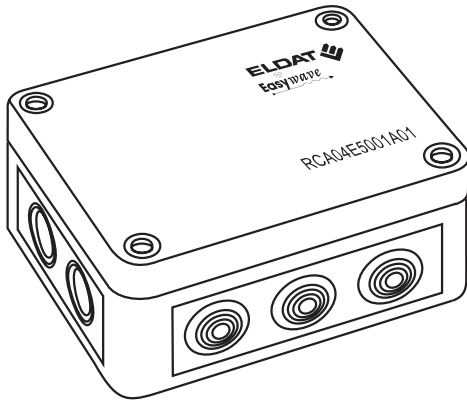


Model



RCA04E5001A01

Technical Details

Frequency:	868.30 MHz
Modulation:	FSK
Coding:	Easywave
Memory locations:	999
Supply voltage:	230 V AC, 50 Hz
Output:	1 potential-free relay contact (SPDT)
Power consumption:	1.5 W in standby mode
Max. contact load:	
- Ohmic load	16.0 A / 3,680 VA
- Inductive load	3.0 A / 690 VA
- Non- or serial-compensated fluorescent lamps with ferromagnetic ballasts	3.0 A / 690 VA
- Parallel-compensated fluorescent lamps with ferromagnetic ballasts	3.0 A / 720 VA
- Electronic ballast capacity	4.0 A / 920 VA
Protection class:	IP55 (when delivered)
Operating modes:	PULSE, DEAD MAN
Button lock:	3-digit PIN code
Operating temperature:	-20 °C to +50 °C
Dimensions (W/L/H):	130 x 94 x 57 mm
Weight:	350 g
Specification SD card:	Micro SDHC card or micro SD card 4 to 32 GB
Supply voltage	3.0 V ±5%
Operating temperature:	according to RCA04

Scope of delivery

RCA04 Radio Control Access, operating instructions, attachment materials

Intended use

The radio access control was developed and manufactured exclusively as a receiving device for Easywave radio telegrams.

The manufacturer is not liable for any damage caused by improper or unintended use!

Safety information

- Before connecting this device, please read these instructions carefully!
- **Note: The electrical installation and programming must be performed by a licensed and qualified electrician. Failure to observe this requirement presents a risk of electric shock or fire.**
 - The controller and connection terminals will be under live voltage during the programming process. Avoid touching live parts.
 - As well as the device, a suitable, easily accessed isolation device must be present in the permanent electrical installation.
 - Before mounting or maintenance of connecting cables, ensure that the device is electrically disconnected and isolated.
 - Observe any applicable laws, standards and regulations as well as manufacturer instructions pertaining to the devices being connected!
 - Ensure any malfunctioning devices are inspected by the manufacturer
 - Ensure that children and unauthorized persons cannot use the controller or temperature sensors.
 - Do not perform unauthorized modifications to the device!

Function

The RCA04 radio access control is used for the potential-free control of door openers or gate control systems. Up to 999 Easywave transmission codes can be programmed and managed for operation.

When the code of a programmed transmitter is received, the relay output emits a switch PULSE. The length of this pulse can be set between 0.5 and 998.0 seconds.

If the pulse duration is set to a value of "999", the control will operate in DEAD MAN'S SWITCH mode. In this mode, the relay will be active as long as the transmitter button is held down. The total transmission length is limited to a maximum of 36 seconds.

Each memory location can be locked, unlocked or deleted separately. Access to the associated transmitter is not necessary for this purpose.

All saved transmission codes and memory location settings can be backed up to a micro SD card, and backed-up data can be written back to the control.

The control can be protected from unauthorized use with a user-definable access code (PIN code). If the PIN code is lost, the control can only be unlocked again using a previously programmed master transmitter or by the manufacturer.

Programming of the RCA04 is menu-guided via a display.

Preparing the controller unit for operation

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A Installing the control access

A1 Selecting a location

When choosing the location for the installation please take into account that the reception quality and sensitivity can be disturbed by equipment and systems without interference suppression, other transmitters within the frequency range, atmospheric conditions and other factors.

Transmitter and receiver should be located in such a way that the shortest distance between them is not disturbed or only slightly disturbed by brick walls or other absorbing materials or any disturbance.



Do not mount the receiver or the aerials on the back of metal surfaces on the floor or in recesses, in order to avoid radio shadows.

When mounting the unit on a metal surface, a minimum distance of 10 cm should be adhered to between the unit and the surface.

If any problems arise contact your retailer or for more information see "www.eldat.de"

Where environmental conditions are unfavorable, the external antenna ACC-ANT50-03-21P can be connected to improve wireless reception. This is not included as standard with the product, but can be ordered separately.

A Installing the control access

A2 Device overview

A2.1 Display and control elements

Power supply display

Once the power supply is switched on, the LED POWER lights up continuously in red.

