

Products



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ELDAT-Standards lead the way: Easywave



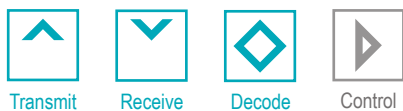
worldwide radio solutions: Building automation | Factory automation | Security Technology | Automotive Technology



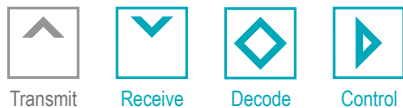


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ELDAT Standards Lead the Way

Easywave In cooperation with competent partners ELDAT has developed the Easywave radio standard in 2001.

Every Easywave-component contains a lot of forward-looking advanced technology. The whole system is based on the earliest radio technology and was especially developed for applications in building services engineering.

It uses the 868 MHz-frequency which ensures transmitting radiograms with a minimum sensitivity to interferences in private as well as industrial environments: reliable, comfortable, cross-functional.

Boundless Liberty with ELDAT Radio Solutions

Enjoy creative freedom and achieve your objectives using wireless Easywave-solutions.

Nowadays the quality of life in our living space is defined by comfort and freedom of movement through using modern technology. ELDAT offers reliable control systems to fulfill these demands.

Easywave-controls enable a comfortable wireless operation of electrical devices via battery-powered hand transmitters and radio wall switches. So applying or upgrading houses with Easywave radio technology raises the housing quality enormously.



Radio Applications for Premises

This intelligent technology opens up new dimensions of comfort to the user.

Remote controls and radio switches enable controlling devices in private and industrial environments like:

- lightings, shutters and awnings
- windows, gates and doors
- heating and air-conditioning
- access controls
- plants and machinery

Easywave radio solutions offer a high standard of flexibility and variability. Additionally the configuration and coding are simple which makes individual and economical planning possible:

Simply enjoy comfort through wireless solutions



Comfort Through Technology

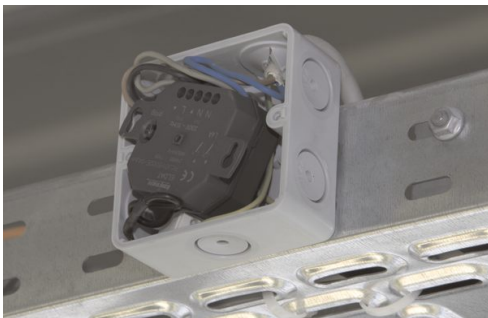
Easywave was designed for applications in building services engineering and offers a variety of solutions in this field.

The ideal frequency band for the demanding tasks in building services engineering is the 868 MHz frequency band due to its classification in sub-bands (e.g. 868.0 MHz to 868.6 MHz) and its different duty-cycles.

Within the ISM-frequency band (ISM = industrial scientific medical) transmission takes only a few milliseconds and very small transmitting wattages (<1 mW to max. 25 mW).

Cell phones transmit with up to 2 Watts!

- Transmission trouble is avoided using 868MHz
- Transmitting wattage max. 25 mW with a duty-cycle of <1% (max. transmitting duration 36 s/h)
- Compared to cell phones electromagnetic pollution is 1000 times smaller, the radiation is even smaller than on a permanently current-carrying cable
- Battery lasts up to five years (at 5 operations a day)
- Range indoors approximately 30 m at penetration of two walls, up to 150 m at open field conditions



The FSK Modulation Method

FSK = Frequency Shift Keying

Easywave is based on the FSK-modulation, a digital frequency modulation.

FSK means key shifting a carrier-frequency using the desired signal. With digital modulation only a limited number of values can be transmitted (discrete values). By choosing appropriate discrete valued transmission symbols abnormalities caused by transmission errors can be detected and compensated. Therefore digital modulation procedures are less sensitive to interferences than analogue ones.

Immunity to Interference

The application of 868.30 MHz-frequencies (conforming to EU-standards) decreases the influences of other radio devices such as cell phones or similar devices.

All applications transmit within the permitted frequency band of 868.0 MHz to 868.6 MHz and have an individual transmission duration. The Easywave-radio-system (868.3 MHz) for instance has a transmission duration of 1% per hour (36 sec.).

Range

The range of radio devices depends on many factors as:

- the transmitting wattage of the transmitters
- the sensitivity of the receivers
- the position of installation
- the installation surface
- interferences by other radio devices
- objects between transmitter and receiver

The transmitting wattage of the transmitters and the sensitivity of the receivers are optimized within reasonable economical bounds.

Position of installation/ structural conditions

For the installation of radio devices advantageous and disadvantageous positions can be chosen.

In principle receivers and transmitters should be installed in a position that ensures minimal damping of the radio signals by objects like walls, furniture etc. because this mainly effects the range.

The following values provide basic information

| Material | Range |
|---------------------------|--------|
| Air/open field | 100% |
| Wood/plaster | 80-95% |
| Concrete/brick | 60-90% |
| Reinforced concrete | 10-50% |
| Metal walls/metal lattice | 0-10% |

To help finding the right frequency or an appropriate position the ELDAT-frequency-detector, which shows the signal strength on an LED-display, can be very helpful.

