

For the owner and heating engineer



Operating and installation manual

# VR 80 Remote Control Device



Bus modular control system

**VR 80**

**GB**

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### Notes on the documentation

The following information is intended to help you throughout the entire documentation.

Other documents apply in combination with this installation and operation manual.

**We accept no liability for any damage caused by failure to observe these instructions.**

#### Other valid documents

VRS 620 operating and installation manual  
VRC 630 operating and installation manual

### Symbols used

Please observe the safety instructions in this manual for the installation of the remote control device.



**Danger!**

**Immediate risk of injury or death!**

- Symbol for a necessary task

#### Storage of the documents

Please pass on this operating and installation manual to the owner of the system in order for him/her to store it so that it is available whenever it is required.

## Safety

The remote control device must be installed by a qualified engineer, who is responsible for adhering to the existing standards and regulations.

**We accept no liability for any damage caused by failure to observe these instructions.**

## Installation and operation

### Vaillant warranty

We only grant a Vaillant manufacturer's warranty if a suitably qualified engineer has installed the system in accordance with Vaillant instructions. The system owner will be granted a warranty in accordance with the Vaillant terms and conditions. All requests for work during the guarantee period must be made to Vaillant Service Solutions (0870 6060 777).

### **Recycling and disposal**

Neither your remote control device nor any of its accessories belong in the household waste. Make sure the old device and any existing accessories are disposed of properly.

# Operating manual

## 1 Overview of the device

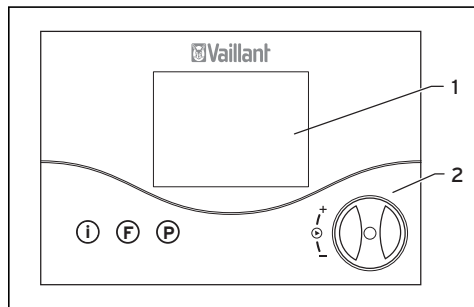


Fig. 1.1 Overview of the device

### Key

- 1 Display
- 2 Dial (turn and click)
- I Info button
- F Special functions button
- P Programming button/installer level

## 2 Overview of the display

### 2 Overview of the display

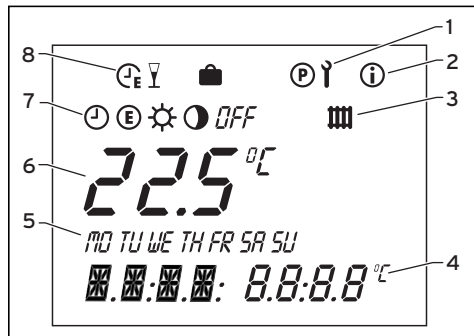


Fig. 2.1 Overview of the display

#### Key

- 1 Installer level and service/diagnostics level
- 2 Info level
- 3 Heating circuit symbol
- 4 Time/temperature display
- 5 Days of the week
- 6 Actual temperature
- 7 Operating modes
- 8 Special function



### 3 Description of the device

The VR 80 is a remote control device used to control a heating circuit within a control system with a central controller (VRS 620 or VRC 630).

All settings for this heating circuit can be made with the central controller, regardless of whether a remote control device is used.

### 4 Operation

The operating principle is based on the three buttons and an dial (Vaillant “turn and click” operating concept).

The current room temperature and the operating mode, e.g. ☀ and ⚙, or, if activated, the respective special function and the current day of the week and time are displayed on the default display.







#### 4.1 Setting the operating modes

Table 4.1 provides you with an overview of the operating modes you can select.


- Press the dial once -  
the symbol for the set operating mode flashes on the display.

## 4 Operation

- Turn the dial until the desired operating mode appears on the display. The display returns to the default display after about five seconds.

Symbol	Meaning
	<b>Automatic:</b> The heating circuit is operated alternately in heating  and set-back  operating mode according to a specified timer programme.
	<b>Eco:</b> The heating circuit is operated alternately in heating  and off <i>OFF</i> operating mode according to a specified timer programme.
	<b>Heating:</b> The heating circuit is operated according to a set room temperature, regardless of the preset timer programme.

**Table 4.1 Operating modes**

Symbol	Meaning
	<b>Set-back:</b> The heating circuit is operated according to the "ECO" set-back temperature, regardless of the pre-set timer programme.
<i>OFF</i>	<b>Off:</b> The heating circuit is off, provided the frost protection function (for outside temperatures of below 3 °C) is not activated.

**Table 4.1 Operating modes (contd.)**

## 4.2 Setting the room temperature



The current temperature is on the default display.


- Turn the dial - the actual temperature disappears from the display, the sun symbol is displayed on the operating mode level and the required room temperature is displayed on the time/temperature level (e.g. TEMP 20 °C).
- You can set the required room temperature directly (after about 1 second) to the desired value by turning the dial.