Radio signal display

If an Easywave radio signal is registered in the area of the control, an antenna symbol (Y) is shown on the display.

Settings display

All settings to be programmed are selected and shown in the display, as well as the RCA04 stand-by mode and lock mode.

Menu select button

You can use this button to scroll down in the menu:

- ↙ tap: go forward one menu item (when the last action is reached, this changes to the first action),
- ↘ press and hold: go back one menu level,
- ↙ tap in the menu area: cancel action,
- ↘ press and hold in main menu: operating mode.

Press OK to confirm

To select menu items and confirm the menu selection.

Tap: Select and deselect menu item in turn.

100, 10, 1 decimal buttons

100 button: set the 100s decimal place

10 button: set the 10s decimal place

1 button: set the 1s decimal place

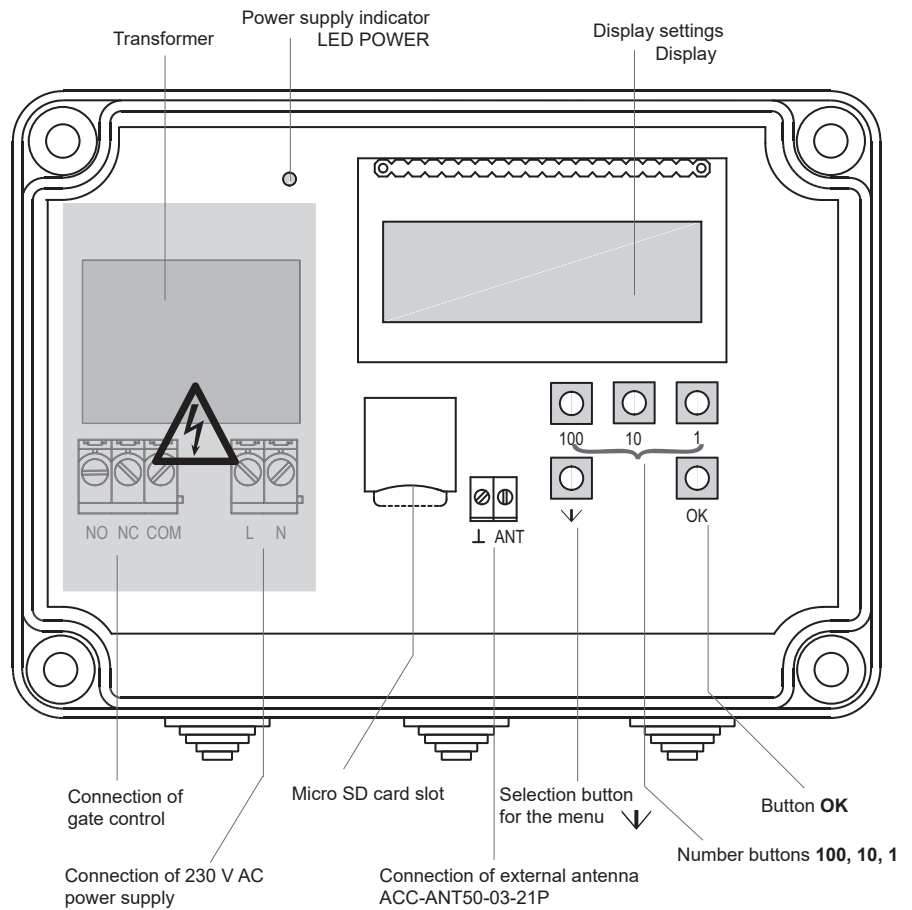
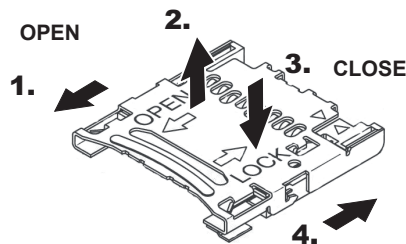


Fig. 1 device overview

A2.3 Storage medium

A micro SD card can be used to import or export transmission codes and saved memory locations. The opening and closing of the slot are shown in figure 2.



The controller must be switched off, before you insert the SD card.

Fig. 2 Micro SD card slot

A3 Start-up

A3.1 Connect the control access

1. Remove the housing cover.
2. Fix the control access in place at the installation location. Use the screw threads for the cover screws for this purpose.
3. Cut the stepped nipple accordingly based on the diameter of the connecting cable.