If possible the receivers and antennas should not be installed on the back of metal surfaces or in recesses to avoid so called radio shadows. In a radio shadow the signals can not be received directly but only indirectly by reflections.

If the devices have to be installed on metal surfaces a minimal distance of 0,1m should be kept to minimize this effect.

Rod aerials and aerial wires form an optimized unit with electronic receiver devices of ELDAT-radio controls. Extending, bending, shortening etc. the antennas can influence the receiving characteristics significantly.

At small ranges applying repeaters can be very helpful. The repeater receives the radio signal and sends it out again to a device. This enables almost doubling the range of Easywave transmitters.

Easywave Functionality:

Definition for channels

Simple transmitters have the same number of channels as buttons because each button releases one radio signal (radiogram).

Complex transmitters do not have an identical amount of buttons and channels. The amount of channels is defined by the number of transmitted radiograms or of required operations.

The radiograms contain the button-codes A, B, C and D. The required operation is not set by the transmitter but by the receiver. It depends on the button-code of the transmitter and the operation mode being adjusted on the receiver.

Operation modes of receivers:

- Pulse (1-button-control)
- ON/OFF (1-button-control)
- ON/OFF (2-button-control)
- Timer: retrigger within 7 minutes (1-button-control)
- OPEN/STOP/CLOSE (2-, 3-, and 4-button-control)
- Dead man's mode (1-button-control)

An advantage of Easywave is that for memorizing transmission codes generally only the code of one button per channel has to be transmitted, the code for the associated buttons is assigned automatically.

More Creative Freedom with Easywave

Due to diverse assembly-options and operating without control lines Easywave products open up new dimensions of creative freedom:

Stick transmitters to glass surfaces or other objects, operate a number of lightings with just one switch or control electric devices via radio.

Radio wall switches are not only an alternative in existing functional buildings but also for newly built premises.

In the past...

- it was necessary to mill cable channels into walls, install cables and do paint-work
- it took a lot of time, and caused costs and dirt

...and today with Easywave!

- simply stick transmitter to the wall
- receivers for switching/dimming lights or shutters/awnings can simply be installed into junction boxes or intermediate ceilings



Benefit for Planers, Architects, Interior Decorators and Users

The Easywave products offer maximal flexibility and can be installed to glass walls, tiles, concrete, plastics and even furniture. The switches can be adapted without any difficulties and little effort and positions can be changed any time.

- maximum freedom of planning
- less cables
- advantageous solutions in difficult environments
- little expenditure of time
- no milling and paintwork
- programmable without special tools
- energy saving
- reduction of electric pollution

Flexible in functional buildings

- ideal for flexible room layouts in offices and businesses
- planning of switch positions after renting and arranging the furniture
- switches on glass surfaces

Ideal for special applications

- simple and economical installation in wooden buildings (an installation of cables into the walls is not necessary)
- simple installation in windproof low-energy houses (there are no switchboxes needed)



Areas of Application

Assistance for the elderly:

Often old people have difficulties switching the light, opening and closing shutters or even sending an emergency call if necessary. In these fields ELDAT offers solutions suitable for the elderly and disabled, e.g. necklace transmitters, wrist-band transmitters or transmitters directly installed on beds or wheelchairs.



Enhancing shutter-/awning controls:

A conversion to radio control is possible without much effort because the receivers fit into every standard junction box and to every shutter drive. The devices can be controlled individually or simultaneously in a comfortable way. The radio timers enable time control but can also be operated manually. Installing a radio light sensor offers additional solar protection- and twilight-functions.



Gentle renovation of buildings listed for preservation:

Additional functionality is often desired when historical buildings are renovated and modernized. In most cases only radio solutions offers the possibility to do so without an intervention to the fabric of a building.





Transmit



Receive



Decode



Control

Mini Transmitter RT20

The RT20 is an universally applicable transmitter for controlling shutters or awnings and can also be used to switch other electric devices.

An LED flashes when battery change is recommended.



RT20-5004E-01

Technical Details

| | |
|-----------------------|--|
| Coding | factory coding with Easywave Telegram |
| Channels | 4 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | LED |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver 2x ON/OFF, 1x OPEN/STOP/CLOSE, 4x Pulse |
| Degree of Protection | IP54 |
| Operating Temperature | -20 °C to +60 °C |
| Dimensions | 70 x 40 x 17 mm |
| Weight | 25 g (including battery) |

Accessories



RT20-ACC-01



RT20-ACC-02

Scope of Delivery

- Mini Transmitter incl. battery
- Mounting Plate
- Operating Manual

Accessories (optional)

- Mounting Plate
- Visor Clip
- Battery

Models

| Product Key | Description | Frequency |
|---------------|------------------|------------|
| RT20-5004E-01 | Mini Transmitter | 868.30 MHz |
| RT20-ACC-01 | Mounting Plate | |
| RT20-ACC-02 | Visor Clip | |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Micro Transmitter RT21

The RT21 is available as a 1-channel or 2 channel-transmitter with one button operation. One signal can be sent to switch a single operation.

