# Operating instructions for the system user



Room thermostat
Type UTDB and UTDB-RF



# **VITOTROL 100**



5592 618 GB 7/2009 Please keep safe.

#### Safety instructions

## For your safety



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

#### Safety instructions explained



#### Danger

This symbol warns against the risk of injury.



#### Please note

This symbol warns against the risk of material losses and environmental pollution.

#### Note

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

#### Target group

These operating instructions are for the heating system user.

This unit is **not** designed to be used by persons (including children) with limited bodily, sensory or mental capacities, or lacking experience and/or lacking knowledge, unless they are supervised by a person responsible for their safety, or have received instructions from such a person as to how to use the unit.



#### Please note

Children should be supervised. Ensure that children do not play with the unit.



#### **Danger**

Incorrectly executed work on the heating system can lead to life-threatening accidents.

- Work on gas appliances must only be carried out by a registered gas fitter.
- Work on electrical equipment must only be carried out by a qualified electrician.

#### If you smell gas



#### Danger

Escaping gas can lead to explosions which may result in serious injury.

- Do not smoke. Prevent naked flames and sparks. Never switch lights or electrical appliances ON or OFF.
- Close the gas shut-off valve.
- Open windows and doors.
- Remove all people from the danger zone.
- Notify your gas or electricity supplier and your heating contractor from outside the building.
- Shut off the electricity supply to the building from a safe place (outside the building).

# For your safety (cont.)

#### If you smell flue gas



#### **Danger**

Flue gas can lead to life-threatening poisoning.

- Shut down the heating system.
- Ventilate the boiler room.
- Close all doors in the living space.

#### In case of fire



#### Danger

Fire creates the risk of burning and explosions.

- Shut down the heating system.
- Close the shut-off valves of the fuel lines
- Use a tested fire extinguisher, class ABC.

#### **Boiler room requirements**

# PI

#### Please note

Incorrect ambient conditions can lead to damage to the heating system and put the safe operation at risk.

- Ensure ambient temperatures above 0 °C and below 35 °C.
- Prevent air contamination by halogenated hydrocarbons (e.g. as contained in paints, solvents or cleaning fluids) and excessive dust (e.g. through grinding/polishing work).
- Avoid continuously high humidity levels (e.g. through frequent drying of washing).
- Never close existing ventilation apertures.

# Ancillary components, spare and wearing parts

#### Please note

Components that are not tested with the heating system may lead to damage to the heating system, or may affect their various functions.

Installation or replacement work must only be carried out by qualified personnel.

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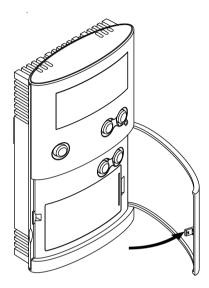
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# Where to find the controls

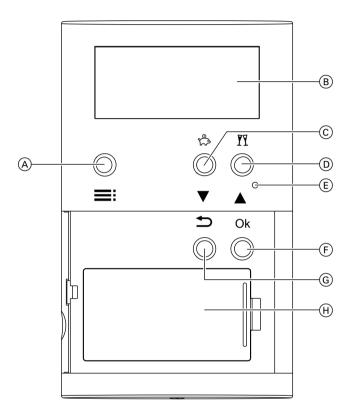
# **Summary of controls and indicators**

# Opening the flap



# **Summary of controls and indicators** (cont.)

# **Functions**



- (A) Calling up menu
- (B) Display
- © Economy mode ⇔ (page 17) or changing values ▼
- D Party mode 

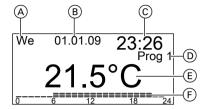
  ¶ (page 16) or changing values ▲
- (E) Reset
- (F) Confirmation
- (G) 1 step back in the menu
- (H) Battery compartment

# Symbols on the display

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

#### Where to find the controls

# Summary of controls and indicators (cont.)



- (A) Weekday
- (B) Date
- C Time
- Selected time program
- (E) Room temperature
- F Time program shown as time slot graphic

- Heat demand
- ▼ Party mode enabled
- Economy mode enabled
- 也 Manual mode active
- Holiday program active
- ☆ Frost protection mode enabled
- Changing the batteries
- Controls locked out

#### **Display backlighting**

The backlighting of the display is activated by pressing any key and goes out 15 s after the last key was pressed.