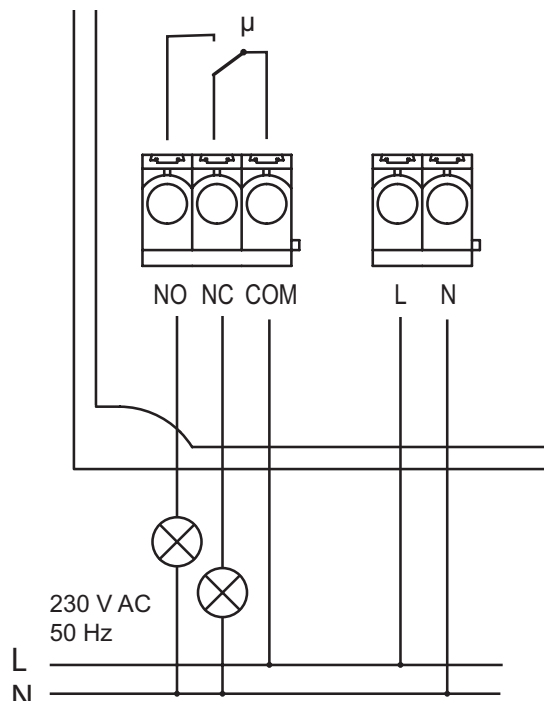
The cable must create a tight seal with the graded nub.

4. Switch off the power supply.
5. Connect the cable for the power supply and the gate control as per connection diagram, Figure 3.
6. Switch on the power supply.
7. Program the transmitter codes into the RCA04 (see section: "Programming"; "Program/overwrite the transmitter")



The control access is under live voltage during programming!

8. Screw the housing cover back onto the lower part of the housing.



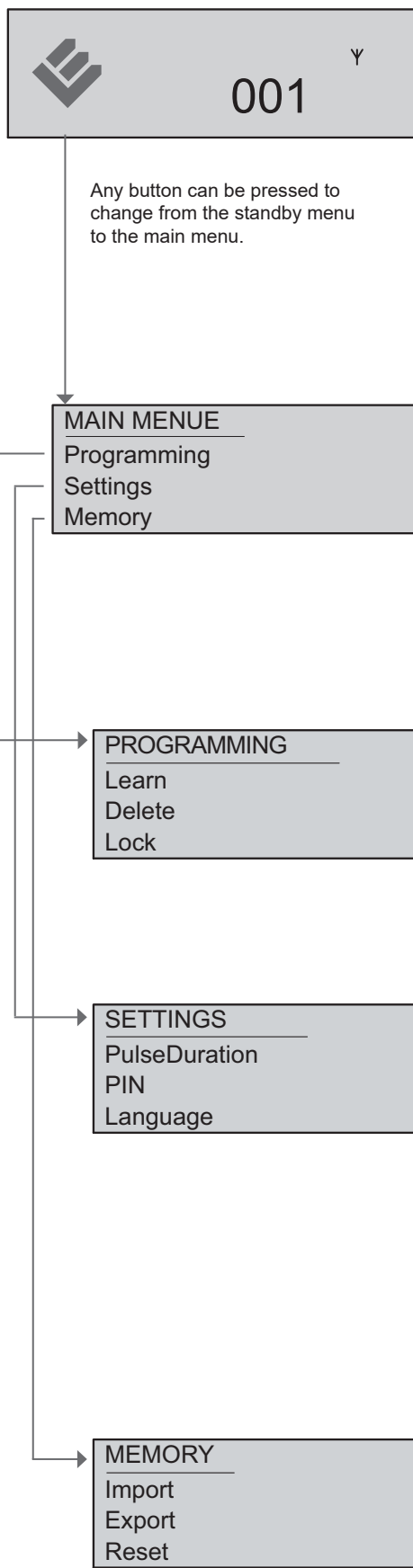
The control is live during programming! Do not touch the terminals! There is a risk of electric shock!

Cable cross-section:

0.5 – 5.0 mm²

If flexible cables are used, then wire-end ferrules must be used and the required cross-section observed.

Fig. 3 Connection diagram



STANDBY menu

The memory location (e.g. 001) of received, programmed telegrams is displayed in the standby menu for the duration of the relay pulse.

If a valid Easywave radio signal is received, this is indicated by the antenna symbol (Y).

A request to enter the PIN will appear in standby mode if a PIN code has been assigned and if a button is pressed. If the wrong PIN is entered, an ERROR will be signaled and further attempts to enter the PIN will be limited as follows:

- 3 failed attempts: locked for 1 minute,
- 4 failed attempts: locked for 3 minutes,
- 5 failed attempts: locked for 5 minutes,
- 6 failed attempts: locked for 10 minutes.

The lock time will be extended 5 minutes for every further failed attempt. The maximum lock time is 60 minutes. Alternatively, the lock can be canceled at any time using a programmed master transmitter (see B2.1.1, "Program master transmitter", page 5).


MAIN MENU

Programming: Here you can program, overwrite, delete and lock the transmission codes of Easywave transmitters.

