

# Installation and service instructions

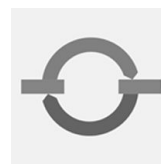
for contractors

**VIESMANN**

## Wireless base station

For connecting a Vitotrol 200 RF and outside temperature sensor RF to a Vitotronic control unit

*For applicability, see the last page*



## Wireless base station



## 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.



#### 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 instructions are exclusively designed for qualified personnel.

- Work on gas equipment must only be carried out by a qualified gas fitter.
- Work on electrical equipment must only be carried out by a qualified electrician.
- The system must be commissioned by the system installer or a qualified person authorised by the installer.

### Regulations

Observe the following when working on this system

- all legal instructions regarding the prevention of accidents,
- all legal instructions regarding environmental protection,
- the Code of Practice of relevant trade associations,

- all current safety regulations as defined by DIN, EN, DVGW, TRGI, TRF, VDE and all locally applicable standards,
- Gas Safety (Installation & Use) Regulations
  - the appropriate Building Regulation either the Building regulations, the Building Regulation (Scotland), Building Regulations (Northern Ireland),
  - the Water Fittings Regulation or Water Bylaws in Scotland,
  - the current I.E.E. Wiring Regulations.

### If you smell gas



#### Danger

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

- Never 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 from outside the building.
- Shut off the electricity supply to the building from a safe place (outside the building).

## Safety instructions (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 leading to the living space.

### Working on the system

- When using gas as fuel, also close the main gas shut-off valve and safeguard against unauthorised reopening.
- Isolate the system from the power supply and check that it is no longer 'live', e.g. by removing a separate fuse or by means of a main isolator.
- Safeguard the system against unauthorised reconnection.



#### **Please note**

Electronic modules can be damaged by electro-static discharges.

Touch earthed objects, such as heating or water pipes, to discharge static loads.

### Repair work



#### **Please note**

Repairing components which fulfil a safety function can compromise the safe operation of your heating system.

Replace faulty components only with original Viessmann spare parts.

### Ancillary components, spare and wearing parts



#### **Please note**

Spare and wearing parts which have not been tested together with the heating system can compromise its function. Installing non-authorised components and non-approved modifications/conversion can compromise safety and may invalidate our warranty. For replacements, use only original spare parts from Viessmann or those which are approved by Viessmann.

## Index

### Installation instructions

#### Installation sequence

Installation location.....	5
Connecting the wireless base station to the control unit.....	6
Logging the wireless components on at the wireless base station.....	7
Fitting the wireless repeater.....	10
Checking the transmission and reception quality of the Vitotrol 200 RF.....	10
Fitting the wall mounting base of the wireless base station.....	11
Inserting and removing the wireless base station.....	11
Fitting the outside temperature sensor RF.....	13

### Service instructions

#### Diagnosis

Diagnosis on the Vitotrol 200 RF.....	15
Diagnosis at the wireless base station.....	15

#### Specification

Specification, wireless base station.....	16
Specification, outside temperature sensor RF.....	16
Specification, wireless repeater.....	16

<b>Parts list</b> .....	17
-------------------------	----

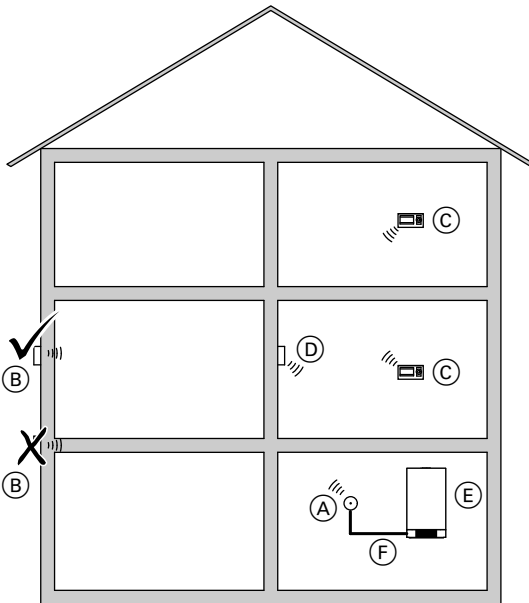
## Installation location

### Connecting several remote control units

Up to three Vitotrol RF and one outside temperature sensor RF can be connected to a single wireless base station at any one time.

### Wireless connection

Select the installation location of the wireless base station and the other wireless components so that the radio signals are beamed as vertically as possible onto walls and furnishings.