# How to operate the controls

# Standard display

21.5°C

When idle, the standard display is always shown.

- Pressing any key takes you to the operating display.
- Pressing key twice calls up the menu.

- takes you one step back in the menu.
- The menu will automatically close 30 s after the last key was pressed. The standard display will be shown 3 min later.

Any changes are accepted with **OK**. Temperature changes through keys 
▼/▲ are adopted automatically 5 s later.

# Where to find the controls

# How to operate the controls (cont.)

# Lock out controls

# **Adjusting**

# Selecting the operating mode

You can select between the following operating modes:

- Heating operation with alternating standard and two reduced room temperatures in accordance with three pre-programmed or individually selected time programs (see page 10)
- Frost protection operation (see page 12)
- Operation with a constant room temperature (see page 12)

## Selecting a time program

You can choose from three pre-programmed time programs (Prog 1 to Prog 3). You may change the time programs in accordance with your individual requirements.

Within each time program, you can select between three temperature values:

- Comfort (delivered condition: 21 °C)
- Eco (delivered condition: 19 °C)
- Reduced (delivered condition: 16 °C)
- 1. Open the flap.
- 2. Press **=** twice.
- 3. Select the required program with **▼**/
  - (e.g. "Prog 1").

# **4.** Confirm with **OK**.

The heating program proceeds according to the selected time program.

# Preset time programs

Time program 1 - Prog 1

Monday to Friday

monday to i mady		
Start	End	Room temperature
06:00	08:00	Comfort
08:00	12:00	Comfort
12:00	14:00	Comfort
14:00	18:00	Comfort
18:00	22:00	Comfort
22:00	06:00	Reduced
	Start 06:00 08:00 12:00 14:00 18:00	Start         End           06:00         08:00           08:00         12:00           12:00         14:00           14:00         18:00           18:00         22:00

# Adjusting (cont.)

Saturday and Sunday

Time phase	Start	End	Room temperature	
1	07:00	08:00	Comfort	
2	08:00	12:00	Comfort	
3	12:00	14:00	Comfort	
4	14:00	16:00	Comfort	
5	16:00	23:00	Comfort	
6	23:00	07:00	Reduced	

# Time program 2 - Prog 2

**Monday to Friday** 

monday to i mady			
Time phase	Start	End	Room temperature
1	06:00	08:00	Comfort
2	08:00	12:00	Reduced
3	12:00	14:00	Reduced
4	14:00	16:00	Reduced
5	16:00	22:00	Comfort
6	22:00	06:00	Reduced

Saturday and Sunday

Saturday and Sunday			
Time phase	Start	End	Room temperature
1	07:00	08:00	Comfort
2	08:00	12:00	Comfort
3	12:00	14:00	Comfort
4	14:00	18:00	Comfort
5	18:00	23:00	Comfort
6	23:00	07:00	Reduced

# Time program 3 - Prog 3

Monday to Friday

Time phase	Start	End	Room temperature
1	06:00	08:00	Comfort
2	08:00	12:00	Eco
3	12:00	14:00	Comfort
4	14:00	18:00	Eco
5	18:00	23:00	Comfort
6	23:00	06:00	Reduced

# Adjusting (cont.)

Saturday and Sunday

Time phase	Start	End	Room temperature
1	07:00	08:00	Comfort
2	08:00	12:00	Comfort
3	12:00	14:00	Comfort
4	14:00	18:00	Comfort
5	18:00	23:00	Comfort
6	23:00	07:00	Reduced

## Frost protection mode

If you do not want to heat the rooms but would like to enjoy frost protection.

Central heating starts if the room temperature falls below 5 °C.

- 1. Open the flap.
- 2. Press twice.