Settings: Here you can set the duration of the switch pulse for the relay, set your three-digit access PIN and choose German or English as the system language.

Memory: You can import or export all saved transmission codes and memory location settings to a micro SD card. In addition, a "reset" may also be executed which will return the RCA04 to factory default settings.



If nothing is entered in the main menu within 60 seconds, the control will automatically go into standby mode. Standby mode can also be manually triggered by pressing and holding the  button.

PROGRAMMING menu

see section B2

Learn: Here you can program or overwrite the codes of the transmitter buttons onto the selected RCA04 memory location, and program a master transmitter.



If you have forgotten your access code, you can only unlock the control again using a programmed master transmitter.

Delete: Each programmed transmission code can be individually deleted. The transmitter does not necessarily have to be present for this to be done.

Lock: A transmission code can be temporarily disabled from operation. This allows you to stop unwanted access via this transmitter for a time.

SETTINGS menu

see section B3

PulseDuration: Here you can set the relay switching duration. The range of values for the PULSE operation is between 0.5 seconds and 998.0 seconds. The switching duration is retriggerable, i.e. each time the button is pressed again, the switching time resets to the set value. The factory default setting is 0.5 seconds.

If you select the value '999', the DEAD MAN'S SWITCH mode is activated. The relay is active for as long as the transmitter button is held down. The transmission length is limited to a maximum of 36 seconds.

PIN: Here you can set your personal 3-digit access PIN for the access control. If you want to make changes to the control settings, the PIN must be entered in standby mode and confirmed by pressing the OK button.



If an access PIN is used, it is recommended to program an additional master transmitter in order to be able to unlock the control if the PIN is lost. If both PIN and master transmitter are lost, the control can only be unlocked again by the manufacturer.

Language: You can specify whether you wish to use German or English as the system language.

MEMORY menu

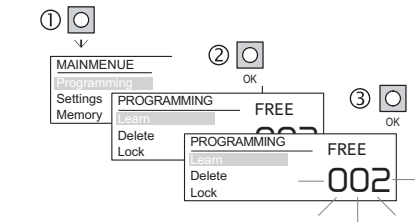
see section B4

Import: You have the possibility of writing saved data (transmission codes, locked memory locations) from a micro SD card back to the RCA04. In the process, the original programming is overwritten.

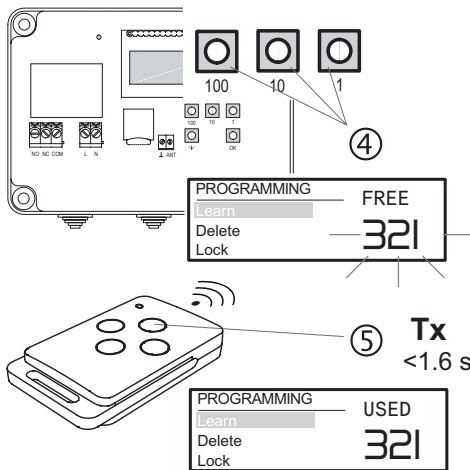
Export: You can back up data saved on the RCA04 (transmission codes, locked memory locations) to a micro SD card. The SD card is not included in the scope of delivery.

Reset: All programmed settings and values will be reset to the factory default settings (pulse length 0.5 seconds, language German, all memory locations empty, PIN deleted).

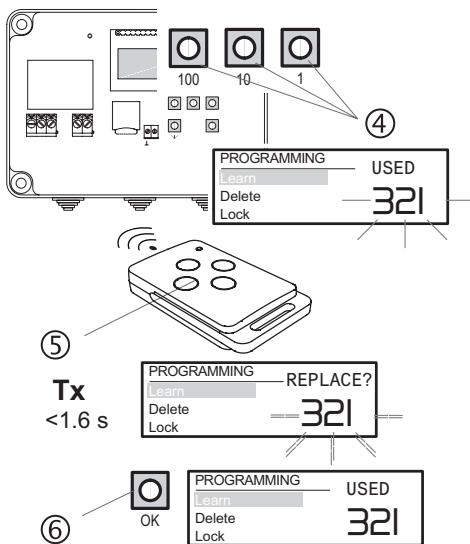
B2.1 Program/overwrite the transmitter



Program the transmit code to free memory location



Overwrite or replace the transmit code



Press button	Operation	Display	Remark
① Button √	select "Programming"	main menu	
② Button OK	confirm "Programming"	FREE	The number of the first free memory location is shown. If you already know which memory location you want, you can enter it directly here using the decimal buttons.
③ Button OK	confirm "Learn"	FREE number flashes	
④ Button 1 or 10 or 100	optional: Enter the desired memory location.	FREE number flashes	Memory location "000" is reserved for the master transmitter.
⑤ Transmitter button TX < 1.6 s	The transmission code is programmed to the selected memory location.	LEARNED USED	The number of the memory location to which the transmission code is programmed is displayed.
		OCCUPIED LOCKED	The memory location is already assigned, but can be overwritten with a new transmission code.
		ERROR	The transmission code is already programmed to another memory location.

