Operating instructions

for the system user

VIE**S**MANN

Vitotrol 100-EH

Wireless remote control for 1 heating circuit or 1 cooling circuit or 1 heating/
cooling circuit

VITOTROL 100-EH

Please keep safe.

Safety instructions

⚠ Please follow these safety instructions closely to prevent accidents and material losses.

Safety instructions explained

⚠ **Danger**
This symbol warns against the risk of injury.

Note
Details identified by the word "Note" contain additional information.

Target group

These instructions are intended for system users.
Individual sections of these instructions describe activities that must be carried out by contractors.
This appliance can also be operated by children aged 8 and older, as well as by individuals with reduced physical, sensory or mental faculties or those lacking in experience and knowledge, provided such individuals are supervised or have been instructed in the safe use of this appliance as well as in any risks arising from it.

⚠ **Danger**
Wireless signals can interfere with electronic medical devices, particularly pacemakers, hearing aids and defibrillators.
If any such devices are used, users should avoid being in the immediate vicinity of operational wireless components.

Installation and setup

- All settings and work on the appliance must be carried out as specified in these instructions.
- Work on electrical equipment may only be carried out by a qualified electrician.
- Only connect appliances to correctly installed sockets.

- When working on the appliance, disconnect the power plug.
- Observe minimum clearances to ensure reliable signal transmission.

Operation of the system

- Only ever operate appliances in dry, frost-free indoor rooms (not bathrooms).
- Do not operate appliances in rooms where there is a risk of explosion.

- Protect appliances from:
  - Moisture
  - Dust
  - Liquids
  - Vapours
  - Direct sunlight
  - Other direct thermal radiation

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Safety instructions (cont.)

- After a power failure or restart, check the status of the wireless components.
- Never touch the power supply unit/ power cable with wet hands.

⚠ **Danger**
Damaged equipment poses a safety hazard.
Check the appliance for external damage. Never start up a damaged appliance.

Auxiliary components and individual parts

For replacement, use only spare parts supplied or approved by Viessmann.

⚠ **Danger**
Connecting unsuitable power supply units/power cables poses a fire risk.
Only connect the power supply unit/ power cable provided.

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Index (cont.)

Safety and liability

Operational reliability and system requirements

System safety:
- The heating system and the functionality of the message paths must be tested at regular intervals.
- To improve the operational reliability of the heating system, we recommend implementing supplementary measures, e.g. frost protection or monitoring for water damage.

Reliable remote control operation:
- The heat pump control unit **and** the Vitotrol 100-EH remote control must be connected via low power radio.
- The remote control unit must be assigned to 1 heating circuit, 1 cooling circuit or 1 heating/cooling circuit (settings to be made by the contractor via software tool).

- Commissioning has been carried out.
- To enable software updates, the heat pump has to be connected to the internet via a WiFi router. The download always takes place via the Viessmann server.
  Automatic software updates occur only if a permanent internet connection is provided via the heat pump (recommend).

Settings for WiFi and low power radio at the connected heat pump:
Vitocal operating instructions

Liability

No liability is accepted for loss of profit, unattained savings, or other direct or indirect consequential losses resulting from use of the Vitotrol remote control, the Viessmann server or the software, or for damage resulting from inappropriate use.
Liability is limited to typical damage arising if a fundamental contractual obligation is violated through slight negligence, the fulfilment of which is essential for proper execution of the contract.
The limitation of liability shall not apply if the damage was caused deliberately or through gross negligence, or if mandatory liability applies due to product liability legislation.

The Viessmann General Terms and Conditions apply, which are included in each current Viessmann pricelist. Viessmann accepts no liability for push notifications and email services, which are provided by network operators. The terms and conditions of the relevant network operators apply in this context.

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Disposal of packaging

Please dispose of packaging waste in line with statutory regulations.

Symbols

Symbol	Meaning
	Reference to other document containing further information
1.	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
	Warning of personal injury
!	Warning of material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	▪ Component must audibly click into place. or ▪ Acoustic signal
	▪ Fit new component. or ▪ In conjunction with a tool: Clean the surface.
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do **not** dispose of component in domestic waste.

Terminology

To provide you with a better understanding of the functions of your remote control, some terminology is explained. This information can be found in chapter "Terminology" in the Appendix.

Introductory information

Contractor

Activities that only contractors should carry out are indicated with this symbol.

Work on electrical equipment may only be carried out by a qualified electrician.

Intended use

Install and operate the Vitotrol 100-EH as intended and only in conjunction with the electronic control units and controllers of the Viessmann appliances that are supported for this purpose.

The Vitotrol 100-EH is intended solely for operation in buildings of a residential or commercial nature. Incorrect use of the device is prohibited and will result in an exclusion of liability (e.g. commercial or industrial use other than for control and monitoring purposes).

Installation, service and operating instructions included with the product and available online must be observed.

Use the Vitotrol 100-EH solely for system operation with the communication interfaces specified for this purpose in the relevant product documentation. With regard to the communication interfaces, ensure on site that the system requirements specified in the product documentation are met at all times for every transfer medium employed.

Note
The device is intended exclusively for domestic or semi-domestic use, i.e. even users who have not had any instruction are able to operate the device safely.

Product information

The Vitotrol 100-EH is a wireless remote control for Viessmann heat pumps. The Vitotrol 100-EH is connected to the heat pump control unit via low power radio.

The Vitotrol 100-EH can be used to operate 1 heating circuit, 1 cooling circuit or 1 heating/cooling circuit:
- Setting the room temperature and operating programs
- Scanning fault messages

Ambient temperatures: +5 to +40 °C
The Vitotrol 100-EH may be used in rooms with moderate or low humidity.

Note
No more than 1 Vitotrol 100-EH can be configured for each heating circuit, cooling circuit or heating/cooling circuit connected to the heat pump control unit.

Up to date information on the remote control

For a current overview of the supported control units and updates for the product, e.g. information on commissioning: See **www.vitotrol.info**.

Maintenance parts and spare parts

Maintenance parts and spare parts can be identified and ordered directly online.

Viessmann Partnershop

Login:
https://shop.viessmann.com/

Product information (cont.)

Viessmann spare part app

www.viessmann.com/etapp

Commissioning

Heat pump control unit

Commissioning and matching of the heat pump control unit to local conditions and building characteristics is carried out by your contractor, who will also instruct the user in the operation of the system.

The settings made at the heat pump control unit are transferred to the remote control during commissioning.

🧑‍🔧 Remote control

Commissioning with ViGuide mobile app is also possible if the heat pump has no permanent internet connection to the Viessmann server.

Commissioning the Vitotrol 100-EH: See page 15.

Your system has been preset

The heat pump control unit is preset at the factory.

📖 Vitocal operating instructions

The range of functions and displays on your remote control depends on the heat pump control unit it is connected to, that unit's settings and the equipment of the system overall.

Your contractor can make further adjustments for you during commissioning.
You can change the settings at any time to suit your individual requirements.