- |                                   |                       |
|-----------------------------------|-----------------------|
| (A) Wireless base station         | (D) Wireless repeater |
| (B) Outside temperature sensor RF | (E) Heat source       |
| (C) Vitotrol RF                   | (F) KM BUS            |

## Installation sequence

### Installation location (cont.)

Install the wireless base station as centrally as possible inside the building. Site wireless components at least 0.5 m away from other transmitters (e.g. GSM, DECT, wireless LAN) and other HF sources of potential interference (computers etc.).

#### **Note**

*Conducting metallic materials have a strong negative effect on reception. Prior to the final fitting at the chosen installation location, commission all wireless components and check the transmission and reception quality at the installation location.*

*If adequate transmission and reception quality cannot be achieved, install a wireless repeater (accessory).*

### Preparing the outside temperature sensor RF for commissioning

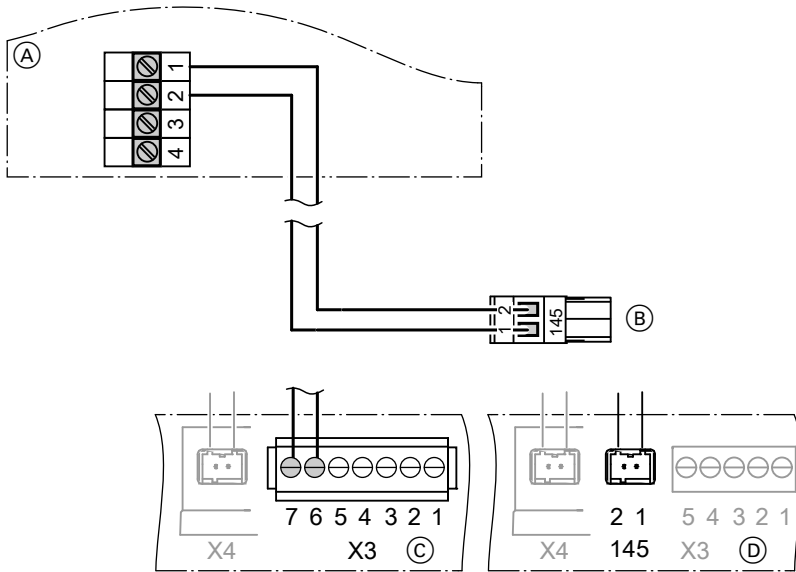
Remove the outside temperature sensor RF from its packaging and position it facing a light source to enable the internal power supply to build up. This takes approx. 15 min.

### Connecting the wireless base station to the control unit

#### **Note**

*Initially, make a provisional connection for the wireless base station to allow a different location to be selected later if the transmission and reception quality needs to be improved.*

## Connecting the wireless base station to the... (cont.)



- (A) Wireless base station  
 (B) Plug 145 to the control unit or to the KM BUS distributor  
 (C) Control unit with terminals X3  
 (D) Control unit with plug-in connection 145

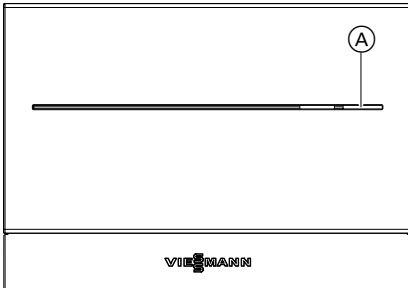
## Logging the wireless components on at the wireless base station

### Note

*If a wireless repeater is used, log all components on via the wireless repeater. Should a wireless repeater become necessary later, log all components off and then log them on again via the wireless repeater (see page 14).*

1. Make a note here of the 3-digit PIN on the protective foil on the front of the wireless base station: \_\_\_\_\_.

## Logging the wireless components on at the... (cont.)



2. Place all components near the wireless base station.  
Position the wireless base station at least 1 m away from the wireless repeater (if installed).

3. Press **(A)** on the wireless base station:
  - Operation **without** wireless repeater: 4 s.  
LED flashes green in long intervals.
  - Operation **with** wireless repeater: 8 s.  
LED flashes green in short intervals.