If you wish to program further transmission codes, please repeat steps ③ to ⑤. To switch to operating mode, press and hold the √ button 2x longer than 1.6 seconds. If no button has been pressed for 60 seconds, the control will automatically switch to operating mode.

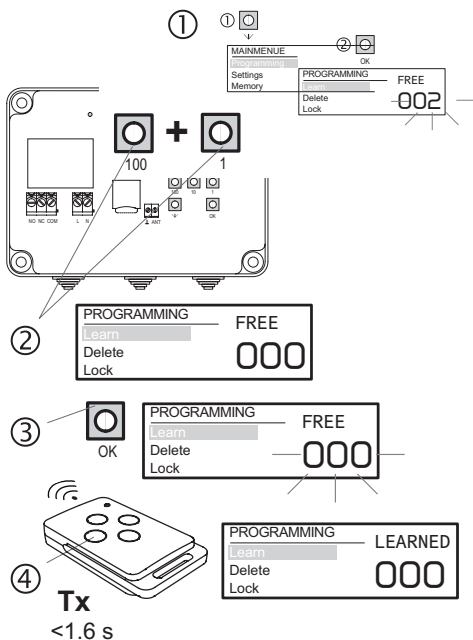
④ Button 1 or 10 or 100	input desired memory location	USED number flashes	
⑤ Transmitter button TX < 1.6 s	The transmitter is programmed to the selected memory location.	REPLACE? number flashes quickly	Confirmation request: should the existing transmission code be overwritten with the new code?
		ERROR	The transmission code is already programmed to another memory location.
⑥ Button OK OR Button √	The memory location will be overwritten. The memory location will not be overwritten.	USED number is displayed	

If you wish to program further transmission codes, please repeat steps ③ to ⑥. To switch to operating mode, press and hold the √ button 2x longer than 1.6 seconds. If no button has been pressed for 60 seconds, the control will automatically switch to operating mode.

B SETUP CONTROL ACCESS

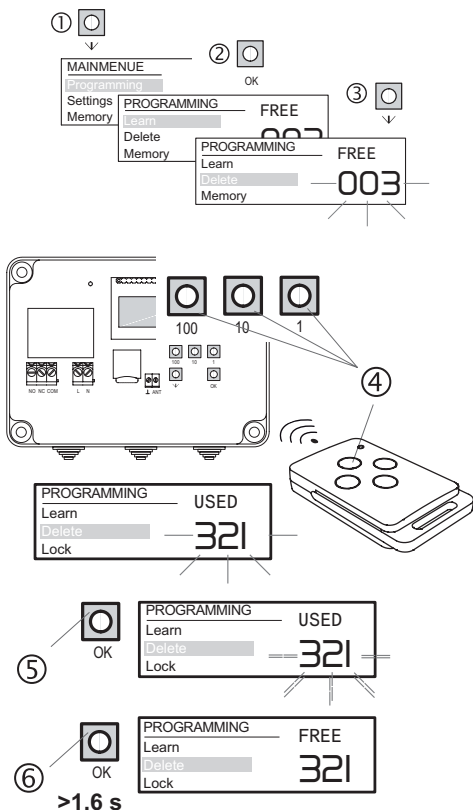
B2 PROGRAMMING

B2.1.1 Program the master transmitter



Press button	Operation	Display	Remark
①	see "Program a transmitter", items 1-2	FREE number flashes	
② Buttons 100 and 1 simultaneously > 1.6 s	set memory location 000 for the master transmitter	FREE 000	OCCUPIED The memory location is already occupied, but can be overwritten anyway.
③ Button OK		FREE 000 flashes	
④ Transmitter button TX < 1.6 s	Master transmitter is programmed to memory location 000.	LEARNED 000 REPLACE? 000 flashes quickly	Confirmation request when the memory location is occupied. Replace by pressing OK. Cancel by pressing the √ button.
⑤ Button √ > 1.6 s	Return to the main menu. 1)	main menu	To switch to operating mode, press and hold the √ button 2x longer than 1.6 seconds.

B2.2 Delete the transmitter



Press button	Operation	Display	Remark
① Button √	select "Programming"	main menu	
② Button OK	confirm "Programming"	FREE	The number of the first free memory location is shown.
③ Button √	select "Delete"	FREE	The number of the first free memory location is shown.
④ Transmitter button TX < 1.6 s OR Button 1 or 10 or 100	Transmitter memory location selected location manually	USED number is displayed USED number is displayed	Delete master transmitter: Select memory location 000 (press 100 button and 1 button simultaneously) and delete, as described in items ⑤ and ⑥.
⑤ Button OK	confirm "Delete"	USED number flashes quickly	ERROR No transmission code is programmed to this memory location.
⑥ Button OK > 1.6 s	transmitter is deleted	DELETED FREE	The number of the deleted memory location is shown.