Introductory information

Energy saving tips

Saving energy when using central heating

- Do not overheat your home. Every degree of room temperature reduction saves up to 6 % on your heating bills.
  Do not set your individual preferred temperature too high, e.g. not above 20 °C: See page 22.
- Heat your home to the reduced room temperature at night or during regular absences (not applicable to underfloor heating). To do this, set the time programs for room heating.
- To switch off functions that are not required (e.g. room heating in summer), select the "Standby mode" operating program.

Saving energy on DHW heating

- At night or during regular absences, heat the DHW to a lower temperature. To do this, set the time program for DHW heating.
- Switch on DHW circulation only for those times in which you regularly use hot water. To do so, adjust the settings in the time program for the DHW circulation pump. This setting can only be made on the heat pump control unit.

  Vitocal operating instructions

For additional energy saving functions, please contact your contractor.

Tips for greater comfort

More comfort in your home

- Set your individual preferred temperature: See page 22.
- Set the time program for your heating circuits such that your individual preferred temperature is automatically reached when you are present.
- If you need a higher room temperature for a short period, select the **"Extend time phase once"** function: See page 23.
  Example: Late in the evening, the reduced room temperature is set by the time program. Your guests stay longer.

Sufficient DHW heating for your needs

- Set the time program for DHW heating such that there is always sufficient hot water for your usual needs: See page 25.
  Example:
  You need more DHW in the morning than in the daytime.
- Set the time program for the DHW circulation pump so that at times when hot water is used frequently, DHW is available immediately from the taps. This setting can only be made on the heat pump control unit.

  Vitocal operating instructions

Installation location

Install your remote control on a wall.
- Installation only in enclosed buildings
- The installation location must be dry and free of frost.
- Ensure ambient temperatures between +5 and +40 °C.
- Never seal off the vent apertures of the Vitotrol 100-EH.

- Distance to floor min. 1.5 m
- Not next to windows or doors
- Not above radiators
- Not between shelves, in recesses, etc.
- Not near heat sources (direct insolation, fireplace, TV set, etc.)
- Away from vents

Checking the reception quality at the installation location

In order to check the reception quality at the intended installation location, ask your contractor to commission the remote control unit first: See page 15.

Tap the following buttons:

1. ≡

2. ⋀ / ⋁ for **"DEV INFO"**

3. **OK**

4. ⋀ / ⋁ for **"RF RANGE"**

5. **OK**
   The signal strength **"RF RANGE"** for this mounting position is displayed. For an explanation of the display: See the following table.

Note
- *The poorer the reception quality, the longer it takes for the remote control unit to establish a connection to the heat pump. It can take up to 6 minutes to establish the connection.*
- *A poor connection can result in the batteries running out sooner.*
- *To ensure a stable wireless connection, we recommend a signal strength of at least –75 dBm: See the following table.*

Meaning of display

Value in dBm	Reception quality
0 to –50	Very good
–51 to –65	Good
–66 to –75	Adequate
–76 to –85	Inadequate
–86 to –...	No reception

The values given in the table are meant as guide values. The connection may vary depending on local conditions.

Range of the wireless signal

The range of wireless signals may be reduced by walls, ceilings and interior fixtures. These weaken the wireless signal, causing poor reception due to the following circumstances.
- On their way between transmitter and receiver, wireless signals are **damped**, e.g. by air or when penetrating walls.
- Wireless signals are **reflected** by metallic objects e.g. reinforcements embedded in walls, metal foil of thermal insulation and thermal glazing with metallised thermal vapour deposit.

- Wireless signals are **isolated** by service ducts and lift shafts.
- Wireless signals are **disrupted** by devices that also operate with high frequency signals. Maintain a distance of **at least 2 m** from these devices:
  - Computers
  - Audio and video systems
  - Devices with active WiFi connection
  - Electronic transformers
  - Pre-ballasts

To extend the range of the wireless signal, the following wireless repeaters can be used:
- Viessmann ViCare repeater for surface mounting
- Ubisys repeater

Installation

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Installation location (cont.)

Angle of penetration

The reception quality remains best if radio signals hit the walls vertically.
Depending on the angle of penetration, the effective wall thickness changes and so does the extent to which the electromagnetic waves are damped.
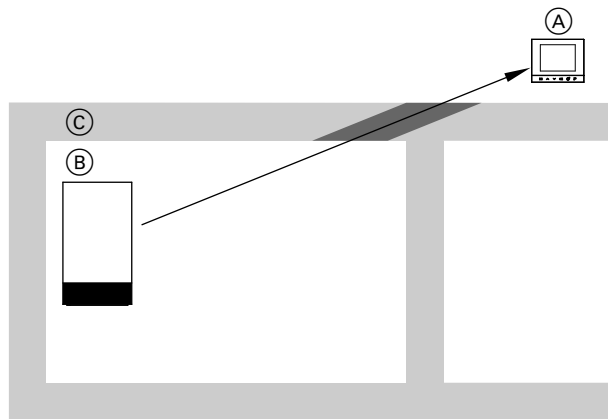
Flat (unfavourable) angle of penetration

Fig. 1

Ⓐ Vitotrol 100-EH
Ⓑ Heat pump
Ⓒ Wall

Ideal angle of penetration

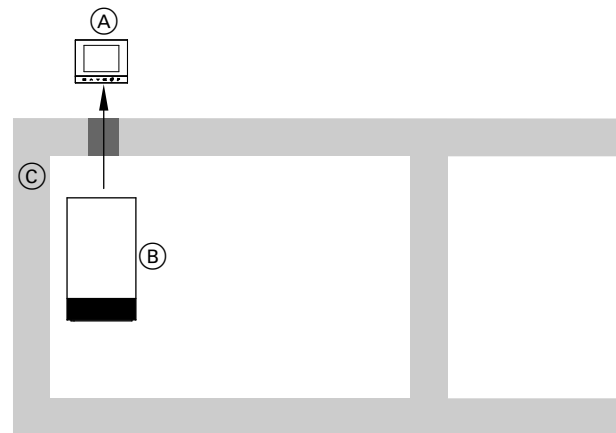*Fig. 2*

Ⓐ Vitotrol 100-EH
Ⓑ Heat pump
Ⓒ Wall

Overview of the installation and commissioning process

Steps		Responsibility	Page
1	Check system requirements.	Contractor IT expert	6
2	Fit the mounting base for the Vitotrol 100-EH.	Contractor System user	13
3	Establish a power supply via batteries.	Contractor System user	13
4	Connect the Vitotrol 100-EH to the heat pump.	Contractor	15
5	Commission the Vitotrol 100-EH.	Contractor	15
6	Insert the Vitotrol 100-EH in the mounting base.	Contractor System operator	14