### **Note**

*If all components are logged on in sequence, press **(A)** on the wireless base station once for each component.*

4. Initiate the logging on process at the relevant component. See the following chapter.

## Logging on the Vitotrol 200 RF

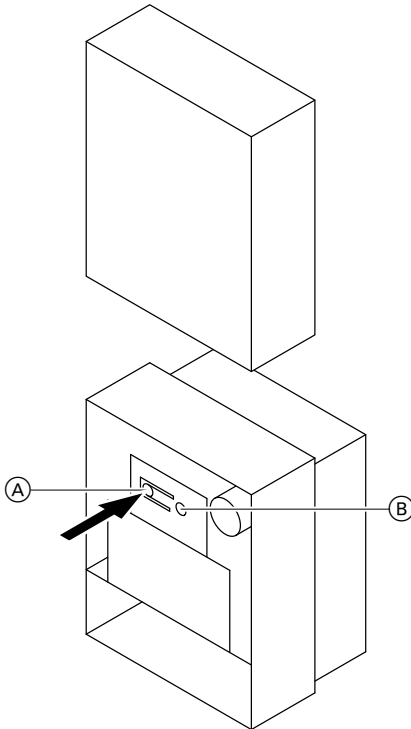


Vitotrol 200 RF installation and service instructions



**Logging the wireless components on at the... (cont.)**

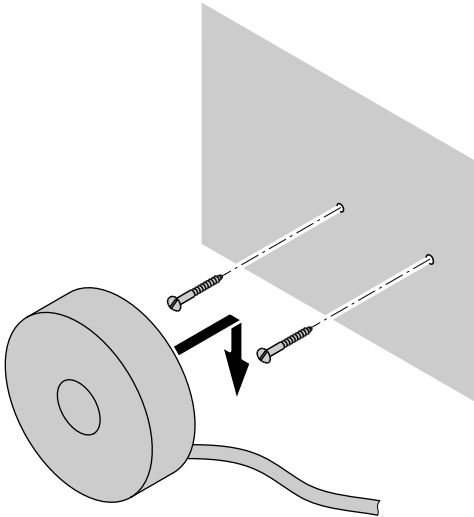
**Logging on the outside temperature sensor RF**



1. Only if the outside temperature sensor is not logged on together with the other components:  
Initiate the logging on process at the wireless base station (see page 7).
2. Open the casing of the outside temperature sensor.
3. Briefly press (A) on the outside temperature sensor.  
The (B) LED on the outside temperature sensor flashes briefly red if it was successfully logged on.

## Installation sequence

### Fitting the wireless repeater



1. Secure the wireless repeater near a socket.
2. Insert the wireless repeater cable into the power supply unit.
3. Plug the power supply unit into a socket.

#### **Note**

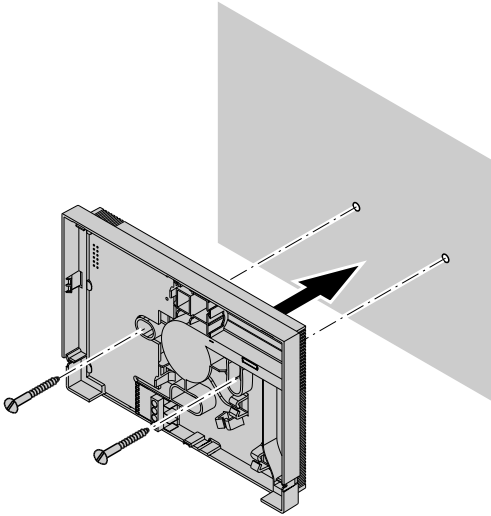
*Logging on process with wireless repeater (see page 7).  
Never adjust the DIP switches on the back of the unit.*

### Checking the transmission and reception quality of the Vitotrol 200 RF

To determine the most favourable place to install a Vitotrol 200 RF, check the transmission and reception quality at the intended installation location.

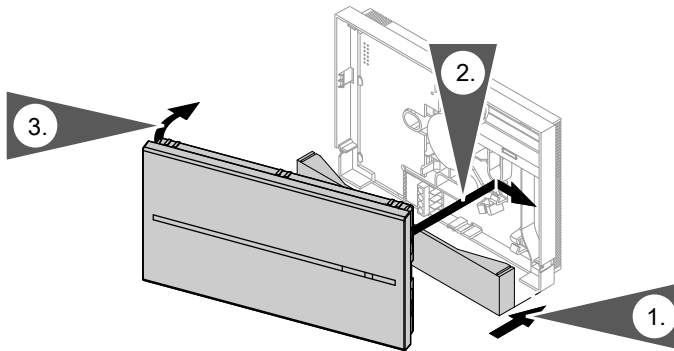
See the diagnosis chapter or the Vitotrol installation and service instructions.