An LED flashes when battery change is recommended.



RT21-500XE-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 or 2 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | LED |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver 1 channel: 1x Pulse, 2 channel: 1 x ON/OFF |
| Degree of Protection | IP54 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 55 x 36 x 16 mm |
| Weight | 17 g (including battery) |

Scope of Delivery

- Micro Transmitter incl. battery
- Operating Manual

Accessories (optional)

- Battery

Models

| Product Key | Description | Frequency |
|---------------|-------------------|------------|
| RT21-5001E-01 | Micro Transmitter | 868.30 MHz |
| RT21-5002E-01 | Micro Transmitter | 868.30 MHz |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Mini Transmitter RT30

The RT30 is an universally applicable transmitter for controlling shutters or awnings and can also be used to switch other electric devices.

An LED flashes when battery change is recommended.



RT30-5004E-01

Technical Details

| | |
|----------------------|--|
| Coding | factory coding with Easywave Telegram |
| Channels | 4 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | LED |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver 4x Pulse, 2x ON/OFF, 1x OPEN/STOP/CLOSE |
| Degree of Protection | IP54 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 60 x 38 x 15 mm |
| Weight | 25 g (including battery) |

Accessories



RT30-ACC-01



RT30-ACC-02

Scope of Delivery

- Mini Transmitter incl. battery
- Mounting Plate
- Operating Manual

Accessories (optional)

- Key Ring
- Lettering Field
- Battery

Models

| Product Key | Description | Frequency |
|---------------|------------------|------------|
| RT30-5004E-01 | Mini Transmitter | 868.30 MHz |
| RT30-ACC-01 | Key Ring | |
| RT30-ACC-02 | Lettering Field | |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Hand Transmitter RT24

The Hand Transmitter RT24 can be obtained either with the functions ON/OFF mode or UP/STOP/DOWN mode.

The 4-channel-model offers four individually coded radio channels to send four different radio signals.

Additionally it is possible to send all four signals one after another to control four different devices simultaneously (group-control) by pushing only one button.



RT24-5004E-01

Technical Details

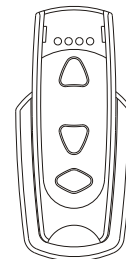
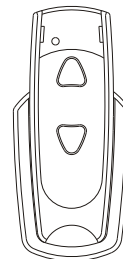
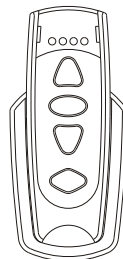
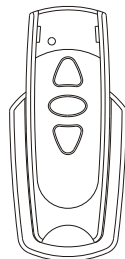
| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 or 4 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | 1 respectively 4 LED's |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver; see model |
| Degree of Protection | IP54 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 110 x 38 x 14 mm |
| Weight | 37 g (including battery) |

Scope of Delivery

- Hand Transmitter incl. battery
- Mounting Plate
- Mounting Accessories
- Operating Manual

Accessories (optional)

- Battery ACC-BAT-05



Models

| | | | | |
|-----------------|------------------|------------------|------------------|------------------|
| Product Key | RT24-5001E-01 | RT24-5004E-01 | RT24-5001E-03 | RT24-5004E-03 |
| Frequency | 868.30 MHz | 868.30 MHz | 868.30 MHz | 868.30 MHz |
| Description | Hand Transmitter | Hand Transmitter | Hand Transmitter | Hand Transmitter |
| Operation Modes | UP/STOP/DOWN | 4x UP/STOP/DOWN | ON/OFF | 4x ON/OFF |



Transmit



Receive



Decode



Control

Hand Transmitter RT29



The Hand Transmitter RT29 is universally applicable. It can be used for controlling shutters or awnings as well as for switching other electric devices.

Its three different types enable a variety of operations which ensure useful combinations of different applications.



RT29-5004E-01

Technical Details

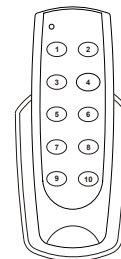
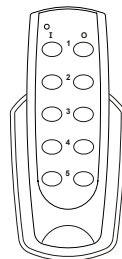
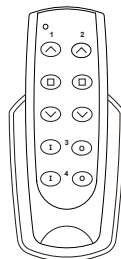
| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 4, 5 or 10 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | LED |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver; see model |
| Degree of Protection | IP54 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 110 x 38 x 14 mm |
| Weight | 37 g (including battery) |

Scope of Delivery

- Hand Transmitter incl. battery
- Mounting Plate
- Mounting Accessories
- Operating Manual

Accessories (optional)

- Battery ACC-BAT-05



Models

| | | | |
|-----------------|---|------------------|------------------|
| Product Key | RT29-5004E-01 | RT29-5005E-01 | RT29-5010E-01 |
| Frequency | 868.30 MHz | 868.30 MHz | 868.30 MHz |
| Description | Hand Transmitter | Hand Transmitter | Hand Transmitter |
| Control | 3-button-control or 2-button-control | 2-button-control | 1-button-control |
| Operation Modes | 2x UP/STOP/DOWN and 2x ON/OFF | 5x ON/OFF | 10x Pulse |



Transmit



Receive



Decode



Control

Multi Channel Transmitter RT22 Easywave

The Multi Channel Transmitter RT22 offers the possibility to control 24 different devices. It has 4 different levels (I to IV) each containing 6 individually coded radio channels:

5 channels are A/B-coded for switching electrical units ON/OFF

1 channel is A/C/B-coded to control UP/STOP/DOWN

The transmitter can be used for operations that include the control of more than just one electrical unit.