- 3. With **▼**/▲ select "Frost pr."
- **4.** Confirm with **OK**. The display shows ∰, then the current room temperature is redisplayed.

# Operation with a constant room temperature (manual)

Central heating operates constantly with the selected temperature.

- 1. Open the flap.
- 2. Press twice.
- With ▼/▲ select "Manual".
- 4. Confirm with **OK**.

- 5. Set the required room temperature with ▼/▲ (at least 10 °C).
- 6. Confirm with **OK**.

  The display shows ७, then the current room temperature is redisplayed.

# Setting a permanent room temperature

You can select 3 temperatures in the time programs:

Standard room temperature "Comfort"
 Setting in the delivered condition: 21 °C
 Setting range: 10 to 40 °C

■ Room temperature "Eco"

Setting in the delivered condition: 19 °C

Setting range: 10 to 40 °C

Reduced room temperature "Reduced" Setting in the delivered condition: 16 °C

Setting range: 10 to 40 °C

1. Open the flap.

2. Press twice.

3. With **▼**/**▲** select "Settings".

4. Confirm with OK.

5. With **▼**/**▲** select "Tmp settings".

6. Confirm with OK.

7. Set the required room temperature for "Comfort" with ▼/▲.

8. Confirm with OK

 Set the required room temperature for "Eco" with ▼/▲.

10. Confirm with OK.

Set the required room temperature for "Reduced" with ▼/▲.

Confirm with OK.

# Setting an individual time program

#### Setting the switching points for the heating periods

In the pre-programmed time programs, the day is split into 6 time phases. However, you may also split the day in less than 6 time phases, for example:

- Time phase 1: Operation with standard room temperature from 06:00 to 22:00 h and
- Time phase 2: Operation with reduced room temperature from 22:00 to 06:00 h After entry, the last time phase will automatically be assigned to time phase 6. The other time phases are then disabled.

For each active time phase, a start time, a stop time and the temperature (**"Comfort"**, **"Eco"**, **"Reduced"**) must be entered (see example).

## Setting a permanent room temperature (cont.)

You can select time phases for several days (day groups) or for individual days:

- "MO-SU" the same time phases for every day of the week
- "MO-FR" the same time phases for Monday to Friday
- "SA-SU" the same time phases for Saturday and Sunday
- "SINGLE DAY" different time phases for single days

#### Note

Settings for individual days take priority over settings for several days.

- 1. Open the flap.
- 2. Press **=** twice.
- With ▼/▲ select "Settings".
- 4. Confirm with OK.
- 5. With **▼**/**▲** select "**Programs**".
- 6. Confirm with OK.
- 7. With **▼**/▲ select the program you want to change (e.g. **"Prog 1"**).
- 8. Confirm with OK.
- 9. With **▼**/**▲** select "Set".
- Confirm with OK.
- **11.** With **▼**/**▲** select the required day group/individual day.
- 12. Confirm with OK.

- **13.** With **→**/**▲** select the required time phase or first the required day.
- **14.** With **▼**/**▲** set the required start time, stop time and the temperature in that order (e.g."Reduced").
- 15. Confirm respectively with OK.
- **16.** Proceed as described in points 11 to 13 to set further time phases.

#### Note

Should gaps be created between the time phases, these are closed automatically by an extension to the previous time phase.

#### Disabling time phases

Set the same value for start and stop time to disable a time phase.

#### Copying time programs

You can copy time programs, for example to make a new time program from another where only minor changes are required.

- 1. Open the flap.
- 2. Press twice.
- 3. With **▼**/**▲** select "Settings".
- 4. Confirm with OK.
- 5. With **▼**/**▲** select "**Programs**".
- 6. Confirm with OK.

# Setting a permanent room temperature (cont.)

- 7. With **▼**/▲ select the program you want to change (e.g. "Prog 1").
- 8. Confirm with OK.
- 9. With **→**/**▲** select "Copy from".
- Confirm with OK.

- With √/▲ select the program you want to copy.
- 12. Confirm with OK.
- With ▼/▲ select "Set" to make changes.