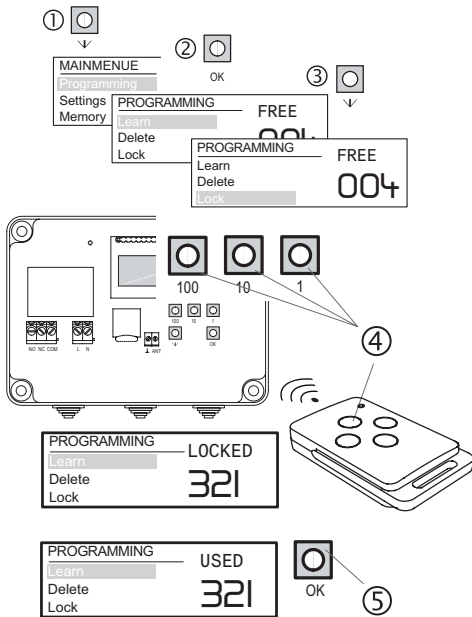


If you wish to delete further transmission codes, please repeat steps ③ to ⑥. To switch to operating mode, press and hold the √ button 2x longer than 1.6 seconds. If no button has been pressed for 60 seconds, the control will automatically switch to operating mode.

B SETUP CONTROL ACCESS

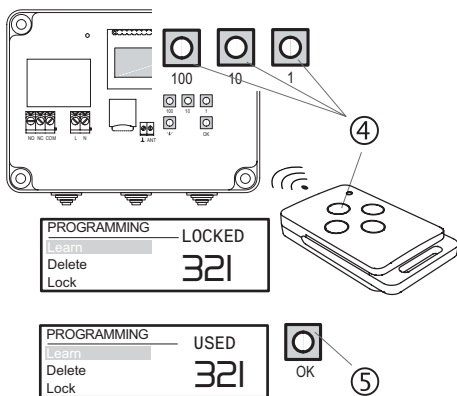
B2 PROGRAMMING

B2.3 Lock/unlock the transmitter



Press button	Operation	Display	Remark
① Button ∇	select "Programming"	main menu	
② Button OK	confirm "Programming"	FREE	The number of the first free memory location is shown.
③ Button ∇	select "Lock"	FREE number is displayed	
④ Transmitter button TX < 1.6 s OR Button 1 or 10 or 100	memory location is selected.	USED number is displayed	
⑤ Button OK	execute "Lock"	LOCKED The number of locked memory locations is displayed.	The transmission code is unlocked again by pressing the OK button a further time.
		ERROR	An attempt has been made to lock a free memory location.

Unlock the transmitter



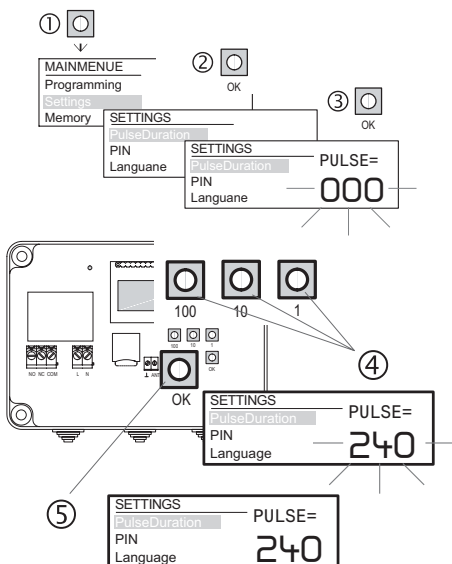
④ Transmitter button TX < 1.6 s OR Button 1 or 10 or 100	select the memory location to be unlocked	LOCKED number is displayed	The number of the locked memory location is shown.
⑤ Button OK	Unlock the transmitter code	USED number is displayed	The transmission code is locked again by pressing the OK button a further time.



If you wish to lock/unlock further transmission codes, please repeat steps ④ to ⑤. To switch to operating mode, press and hold the ∇ button 2x longer than 1.6 seconds. If no button has been pressed for 60 seconds, the control will automatically switch to operating mode.