The display returns to normal mode after about five seconds.

## 4 Operation

### 4.3 Special functions (activating party)

The heating phase is continued beyond the next switch-off time (only possible if the  or  operating mode is selected) if you activate the "Party" special function.

- Press the "F" button - the party symbol  appears on the display for about ten seconds and the function is then activated. The function is deactivated automatically by reaching the next heating phase.
- To deactivate the function beforehand, you only have to press the "F" button again.

The special functions "Save until"  and holiday  are only displayed. They can be activated only on the central device (refer to the other valid documents).

### 4.4 Info level

- You can access the info level by pressing the info button. The info symbol appears on the display as soon as you select the info level. If you press the button several times, the following information is displayed in succession:
  - Product name (VR 80)
  - Set room temperature (e.g. TEMP 20.0 °C)
  - Set-back temperature (e.g. Eco: 15.0 °C)

- eBUS address within the bus modular control system (e.g. ADDR 2)
- Press the “i” button again to return to the default display.

#### **4.5 Installer level**

On the installer level, you can adjust the:



- Set-back temperature
  - Correction factor for the room temperature display
- Hold down the “P” button for about ten seconds - the “spanner” symbol appears to indicate the installer level and the set set-back temperature flashes, e. g. Eco 15.0 °C.
  - Turn the dial and change the set-back temperature.
  - Press the dial again - the correction factor (e.g. C-RT 0.0 °C) for the room temperature is displayed. You can now change the display value within the range between -3 and +3 (current room temperature displayed = measured room temperature + correction factor).

## 4 Operation

- Press the “P” button to return to the default display.

### **4.6 Service/diagnostics level**

On the service/diagnostics level, you can

- Check the display.
- Display the software version of the remote control device.
  
- Press the “P” button and the dial simultaneously about three seconds - you are now on the service/diagnostics level (   ).

You are shown all possible displays.

- Press the dial again - the software version of the remote control device is displayed, e.g. VERS 2.20.
- Press the “P” button to return to the default display.

## Installation manual

### 5 Information on the installation and operation

The device may be installed, connected to the mains supply, set and put into service for the first time only by an approved company specialised in heating engineering, which is responsible for compliance with existing standards and regulations.

#### 5.1 CE label

The CE label documents that, in combination with Vaillant boilers, the VR 80

remote control device meets the basic requirements of the directive on electromagnetic compatibility (89/336/EEC) and the low voltage directive (73/23/EEC).

#### 5.2 Intended use

The VR 80 remote control is a state-of-the-art device which has been designed in accordance with approved safety regulations. Nevertheless, there is still a risk of injury or death to the user or others or of damage to the device and other property in the event of improper use or use for which it is not intended.

The VR 80 remote control device is a system component of the VRS 620 or

## 5 Information on the installation and operation

VRC 630 bus modular control system for the regulation of hot water central heating systems with integrated hot water supply.

Please observe that a maximum of eight remote control devices can be connected. Any other use or extended use is regarded as other than intended.

The manufacturer/ supplier is not liable for any resulting damage. The user alone bears the risk.

Intended use includes the observance of the operating and installation manual.



## 6 Safety instructions and regulations

### 6.1 Safety instructions

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#### **Danger!**

**Risk of death from electric shock through contact with live connections. Before carrying out work on the remote control device, switch off the power supply and secure it against being switched on again.**

**Only remove the remote control device from the wall base if it is not live.**

### 6.2 Regulations

All wiring must be in accordance with Building Regulations Part P, current IEE regulations, and all other relevant regulations and guidelines, and must be carried out by a suitably qualified person.

Use standard commercial cables for wiring.

- Minimum cross section of the lines:  
0.75 mm<sup>2</sup>

The following line lengths may not be exceeded:

- Bus lines: 300 m

## 6 Safety instructions and regulations, 7 Installation

230 V connection lines and bus lines must be laid separately if they are longer than 10 m.

The remote control device may only be installed in dry rooms.

## 7 Installation

The VR 80 remote control device can be mounted on the wall of any room within the heating system.

### 7.1 Place of installation

When selecting the place of installation, please take into account whether the room temperature is supposed to be measured (selection of the lead room). In this case the remote control device should be mounted in such a manner that the room temperature is able to be measured perfectly.

The best place to install it is on an inside wall at a height of about 1.5 m. The remote control device should be able to measure the temperature of the circulating air there, unhindered by furniture, curtains or other objects. Choose a location where the remote control device is not affected by draughts from doors or windows or by heat sources such as radiators, chimney walls, television sets or direct sunlight.

