

B-Tronic VarioControl VC4200B

en

Assembly and Operating Instructions

Flush-mounted radio receiver

Important information for:

- Fitters / • Electricians / • Users

Please forward accordingly!

These instructions must be kept safe for future reference.

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General

The flush-mounted radio receiver, delivered ex works, converts radio signals into control signals. A wired drive can be radio-controlled using the radio receiver. The radio receiver can be operated by all the transmitters in the B-Tronic range of control units.

Please observe these Assembly and Operating Instructions when installing and setting up the equipment.

Explanation of pictograms

	CAUTION	CAUTION indicates a hazardous situation which, if not avoided, could result in injury.
	ATTENTION	ATTENTION indicates measures that must be taken to avoid damage to property.
		Denotes user tips and other useful information.

You will find the current status on the type plate according to the following symbol: 

Confirmation is provided by the receiver switching briefly on and off, or by a shift in the shading solution.

Warranty

Structural modifications and incorrect installation which are not in accordance with these and our other instructions can result in serious injuries, e.g., crushing of limbs. Therefore, structural modifications may only be carried out with our prior approval and strictly in accordance with our instructions, particularly the information contained in these Assembly and Operating Instructions.

Any further processing of the products which does not comply with their intended use is not permitted.

The end product manufacturer and fitter have to ensure that all the relevant current statutory, official and, in particular, EMC regulations are adhered to during utilisation of our products, especially with regard to end product manufacture, installation and customer advice.

Safety instructions

The following safety instructions and warnings are intended to avert hazards and to prevent property damage and personal injury.

General information

- Always comply with regulations of local energy supply companies as well as VDE 100 provisions for wet and damp rooms during installation.
- Only use in dry rooms.
- Only use unmodified original parts from the control unit manufacturer.
- Observe all pertinent country-specific regulations.
- Keep people out of the system's range of travel.
- If the system is controlled by one or several appliances, the system's range of travel must always be visible during operation.
- Keep children away from control units.



Caution

- **Risk of injury due to electric shock.**
- **Connections to the 110-240 V mains must always be performed by a specialist.**
- **During installation, all-pole disconnection from the mains with a contact gap of at least 3 mm per pole must be provided.**
- **Disconnect the connecting cable from the power prior to installation.**
- **When connecting the control cables (protected extra-low voltages), only use cables with sufficient electrical strength.**
- **A wind monitoring unit cannot be connected to the device. Retract the exterior sun protection manually in strong winds in order to prevent damage.**

Intended use

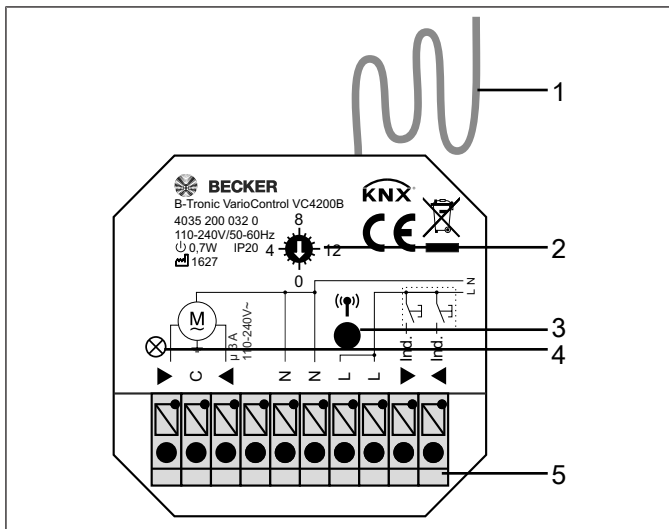
The radio receiver described by the present instructions must only be used for the operation of roller shutter, blind and ON/OFF control units (e.g. lighting equipment).

- Please note that radio-controlled systems may not be used in areas with a high risk of interference (e.g. hospitals, airports).
- The remote control is intended solely for use with equipment and systems in which malfunctions in the transmitter or receiver would not pose any risk to persons, animals or property, or which contain safety devices to eliminate such risks.
- The operator is not protected from interference from other telecommunications systems and terminal equipment (e.g. even from radio-controlled systems which are properly operated in the same frequency range).
- Only connect radio receivers to devices and systems approved by the manufacturer.