Due to its functionality and its stout case it can also be used for industrial applications.



RT22-5022E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 24 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 2x 3V battery, CR2032 |
| Operation Indicator | 4 LED's |
| Control | see operating manual |
| Operation Modes | depending on the receiver 20x ON/OFF, 4x OPEN/STOP/CLOSE |
| Degree of Protection | IP54 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 150 x 60 x 22 mm |
| Weight | 100 g (including battery) |

Accessories



RT22-ACC-01

Scope of Delivery

- Multi Channel Transmitter incl. battery
- Operation Manual

Accessories (optional)

- Mounting Plate
- Battery

Models

| Product Key | Description | Frequency |
|---------------|---------------------------|------------|
| RT22-5022E-01 | Multi Channel Transmitter | 868.30 MHz |
| RT22-ACC-01 | Mounting Plate | |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Wristband Transmitter RT26

The Wristband Transmitter RT26 allows releasing wireless calls for persons or commands at the push of a button independent of room location, e.g. to operate a plug in radio bell, lights etc.

It also includes a battery-check-function which is represented by a flashing LED that shows low battery capacity.

Parallel to sending a low voltage radiogramm is sent. This way a low battery can be additionally indicated by a control device.



RT26-5001E-02

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | LED |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver 1x Pulse |
| Degree of Protection | IP65 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 38 x 46 x 14 mm |
| Weight | 16 g (including battery) |

Accessories



RT26-ACC-01



RT26-ACC-02

Scope of Delivery

- Wristband Transmitter incl. battery
- Wrist Strap (closure nickel-free)
- Operating Manual

Accessories (optional)

- Battery Exchange Set
- Wrist Strap
- Battery

Models

| Product Key | Description | Frequency |
|---------------|-----------------------------------|------------|
| RT26-5001E-02 | Wristband Transmitter | 868.30 MHz |
| RT26-ACC-01 | Battery Exchange Set | |
| RT26-ACC-02 | Wrist Strap (closure nickel-free) | |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Necklace Transmitter RT27 Easywave

The Necklace Transmitter RT27 allows releasing wireless calls for persons or commands at the push of a button independent of room location, e.g. to operate a plug in radio bell, lights etc.

It also includes a battery-check-function which is represented by a flashing LED that shows low battery capacity.

Parallel to sending a low voltage telegramm is sent. This way a low battery can be additionally indicated by a control device.



RT27-5001E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | LED |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver 1x Pulse |
| Degree of Protection | IP65 |
| Operating Temperatur | -20 °C up to +60 °C |
| Dimensions | 41 x 13 mm |
| Weight | 16 g (including battery) |

Accessories



RT26-ACC-01



RT27-ACC-02



RT27-ACC-05

Scope of Delivery

- Necklace Transmitter incl. battery
- Necklace
- Operating Manual

Accessories (optional)

- Battery Exchange Set
- Necklace (standard)
- Necklace (predetermined breaking point)
- Battery

Models

| Product Key | Description | Frequency |
|---------------|---|------------|
| RT27-5001E-01 | Necklace Transmitter | 868.30 MHz |
| RT26-ACC-01 | Battery Exchange Set | |
| RT27-ACC-02 | Necklace (standard) | |
| RT27-ACC-05 | Necklace (predetermined breaking point) | |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

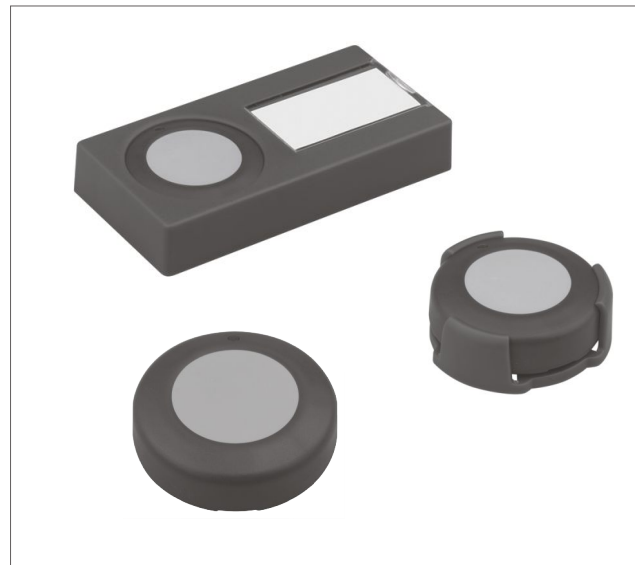
Push-Button Transmitter RT28

The Push-Button Transmitter RT28 is designed with a large button for the one-push-operation. Electronic devices can be switched with an ON/OFF pulse.

