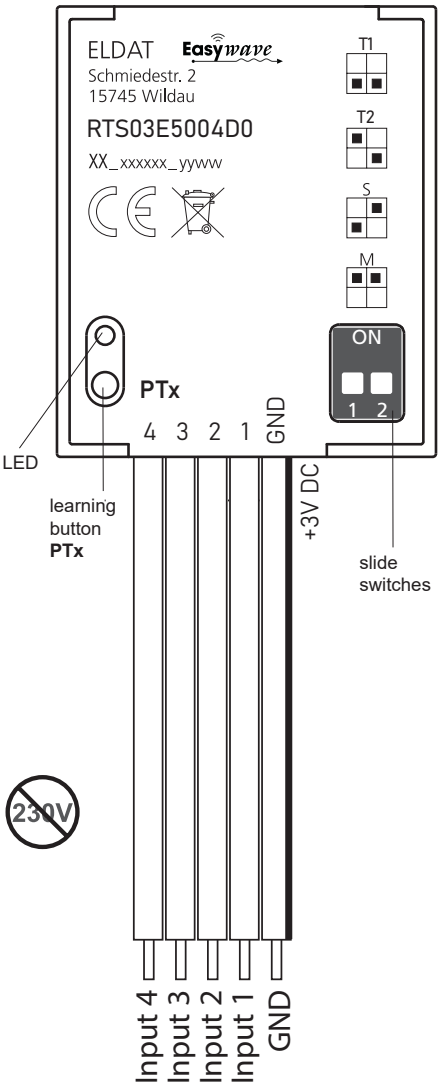
EN RTS03 Built-in transmitter multifunction

Model



RTS03E5004D0

Technical details

Frequency:	868.30 MHz
Radiated power:	0.47 mW
Modulation:	FSK
Coding:	Easywave POTA
Power consumption:	1x 3V-battery CR2032 OR 3V DC wired
Transmit current:	approx. 12 mA
Stand-by current:	approx. 2.5 µA
Range:	free-field: approx. 150 m buildings: approx. 30 m
Operating temperature:	-20 °C to +60 °C
Dimensions (W/L/H):	29,2/34,7/9,0 mm
Weight:	12.0 g

Scope of delivery

Built-in transmitter, battery CR2032, operating instructions

Intended use

The built-in transmitter may only be used to operate Easywave radio controls.

The manufacturer shall not be liable for any damage caused by improper or non-intended use!

Safety advice

Before using the device, carefully read through the operating instructions

- Never control moving devices or heaters without observation.
- Note also the operating instructions of the radio receiver.
- Have faulty devices checked by the manufacturer!
- Do not make any unauthorized alterations or modifications to the transmitter!
- Do not connect an external 3V power supply when a battery is inserted, risk of fire!
- The transmitter must not be connected to 230 V!

Function

With the built-in transmitter RTS03, the functionality of existing switches or buttons can be extended by a radio interface.

As soon as one of the four inputs (1, 2, 3, 4) is switched potential-free to GND, the RTS03 sends a corresponding Easywave code. Which transmission code is sent depends on the operating mode set.

Buttons, switches and interlocked shutter switches can be connected. The LED lights up red during the transmission process.

Start-Up

1. Open the housing according to the section “Inserting / changing the battery”.
2. Set the desired operating mode using the slide switches (see “Operating modes” section).
3. Connect the buttons or switches to terminals 1-4 and GND according to the connection diagram.
4. Insert the battery **OR** connect an external 3V power supply to the GND and +3V DC terminals (see section “Connecting external power supply”).
5. Close the housing again.

If an external power supply is connected, DO NOT insert a battery!

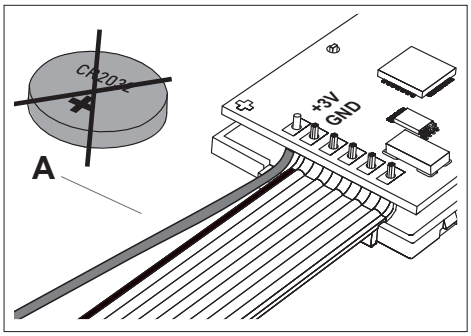
Mounting advice

Mount the transmitter at a suitable location. Avoid mounting at the following locations, as this may affect the range of the transmitter:

- in a distribution box or housing made of metal
- in the immediate vicinity of large metal objects
- on the ground (or near it).

Connect external power supply (optional)

Use a 0.5mm² LYI stranded wire (**A**), strip approximately 2.5 mm of insulation, and tin the end. Insert the tinned end of the wire into the bottom of the board and solder it.



Operating modes

The operating modes of the RTS03 can be selected using the slide switch.

If you want to change the operating mode, you must disconnect the power supply or briefly remove the battery. Only then will the change take effect.

The operating modes can be set using the slide switch positions described below:

PUSH-BUTTON 10 s (T1) **T1**

1: OFF
2: OFF

max. 10 seconds transmission time

Suitable receiver operating modes:

- ON/OFF (1-button operation)
- DEAD MAN
- PULSE
- TIMER
- ON/OFF (2-button operation)
- UP/DOWN (2-button operation)

PUSH-BUTTON 36 s (T2) **T2**

1: ON
2: OFF

max. 36 seconds transmission time

Suitable receiver operating modes:

- ON/OFF (1-button operation)
- DEAD MAN
- PULSE
- TIMER
- ON/OFF (2-button operation)
- UP/DOWN (2-button operation)

SWITCH (S) **S**

1: OFF
2: ON

Suitable receiver operating modes:

- ON/OFF (2-button operation)
- LOGIC

SHUTTER-CONTROL (M) **M**

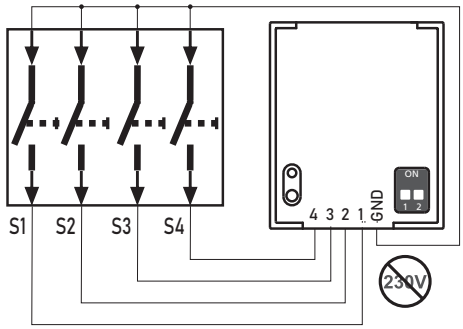
1: ON
2: ON

Suitable receiver operating modes:

- UP/STOP/DOWN (3-button operation)

Connection diagrams

PUSH-BUTTON 10 s/36 s (T1 + T2)

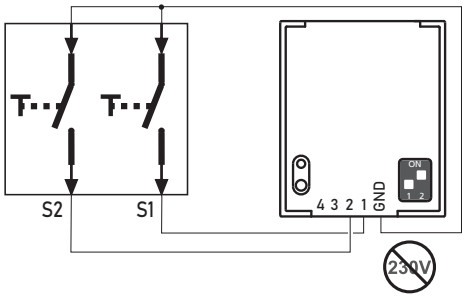


If the connected button is pressed, the transmitter sends a maximum of 10 or 36 seconds.

push-button 1: input 1 code **A**
push-button 2: input 2 code **B**
push-button 3: input 3 code **C**
push-button 4: input 4 code **D**

In this mode, only one input may be active at a time! If multiple inputs are active simultaneously, the transmission process will be blocked until **ALL** inputs have been released again.

SWITCH (S)



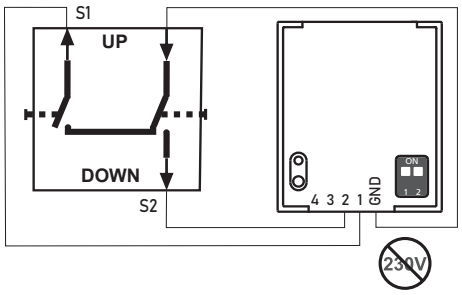
When a connected switch changes state, the transmitter sends a switching pulse of approximately 0.5 seconds.

switch 1: input 1
close switch: code **A**
open switch: code **B**

switch 2: input 2
close switch: code **C**
open switch: code **D**

Inputs 3+4 have no function in this mode!

SHUTTER-CONTROL (M)



When a connected switch changes state, the transmitter sends a switching pulse of approximately 0.5 seconds.

switch 1: input 1
close switch: code **A**
open switch: code **C**

switch 2: input 2
close switch: code **B**
open switch: code **D**

Inputs 3+4 have no function in this mode!

Program transmitter into the receiver

The RTS03 is programmed into a Easywave receiver by sending the desired transmission code (A/B/C/D).

To do this, press a connected push-button or switch during the according step of the learning procedure.

For more information about the learning procedure, read the operating instructions of the respective receiver.

Remote learning function (POTA)

The RTS03 supports the POTA (Programming Over The Air) remote programming function. This can be used to reprogram an already-installed and no longer accessible receiver, as long as the RTS03 is programmed into it. To find out whether a specific receiver supports this function, please refer to its operating instructions.

In order to initiate the POTA procedure, connected switching elements must be open and a push-button must be used necessarily.

By pressing the **PTx** button, the RTS03 activates the remote learning (POTA-)mode for 5 seconds and the LED PTx flashes slowly.

While being in this mode, POTA-commands are transmitted, as the connected buttons are pressed. The selected operating mode determines for which transmission code the remote learning telegram is sent with the terminals 1-4:

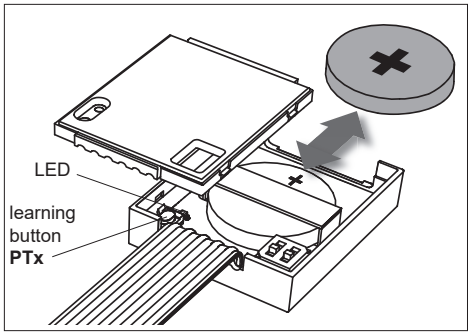
push-button	**switch / shutter-control**
1 --> code **A**	1 --> code **A**
2 --> code **B**	2 --> code **C**
3 --> code **C**	
4 --> code **D**	

A detailed POTA programming manual is available on our website:
https://www.eldat.de/pota_en.pdf
or you can request support from our customer service.

Inserting / changing the battery

1. Open the housing cover. If necessary, remove the old battery.
2. Insert the new battery. Use only CR2032 batteries. Make sure the polarity is correct! The positive pole must be visible.
3. Close the housing cover again.

Keep batteries out of the reach of children!



Battery control

The transmitter has a battery check function, which monitors the capacity of the battery cyclically. If the battery is weak, the LED flashes for about 3 seconds after any transmission process and an undervoltage telegram is transmitted.

This telegram can be evaluated by suitable Easywave receivers.

For further information, please read the operating instructions of the relevant receiver.

Troubleshooting

- The LED flashes after a transmission: Change the battery.
- The LED does not light up at all: Check the polarity of the battery.
- The receiver does not respond to transmitted commands: Reduce the distance to the receiver or program the transmitter codes again.

General information

Disposal

Waste electrical products and batteries must not be disposed of with household waste!

Dispose of the waste product via a collection point for electronic scrap or via your specialist dealer.

Dispose of used batteries in a recycling bin for batteries or via the specialist trade.

Put the packaging material into the recycling bins for cardboard, paper and plastics.

Warranty

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

Any unauthorized tampering with, or modifications to, the product shall render this warranty null and void.

Conformity

CE

Hereby, ELDAT EaS GmbH declares that the radio equipment type RTS03 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

Service

If, despite correct handling, faults or malfunctions occur or if the product was damaged, please contact your retailer or the manufacturer.

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