Fitting the mounting base

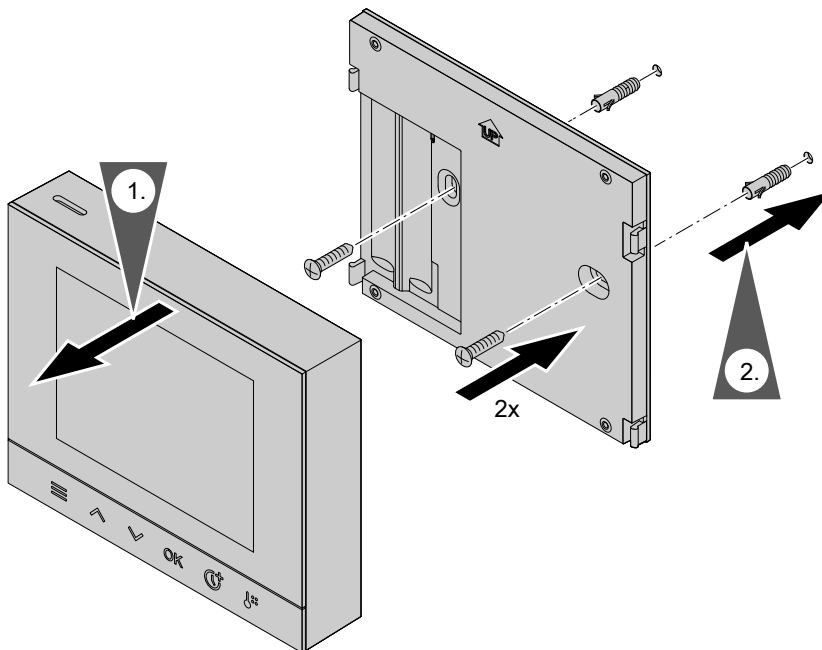*Fig. 3*

Setting up a power supply using batteries

We recommend the use of AA batteries as they last longer than rechargeable ones.

Installation

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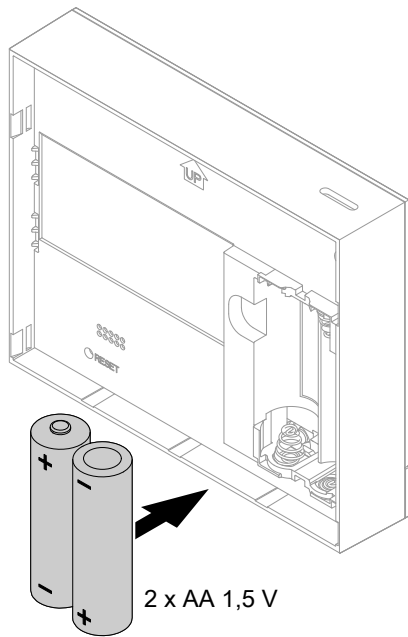## Setting up a power supply using batteries (cont.)

2 x AA 1,5 V

Fig. 4

On the screen, **"SW VERS"** is displayed with the software version of the device.
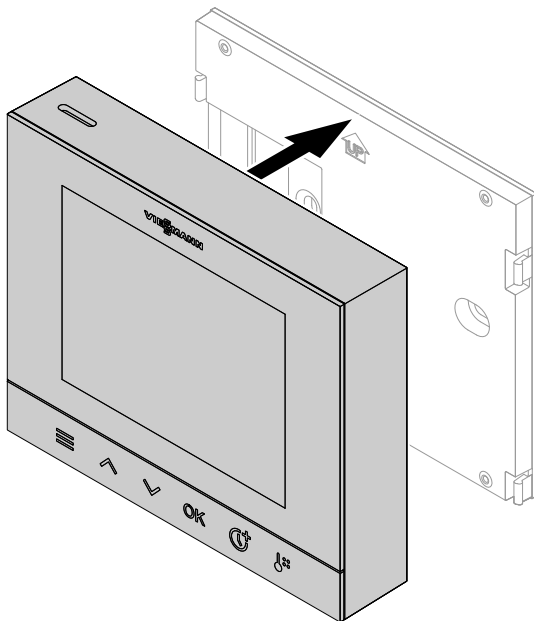
Inserting the Vitotrol 100-EH in the mounting base

Fig. 5

Connecting the Vitotrol to the heat pump

Note
For further information on the ViGuide mobile app: See www.viguide.info

In order to connect, you may need to remove the Vitotrol from the mounting base.

1. On the heat pump control unit, enable low power radio.

   📖 Vitocal operating instructions

2. Install the ViGuide mobile app from the Apple App Store or Google Play Store on a mobile device.

3. Launch the ViGuide mobile app.

4. To register, follow in the instructions in the app.

5. Assign the Vitotrol 100-EH to the heat pump via the ViGuide mobile app.

6. Assign the Vitotrol 100-EH to the required heating circuit, cooling circuit or heating/cooling circuit via the ViGuide mobile app.

   Note
   Any subsequent change can be made only via the ViGuide mobile app.

Commissioning the Vitotrol 100-EH

Note
The Vitotrol 100-EH must always be commissioned with the ViGuide mobile app, both for connected and non-connected systems.

The Vitotrol needs to be commissioned in the following cases:
- When the Vitotrol is installed for the first time.
- When the heat pump's TCU communication module has been replaced.
- When the Vitotrol is reset to factory settings.

On the screen, **"SW VERS"** is displayed with the software version of the device.

Press the following buttons:

1. **OK** for **"LANGUAGE"**

2. ⋀ / ⋁ to set the required language.

3. **OK** to confirm.
   "FORMAT" is displayed.

4. ⋀ / ⋁ to select the required time format.

5. **OK** to confirm.
   "WEEK TYPE" is displayed.

6. ⋀ / ⋁ to select whether days of the week should be displayed as **"NUMBER"** or **"WORD"**.

7. **OK** to confirm.
   "STARTPAIR" is displayed.

8. **OK** to confirm.
   "PAIRING" is displayed.
   While the connection to the heat pump is being established, a percentage progress indicator **"PROC"** is displayed.

9. Launch the ViGuide mobile app.

10. Follow the instructions in the app to establish the connection to the heat pump.

    Note
    To cancel the connection attempt, press ☰.

    - The connection attempt is displayed via a progress bar in percent.
    - It can take up to 6 minutes to establish the connection.
    - The settings on the heat pump are transferred to the Vitotrol 100-EH during commissioning.
    - If the connection to the heat pump could not be established, the Vitotrol 100-EH display will show **"RETRY"**. Restart the attempt by pressing **OK**.

Basics of operation

Overview of controls

The remote control allows you to make the following settings from your living space:
■ Set room temperatures
■ Heating or cooling time program
■ DHW heating:
  – DHW temperature
  – Time program
■ Heating/cooling circuit: Enabling/disabling "Extend time phase once"
■ Standby mode

All settings are transferred from the remote control to the heat pump control unit and vice versa. It is always the **most recent** settings that apply. During commissioning, the settings of the heat pump control unit were already transferred to the remote control.