## Fitting the wall mounting base of the wireless base station



## Inserting and removing the wireless base station

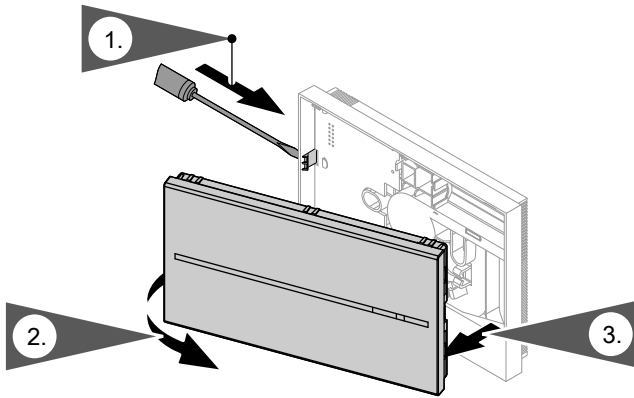
### Insertion



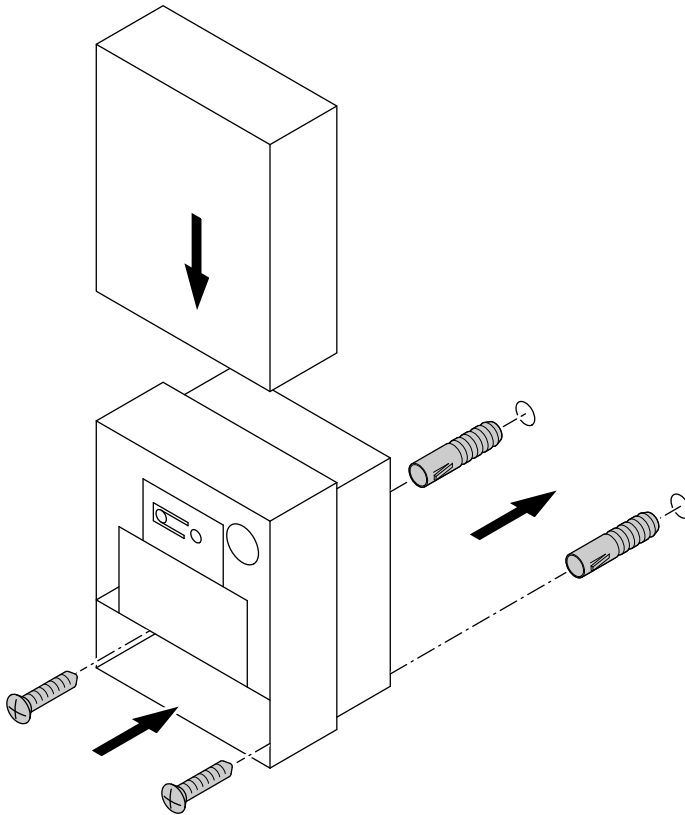
Installation sequence

**Inserting and removing the wireless base station (cont.)**

**Removal**



## Fitting the outside temperature sensor RF



### Installation location:

- North or north-western wall, 2 to 2.5 m above ground level; in multi storey buildings, in the upper half of the second floor
- Not above windows, doors or ventilation outlets
- Not immediately below balconies or gutters
- Not at the level or immediately above a concrete ceiling/floor
- Never render over

## Logging off components

If a faulty component has been replaced or the wireless connection proved to be unstable, log all components off (including the wireless repeater, if installed) at the wireless base station and then log all components on again.

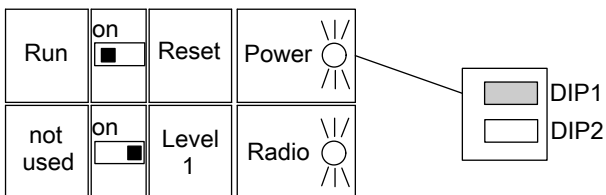
### ■ Logging off:

- Switch the control unit OFF and ON again.
- Within 5 min, press and hold down Ⓐ on the wireless base station for 20 s (see page 7).
- The components are logged off if the LED on the wireless base station flashes red.

### ■ Logging off the wireless repeater (if installed):


- Switch the wireless repeater OFF and ON again (pull power plug).
- Within 5 minutes, set DIP switch 1 at the back of the wireless repeater to "Reset".
- The wireless repeater has been logged off from the wireless base station if the red LED at the front flashes (for approx. 20 s).
- Then set DIP switch 1 to "Run" again.


### DIP switch at the back of the wireless repeater



## Diagnosis on the Vitotrol 200 RF

The Vitotrol 200 RF can display the assigned heating circuits as well as the transmission and reception quality of the individual components.

1. Hold down **OK** and  simultaneously for approx. 4 s.  
The display shows **"dl"** and **"H .."** for the assigned heating circuit.