# Changing the room temperature for a few days only

The following energy saving options are available for times when you are on holiday:

- You can completely stop central heating by selecting Frost protection mode "%".
  or
- You can set central heating to minimum energy consumption (e.g. to prevent your houseplants from being damaged by frost). For this, select the holiday program "iii". When the holiday program has been enabled, the rooms are heated to the reduced room temperature ("Reduced").

# Setting a holiday program

- 1. Open the flap.
- 2. Press **\equiv** twice.
- 3. With **▼**/▲ select "Holiday".
- 4. Confirm with OK.
- 5. With **▼**/**▲** select "ON".
- 6. Confirm with OK.
- 7. With **▼**/▲ select the required day and time for start and end of the holiday function.
- **8.** Confirm respectively with **OK**.

#### Terminating the holiday program

- The holiday program terminates automatically when the end time has been reached.
- If you want to delete the holiday program early:
- 1. Open the flap.
- 2. Press twice.
- With ▼/▲ select "Holiday".
- 4. Confirm with **OK**.
- 5. With **▼**/**▲** select "OFF".

## Changing the room temperature for a few hours only

The following functions enable you to change the room temperature for a few hours without permanently altering your settings.

The modified temperature remains enabled until the next changeover within a program or until the next program change.

If you want to raise the room temperature unexpectedly:

- In programs "Prog 1" to "Prog 3" and "Manual", you can increase the room temperature with ▲
  or
- In programs "Prog 1" to "Prog 3", you can select party mode with \mathbb{\gamma}.

If you want to lower the room temperature unexpectedly:

- In programs "Prog 1" to "Prog 3" and "Manual", you can decrease the room temperature with ▼
  or
- In programs "Prog 1" to "Prog 3" select economy mode with ♣.

# Making changes with keys **▼**/▲

- Press or a.
   The current set temperature will be displayed.
- Confirm with OK or wait approx. 5 s until the value is adopted automatically.
- 2. Select the required temperature with ▼/▲.

# Setting party mode

In party mode, the reduced room temperature will be raised automatically to the selected standard room temperature ("Comfort").

- Press 
   ¶ for approx. 5 s.
   The display shows "
   ¶".
- 2. With ▼/▲ you can also change the temperature.

3. Confirm with OK.

#### **Ending party mode**

- Party mode ends automatically the next time the heating program changes over.
- If you want to terminate party mode early, press \ again for approx. 5 s.

# Changing the room temperature for a few hours... (cont.)

# Setting economy mode

In economy mode, the standard room temperature will be reduced automatically by 2 °C.

- 1. Press  $\mbox{\ref{A}}$  for approx. 5 s. The display shows " $\mbox{\ref{A}}$ ".
- 2. With **→**/**▲** you can also change the temperature.
- 3. Confirm with OK.

#### **Ending economy mode**

- Economy mode ends automatically the next time the heating program changes over.
- If you want to terminate economy mode early, press ⇔ again for approx.
  5 s.

# Further adjustments

#### Time and date

- 1. Open the flap.
- 2. Press twice.
- 3. With **▼**/**▲** select "Settings".
- 4. Confirm with OK.
- With ▼/▲ select "Standard settings".

- 6. Confirm with OK.
- 7. With **▼**/**▲** select "Date Time".
- 8. Confirm with **OK**.
- With ▼/▲ select the current day and time.
- 10. Confirm respectively with **OK**.

#### Summertime/wintertime

The changeover from summer to wintertime and vice-versa is automatic. You can disable the automatic changeover.

- 1. As described on page 18 select "Date Time".
- 2. With OK select "Summertime ON".
- 3. With **▼**/**▲** select "OFF".
- 4. Confirm with OK.

# Selecting the language

- 1. Open the flap.
- 2. Press twice.
- 3. With **▼**/**▲** select "Settings".
- 4. Confirm with OK.
- With ▼/▲ select "Standard settings".

- 6. Confirm with OK.
- 7. With **▼**/**▲** select "Language".
- 9. Confirm with OK.