Operating buttons
≡   ■ On the home screen:
          Opens the main menu.
        ■ Within a menu:
          Takes you one step back in the menu.
∧ / ∨   Scrolls through the menu.
OK   Confirms your selection or change.
↻⁺   Enables/disables the "Extend time phase once" function.
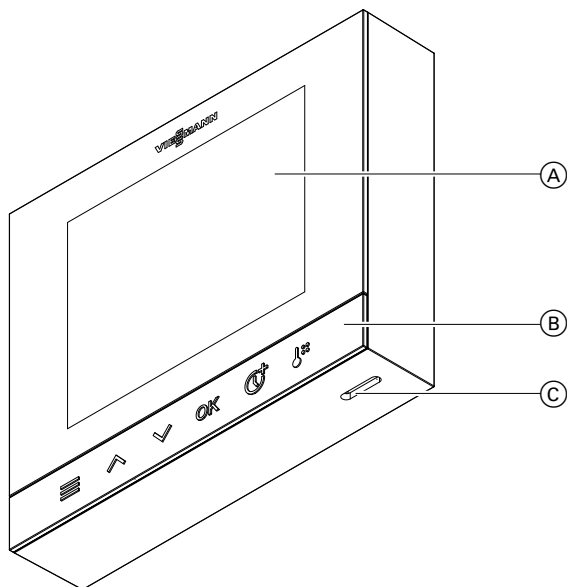🌡   Takes you directly to the menu where you can set room temperatures for the temperature levels.

Fig. 6

Ⓐ Display
Ⓑ Operating buttons
Ⓒ Room temperature sensor aperture:
  Do not seal off!
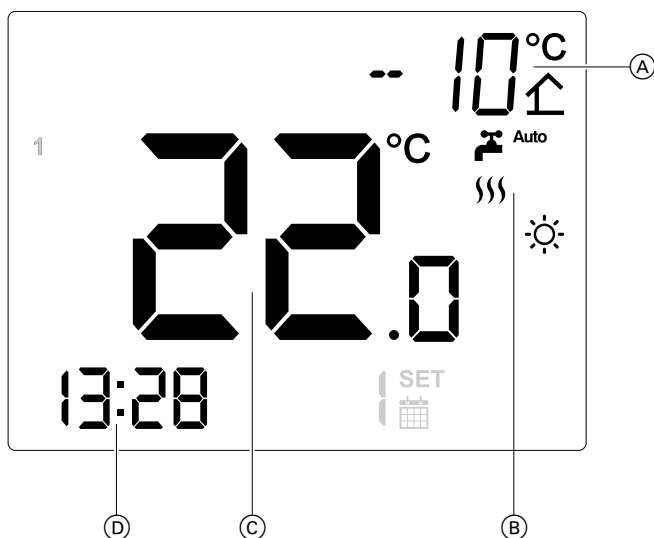
Basics of operation (cont.)

Home screen

Fig. 7   The display will depend on the current operating state

(A) Outside temperature
(B) Symbols, depending on operating state
(C) Actual room temperature
(D) Time

Symbols on the display

These symbols are not always displayed, but appear subject to the system version and the operating condition.

General symbols
📶 Indicates that the low power radio connection to the heat pump has been established.
✋ "Lock out controls" is active.

Temperatures
☾ Room heating/room cooling to reduced room temperature
☼ Room heating/room cooling to standard room temperature
⏺ Room heating/room cooling to comfort room temperature
🚰 DHW temperature in ON/OFF condition or time program (according to system configuration)

Operating programs
❄ Cooling mode is active.
〜 "Reduced", "Standard" or "Comfort" heating mode is active.
↻⁺ "Extend time phase once" is active.
Auto DHW is heated according to the time program.
Off DHW heating is permanently off.
On DHW heating is permanently on.

Messages
⚠ Fault
🔋 Replace batteries.

Symbols during operation
⚙ While settings are being made.
📅 Time program: Active time phase

Standby

If no settings are made at the remote control for at least 5 seconds, the display backlighting switches off.

To end standby:

Press any button.
The display lights up. The home screen is displayed.

Basics of operation (cont.)

Locking/unlocking the controls

To protect your settings from unwanted access, you can activate a key lock. To do so, press and hold the **OK** button for approx. 3 seconds. You can deactivate the key lock in the same way.

Note
The key lock can be activated only if the "Lock out controls" function is enabled: See page 27.

Operating programs

Room heating, room cooling and DHW heating

Note
The operating programs for room heating, room cooling and DHW heating can be set separately.

Display	Operating program	Function
Room heating/room cooling		
"HEATING" 〰 and one of the following symbols is displayed: ▪ ☾ ▪ ☼ ▪ ⍓	"Heating"	The rooms on the heating circuit are heated in accordance with the specifications for room temperature and with the time program: See chapter "Room heating/Room cooling".
"COOLING" ❄ and one of the following symbols is displayed: ▪ ☾ ▪ ☼ ▪ ⍓	"Cooling"	The rooms on the heating/cooling circuit or cooling circuit are cooled in accordance with the specifications for room temperature and with the time program: See chapter "Room heating/Room cooling".
"AUTO"	"Heating/cooling"	The rooms on the heating/cooling circuit are heated/cooled in according with the specifications for room temperature and with the time program: See chapter "Room heating/Room cooling".
"STANDBY"	"Standby mode with frost protection"	▪ No room heating/room cooling ▪ Frost protection for the heat pump is active.
DHW heating		
⌁Auto	DHW heating according to time program	DHW is heated in accordance with the specifications for DHW temperature and with the time program: See chapter "DHW heating".
⌁On	DHW heating is permanently on.	DHW is permanently heated to the set DHW temperature regardless of any time program: See chapter "DHW heating".
⌁Off	DHW heating is permanently off.	▪ No DHW heating: See chapter "DHW heating". ▪ Frost protection for the DHW cylinder is enabled.

Operating programs (cont.)

Special operating programs and functions

■ **Screed drying**
This function is activated by your contractor on the heat pump control unit, if the heat pump supports this function. Your screed is dried in line with a set time program (temperature/time profile) suitable for the relevant building materials. Your settings for room heating have no effect on the duration of screed drying (max. 32 days). The "Screed drying" function can be altered or switched off by your contractor.

Vitocal

■ **External hook-up**:
The operating program set at the heat pump control unit was changed over by an external device, e.g. an EM-EA1 extension (DIO electronics module). The operating program cannot be changed via the heat pump control unit or remote control while the external hook-up is active.

Vitocal

■ **"Extend time phase once"**: See page 23.

Procedure for setting a time program

The following explains how to enter the settings for a time program. The specifics of the individual time programs can be found in the relevant chapters.

Time programs and time phases

The **time program** allows you to divide the day into sections. These are called **time phases**. They specify when your rooms are heated to standard room temperature, for example, or when DHW heating is switched on.

You can adjust the time program on the heat pump control unit or on the remote control.

You can set up a time program for the following functions:

Function	System characteristics	
	Within the time phase	Outside the time phase
Central heating	Your rooms are heated to standard room temperature or comfort room temperature.	Your rooms are heated to reduced room temperature.
Room cooling	Your rooms are cooled with standard room temperature or comfort room temperature.	Your rooms are cooled to the reduced room temperature.
DHW heating	DHW heating is switched on. The water in the DHW cylinder is heated to the set DHW temperature.	Domestic hot water heating is switched off.

Setting time phases

You can set up to 4 time phases in each **"Time program"**.

For each time phase, you define the start point **"START"** and the end point **"END"**.

Operation

Operation

Procedure for setting a time program (cont.)

