



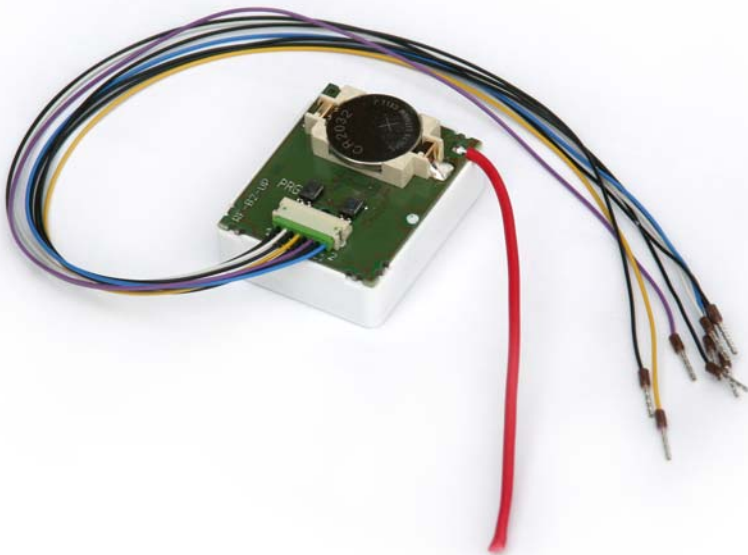
# RF-B2-UP

## Radio-button interface

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### Technical specifications and installation instructions

Item number 60540



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# 1. Description

The **Button interface RF-B2-UP** features four connections for two double buttons (up/down or on/off) and transfers the switching signals to the taught device by radio.

## **Suitable for the following devices:**

- Building control WS1 Color (from version 1.597)
- Building controls WS1 Style and (KNX) WS1000 Style
- Shading control Solexa (from version 3.6)
- Radio control Solexa II (from software version 1.9)
- Window control Arexa (from version 3.7)
- Ventilation units WL400 and WL800 (from version 1.0)
- Air supply unit WL-Z (from version 1.0), WFL (from version 2.0)
- RF relay (from version 2.0), motor control device RF-MSG, fan module RF-VM

The software version of the device must be appropriate for interaction with the **Button interface RF-B2-UP!**

## 1.1. Deliverables

- Button interface

## 1.2. Technical specifications

Assembly	Installation
Protection category	IP 00
Dimensions	approx. 38 x 47 x 19 (W x H x D, mm)
Weight	approx. 20 g
Ambient temperature	Operation -20...+70 °C, storage -55...+90 °C
Ambient humidity	max. 95% RH Avoid condensation
Power supply	3 V battery, type CR2032
Inputs	2 x inputs for double buttons (8 wires) for potential-free contacts, with 300 mm connection line, Extendable to a maximum of 10 m

The product is compliant with the provisions of EC guidelines.

# 2. Installation and commissioning

## 2.1. Notes on wireless equipment

When planning facilities with devices that communicate via radio, adequate radio reception must be guaranteed. The range of wireless control will be limited by legal regulation and structural circumstances. Avoid sources of interference and obstacles between receiver and transmitter, that could disturb the wireless communication. Those would be for example:

- Walls and ceilings (especially concrete and solar protection glazing).
- Metal surfaces next to the wireless participants (e. g. aluminium construction of a conservatory).
- Other wireless devices and powerful local transmitters (e.g. wireless headphones), which transmit on the same frequency (868,2 MHz). Please maintain a minimum distance of 30 cm between wireless transmitters for that reason.

## 2.2. Installation location



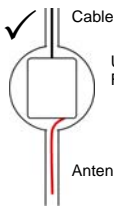
**The device may only be installed and operated in dry, indoor spaces.**



**Avoid condensation.**

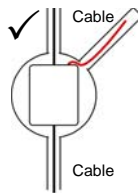
### 2.2.1. Antenna arrangement

**Good** for wireless communication:



Unit in  
Flush-mounted container

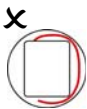
Antenna and cable in  
different pipes.



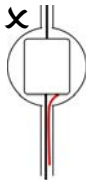
Tube/pipe  
with antenna

Separate tube/  
pipe for antenna.

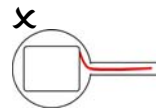
**Bad** for wireless communication:



Do not wrap!