An LED flashes at low battery capacity to recommend a battery change.

Dependant on the application the Push-Button Transmitter can be mounted using the mounting plate or the bell button case. e.g. be used as a doorbell together with the plug in radio bell RCP04.

The transmitter is waterproof which enables an outdoor use.



RT28-5001E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | LED |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver 1x Pulse |
| Degree of Protection | IP65 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 38 x 13 mm |
| Weight | 16 g (including battery) |

Accessories



RT26-ACC-01



RT28-ACC-01



Scope of Delivery

- Push-Button Transmitter incl. battery
- Operating Manual

Accessories (optional)

- Battery Exchange Set
- Bell Button Case
- Mounting Plate
- Battery

Models

| Product Key | Description | Frequency |
|---------------|-------------------------|------------|
| RT28-5001E-01 | Push-Button Transmitter | 868.30 MHz |
| RT26-ACC-01 | Battery Exchange Set | |
| RT28-ACC-01 | Bell Button Case | |
| RT28-ACC-02 | Mounting Plate | |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Radio Wall Sensor RTS05

The Radio Wall Sensor RTS05 is a capacitive proximity switch that can be installed wall-mounted in dry rooms.

By touching or approaching to it the signal is sent and the devices referred to it operate.



RTS05-5001E-01

Technical Details

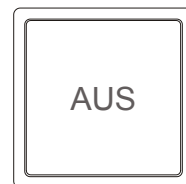
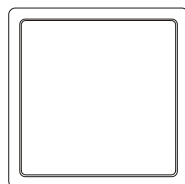
| | |
|----------------------|--|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 |
| Range | up to 100 m under favourable open field conditions |
| Power Supply | 2x 3V battery, CR2032 |
| Operation Indicator | LED (not visible when mounted) |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver 1x Pulse |
| Degree of Protection | IP30 |
| Operating Temperatur | -20 °C to +50 °C |
| Dimensions | 80 x 80 x 10 mm |
| Weight | 40 g (including battery) |
| Color | White (Reinweiß RAL 9010) |

Scope of Delivery

- Radio Wall Sensor incl. battery
- Mounting Accessories
- Operating Manual

Accessories (optional)

- Battery ACC-BAT-05



| | | |
|-----------------|-------------------|-------------------|
| Product Key | RTS05-5001E-01 | RTS05-5001E-02 |
| Frequency | 868,30 MHz | 868,30 MHz |
| Description | Radio Wall Sensor | Radio Wall Sensor |
| Operation Modes | 1x ON/OFF | 1x OFF |



Transmit



Receive



Decode



Control

Radio Wall Switch RTS08 Easywave

The RTS08 is a Radio Wall Switch that can be installed wall-mounted in dry rooms. It can be fitted to usual switches, pasted on walls or screwed onto the wall.

By pressing the switch the signal is transmitted and the referring receiver operates.



RTS08-5002E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 or 2 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver; see model |
| Degree of Protection | IP30 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 80 x 80 x 10 mm |
| Weight | 46 g (including battery) |
| Color | White (Reinweiß RAL 9010) |

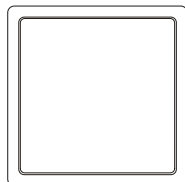
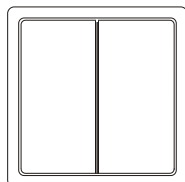
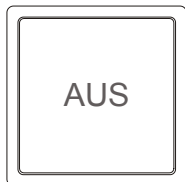
Scope of Delivery

- Radio Wall Switch incl. battery
- Mounting Accessories
- Operating Manual

Accessories (optional)

- Battery ACC-BAT-05

Models

| | | | |
|-----------------|---|---|---|
| |  |  |  |
| Product Key | RTS08-5002E-01 | RTS08-5004E-01 | RTS08-5001E-01 |
| Frequency | 868,30 MHz | 868,30 MHz | 868,30 MHz |
| Description | Radio Wall Switch | Radio Wall Switch | Radio Wall Switch |
| Operation Modes | 1x ON/OFF | 2x ON/OFF | 1x OFF |



Transmit



Receive



Decode



Control

Radio Wall Switch RTS13

The RTS13 is a Radio Wall Switch that can be installed wall-mounted in dry rooms.

It can be fitted to usual switches, pasted on walls or screwed onto the wall.

By pressing a key the signal is transmitted and the referring receiver operates.