"MO-FR"	Monday to Friday period
"SA-SU"	Saturday and Sunday period
"MO-SU"	Entire week
"MON", **"TUE"**, etc.	Single day
	The days of the week can also be displayed as a number: See chapter "Setting the format for the day and time display".

How the days of the week are shown:

MON or 1 Monday
TUE or 2 Tuesday
WED or 3 Wednesday
THU or 4 Thursday
FRI or 5 Friday
SAT or 6 Saturday
SUN or 7 Sunday

Explanation of the procedure using the example of room heating

- **"Time program"** for **"Monday"**
- Time phase 1:
  06:30 to 12:00 with the normal room temperature ☼
- Time phase 2:
  15:00 to 20:00 with the comfort room temperature ☲

In between these time phases the rooms are heated with the reduced temperature ☾.

Press the following buttons:

1. ☰

2. ⋀ / ⋁ for **"SCHEDULE"**

3. **OK** to confirm

4. ⋀ / ⋁ for **"MON"**

5. **OK** to confirm

6. If necessary, ⋀ / ⋁ to select "Time phase 1".

7. **OK** to confirm

8. **"START"**: ⋀ / ⋁ to set the hour for the start of time phase 1 to 6.

9. **OK** to confirm.

10. ⋀ / ⋁ to set the minutes for the start of the time phase 1 to 30 minutes.

11. **OK** to confirm

12. **"END"**: ⋀ / ⋁ to set the hour for the end of time phase 1 to 12.

13. **OK** to confirm.

14. ⋀ / ⋁ to set the minutes for the end of the time phase 1 to 00 minutes.

15. **OK** to confirm

16. ⋀ / ⋁ for the required temperature level **"NOR-MAL"**

17. **OK** to confirm
    Time phase 1 is set.

18. **"START"**: ⋀ / ⋁ to set the hour for the start of time phase 2 to 15.

19. **OK** to confirm.

20. ⋀ / ⋁ to set the minutes for the start of the time phase 2 to 00 minutes.

21. **OK** to confirm

22. **"END"**: ⋀ / ⋁ to set the hour for the end of time phase 2 to 22.

23. **OK** to confirm.

24. ⋀ / ⋁ to set the minutes for the end of the time phase 2 to 00 minutes.

25. **OK** to confirm

26. ⋀ / ⋁ for the required temperature level **"COM-FORT"**

27. **OK** twice to confirm
    Time phase 2 is set.

Finalising the time phase settings:

If you are not entering settings for all possible time phases, set the first time phase that is not being used to "--:--". Only then are the time phase settings finalised.

1. **"START"**: ⋀ / ⋁ to set the hour for the start of time phase 3 to **--:--**.

2. **OK** twice to confirm.
    Time phase 3 is set.

3. **"START"**: ⋀ / ⋁ to set the hour for the start of time phase 4 to **--:--**.

4. **OK** twice to confirm.
    Time phase 4 is set.

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Procedure for setting a time program (cont.)

Deleting time phases

Explanation of the procedure using the example of room heating

Example:
For **Monday** you want to delete time phase 2.

Press the following buttons:

1. ≡

2. ⋀ / ⋁ for **"SCHEDULE"**

3. **OK** to confirm

4. ⋀ / ⋁ for **"MON"**.

5. **OK** to confirm

6. ⋀ / ⋁ for time phase 2

7. **OK** to confirm.

8. **"START"**: ⋀ / ⋁ to set the hour for the start of the time phase to **--:--**.

   Note
   The first time phase cannot be deleted.

9. **OK** to confirm.
   The time phase has been deleted.

Room heating/room cooling

Setting room temperatures

Depending on the temperature level set in the time program, your rooms will be heated or cooled to the corresponding temperature. Set the time program for room heating/room cooling: See page 19.

You can adjust the room temperatures for 3 temperature levels:

- Reduced room temperature **"REDUCED"** ☾:
  Heat/cool your home to the reduced room temperature at night or during regular absences (not applicable to underfloor heating).
- Normal room temperature **"NORMAL"** ☼:
  Heat/cool your home to the standard room temperature during the day.
- Comfort room temperature **"COMFORT"** ☖:
  For greater comfort, heat/cool your home to the comfort room temperature.

Note
- *Temperatures for room cooling cannot be set lower than temperatures for room heating.*
- *Temperatures for room heating cannot be set higher than temperatures for room cooling.*

Note
You define which temperature level is active via the time program.

Changing the room temperature for the current temperature level

Press the following buttons:

1. ∧ / ∨ for the required temperature.

2. **OK** to confirm

Changing the room temperature for further temperature levels

Press the following buttons:

1. ≡

2. ∧ / ∨ for **"TEMP PROF"**

3. **OK** to confirm

4. ∧ / ∨ for the required temperature level **"COMFORT"**, **"REDUCED"** or **"NORMAL"**

5. **OK** to confirm

6. ∧ / ∨ for the required temperature value.

7. **OK** to confirm

Note
Depending on which operating program is active, only the temperature level for the active operating program can be adjusted.
- *If "Heating" is active, only the set room temperatures for "Heating" can be adjusted.*
- *If "Cooling" is active, only the set room temperatures for "Cooling" can be adjusted.*
- *If "Automatic" is active, the set temperatures for "heating" and "cooling" are adjusted sequentially.*

Changing the room temperatures for temperature levels using 🌡

Press the following buttons:

1. 🌡

2. **OK** to confirm

3. ∧ / ∨ for **"COMFORT"**, **"REDUCED"** or **"NORMAL"**

4. **OK** to confirm

5. ∧ / ∨ for the required temperature value.

6. **OK** to confirm

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Setting room temperatures (cont.)

Time program for central heating

Setting a time program

You can change the time program individually in accordance with your requirements.

Press the following buttons:

1. ≡

2. ∧ / ∨ for **"SCHEDULE"**

3. **OK** to confirm

Switching room heating/room cooling on or off (Operating program)

Press the following buttons:

1. ≡

2. ∧ / ∨ for **"MODE"**

3. **OK** to confirm

4. ∧ / ∨ for the required operating program:
   "HEATING" "Heating"
   "COOLING" "Cooling"
   "AUTO" "Heating and cooling"
   "STANDBY" "Standby mode with frost protection"

   Note
   ∖ *indicates the operating program currently set.*
   ∕
   For example:
   ∖ *HEATING for heating.*
   ∕

5. **OK** to confirm.

Note
If the actual room temperature exceeds the current set room temperature, room heating/room cooling is automatically switched off.

Temporarily adjusting the room temperature

If you wish to adjust the room temperature temporarily, select the ↻ "Extend time phase once" function. This function is **independent** of the time program for room heating/room cooling.
- The rooms will be heated/cooled with the temperature of the last active time phase for standard room temperature or comfort room temperature.
- If your contractor has not made alternative adjustments, DHW is heated to the selected DHW temperature **first**, before room heating/room cooling commences.
- The DHW circulation pump is switched on (if installed).

Operation

Temporarily adjusting the room temperature (cont.)