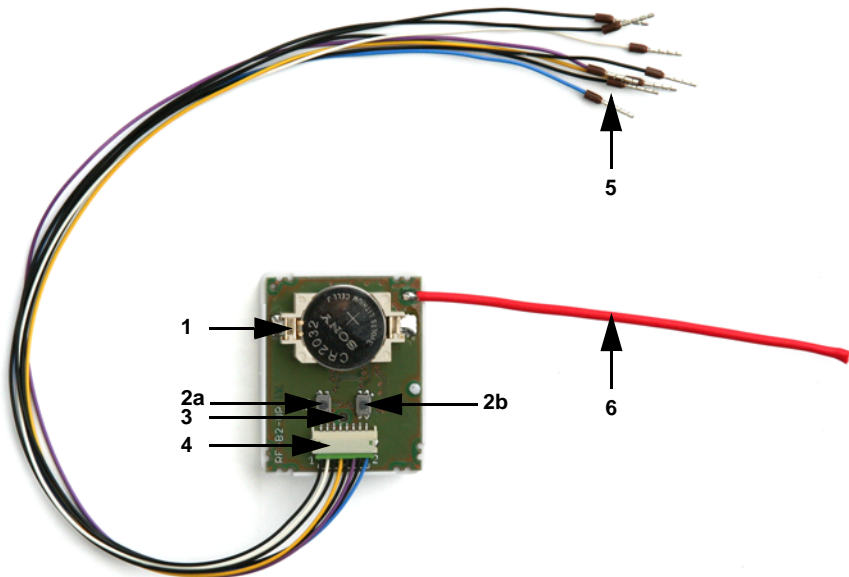
Antenna and cable  
are not parallel!



Do not arrange horizon-  
tally!

## 2.3. Device/connection design

Connection wires that are not used must be isolated against one another as the battery might otherwise be discharged.



- 1 Battery holder
- 2 Programming key (PRG) for radio connections
  - 2a: Pushbutton 1 | 2b: Pushbutton 2
- 3 Programming LED (ready for learning/cancellation)
- 4 Binary contact connection
- 5 Pushbutton connection wires
- 6 Antenna

**Wiring:**

Black (4x): - ("negative")

White: Pushbutton 1 UP (and/or ON)

Yellow: Pushbutton 1 DOWN (and/or OFF)

Purple: Pushbutton 2 UP (and/or ON)

Blue: Pushbutton 2 DOWN (and/or OFF)

## 2.4. Creating and deleting wireless connections

Each of the pushbuttons connected to input 1 and 2 controls one or several drives/devices.

### 2.4.1. Controls WS1 and WS1000 Color/Style

**Learn:**

1. Prepare control for learning:
  - Menu *System* > *Installation* > *Radio connection* > *Learning*.
  - Please also follow the instructions in the manual.
2. Teaching the pushbutton interface:
  - Briefly press the PRG key 1 or 2 on the pushbutton interface once.
  - The selected PRG key will not affect the configuration of the WS1000 Color/WS1 Color.
3. Acknowledgement from the control system:

- Control signals "device taught".

Once the **Button interface RF-B2-UP** has been taught to know the control, you can assign a name to the pushbutton interface in the menu *System > Installation > Radio connection > Status* and assign drives and devices to pushbutton 1 and 2 ("channel" 1 and 2).

### **Deletion:**

1. Deleting a radio connection:
  - On the control, call up the menu item *System > Installation > Radio connection > Delete*.
  - Please also follow the instructions in the manual.

## **2.4.2. XS MSG2-AP motor control device**



**Teaching and deletion may only be carried out by a qualified electrician (according to VDE 0100)!**

### **Learn:**

1. Prepare motor control device for learning:
 

(also see chapter "Radio connection motor control device - Remo 8" in the manual)

  - Press the learning/deletion key of the motor control device briefly 3 times until the left LED comes on.
  - For the right channel, press the learning/deletion key of the motor control device briefly 4 times until the right LED comes on.
2. Teaching the pushbutton interface:
  - Press the PRG key 1 (for pushbutton 1) or 2 (for pushbutton 2) on the pushbutton interface once briefly.

The pushbutton is now configured to the channel of the motor control unit.

### **Deletion:**

1. Prepare control for deletion:
 

(see also the chapter "Radio connection motor control device - Remo 8" in the manual)

  - Press the learning/deletion key of the motor control device briefly 3 times until the left LED comes on.
  - For the right channel, press the learning/deletion key of the motor control device briefly 4 times until the right LED comes on.
2. Deleting the pushbutton interface:
  - Press the PRG key 1 (for pushbutton 1) or 2 (for pushbutton 2) on the pushbutton interface once for more than 3 seconds until the programming LED comes on.
  - Press the PRG once again for longer than 3 seconds until the programming LED flashes (= ready for deletion)
  - Press the PRG key once again briefly.

