

Push Button wave UP 210
5WG3 210-2_B_1
Product and Applications Description


The push button wave UP 210 is a single radio control push button used both as a transmitter and a receiver for lighting control. The available colours match the DELTA switch ranges i-system (vita, line), DELTA profil and DELTA style. The push button is clipped onto the switch or dimmer insert sys together with the relevant frame of the switch ranges (to be ordered separately). An additional function besides the wireless remote control is the operation of the insert located beneath the push button as a time switch with an adjustable overshoot time of 1-60 minutes.

DELTA i-system (DELTA vita, DELTA line):

| | |
|---|----------------|
| DELTA i-system push button wave, titanium white | 5WG3 210-2HB11 |
| DELTA i-system push button wave, carbon metallic | 5WG3 210-2HB21 |
| DELTA i-system push button wave, aluminium metallic | 5WG3 210-2HB31 |

DELTA profil:

| | |
|---|----------------|
| DELTA profil push button wave, titanium white | 5WG3 210-2AB11 |
| DELTA profil push button wave, pearl grey | 5WG3 210-2AB01 |
| DELTA profil push button wave, anthracite | 5WG3 210-2AB21 |
| DELTA profil push button wave, silver | 5WG3 210-2AB71 |

DELTA style:

| | |
|--|----------------|
| DELTA style push button wave, titanium white | 5WG3 210-2GB11 |
| DELTA style push button wave, basalt black | 5WG3 210-2GB21 |

The commissioning of the push button wave is carried out without any additional means via push button actions (Easy mode Push Button: EP).

There are two different operation modes which can be used by the push button wave:

Normal function

- Operation of the insert located beneath the push button
- Remote operation of the insert located beneath the push button via other radio control push buttons or radio control transmitters
- Remote operation of other inserts connected via radio control
- storing a memory brightness value

Special function

- Establishing connections with other radio control components
- Deleting connections with other radio control components
- Activating, setting and disabling the time switch function

Operation

The operation of the push button wave can be carried out at the TOP, BOTTOM or in the CENTRE (i.e. TOP and BOTTOM simultaneously). The exact functionality of the push button wave depends on the inserts sys used: switch (switching only) or dimmer (switching, dimming and memory).

Switching (Actions shorter than 0.4s):

| | |
|---------|---|
| TOP: | TOGGLE (i.e. OFF or ON with saved memory value) |
| BOTTOM: | TOGGLE |
| CENTRE: | TOGGLE |

Note: If the time switch function is active the overshoot time is restarted with every further push button activity.

Dimming (Actions between 0.4s and 3s):

| | |
|---------|---|
| TOP: | Dimming BRIGHTER up to max. light intensity |
| BOTTOM: | Dimming DARKER down to min. light intensity |

Memory function (Actions between 3s and 10s):

CENTRE: Stores the current brightness value as a memory value. The LED of the push button wave flashes briefly after 3 seconds. The storing of the brightness value is confirmed by the dimmer insert sys by switching the connected loads OFF briefly and then ON again.

Technical Specifications

Frequency band

868 MHz (transmission is not susceptible to interference; frequency band reserved for system and security applications)

Range of radio control

approx. 100 m (applying to free field applications)

Power supply

via the 230V physical external interface (230V-PEI) of the switch or dimmer inserts sys

Connections

10 pin bar (230V-PEI) for connection to the switch or dimmer inserts sys

Mechanical specifications

- Housing: plastic
- Dimensions (L x W x D):
 - DELTA i-system 55x55x24mm (including spring)
 - DELTA profil 65x65x25mm (including spring)
 - DELTA style 68x68x27mm (including spring)
- Weight: approx. 35g
- Fire load: approx. 950kJ
- Mounting: placed on the switch or dimmer inserts sys

Electrical safety

- Pollution degree (according to IEC 60664-1): 2
- Protection (according to EN 60529): IP 20
- Overvoltage category (according to IEC 60664-1): III
- Device complies with EN 60669-2-1 and IEC 60664-1