RTS13-5001E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 or 3 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver; see model |
| Degree of Protection | IP30 |
| Operating Temperatur | -20 °C to +50 °C |
| Dimensions | 80 x 80 x 10 mm |
| Weight | 42 g (including battery) |
| Color | White (Reinweiß RAL 9010) |

Scope of Delivery

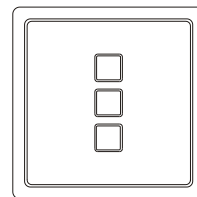
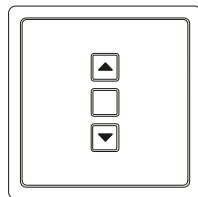
- Radio Wall Switch incl. battery
- Mounting Accessories
- Operating Manual

Accessories (optional)

- Battery ACC-BAT-05

Models

| | | |
|-----------------|-------------------|-------------------|
| Product Key | RTS13-5001E-01 | RTS13-5003E-01 |
| Frequency | 868.30 MHz | 868.30 MHz |
| Description | Radio Wall Switch | Radio Wall Switch |
| Operation Modes | 1x UP/STOP/DOWN | 3x Pulse |





Transmit



Receive



Decode



Control

Radio Wall Switch RTS14

The RTS14 is a Radio Wall Switch that can be installed wall-mounted in dry rooms.

It can be fitted to usual switches, pasted on walls or screwed onto the wall.

By pressing a key the signal is transmitted and the allocated receiver operates.



RTS14-5003E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 2, 3 or 6 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver; see model |
| Degree of Protection | IP30 |
| Operating Temperatur | -20 °C to +50 °C |
| Dimensions | 80 x 80 x 10 mm |
| Weight | 42 g (including battery) |
| Color | White (Reinweiß RAL 9010) |

Scope of Delivery

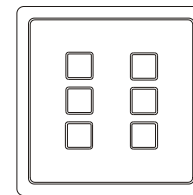
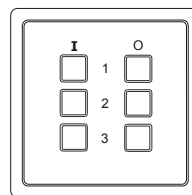
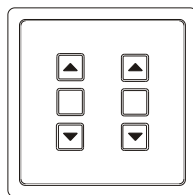
- Radio Wall Switch incl. battery
- Mounting Accessories
- Operating Manual

Accessories (optional)

- Battery ACC-BAT-05

Models

| | | | |
|------------------------|-------------------|-------------------|-------------------|
| Product Key | RTS14-5002E-01 | RTS14-5003E-01 | RTS14-5006E-01 |
| Frequency | 868.30 MHz | 868.30 MHz | 868.30 MHz |
| Description | Radio Wall Switch | Radio Wall Switch | Radio Wall Switch |
| Operation Modes | 2x UP/STOP/DOWN | 3x ON/OFF | 6x Pulse |





Transmit



Receive



Decode



Control

Push-Button System 45 RTS09 Easywave

The RTS09 is a push-button belonging to system 45 which can be installed directly to all products with a frame height of 45 mm.

It can be attached by simply pushing it into the frame.

This enables comfortable switching for a variety of operations from every direction.



RTS09-5002E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 or 2 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | LED |
| Control | transmission lasts for as long as button is pressed (but max. 36 s) |
| Operation Modes | depending on the receiver 1x ON/OFF |
| Degree of Protection | IP30 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 45 x 22,5 x 45 mm |
| Weight | 20 g (including battery) |

Scope of Delivery

- Radio Push-Button System 45 incl. battery
- Operating Manual

Accessories (optional)

- Battery

Models

| Product Key | Description | Frequency |
|----------------|-----------------------|------------|
| RTS09-5002E-01 | Push-Button System 45 | 868.30 MHz |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Radio Time Switch w. Light Sensor RTS07

The radio controlled RTS07 is a time switch that runs on batteries and can be installed wall-mounted in dry rooms. It allows to control receivers by time and brightness. The brightness control only works in connection with the radio light sensor SL01.

The radio time switch has 4 individually coded channels that send 4 different signals to operate 4 different devices (e.g. shutters, awnings or other electrical units). Additionally all 4 signals can be send in combination to control 4 different devices simultaneously (group-control).



RTS07-5004E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 4 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Indicator | none |
| Control | see operating manual |
| Operation Modes | depending on the receiver 4x UP/STOP/DOWN or 4x ON/OFF |
| Degree of Protection | IP30 |
| Operating Temperatur | -20 °C to +50 °C |
| Dimensions | 80 x 80 x 16 mm |
| Weight | 50 g (including battery) |
| Color | White (Reinweiß RAL 9010) |

Accessories



SL01-5001FS-01

Scope of Delivery

- Radio Time Switch
incl. battery
- Mounting Accessories
- Operating Manual

Accessories (optional)

- Radio Light Sensor
- Battery

Models

| Product Key | Description | Frequency |
|----------------|-----------------------------------|------------|
| RTS07-5004E-01 | Radio Time Switch w. Light Sensor | 868.30 MHz |
| SL01-5001FS-01 | Radio Light Sensor | 868.30 MHz |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Radio Light Sensor SL01

The Radio Light Sensor SL01 measures brightness values cyclically and sends them to the time switch.

It can only be used in connection with the Radio Timer w. Light Sensor RTS07 or the Junction Box Receiver RCJ02.



