

## Manual multi-functional control 916 MHz

Besides many further connection possibilities the multi-functional control also provides the use of a day latch function and a permanent-open function.

With the day latch function, during the day the door is secured only by the latch. Ideal for heavily frequented doors where controlled access is required. With the permanent-open function, the latch and all bolts are permanently retracted. This allows unhindered opening of the door from both sides – without access control.

There are two possible ways to realize these functions:

- **Cable connected** – via external wiring or via the built-in switch
- **Wireless via radio signal** – via a radio key (from SW 4.51)

**A combined application of both variants is not recommended, or should only be carried out by qualified personnel and checked beforehand on the basis of individual customer requirements.**

The LEDs on the controller indicate which function has been set:

Day latch function: green + red LED flash slowly

Permanent-open function: green LED flashes slowly

### Cable connected permanent unlocking

Enables manual activation of the permanent-open function (terminals 9 + 10) or the day latch function (terminals 11 + 12) via the built-in switch.

The built-in switch is connected to terminals 9 + 10 in the factory, but can be connected to other terminals if required.

### Wireless permanent unlocking via radio signal

Enables activation of the permanent-open function or the day latch function via radio key, available from software version SW 4.51:



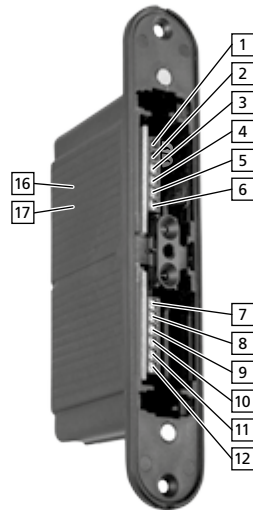
#### 4-channel radio key, 916 MHz

Remote control with 4 white buttons and LED display, high transmission range, including battery with long life.

Art. no. VNZ80320

### Connecting possibilities of the control

The following is an example of how the connection terminals of the control unit can be assigned:



#### Frame-side control

Art. no. VNZSTP0880

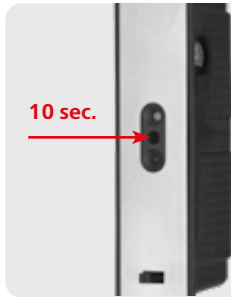
# Terminal assignment

<b>Terminal/ Function</b>	<b>Assignment</b>
<b>Grid</b> 1 (GND) + 2(+12 V)	Stabilized power supply 12 V DC $\pm 4\%$ .
<b>Outputs</b> 3 + 4 Switching output	<b>Output, e.g. for electric swing door drive</b> <b>Make contact</b> After the motorized opening of the <b>multitronic</b> lock, the contact is switched for 1 second.
5 + 6 Alarm output	<b>Locking status output, e.g. for alarm systems</b> <b>Break contact</b> Door locked/unlocked feedback, switches after unlocking the <b>multitronic</b> lock and/or opening the door leaf.
<b>Inputs</b> 7 + 8 Door opening	<b>Input 6–12 V AC / 6–24 V DC</b> For <b>potential-based opening impulses</b> from access control systems, e.g. from intercom systems or BMS for short-term unlocking or day latch function. If a signal > 1 sec. is applied to this input, the lock latch extends again after the door leaf has been opened or after 5 sec. The locking elements remain retracted.
9 + 10 Door opening	<b>Input potential-free</b> For <b>potential-free opening impulses</b> from access control systems for short-term or permanent unlocking. For the duration of the pending signal, the latch and all bolts of the <b>multitronic</b> lock remain retracted, e.g. for permanent unlocking, controlled by timers.
11 + 12 Door opening	<b>Input potential-free</b> For <b>potential-free opening impulses</b> from access control systems for short-term or day latch function. If a signal > 1 sec. is applied to this input, the lock latch extends again after the door leaf has been opened or after 5 sec. The locking elements remain retracted.
13 – 15	Already pre-assigned for power and data transmission.
16 + 17 Deactivation	<b>Input potential-free</b> All motorized opening functions (control unit: radio receiver and inputs terminals 7-12/control board in the motorized drive: terminals 4 and 7) are deactivated for the duration of the pending signal, e.g. to prevent motorized door opening after an alarm system has been armed.
<b>Jumper DRT</b>	If the <b>DRT jumper is removed</b> , the output at terminal 3+4 remains switched as long as a continuous signal is present at terminal 9+10.
<b>Jumper TGF</b>	If the <b>TGF jumper is removed</b> , the locking elements, but not the latch, are retracted when the input at terminals 11+12 is switched with a signal > 1 second (day latch function 2).
<b>Radio receiver</b>	For <b>opening impulses via FUHR radio key</b> .


# Wireless control of the permanent release by radio signal

## Programming a radio key

### Permanent–open function




1. Carefully press the programming button on the control unit for about **10 seconds**. As soon as the red and green LED flash release the programming button.



**within 20 sec.**

2. Now press the master key's front, middle button **within 20 seconds**.


» If the control unit accepts the master key, the green LED lights up for 3 seconds and then continues to flash quickly.



**within 20 sec.**

3. **Within 20 seconds**, press a key of the radio key to be paired **twice** in succession. The programming procedure is aborted if the 20 second time limit is exceeded.

» If the control unit accepts the new radio key, the green LED lights up for 3 seconds.