B3 SETTINGS

B3.1 Set the pulse duration



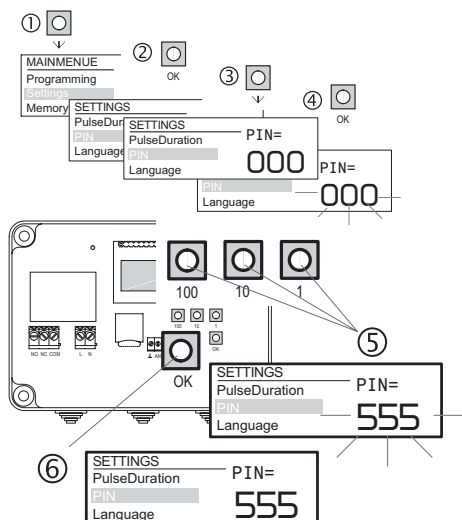
Press button	Operation	Display	Remark
① Button ∇	select "Settings"	main menu	
② Button OK	confirm "Settings"		
③ Button OK	confirm "PulseDuration"	PULSE = digit flashes	
④ Button 1 or 10 or 100	Set the desired switching time in seconds.	PULSE = digit flashes	value "000" = 0.5 s pulse duration value "001" to "998" = pulse duration in seconds value "999" activates DEAD MAN'S SWITCH mode
⑤ Button OK	confirm "Settings"	PULSE = digit is displayed	
⑥ Button ∇ > 1.6 s	Return to the main menu. 1)	main menu	To switch to operating mode, press and hold the ∇ button 2x longer than 1.6 seconds.

1) If no button has been pressed for 60 seconds, the control will automatically switch to operating mode.

B SETUP CONTROL ACCESS

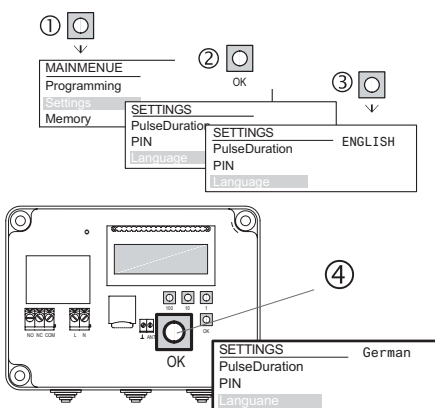
B3 SETTINGS

B3.2 Assign the PIN



Press button	Operation	Display	Remark
① Button ∇	select "Settings"	main menu	
② Button OK	confirm "Settings"		
③ Button ∇	select "PIN"	PIN = Number is displayed	
④ Button OK	confirm "PIN"	PIN = Number flashes	
⑤ Button 1 or 10 or 100	set the desired code number	PIN = Number flashes	To deactivate a PIN, the number must be overwritten with "000".
⑥ Button OK	confirm SETTINGS	PIN = PIN is displayed	
⑦ Button ∇ > 1.6 s	Return to the main menu. 1)	main menu	To switch to operating mode, press and hold the ∇ button 2x longer than 1.6 seconds.

B3.3 Select the language

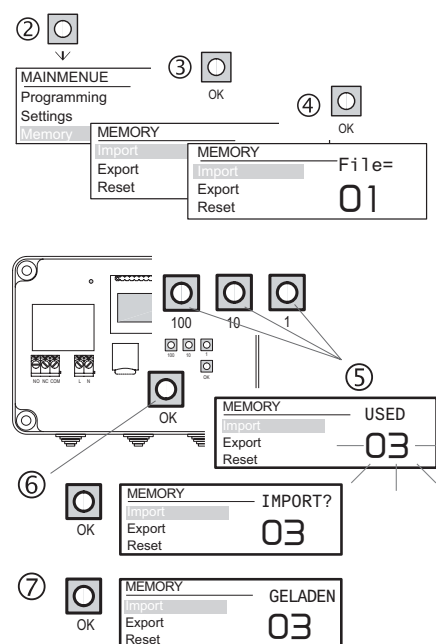


Press button	Operation	Display	Remark
① Button ∇	select "Settings"	main menu	
② Button OK	confirm "Settings"		
③ Button ∇	select "Language"	GERMAN	
④ Button OK	change language	ENGLISH	The display language is selected.
⑤ Button ∇ > 1.6 s	Return to the main menu. 1)	main menu	To switch to operating mode, press and hold the ∇ button 2x longer than 1.6 seconds.

1) If no button has been pressed for 60 seconds, the control will automatically switch to operating mode.

