button lock activated
- ZONE Display of zone (default = 1)
- Heating On
- Current room temperature

2 Change operating mode

3 Decrease value

4 Increase value

5 Battery holder

RCR100RF

6 Indication of data transmission and operating state (LED)

7. Initialization of wireless communication with transmitter (LEARN button)

Do you want to lock the buttons?

	Press and hold for at least 7 seconds to activate a button lock. Repeat to unlock. The unit operates normally when the buttons are locked, but no changes can be made.

Do you want to change the operating mode?

	The room thermostat provides Comfort mode and Economy mode . Changeover between the operating modes can be made manually by pressing . **Comfort mode** is a permanent (24 h) selection of Comfort. Select this mode when you want to maintain permanently the Comfort temperature. It is used during occupancy periods, for example. **Economy mode** is a permanent (24 h) selection of Economy. Select this mode when you want to maintain permanently the Economy temperature. It is used during non-occupancy periods, for example at night.
!	**Note:** **Frost protection** is a function always active in the background. As soon the room temperature falls below 5 ºC, the unit automatically activates heating .

Energy saving tips without loss of comfort

- Use Economy mode during longer periods of non-occupancy

Are your rooms too warm/too cold?

+ **–** ↻	Press **+** or **–** to increase or decrease the room temperature setpoint in increments of 0.5 °C/1 °F. Proceed as follows: • Press **+** or **–** to change the setpoint temporarily. Press ↻ to save the setting or wait for the program to exit automatically • To permanently change the temperature setpoints, use parameters P05 and P07. To lock the setpoints, use parameters P06 and P08

Does symbol ▭ appear on the display?

Symbol ▭ is displayed when the batteries are low. Replace them with 2 new alkaline batteries type AAA. Proceed as follows:

- Get 2 new alkaline batteries type AAA
- Remove the battery holder and then the batteries. Insert the new batteries and, within 1.5 minutes, replace the battery holder
- Ensure the exhausted batteries are disposed of correctly, in compliance with environmental requirements

Do you want to pair transmitter and receiver?

+ **–** **Learn** ↻	The RDD100.1RF communicates with the RCR100RF at a frequency of 433 MHz. To pair transmitter and receiver, proceed as follows: **RCR100RF receiver setting:** 1) Press and hold the **LEARN** button on the reveiver for at least 3 seconds and then release it. 2) Red and green LEDs flash alternately to indicate that the receiver is in learning mode. **RDD100.1/RF transmitter setting:** 3) On the transmitter, set the parameters (refer to section "Do you want to change parameters?"). 4) Check to ensure that parameter P19 is not 0, because this would mean that the wireless function is disabled. By default, parameter P19 is 1. 5) Proceed to parameter P20. Press ↻ and parameter P20=0 (OFF) flashes. Adjust the value by pressing **+** to change to P20=1 (ON), then press ↻ to confirm. 6) During wireless learning, the LCD displays "rF" and "Lrn". Wait for time out, and the transmitter exits the parameter setting mode. **Successful wireless learning:** 7) The green LED on the RCR100RF flashes for 10 minutes to indicate that the receiver has successfully completed wireless learning. **Recommendation:** 8) *Additional test to ensure the wireless signal is fine:* On the RDD100.1/RF, change the operating mode by pressing ↻ or change the setpoint by pressing **+** or **–**. On the RCR100RF, the green LED should flash for 3 seconds before changing to constantly green. At the same time, observe your radiator, boiler or heater indication (if it has one) to ensure that it changed the operating mode. 9) If step 7 or 8 is working fine, this means you have succesfully paired the units. **Unsuccessful wireless learning:** 10) If the RCR100RF fails to receive wireless data, the red LED starts to flash **. Repeat steps 1 to 8 until pairing is successful. **!** **Note:** Always start receiver learning before starting pairing with the transmitter. The units must be placed such that transmitter and received signals have limited external wireless interference. **In normal operation, if a drop in wireless communication occurs due to unforseeable noise, just leave the receiver and it will recover automatically. The pairs are saved even if there is a power shut down. Communication restarts automatically after several minutes without any user action.

Do you want to change parameters?

+ **–** 	If you want to change control parameters, proceed as follows: • Press **+** and **–** simultaneously for 5 seconds • Release the buttons and parameter P02 is displayed • Press **+** or **–** to scroll to the parameter that needs to be changed • Press to select the parameter • Press **+** or **–** to change the value • Press to confirm and save the changed value • Select and change other parameters • The program automatically returns to the normal screen after a timeout

Parameter list

Parameter no.	Description	Setting range (default)
P02	Selection of °C or °F	1 = °C (default) 2 = °F
P03	Standard temperature display	1 = room temperature (default) 2 = setpoint
P04	Temperature sensor calibration	-3…3 °C Step 0.5 °C (-6…6 °F, step 1 °F) Default: 0 °C
P05	Comfort setpoint	5…35 °C, step 0.5 °C (41…95 °F, step 1 °F) Default: 20 °C, 68 °F
P06	Comfort setpoint lock	0 = OFF (default) 1 = ON → locked according to setting in P05
P07	Economy setpoint	5…35 °C, step 0.5 °C (41…95 °F, step 1 °F) Default: 16 °C, 61 °F
P08	Economy setpoint lock	0 = OFF (default) 1 = ON → locked according to setting in P07
P09	Buzzer	0 = OFF 1 = ON (default)
P10	Show frost protection icon	0 = OFF (default) 1 = ON and always on at 5 ºC
P19	Sequential number of room unit	0 = no display of zone (RF off) 1 = zone number 1 (for standard RF) (default) … 6 = zone number 6
P20	RF learn	0 = OFF (default) 1 = ON
P21	Scanning rate for the capacitive buttons Note: Shorter scanning rate means shorter battery life	0.2 = 0.25 s 0.5 = 0.5 s 1.0 = 1.0 s (default) 1.5 = 1.5 s
P22	Reload factory settings	0 = OFF (default) 1 = reload
P23	Software version information	No adjustment possible

Receiver’s LED indication

State of receiver	State of LED
Power up (or reset)	The red and green LEDs flash alternately for 5 seconds, then change to constantly red. Note: If the receiver was previously programmed, it shows immediately constantly red.
Learning mode Successful learning mode	The red and green LEDs flash alternately. If RCR100RF learning is successful, the green LED will flash for 10 minutes.
Signal ok and output status change	The green LED is constantly lit, and if the output status changes, the green LED flashes for 3 seconds, then changes back to constantly green.
Fail to receive wireless data	If the RCR100RF fails to receive wireless data, the red LED will start to flash after 125 minutes. If the RCR100RF signal is recovered, it will return to the previous LED state.

RED regulation

RDD100.1RF: • Operating frequency: 433.9 MHz • Maximum Radio-Frequency power: 3.38 dBm
Siemens Switzerland Ltd. declares that the radio equipment type RDD100.1RFS is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at www.siemens.com/download?A6V10403583.