2. Call up a display of the transmission and reception quality with :
  - **"d2": Vitotrol 200 RF**
  - **"d3": Wireless base station**
  - **"d4": Outside temperature sensor RF**
 See the following table.

Display	Value	Transmission and reception quality
■■■■	0 to - 78	Extremely good
■■■_	- 79 to - 83	Good
■■__	- 84 to - 87	Adequate
■___	- 88 to - 91	Inadequate
----	- 92 to - ...	No reception

## Diagnosis at the wireless base station

Different operating states are displayed by the LED at the front of the wireless base station.

LED	Explanation
OFF	Wireless components not operational
Illuminated green:	
Constant	Wireless components operational
Flashing slowly	Logging on without wireless repeater
Flashing quickly	Logging on with wireless repeater
Flashing and dark	Wireless communication
Illuminated red:	
Constant	Fault with the wireless connection or in the KM BUS connection to the control unit
Flashing	Logging off wireless components

## Specification

### Specification, wireless base station

Power supply	via KM BUS
Rated voltage	27 V +/- 3 V
Rated current	40 mA
Power consumption	1 W
Radio frequency	868.3 MHz
Safety category	III
IP rating	IP 30
Permissible ambient temperature	
■ During operation	0 to +40 °C
■ During storage and transport	-20 to +65 °C

### Specification, outside temperature sensor RF

Power supply	via PV cells and energy store
Rated voltage	3 V
Rated current	5 µA
Radio frequency	868.3 MHz
IP rating	IP 30
Permissible ambient temperature	-40 to +60 °C
Ambient light	min. 1000 Lux - 4 h/day

### Specification, wireless repeater

Power supply	via power supply unit with USB cable
Rated voltage	4.75 - 8 V
Rated current	55 mA
Radio frequency	868.3 MHz
IP rating	IP 20
Permissible ambient temperature	0 to +55 °C



## Parts list

### **When ordering spare parts**

Quote part no. **7455214** and the position no. of the part (as per this parts list).

Obtain standard parts from your local supplier.

### Parts not shown

080 Installation and service instructions

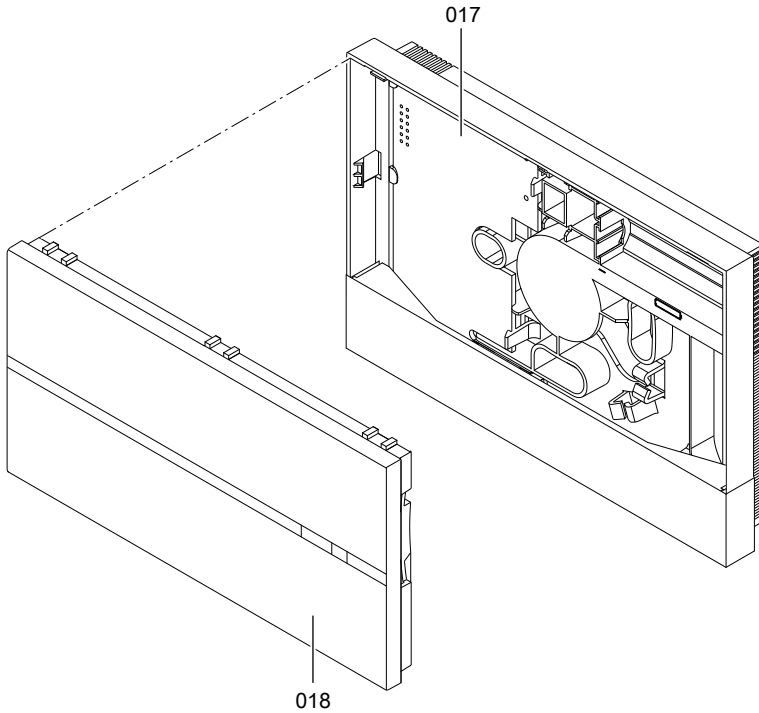
081 Operating instructions

100 Plug

### Parts

017 Wall mounting base

018 Wireless base station







## Applicability

**Serial No.:**  
7455214

Viessmann Werke GmbH&Co KG  
D-35107 Allendorf  
Telephone: +49 6452 70-0  
Fax: +49 6452 70-2780  
[www.viessmann.com](http://www.viessmann.com)

Viessmann Limited  
Hortonwood 30, Telford  
Shropshire, TF1 7YP, GB  
Telephone: +44 1952 675000  
Fax: +44 1952 675040  
E-mail: [info-uk@viessmann.com](mailto:info-uk@viessmann.com)

5692 915 GB Subject to technical modifications.



Printed on environmentally friendly,  
chlorine-free bleached paper