# Renaming time programs

You can individually rename programs "Prog 1" to "Prog 3". The designation is limited to 5 characters.

- 1. Open the flap.
- Press twice.

# Renaming time programs (cont.)

- 3. With **▼**/**▲** select "Settings".
- 4. Confirm with **OK**.
- 5. With **▼**/**▲** select "Prog".
- 6. Confirm with OK.
- 7. With **▼**/**▲** select the program you want to rename (e.g. "Prog 1").

- 8. Confirm with OK
- 9. With **▼**/**▲** select "Rename".
- 10. Confirm with OK.
- **11.** Enter the required characters on line "New name" with ▼/▲.
- 12. Confirm respectively with OK.

# Temperature adjustment

The displayed room temperature can deviate from the actual room temperature if your Vitotrol 100 is installed in an unfavourable position, e.g. on an external wall or near a chimney. You can correct this temperature deviation with a compensator. Example:

The room temperature displayed by the Vitotrol 100 is 2 °C higher than the actual room temperature. The correction is then -2 °C.

- 1. Open the flap.
- 2. Press **:** twice.
- With ▼/▲ select "Settings".
- 4. Confirm with OK.
- With ▼/▲ select "Service".
- 6. Confirm with **OK**.

- 7. With **OK** select the required value to be set for "Ctrller offset".
- 8. With **▼**/**▲** set the required value.
- 9. Confirm with OK.
- 10. Only for the Vitotrol 100, type UTDB-RF: Exit the menu with **\_\_\_**.

#### Control characteristics

The hysteresis controller is factory-set. The hysteresis value influences the start and stop point for "Heating" or "Not heating".

#### Example:

Set room temperature: 21 °C Hysteresis: 0.6 °C (delivered

Hysteresis: 0.6 °C (delivered condition)

# Further adjustments

# Control characteristics (cont.)

Heating stops as soon as the actual room temperature exceeds 21.3  $^{\circ}$ C. Heating starts as soon as the actual room temperature falls below 20.7  $^{\circ}$ C.

You can change the control characteristics by changing the hysteresis value. Select a lower value if your system responds too slowly.

- 1. Open the flap.
- 2. Press twice.
- 3. With **▼**/**▲** select "Settings".
- 4. Confirm with OK.
- 5. With **▼**/**▲** select "Service".
- 6. Confirm with OK.
- 8. Confirm twice with OK.
- 9. Only for the Vitotrol 100, type UTDB-RF:

Exit the menu with **1**.

# Scanning options

# Scanning temperatures and further settings

1. Press =

The display shows the following details:

- Room temperature
- Date and time
- Current program
- Weekday

2. With <del>▼</del>/▲ call up the current set temperature.

# Scanning time programs

# Time program for the current day for Prog 1 to Prog 3

The display shows the switching times for the current day on a time slot graphic.

Example:



Central heating from 06:00 (A) to 22.00 h (B) with standard room temperature and from 22.00 to 06:00 h central heating with reduced temperature.

# Scanning holiday program (if programmed)

- 1. Open the flap.
- 2. Press twice.
- 3. With **▼**/▲ select "Holiday".
- Confirm with OK. Start and end of the set holiday period are displayed.

# What to do if...

# Rooms are too cold

Cause	Remedy
Vitotrol 100 is incorrectly set up	Check and correct settings if required:  Program (see page 10)  Room temperature (see page 13)  Time (see page 18)
Wireless connection to the boiler control unit interrupted (only for the Vitotrol 100, type UTDB-RF with wireless connection).  At the receiver unit, the display  flashes.	Change the address code (see page 24).