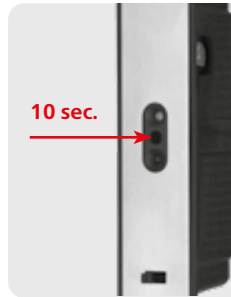


**1 x**

4. If you want to activate or deactivate the permanent-open function, press the send button on the radio key **once**.


» When the permanent-open function is activated, the green LED of the control unit flashes slowly.

### Day latch function



1. Carefully press the programming button on the control unit for about **10 seconds**. As soon as the red and green LED flash release the programming button.

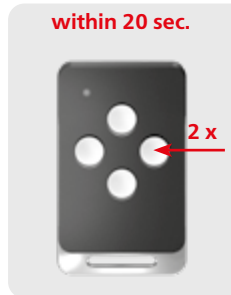
2. **Briefly** press the programming button on the control unit **again**. The red and green LEDs flash alternately.



**within 20 sec.**

3. Now press the master key's front, middle button **within 20 seconds**.

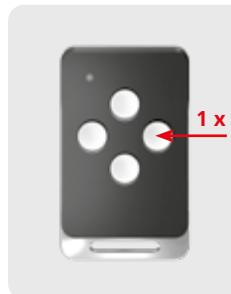
» If the control unit accepts the master key, the green LED lights up for 3 seconds and then continues to flash quickly.



**within 20 sec.**

4. **Within 20 seconds**, press a key of the radio key to be paired **twice** in succession. The programming procedure is aborted if the 20 second time limit is exceeded.

» If the control unit accepts the new radio key, the green LED lights up for 3 seconds.



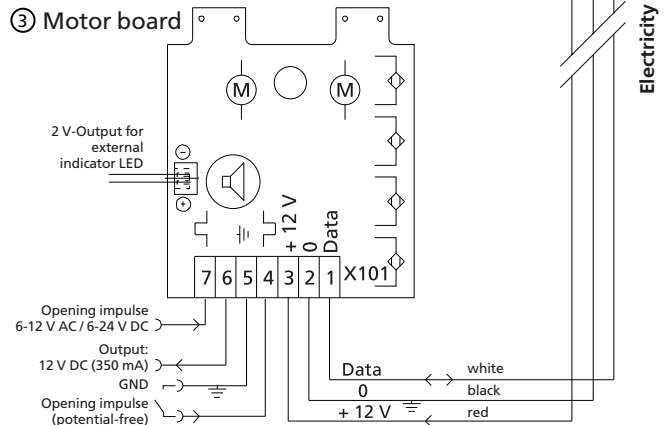
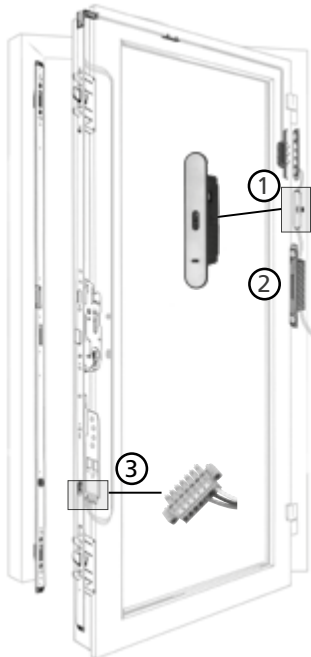
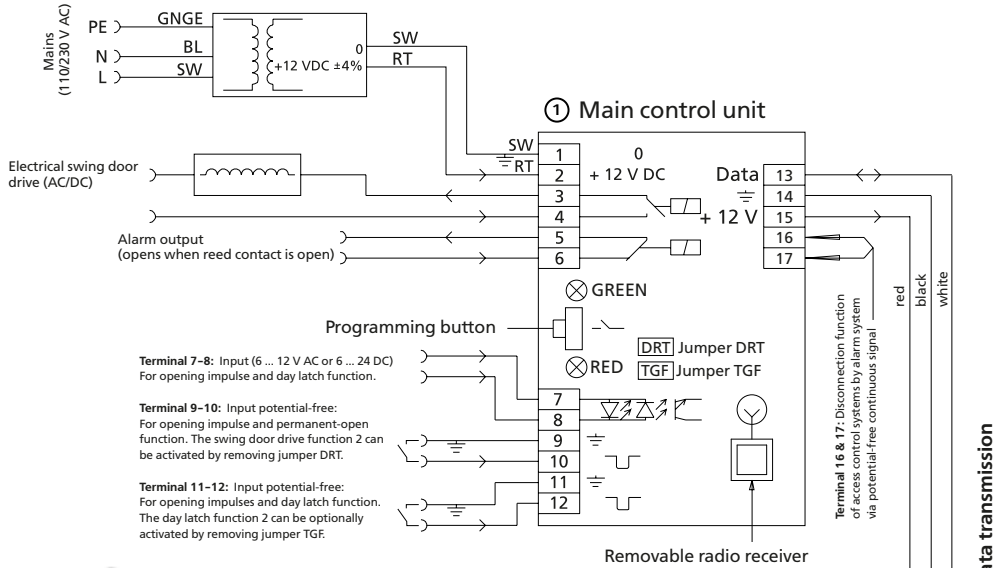
**1 x**

5. If you want to activate or deactivate the day latch function, press the send button on the radio key **once**.

» When the day latch function is activated, the red and green LED of the control unit flash slowly.

## Wiring diagram

### ② Power supply via FUHR switching power supply unit 12 V DC (residual ripple < 250 mVpp)



Detailed information on [www.fuhr.de](http://www.fuhr.de):  
Manual multitronic 881 (MBW20)