Switching on "Extend time phase once" ↺⁺

Press the ↺⁺ button.
The temperature of the last active time phase for standard room temperature or comfort room temperature will be set.

Switching off "Extend time phase once"

The function ends automatically when switching to the next time phase for standard room temperature or comfort room temperature.

To terminate **"Extend time phase once"** ↺⁺ early, press the ↺⁺ button.
The room is heated according to the set time program again.

Starting DHW heating

DHW is heated according to the set time program.
If you switch off DHW heating, no DHW will be heated.

Press the following buttons:

1. ≡

2. ⋀ / ⋁ for the required operating program:
   "DHW"

3. **OK** to confirm

4. ⋀ / ⋁ for **"DHW ONOFF"**

5. **OK** to confirm

6. ⋀ / ⋁ for the required operating program:
   "AUTO" DHW heated according to time program
   "ON" DHW heating is permanently on.

7. **OK** to confirm

Switching off DHW heating

Press the following buttons:

1. ≡

2. ⋀ / ⋁ for **"DHW"**

3. **OK** to confirm

4. ⋀ / ⋁ for **"DHW ONOFF"**

5. **OK** to confirm

6. ⋀ / ⋁ for **"OFF"**

7. **OK** to confirm

Setting the DHW temperature

Press the following buttons:

1. ≡

2. ⋀ / ⋁ for **"DHW"**

3. **OK** to confirm

4. ⋀ / ⋁ for **"SETPOINT"**

5. **OK** to confirm

6. ⋀ / ⋁ for required DHW temperature

7. **OK** to confirm

Setting the mode of DHW heating

You can set whether DHW is heated to the set DHW temperature as quickly as possible or with as little energy consumption as possible.

Note
The setting is not possible with all heat pumps.

Press the following buttons:

1. ≡

2. ⋀ / ⋁ for **"DHW"**

3. **OK** to confirm

4. ⋀ / ⋁ for **"MODE"**

5. **OK** to confirm

6. ⋀ / ⋁ for the required mode:
   "ECO" Energy saving DHW heating
   "COMFORT" Fast DHW heating

7. **OK** to confirm.

Operation

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Time program for DHW heating

Setting a time program

You can change the time program individually in accordance with your requirements.

Press the following buttons:

1. ≡

2. ∧ / ∨ for **"DHW"**

3. **OK** to confirm

4. ∧ / ∨ for **"DHW SCHED"**

5. **OK** to confirm

To continue: , but without selecting a temperature level.

Setting or changing the language

You can change the language selected by your contractor at any time.

Press the following buttons:

1. ☰

2. ︿ / ﹀ for **"LANGUAGE"**

3. **OK** to confirm

4. ︿ / ﹀ for the required language

5. **OK** to confirm

Enabling "Lock out controls" function

To protect your settings from unwanted access, you can activate a key lock. You need to enable the function once, as follows:

Press the following buttons:

1. ☰

2. ︿ / ﹀ for **"CHILDLOCK"**

3. **OK** to confirm

4. ︿ / ﹀ for **"ON"**

5. **OK** to confirm

Disabling the "Lock out controls" function

Press the following buttons:

1. ☰

2. ︿ / ﹀ for **"CHILDLOCK"**

3. **OK** to confirm

4. ︿ / ﹀ for **"OFF"**

5. **OK** to confirm

Updating the software

If WiFi is activated on the heat pump and a software update is available, the software is automatically updated. The software is transmitted to the remote control via low power radio. After updating, the remote control unit switches off for up to 2 minutes and restarts.

Recommendation
Keep the heat pump permanently connected to the WiFi so that the Vitotrol 100-EH software is always up to date.

Setting the format for the day and time display

You can choose whether the time is shown on the display in 12-hour or 24-hour format.

You can choose how the days of the week are shown in abbreviated form: See the following table.

Weekday	Shown as an abbreviation of the English day of the week "WORD" setting (factory setting)	Shown as a number "NUMBER" setting
Monday	MON	1
Tuesday	TUE	2
Wednesday	WED	3
Thursday	THU	4
Friday	FRI	5

Functions

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▶▶

Further settings

Weekday	Shown as an abbreviation of the English day of the week "WORD" setting (factory setting)	Shown as a number "NUMBER" setting
Saturday	SAT	6
Sunday	SUN	7

Press the following buttons:

1. ≡

2. ⋀ / ⋁ for **"TIME DATE"**

3. **OK** to confirm

4. ⋀ / ⋁ for **"FORMAT"**

5. **OK** to confirm

6. ⋀ / ⋁ for **"12"** or **"24"**

7. **OK** to confirm

8. ⋀ / ⋁ for **"WEEK TYPE"**

9. **OK** to confirm

10. ⋀ / ⋁ for **"WORD"** or **"NUMBER"**

11. **OK** to confirm

Adjusting date and time

Date and time are adopted from your heat pump.

📖 Vitocal operating instructions

Changing assignment of heating/cooling circuits

If you want to assign the Vitotrol to a different heating or cooling circuit, contact your contractor.

Restoring factory settings

You can reset all entries and values to their factory settings. In this case, the remote control will need to be recommissioned by your contractor.

Note
All heat pump settings are retained. Your heat pump remains in operation.

Press the following buttons:

1. ≡

2. ⋀ / ⋁ for **"RESET"**

3. **OK** to confirm

4. ⋀ / ⋁ for **"ON"**

5. **OK** to confirm

6. Enter PIN "1917". To do this, select each number individually:
   ▪ ⋀ / ⋁ for the required number
   ▪ **OK** to confirm

7. **OK** to confirm the prompt
   The remote control is reset to the factory settings. The remote control is restarted. Initial commissioning of the remote control must be carried out again:

Calling up device information

In the "DEV INFO" menu you can call up the following information for the Vitotrol 100-EH:

Display	Explanations
"SW VERS"	Software version
"RF RANGE"	Signal strength of low power radio in dBm
"ADJUST"	Correction value for the current room temperature
"BATT"	Battery charge level in % Replace the batteries when the charge level is below 10 %.

Displaying "DEV INFO"

Press the following buttons:

1. ≡

2. ∧ / ∨ for **"DEV INFO"**

3. **OK** to confirm

4. ∧ / ∨ for the required information

5. **OK** to confirm

Correcting the displayed room temperature

If the room temperature displayed on the remote control differs from the actual room temperature, you can use this setting to adjust the display up or down by 5 °C.

Press the following buttons:

1. ≡

2. ∧ / ∨ for **"DEV INFO"**

3. **OK** to confirm

4. ∧ / ∨ for **"ADJUST"**

5. **OK** to confirm

6. ∧ / ∨ for the required correction value.

7. **OK** to confirm

Messages shown on the display

If there are messages available on your heating system or remote control, the symbol ⚠ is displayed along with one of the following messages.

Diagnosis

Messages shown on the display (cont.)