The wireless connection is deleted.

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### 2.4.3. Controls Solexa / Arexa / Lixa, ventilator WL305 / WL610 / WFL, RF relay, RF-VM

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**Teaching and deletion may only be carried out by a qualified electrician (according to VDE 0100)!**

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#### **Learn:**

1. Prepare pushbutton interface for learning:
  - Press the PRG key 1 (for pushbutton 1) or 2 (for pushbutton 2) on the pushbutton interface once for more than 3 seconds until the programming LED comes on (= ready for learning)
2. Teach controls, ventilators or relays:
  - Press the programming button inside the device briefly a single time using an insulated screwdriver.

The pushbutton is now taught for the device.

#### **Deletion:**

1. Prepare pushbutton interface for deletion:
  - Press the PRG key 1 (for pushbutton 1) or 2 (for pushbutton 2) on the pushbutton interface once for more than 3 seconds until the programming LED comes on.
  - Press the PRG once again for longer than 3 seconds until the programming LED flashes (= ready for deletion)
2. Delete controls, ventilators or relays:
  - Press the programming button inside the device briefly a single time using an insulated screwdriver.

The wireless connection is deleted.

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### 2.4.4. Ventilation units WL400/WL800, WL-Z

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**Teaching and deletion may only be carried out by a qualified electrician (according to VDE 0100).**

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#### **Learn:**

1. Prepare pushbutton interface for learning:
  - Press the PRG key 1 (for pushbutton 1) or 2 (for pushbutton 2) on the pushbutton interface once for more than 3 seconds until the programming LED comes on (= ready for learning)
2. Teach ventilation unit:
  - Switch on the 230 V power supply to the fan and/or shut off the power supply briefly if the unit is already supplied with power. The fan automatically teaches itself after the mains voltage is applied.

**Deletion:**

1. Prepare pushbutton interface for deletion:
  - Press the PRG key 1 (for pushbutton 1) or 2 (for pushbutton 2) on the pushbutton interface once for more than 3 seconds until the programming LED comes on.
  - Press the PRG once again for longer than 3 seconds until the programming LED flashes (= ready for deletion)
2. Deleting a ventilation unit:
  - Switch on the 230 V power supply to the fan and/or shut off the power supply briefly if the unit is already supplied with power. The radio connection will be cleared automatically after the mains voltage is applied.

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### 2.4.5. Motor control devices RF-MSG, RF relay UP

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**Teaching and deletion may only be carried out by a qualified electrician (according to VDE 0100).**

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**Learn:**

1. Prepare pushbutton interface for learning:
  - Press the PRG key 1 (for pushbutton 1) or 2 (for pushbutton 2) on the pushbutton interface once for more than 3 seconds until the programming LED comes on (= ready for learning)
2. Teach relay or motor control device:
  - Switch on the voltage supply of the RF-MSG or RF relay UP. The motor control unit automatically teaches itself 3 seconds after the mains voltage is applied.

**Deletion:**

1. Prepare pushbutton interface for deletion:
  - Press the PRG key 1 (for pushbutton 1) or 2 (for pushbutton 2) on the pushbutton interface once for more than 3 seconds until the programming LED comes on.
  - Press the PRG once again for longer than 3 seconds until the programming LED flashes (= ready for deletion)
2. Deleting a relay or motor control device:
  - Switch the voltage supply of the RF-MSG or RF relay UP off and then on again. The radio connection will be cleared automatically 3 seconds after the mains voltage is applied.

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## 3. Operation

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### 3.1. Pushbutton functions

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**Up/Down** via the connected up/down double pushbutton  
Integrated pushbutton automatics:

- Key pressed briefly = step operation
- Key pressed for a longer time = movement to final position
- Briefly pressing the opposite direction key = stop

**On/Off** via the connected double pushbutton (pushbutton 1 = on, pushbutton 2= off)

**Dimming** via the connected up/down double pushbutton

Integrated pushbutton automatics:

- "Up" briefly = ON with the last dimming value.
- "Up" long = brighter
- "Down" briefly = OFF
- "Down" long = darker

### 3.1.1. Order of the ventilation levels

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Ventilation units WL305/610 and WL400/800:

Exhaust air 8 – 7 – 6 – 5 – 4 – 3 – 1 – off – Circulation air 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8

## 4. Maintenance

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### 4.1. Replace the battery

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*Pry the drained battery from the holder carefully. Mind the clips when inserting the new battery.*

*CR2032 type battery, 3 V.*



**Dispose of the used battery properly – empty batteries should not be thrown away in household refuse.**

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