Electromagnetic compatibility

complies with EN 60669-2-1, EN 301489, EN 300220

Environmental specifications

- Climatic conditions: EN 50090-2-2
- Ambient operating temperature: - 5 ... + 45°C
- Storage temperature: - 25 ... + 70°C
- Relative humidity (non-condensing): 5% to 93%

Certification

VDE certificate in preparation, complies with  - standard
radio frequency rf
easy mode push button 

CE norm

complies with the EMC regulations (residential buildings), low voltage regulations and R&TTE regulations:



The CE declaration can be inspected at:
SIEMENS AG
Siemensstraße 10
93055 Regensburg

Installation Instructions

Caution:

- The device may be used for interior installations and in dry rooms only.
- The installation of the device into metal walls has to be avoided since through this the range of radio control is reduced considerably.
- Occasionally the transmission range may be influenced by structural conditions (e.g. reinforced concrete) or electric / electronic sources of interference.
- A minimum distance of 0.5 m must be maintained between the transmitter and the relevant receivers.
- Though the radio transmission is carried out in the safe 868 MHz range, disruptions to the radio transmission cannot be excluded.
- The radio transmission is not suitable for security applications.



WARNING

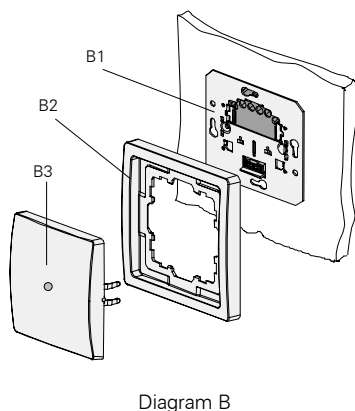
- The device must be mounted and commissioned by an authorised electrician.
- The device must not be opened.
- The device may be mounted in switch and socket combination box mounts provided that only VDE-certified devices are used.
- The prevailing safety and accident regulations must be observed.

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Mounting

The push button wave is clipped onto the switch or dimmer insert sys together with its frame. The electrical connection between the push button and the insert is thus established via the 230V-PEI.

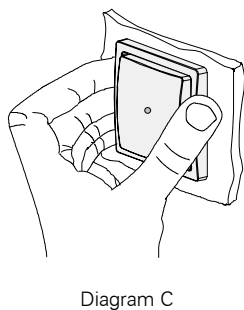
Mounting of the Push Button wave UP 210:

- B1 Switch insert sys or dimmer insert sys
 B2 Frame
 B3 Push button wave UP 210

- 1) The switch or dimmer insert sys is connected and mounted within the flush-type box (see installation instructions for switch or dimmer insert sys).
- 2) Place the push button wave together with its frame onto the switch or dimmer insert sys.

Dismantling:

Remove the push button wave manually together with its frame (Diagram C).

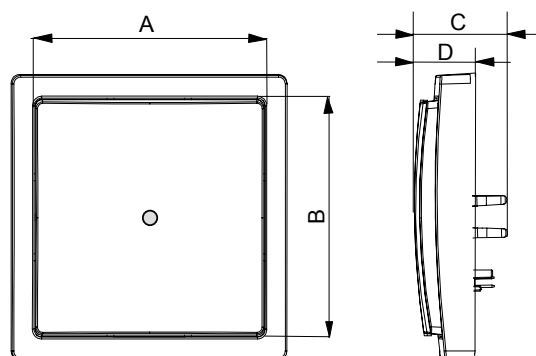


Caution: Cut-out frames have to be used to integrate the push button wave into the DELTA profil range!

Dimension Diagram

Dimensions in mm

| | A | B | C | D |
|----------------|----|----|----|------|
| DELTA i-system | 55 | 55 | 24 | 13 |
| DELTA profil | 65 | 65 | 25 | 14 |
| DELTA style | 68 | 68 | 27 | 16,5 |

**Commissioning**

The function of the insert located beneath the push button is ensured without further commissioning once the push button has been placed on it.