SL01-5001FS-01

Technical Details

| | |
|-------------------------|--|
| Coding | factory coding with Easywave Telegram |
| Channels | 1 |
| Power Supply | 1x 3V battery, CR2032 |
| Degree of Protection | IP54 |
| Range | up to 150 m under favourable open field conditions |
| Lux Value for Sunlight | approx. 2.000lx up to 80.000lx |
| Lux Value for Twillight | approx. 2lx up to 250lx |
| Operating Temperatur | 0 °C to +70 °C |
| Dimensions | 38 x 13 mm |
| Weight | 16 g (including battery) |

Accessories



RT26-ACC-01

Scope of Delivery

- Radio Light Sensor
- Mounting Accessories
- Operating Manual

Accessories (optional)

- Battery Exchange Set
- Battery

Models

| Product Key | Description | Frequency |
|----------------|--------------------|------------|
| SL01-5001FS-01 | Radio Light Sensor | 868.30 MHz |
| RT26-ACC-01 | Battery Set | |
| ACC-BAT-05 | Battery CR2032 | |



Transmit



Receive



Decode



Control

Built-In Transmitter RTS03

The Built-In Transmitter RTS03 can change conventional light switches into radio controlled ones. Four radio signals can be transmitted (static signals) to switch four different functions.

Operating is possible via 4 push-buttons or 2 switches. When operated with a switch the transmitter only sends a signal if the switch position is changed.



RTS03-5004E-01

Technical Details

| | |
|----------------------|--|
| Coding | factory coding with Easywave Telegramm |
| Channels | 4 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 1x 3V battery, CR2032 |
| Operation Modes | by connected push button/switch |
| Function | 2x ON/OFF (switch), 2x ON/OFF (button), 4x Pulse |
| Degree of Protection | IP20 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 36 x 30 x 10 mm (case) |
| Weight | 12g (including battery) |

Scope of Delivery

- Built-In Transmitter incl. battery
- Operating Manual

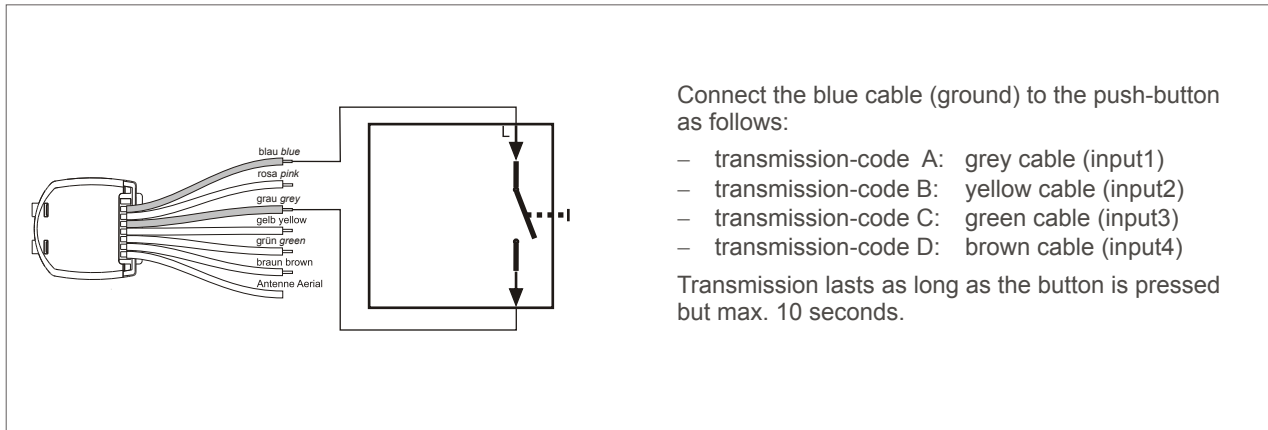
Accessories (optional)