Display	Meaning	Remedy
ERR CONN	The low power radio connection to the heat pump has been interrupted.	■ Check that your heat pump is switched on. ■ Check that "low power radio" on your heat pump is activated. 　Vitocal operating instructions ■ Check the signal strength of the "low power radio" in the **"DEV INFO"** menu of your Vitotrol 100-EH: See page 29. ■ If necessary, move the Vitotrol 100-EH to a different installation location: See page 11. ■ Restart the Vitotrol 100-EH: See page 31. ■ Switch your heat pump off and on again. 　Vitocal operating instructions ■ Return your Vitotrol 100-EH to factory settings: See page 28. Ask your heating contractor to recommission the remote control.
ERR SYS and ⚠	A fault has occurred on your heat pump.	Check the message on the heat pump control unit. 　Vitocal operating instructions Please notify your contractor.
ERR DEV	A fault has occurred in the Vitotrol 100-EH.	Replace the Vitotrol 100-EH.
🔋	The batteries have nearly run out.	Replace the batteries: See page 33.

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Faults with no display

All displays on the Vitotrol 100-EH are off.

Cause	Remedy
The batteries in the Vitotrol 100-EH have nearly run out.	Replace the batteries: See page 33.

Cause of fault could not be found

Find out about possible troubleshooting measures on your heat pump control unit and notify your heating contractor.

Vitocal operating instructions

Restarting the Vitotrol 100-EH

Remove the batteries from your remote control for at least 10 seconds.
After the batteries are reinserted, the device restarts.

Fig. 8

Fig. 9

Diagnosis

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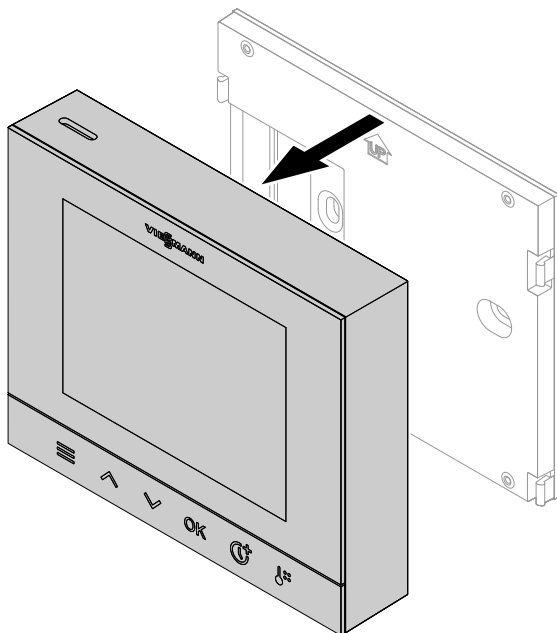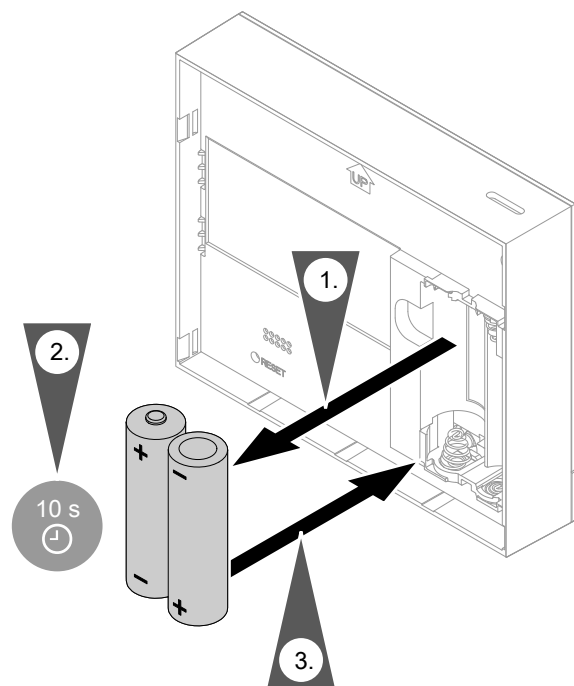
Restarting the Vitotrol 100-EH (cont.)
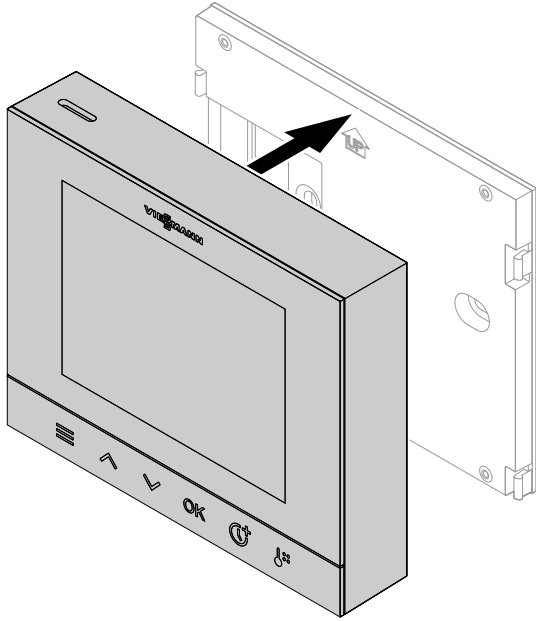
Fig. 10

Replacing batteries

We recommend the use of AA batteries as these last longer than rechargeable ones.

Fig. 11

Fig. 13

2 x AA 1,5 V
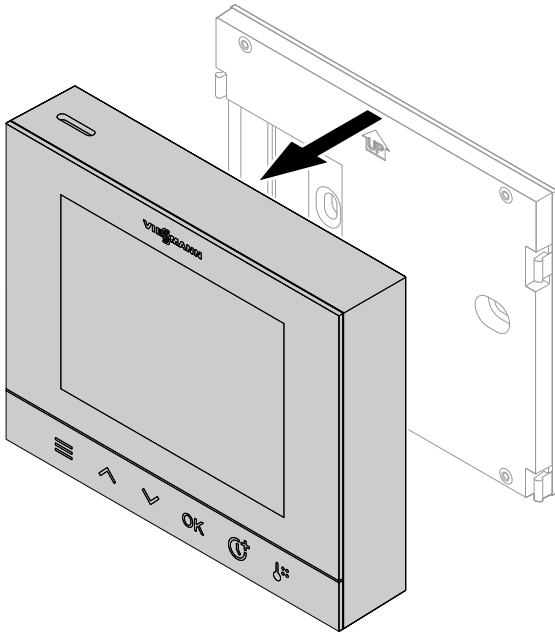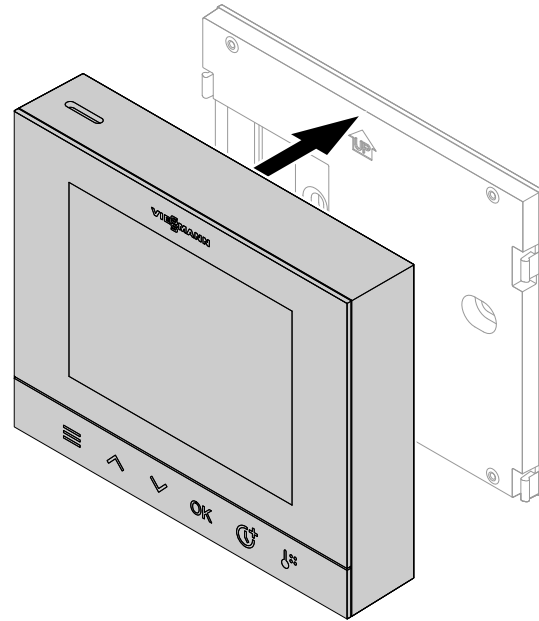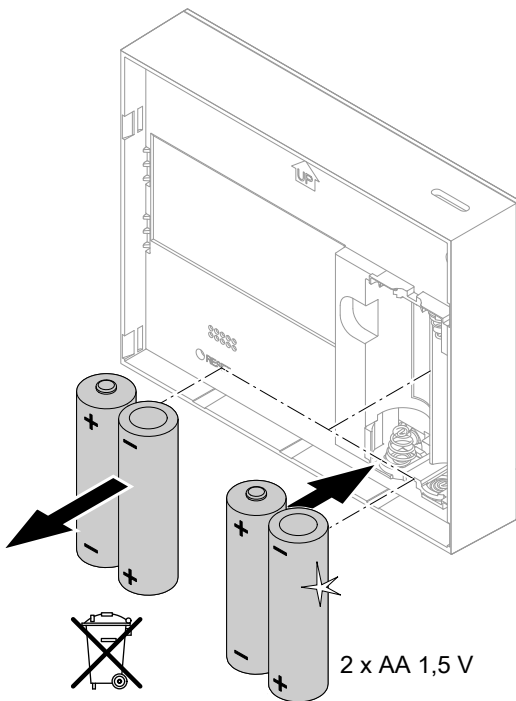
Fig. 12