B4 MEMORY

B4.1 Import the data



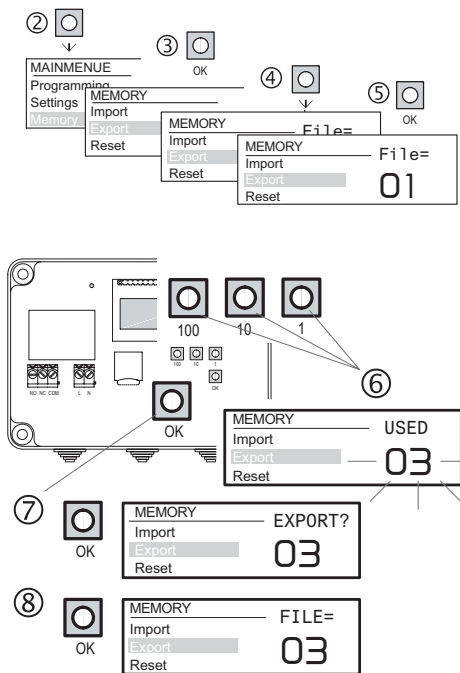
Press button	Operation	Display	Remark
①	insert SD card		The contact surfaces must be facing downwards.
② Button ∇	select "Memory"	main menu	
③ Button OK	confirm "Memory"	file = 01	
④ Button OK	confirm "Import"	file = 01	The first existing file is displayed.
⑤ Button 1 or 10 or 100	select file	USED file number flashes EMPTY	Only occupied files can be imported. No files are available to import.
⑥ Button OK	confirm the selection	IMPORT? file number	Confirmation request: should the file with this file number really be imported?
⑦ Button OK	the import process is running.	LOADED file number is displayed	LOAD is displayed during the import process. All settings of the RCA04 have been overwritten by the imported settings.
OR			
Button ∇	the import process is aborted.		
⑧ Button ∇ > 1.6 s	Return to the main menu. 1)	main menu	To switch to operating mode, press and hold the ∇ button 2x longer than 1.6 seconds.

1) If no button has been pressed for 60 seconds, the control will automatically switch to operating mode.

B STEUERUNG EINRICHTEN

B4 MEMORY

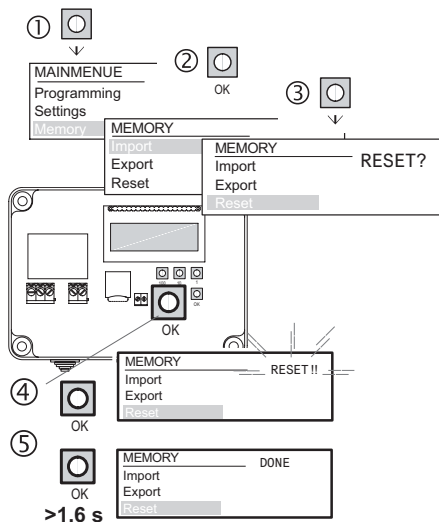
B4.2 Export the data



Press button	Operation	Display	Remark
①	insert SD card		The contact surfaces must be facing downwards.
② Button ↓	select "Memory"	main menu	
③ Button OK	confirm "Memory"		
④ Button ↓	select "Export"	FILE = 01	
⑤ Button OK	confirm "Export"	FILE = 01 flashes	
⑥ Button 1 or 10 or 100	select file number	EMPTY USED file number flashes	Memory location on SD card free Memory location already occupied
⑦ Button OK	confirm file number	EXPORT? file number is displayed	Confirmation request: should the file with these settings really be exported to the SD card?
⑧ Button OK	the export process is running.	REPLACE? file number is displayed	Confirmation request: should a file already existing on the SD card be overwritten?
OR	the export process is aborted.	SAVED FILE = file number is displayed	The number is the file name under which the file is saved to the SD card.
⑨ Button ↓ > 1.6 s	return to the main menu. 1)	main menu	To switch to operating mode, press and hold the ↓ button 2x longer than 1.6 seconds.

1) If no button has been pressed for 60 seconds, the control will automatically switch to operating mode.

B4.3 Reset



Press button	Operation	Display	Remark
① Button ↓	select "Memory"	main menu	
② Button OK	confirm "Memory"		
③ Button ↓	select "Reset"	RESET ?? is displayed	
④ Button OK	confirm "Reset"	RESET !! flashes quickly	
⑤ Button OK > 1.6 s	execute "Reset"	DONE	Factory default settings have been restored. Pulse length 0.5 seconds, language German, all memory locations empty, PIN deleted. The control switches automatically to operating mode.

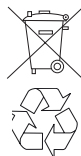
C General information

Disposal

Waste electronic equipment must not be disposed of with household waste!

Dispose of the waste equipment via collection facilities for electronic scrap or via your specialist dealer.

Dispose of packaging material in the recycling bins for cardboard, paper and plastic.



Warranty

Within the statutory warranty period, we undertake to rectify free of charge by way of repair or replacement any product defects arising from material or production faults.

Any unauthorized tampering or modifications will render this warranty null and void.

Conformity

ELDAT EaS GmbH hereby declares that the radio equipment type RCH01 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.eldat.de



Customer service

If, despite proper handling, the device does not work properly or if the device has been damaged, please contact the manufacturer or your retailer

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