- **Ensure that the control unit is not installed or operated close to metal surfaces or magnetic fields.**
- **Radio-controlled systems transmitting on the same frequency may cause reception interference.**
- **Note that the range of the radio signal is limited by legislation as well as by design.**

Explanation of displays and buttons



1. Antenna		
2. Function selection switch (Positions 0-15)	Position 0	Reference (LED briefly lights up red)
	Position 1	Roller shutter (current detection active)
	Position 2	Venetian blind (current detection active)
	Position 3	ON/OFF
	Position 4	ON and OFF after 10 minutes
	Position 5	ON and OFF after 3 minutes
	Position 6	Pulse (1 second)
	Position 7	Pulse (3 seconds)
	Position 8	Roller shutter (current detection inactive)
	Position 9	Venetian blind (current detection inactive)
	Positions 10-15	Not assigned
3. Programming button		
4. LED		
5. Connecting terminals		



To be able to program the transmitter and receiver, the function of both devices must correspond.

Extra functions

Function	Intermediate position I / tilt position I	Intermediate position II / tilt position II	Memory function	Repeater	Reversal of rotational direction using master transmitter	Current detection
Roller shutter	●	●	●	●	●	◐
Venetian blind	●	●	●	●	●	◐
ON/OFF				●		
ON and OFF after 10 minutes				●		
ON and OFF after 3 minutes				●		
Pulse (1 second)				●		
Pulse (3 seconds)				●		

● = present

◐ = optional

Wiring



Caution

- Risk of injury due to electric shock.
- Connection may only be performed by a qualified electrician!
- The device only offers back-of-hand protection, not touch protection.
- Do not bend, shorten or lengthen the antenna.
- Only operate the programming button with an insulated tool.
- If more than one drive is going to be operated by the radio receiver, the drives must be decoupled by relay controls. There is no need for decoupling in the case of our drives with electronic limit switching.
- Always take into account the device switching current.
- The maximum switching capacity must not be exceeded.
- When the jumper is inserted (C to L), the mains voltage is switched to the outputs of the radio receiver.

Individual inputs ^{Ind.} with drive control

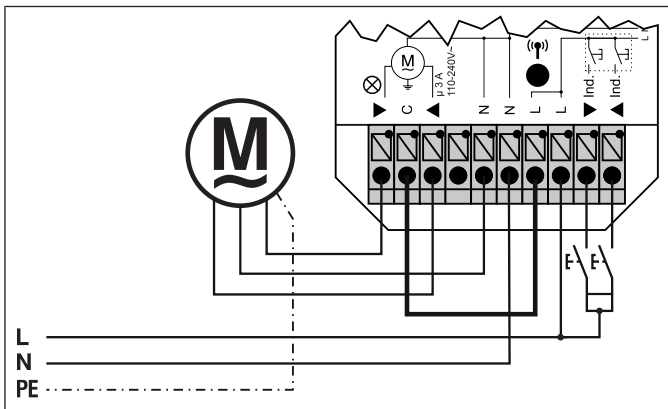
These connecting terminals are intended for an additional button. If a travel button is pressed for more than 0.5 seconds, the shading solution runs in the desired direction as far as the limit position. If the travel button is pressed for less than 0.5 seconds, the shading solution stops.

If intermediate positions have been programmed, these can be approached using the push-button by tapping UP / DOWN twice.



Ensure that there is optimum radio reception.

Drive connection



Individual inputs [▲]Ind. _▼Ind. with ON/OFF control

When connecting the individual terminal on the left

This connecting terminal is for an additional push-button. Pressing the button for longer than 0.5 seconds switches on the device. Pressing the button again switches off the device.

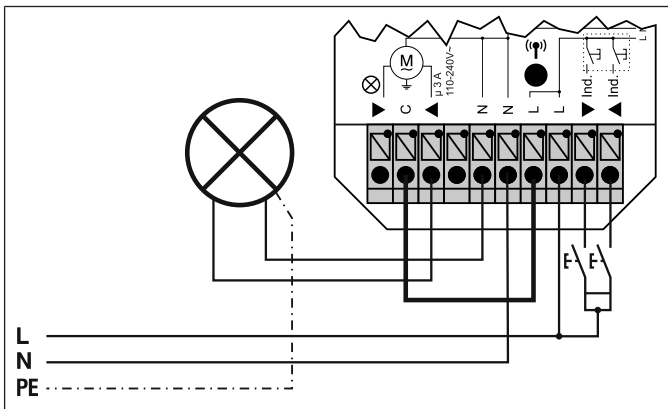
When connecting the individual terminal on the right

This connecting terminal is for an additional push-button. Pressing the button enables the pulse sequence ON-OFF-ON-OFF, etc.