If further switch or dimmer inserts sys are to be operated remotely, they must first be linked via radio control. Any switch or dimmer inserts sys which have to be connected must also be equipped with a push button wave.

Switching and dimming functions can be linked via radio control:

- A push button wave on a switch insert sys can switch a dimmer insert sys ON or OFF via radio control.
- A push button wave on a dimmer insert sys can switch a switch insert sys ON or OFF via radio control.

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The connection of the push button wave with other radio components is carried out by pressing the push button. To do so, the special function must be set for the two devices which have to be connected with each other. The operating state of the push button and the successful connection are displayed by the LED located in the centre of the push button.

Connection via radio control:

Connecting the push button wave I with a dimmer insert sys II via radio control.

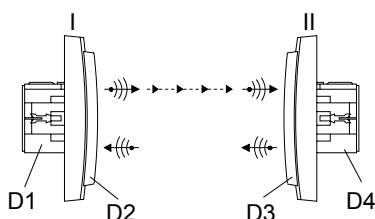


Diagram D

- D1 Dimmer insert sys I
- D2 Push button wave I
- D3 Push button wave II
- D4 Dimmer insert sys II

1. Push button wave II: Switch to the special function (D3).

Action: Press the push button rocker II in the CENTRE for at least 10 seconds.

Display: The LED of the push button begins to flash slowly (approx. once per second) after 10 seconds (toggling to the special function).

2. Push button wave I: Switch to the special function (D2).

Action: Press the push button rocker I in the CENTRE for at least 10 seconds.

Display: The LED of the push button begins to flash slowly (approx. once per second) after 10 seconds (toggling to the special function).

3. Push button wave I: Transmit a linking telegram (D2).

Action: Brief operation (up to 0.4 sec.) of the push button rocker I at the TOP, CENTRE or BOTTOM.

Display: The LED of push button wave I flashes rapidly (3 times per second) for approx. 3 seconds if the connection has been established successfully. The LED is then extinguished and the push button exits the special function. The LED of the push button wave II also flashes and is extinguished. The push button then exits the special function.

Note: There is only a limited period available for the connection as the push buttons wave exit the special function after 2 minutes.

The connection of push button wave I with dimmer insert II is complete. When push button wave I (D2) is pressed, the dimmer insert sys II (D4) is also operated via radio control.

If the connection has failed (e.g. if the distance is too great), the two push buttons wave exit the special function after max. 2 minutes, without confirming the success of the connection by flashing rapidly.

This procedure must be repeated if push button wave I is to be connected with other dimmer inserts sys.

An unlimited number of switch inserts sys can be operated via remote control by the push button wave (Diagram E).

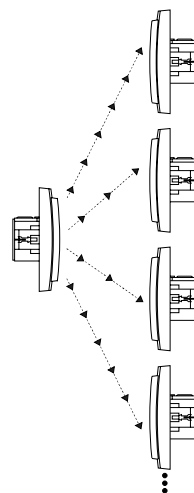


Diagram E

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A switch or dimmer insert sys equipped with a push button wave can be operated via remote control by up to 10 radio control push buttons (Diagram F).

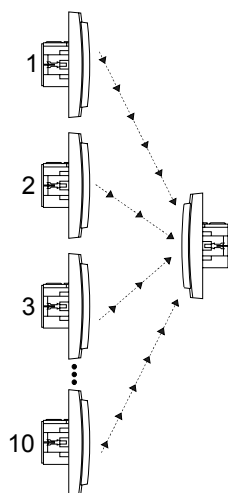


Diagram F

If you wish dimmer insert I (G1 in Diagram G) to be operated via remote control by push button wave II (G3), the two push buttons wave I and II must be switched to the special function again. However, the linking telegram has to be triggered at push button wave II.

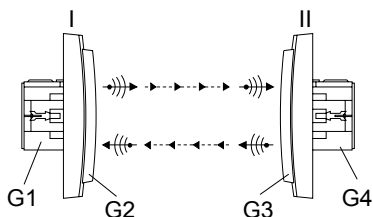


Diagram G

- G1 Dimmer insert sys I
- G2 Push button wave I
- G3 Push button wave II
- G4 Dimmer insert sys II

Procedure for deleting a connection:

Single connections can be deleted by assigning the new correlation.