After the batteries are inserted, the remote control adopts all settings from the connected heat pump.

Cleaning

You can clean the surfaces of the device with a microfibre cloth. Do not use any cleaning agents.

Maintenance

👷 Uninstalling the Vitotrol 100-EH

The Vitotrol needs to be uninstalled in the following cases:
- If the Vitotrol is to be connected to a different heat pump.
- If the Vitotrol is faulty.

1. Launch the ViGuide mobile app.

2. Follow the instructions in the app to remove the Vitotrol 100-EH from the system.

Note
If the uninstalled Vitotrol is to be connected to a different heat pump, restore factory settings: See page 28.

Specification

Vitotrol 100-EH

Power supply	Via batteries: 2 x 1.5 V AA (LR06)
Protection class	III
IP rating	IP 20D to EN 60529, ensure through design/installation.
Low Power Radio Status	
Radio frequency	2.4 GHz
Encryption	Encrypted
Wireless range through walls	Up to 14 m (depending on wall thickness and wall type)
Permissible ambient temperature	
▪ Operation	+5 to +40 °C Installation in living spaces or boiler rooms (normal ambient conditions). Do not install in wet rooms, e.g. bathrooms.
▪ Storage and transport	–20 to +60 °C

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Licences

This product comprises third party software and/or open source software. You are authorised to use this software subject to compliance with the relevant licensing terms.

The following open-source software components are used in the Vitotrol 100-EH:

No.	Name	Version	Download URL	Licence
1	Mbed TLS	2.7.12	https://github.com/Mbed-TLS/mbedtls	APACHE-2.0
2	CMSIS	5.3.0	https://github.com/ARM-software/CMSIS_5	APACHE-2.0

APACHE-LIZENZ/Version 2.0

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Terminology

Standby mode

Standby mode can be set only on your connected heat pump.
Heat generation for the heating circuit is switched off.

Only frost protection is active. No room heating, no DHW heating

Setback mode (reduced heating mode)

See "Reduced heating mode".

Operating program

You define the following with the operating program:
- How you heat your rooms.
- How you cool your rooms

- Whether you heat DHW.
- Whether only the frost protection for the heat pump and DHW cylinder is active.

Screed drying

Your contractor can activate this function for screed drying, for example in your new build or extension. This means your screed is dried in line with a fixed time program (temperature/time profile) that is appropriate for the building materials used.

Screed drying affects all heating circuits:
- All rooms are heated according to the temperature/time profile.
  Your settings for central heating have no effect on the duration of screed drying (max. 32 days).
- DHW heating is enabled.

Terminology (cont.)

Underfloor heating system

Underfloor heating systems are slow low temperature heating systems and respond only very slowly to short term temperature changes.

Heating with reduced room temperature at night therefore does not result in any significant energy savings.

Heating/cooling mode

Standard heating/cooling mode or comfort heating/cooling mode

For periods when you will be at home during the day, heat or cool your rooms to the standard room temperature or comfort room temperature.

Reduced heating/cooling mode

For periods when you will be absent or during the night, heat or cool your rooms to the reduced room temperature. With underfloor heating systems, reduced heating operation only yields limited energy savings (see "Underfloor heating system").

Weather-compensated heating/cooling mode

In weather-compensated operation, the flow temperature is controlled according to the outside temperature. More heat is made available at a lower outside temperature than at a higher one. If the system and the Viessmann appliance support the "cooling" function, the rooms are cooled when outside temperatures are very high.
The outside temperature is captured and transmitted to the heat pump control unit by a sensor. The sensor is fitted to the exterior of the building.

Heating circuit

A heating circuit is a sealed unvented circuit connecting the heat generator and the radiators, in which the heating water circulates.

There may be several heating circuits combined in one system. For example, one heating circuit for the rooms occupied by you and one heating circuit for the rooms of a separate apartment.

Heating/cooling circuit

A heating/cooling circuit is a sealed unvented circuit between the heat generator and the radiators, in which the heating water or coolant circulates.

A system may comprise several heating/cooling circuits. For example, it may have one heating/cooling circuit for the rooms occupied by you and one heating/cooling circuit for the rooms of a separate apartment.

Cooling circuit

A cooling circuit is a sealed unvented circuit between the heat generator and the radiators, in which the coolant circulates.

A system may comprise several cooling circuits. For example, it may have one cooling circuit for the rooms occupied by you and one cooling circuit for the rooms of a separate apartment.

Night setback

See "Reduced heating mode"

Terminology (cont.)

Room temperature

- Standard room temperature or comfort room temperature:
  Set the standard room temperature or comfort room temperature for periods when you are at home during the day.
- Reduced room temperature:
  For periods when you will be absent or during the night, set the reduced room temperature: See "Setting the room temperature".

Actual room temperature

Room temperature currently measured at the Vitotrol 100-EH

Set temperature

Specific temperature that should be reached, e.g. set DHW temperature.

Time program

In the time programs, you specify what your system should do at what time.

Final decommissioning and disposal of the remote control

Viessmann products can be recycled. Components and fluids from your heating system do not belong in ordinary domestic waste.
Contact your heating contractor regarding correct disposal of your old system.

DE: Operating fluids (e.g. heat transfer medium) can be disposed of at municipal collection points.
AT: Operating fluids (e.g. heat transfer medium) can be disposed of at municipal collection points (ASZ).

Certification

RoHS
compliant
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Keyword index

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Keyword index (cont.)