ON/OFF control unit connection (e.g. lighting)



The "left" terminal is not connected.



Programming transmitters



Caution

- Risk of injury due to electric shock.
- The device only offers back-of-hand protection, not touch protection.
- Only operate the programming button with an insulated tool.

Putting the radio receiver into programming mode

a) Putting the radio receiver into programming mode by switching on the power



If you select position 0 (reference) via the function switch after programming, the function that was previously set is saved. It is now no longer possible to activate programming mode by switching on the voltage.

Select the required function via the function switch (see Explanation of displays and buttons [▶ 6]).

Switch on the power.

The LED flashes green.

- ▶ The radio receiver goes into the programming mode for 3 minutes.

b) Putting the radio receiver into programming mode with the programming button

Select the required function via the function switch (see Explanation of displays and buttons [▶ 6]).

Press the programming button for 1 second.

The LED flashes green.

- ▶ The radio receiver goes into the programming mode for 3 minutes.

c) Putting the radio receiver into programming mode with a previously programmed B-Tronic transmitter

Select the required function via the function switch (see Explanation of displays and buttons [▶ 6]).

For a more detailed description refer to the instructions for the transmitter.

Limit position adjustment and configurations

The commissioning and later configurations are only possible with a B-Tronic transmitter.

1. Setting of limit positions

Please find the appropriate description in the instructions for the drive.

2. Performing the programming run

Feedback is disabled and it is not possible to program the intermediate positions until the programming run has been performed.

Please find the information on how to perform the programming run in the instructions for the B-Tronic transmitter.

3. Possible configurations

Please find the appropriate description in the instructions for the B-Tronic transmitter.

- Intermediate positions I+II
- Memory function
- Repeater mode

Deleting transmitters

Deleting a transmitter via the radio receiver



Caution

- Risk of injury due to electric shock.
- The device only offers back-of-hand protection, not touch protection.
- Only operate the programming button with an insulated tool.

Select the required function via the function switch (see Explanation of displays and buttons [▶ 6]).

Press the programming button at the radio receiver for 5 seconds until the LED at the radio receiver flashes red.

For a more detailed description refer to the instructions for the transmitter.

Deleting a transmitter via a programmed B-Tronic transmitter

Please find the appropriate description in the instructions for the B-Tronic transmitter.

Restoring to factory settings

Select position 0 at the function switch.

Press the programming button at the radio receiver (for approx. 15 s) until the LED at the radio receiver flashes green again.

Now all programmed transmitters have been deleted.

Technical data for the flush-mounted radio receiver

Rated voltage	110-240 V AC / 50-60 Hz
Switching current	3 A / 110-240 V AC with $\cos \varphi = 1$
Current detection threshold at roller shutter/venetian blind	>250 mA at 50-60 Hz
Degree of protection	IP 20
Class of protection (dependent on correct assembly)	II
Permissible ambient temperature	-25 to +55 °C
Roller shutter running time	2 min.
Venetian blind running time	3 min.
Type of mounting	Flush mounted Ø 58 mm, wall mounted/surface mounted in appropriate surface mounted housing
Maximum emitted transmission output	≤ 25 mW
Radio frequency	868.3 MHz

The maximum transmitter range on and in the building is up to 25 m, and up to 350 m in the open.

What to do if...?

Problem	Remedy
Drive is not functioning.	Check connection.
Drive is running in the wrong direction.	Swap the ▲ and ▼ wires at the radio receiver.
The radio receiver does not perform manual run commands.	Program transmitter.
	Connect the external button correctly.
The radio receiver does not perform automatic run commands.	Program transmitter.
	Set the transmitter to automatic mode.
Intermediate position I / II cannot be programmed.	Perform the programming run in accordance with the instructions for the B-Tronic transmitter.
Programming failed.	Set the same function at the transmitter and receiver.
The feedback is not plausible (function switch in position 1, 2, 8 or 9)	Delete and restart the programming run in accordance with the instructions for the B-Tronic transmitter.
The feedback is not plausible (function switch in position 1 or 2)	Reset the radio receiver back to the factory setting. Depending on the shading solution, set the function switch to position 8 or 9. Put the device back into operation.
The intermediate position/tilt position is not moved to correctly (function switch in position 8 or 9)	Always move to the intermediate position/tilt position from the corresponding limit position.

Simplified EU declaration of conformity

Becker-Antriebe GmbH hereby declares that this radio control system complies with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following web address:

www.becker-antriebe.com/ce



Subject to technical changes without notice.



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