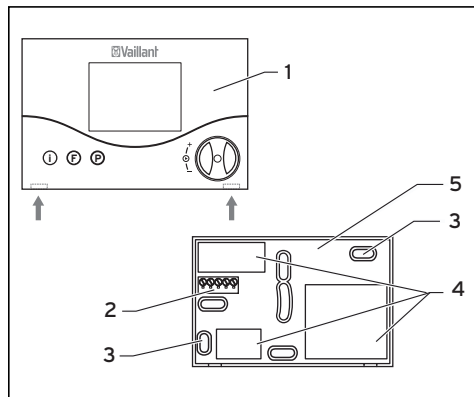
All radiator valves must be fully open in the room where the remote control device is to be installed if room temperature modulation is activated by means of the central device.

## 7.2 Installing the remote control device

The device is connected to the heating system by means of a two-wire bus line (eBus).

- Open the remote control device (**1**) using a screwdriver to push open the lock in the provided slots.
- Drill two holes (**3**) of 6 mm diameter (see Fig. 3.1) and insert the supplied wall plugs.
- Lay the connection cable through a cable duct (**4**).
- Attach the mounting box to the wall with the two screws provided.

## 7 Installation



**Fig. 7.1 Installation of the remote control device**

- Connect the connection cable as illustrated in Fig. 8.1.
- Place the remote control device (1) on the mounting box (5) so that the pins on the back of the top part fit into the recesses (2).
- Push the remote control device onto the mounting box until it engages.

## 8 Electrical installation

The electrical connection may only be carried out by a suitably qualified engineer.



### **Danger!**

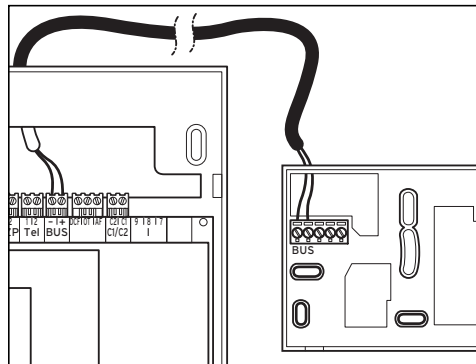
**Risk of death from electric shock through contact with live connections. Before carrying out work on the remote control device, switch off the power supply and secure it against being switched on again.**

### 8.1 Connecting the remote control device

The remote control device communicates with the central controller via the eBus. It can be connected to any interface in the system. It must be ensured that the bus interfaces are connected to the central controller.

The structure of the Vaillant system allows you to lay the eBus from component to component. This means that the lines can be exchanged without impairing communication.

## 8 Electrical installation

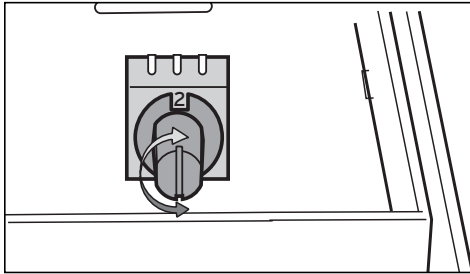


**Fig. 8.1** Connecting the remote control device

### **8.2** Setting the bus address

To ensure perfect communication between all components via the eBus, the remote control device is assigned an address which is suitable for the heating circuit to be controlled.

The correct addresses for the individual system components can be taken from Table 8.1.



**Fig. 8.2 Setting the bus address**

System component	Address of the component	Bus address to be set in the VR 80
Heating circuit 1 VRS 620/ VRC 630	HK 1	1
Heating circuit 2 VRS 620/ VRC 630	HK2	2
Heating circuit 3 VRC 630	HK 3	3
VR 60, address 4	HK 4 HK 5	4 5
VR 60, address 6	HK 6 HK 7	6 7
VR 60, address 8	HK 8	8

**Table 8.1 Bus addresses to be set**

### 9 Start-up

The device is put into service together with the central controller. Please proceed in accordance with the instructions in the manual of the VRS 620 or VRC 630 central controller.

#### **Handing over to the owner**

The owner of the remote control device must be instructed about its functions and how to operate it.

- Hand over any instructions intended for the owner as well as the documents of the device.
- Go through the operating manual with the owner and answer any questions.
- Draw special attention to the safety instructions, which the owner must follow.
- Tell the owner to keep the manuals nearby the remote control device.



## 10 Technical data

Description	Unit	VR 80
Operating voltage $U_{\max}$	V	24
Maximum permissible ambient temperature	°C	50
Minimum cross-section of the connection lines	mm <sup>2</sup>	0,75
Dimensions		
Height	mm	97
Width	mm	146
Depth	mm	32
Level of protection		IP 20
Protection class		III

**Fig. 10.1 Technical data**

## 11 Vaillant Service

To ensure regular servicing, it is strongly recommended that arrangements are made for a Maintenance Agreement. Please contact Vaillant Service Solutions (0870 6060 777) for further details.





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