#### Note

For further causes, see the boiler operating instructions

# Rooms are too hot

Cause	Remedy
Vitotrol 100 is incorrectly set up	Check and correct settings if required:
	■ Program (see page 10)
	■ Room temperature (see page 13)
	■ Time (see page 18)

#### Note

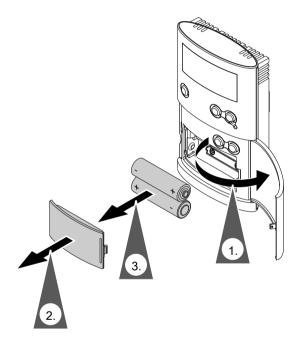
For further causes, see the boiler operating instructions

# \_ flashes in the display

Cause	Remedy
Batteries spent	Battery replacement (see page 23)  Disposal
	Batteries/rechargeable batteries should not be disposed of in domestic waste. Always dispose of spent batteries/ rechargeable batteries via an authorised collection site.

# Changing the batteries

- Use only alkaline batteries, 1.5 V
   Mignon alkaline cells, type LR6/AA
   that do not contain noxious substances.
- Never use rechargeable batteries.
- Replace both batteries every 18 months.

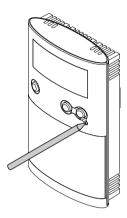


The Vitotrol 100 has a power reserve of 3 min. If you replace the batteries within this time, all set details will be retained. After the power reserve has been exceeded, carry out a reset (see following page).

#### What to do if...

# Changing the batteries (cont.)

#### Reset



Press the reset button with a suitable instrument. After a reset, re-enter the language, time and date.

# Changing the address code

Only for the Vitotrol 100, type UTDB-RF if the wireless receiver > flashes.

- Press <sup>(∆)</sup> on the wireless receiver for approx. 10 s until **|⇒** flashes.
- 2. Open the flap of the Vitotrol 100.
- Press twice.
- 4. With **▼**/**▲** select "Settings".
- 5. Confirm with **OK**.
- 6. With **▼**/**▲** select "Service".
- 7. Confirm twice with OK.
- 8. With **▼**/▲ select "Address code".

9. Confirm with OK.

The display shows a number combination for approx. 30 s. Then **"Send data"** appears on the display. The transfer takes 30 s. n flashes during the transfer.

# **Declaration of Conformity**

# **Declaration of Conformity Vitotrol 100, type UTDB**

We, Viessmann Werke GmbH&Co KG, D-35107 Allendorf, confirm as sole responsible body that the product **Vitotrol 100**, **type UTDB** complies with the following standards:

DIN EN 60730-1: 2005-12 DIN EN 55014-1: 2007-11

DIN EN 60730-2-9: 2005-10

In accordance with the following Directives, this product is designated with **C€**: 2004/108/EC 2006/95/EC

Allendorf, 1. July 2009 Viessmann Werke GmbH&Co KG

pp. Manfred Sommer

# Declaration of Conformity for the Vitotrol 100, type UTDB-RF

We, Viessmann Werke GmbH&Co KG, D-35107 Allendorf, confirm as sole responsible body that the product **Vitotrol 100**, **type UTDB-RF** complies with the following standards:

DIN EN 60730-1: 2005-12 DIN EN 55014-1: 2007-11 DIN EN 60730-2-9: 2005-10 EN 300220-2: 2007-06

In accordance with the following Directives, this product is designated with  $\textbf{C}\pmb{\varepsilon}$ 

2004/108/EC 1995/5/EC

2006/95/EC

Allendorf, 1. July 2009 Viessmann Werke GmbH&Co KG

pp. Manfred Sommer

# Maintenance

# Cleaning

The equipment can be cleaned with a commercially available domestic cleaning agent (non-scouring).

# **Energy saving tips**

With the following steps, you can save additional energy.

- Correct ventilation/airing. Briefly open windows fully and at the same time close the thermostatic radiator valves.
- Never overheat a room; endeavour to achieve 20 °C room temperature; every degree of room temperature reduction saves up to 6 % of your heating bills.
- Close roller shutters (where installed) at dusk.
- Make use of the remote control options, e.g. standard room temperature alternating with reduced room temperature.

# Printed on environmentally friendly, chlorine-free bleached paper

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# **Keyword index**

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# Your contact

Contact your local contractor if you have any questions regarding the maintenance and repair of your system. You may, for example, find local contractors on the internet under www.viessmann.com.

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