Deletion of the connection between the push button wave in combination I and the dimmer insert sys in combination II (Diagram D).

1. Push button wave II: Switch to the special function
2. Push button wave I: Switch to the special function
3. Push button wave I: Trigger the linking telegram

The connection between push button wave I and dimmer II is thereby deleted.

Deleting all connections and resetting the supplied state:

1. **Switch the push button wave to the special function.**

Action: Press the push button rocker in the CENTRE for at least 10 seconds.

Display: The LED of the push button begins to flash slowly (approx. once per second) after 10 seconds (toggling to the special function).

2. **Reset the device.**

Action: Press the push button rocker again in the CENTRE for at least 10 seconds.

Display: The LED of the push button flashes rapidly (3 times per second) for approx. 3 seconds. The LED is then extinguished and the push button exits the special function.

All connections are deleted. The device is restored to its initial state.

Connections of this push button wave to other inserts are retained and must likewise be deleted.

Time switch mode:

Switch inserts sys or dimmer inserts sys, which are equipped with a push button wave, can be operated as time switches. In this operation mode, the connected load is switched off automatically after a time interval which can be set in steps of one minute. The overshoot time can be retrigged and is reset and restarted via radio control after each push button action or on receipt of an ON command. The time switch function is enabled or disabled via the special mode.

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Activating the time switch function with a time interval which can be set in steps of one minute from 1 to 60 minutes:

1. Switch the push button wave to the special function.

Action: Press the push button rocker in the CENTRE for at least 10 seconds.

Display: The LED of the push button begins to flash slowly (approx. once per second) after 10 seconds.

2. Select the time switch mode.

Action: Long operation (at least 3 seconds) of the push button rocker at the BOTTOM.

Display: After 3 seconds, the LED of the push button flashes rapidly (3 times per second) for approx. 3 seconds.

If the following step 3 is not carried out, the overshoot time is automatically set to 3 minutes.

If an overshoot time is required between 1 and 60 minutes, the setting must be started within 7 seconds.

3. Set the overshoot time in steps of 1 minute.

Action: Press the push button rocker at the BOTTOM. The first push button action sets the overshoot time to 1 minute. Each further push button operation extends the period by 1 minute each time (e.g. 5 push button actions for a 5 minute overshoot time).

Display: The LED of the push button flashes once after each new push button action.

4. Activating the time switch function

Action: After the last push button action, no further operation for approx. 3 seconds.

Display: The LED of the push button flashes rapidly (3 times per second) again for approx. 3 seconds and is then extinguished.

The time switch function is activated with the desired overshoot time.

Disabling the time switch function and returning to normal mode:

1. Switch the push button wave to the special function.

Action: Press the push button rocker in the CENTRE for at least 10 seconds.

Display: The LED of the push button begins to flash slowly (approx. once per second) after 10 seconds.

2. Disable the time switch mode, activate normal mode.

Action: Long operation (at least 3 seconds) of the push button rocker at the TOP.

Display: The LED of the push button flashes rapidly (3 times per second) for approx. 3 seconds and is then extinguished.

The time switch function is disabled and the device is in normal mode.





Exiting the special function:

If the push button wave is operated in the special function mode, this state is terminated by the following actions and switched back to normal mode.

1. Transmission of a linking telegram.
2. Receipt of a linking telegram.
3. Enable the time switch function (long operation (between 3 and 10 seconds) of the push button rocker at the BOTTOM).
4. Switch from time switch mode to normal mode (long operation (between 3 and 10 seconds) of the push button rocker at the TOP).
5. Time out after 2 minutes (no push button actions are carried out and no linking telegrams are received for a period of two minutes).

General Notes

- The operating instructions must be handed over to the client.
- Any faulty devices should be returned to the local Siemens office.
- If you have further questions concerning the product please contact our technical support:

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