- Battery

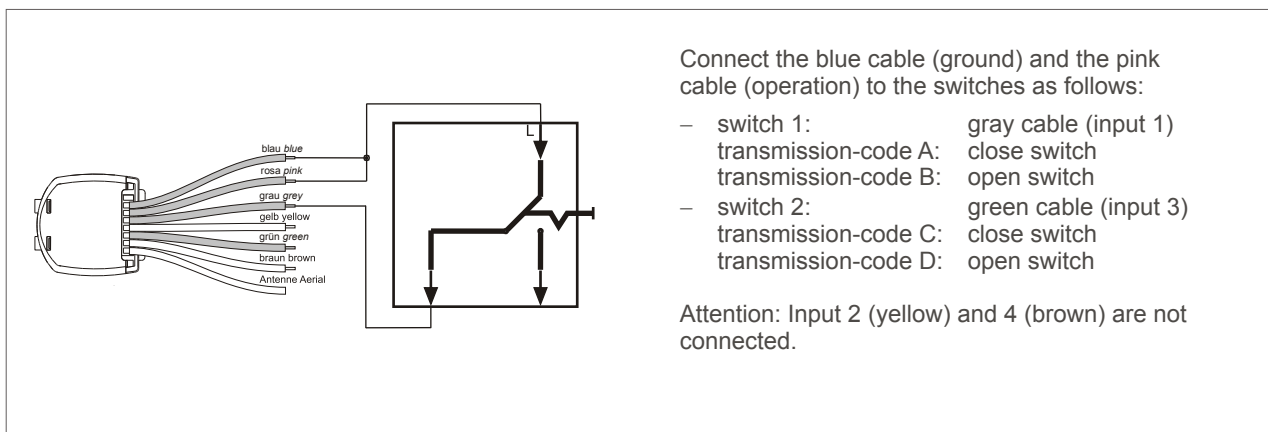
Models

| Product Key | Description | Frequency |
|----------------|----------------------|------------|
| RTS03-5004E-01 | Built-In Transmitter | 868.30 MHz |
| ACC-BAT-05 | Battery CR2032 | |

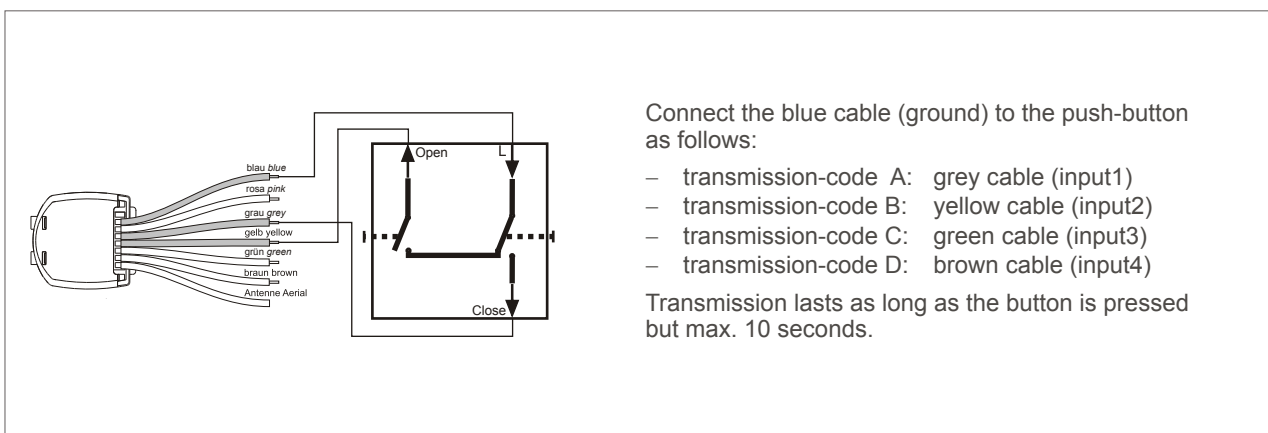
Connection Diagram



connection to the push-button



connection to the switch



connection to the shutter-control



Transmit



Receive



Decode



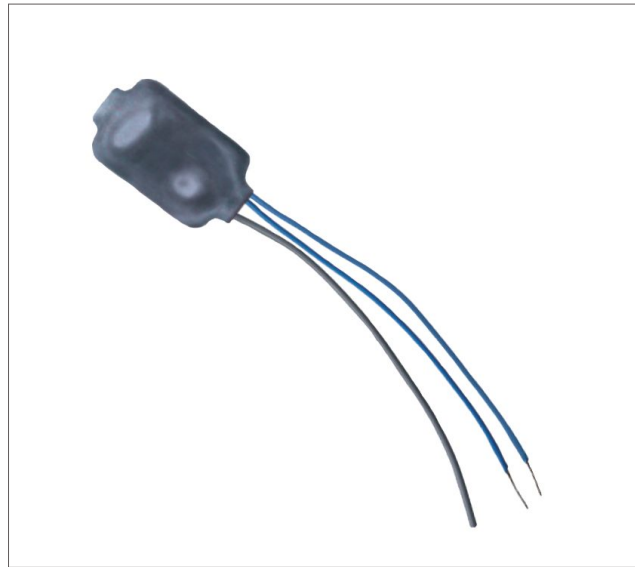
Control

Built-In Transmitter RTS17 (Low Voltage)



The Built-In Transmitter RTS17 can be connected to a voltage supply unit of 5 V to 24 V DC or 6 v to 32 V AC to provide it with radio function.

As long as it is connected to voltage but maximally for a duration of 10 seconds an A-coded telegram is transmitted. This way a device can be switched by radio control.



RTS17-5001E-01

Technical Details

| | |
|----------------------|---|
| Coding | factory coding with Easywave Telegramm |
| Channels | 1 |
| Range | up to 100 m under favourable open field conditions |
| Power Supply | 5 V - 24 V AC, 50 Hz 6 V - 32 V DC |
| Operation Modes | by connected voltage supply |
| Function | 1x ON/OFF |
| Degree of Protection | IP20 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | approx. 30 x 17 x 7 mm (with shrink hose) 25 x 15 x 6 mm (without shrink hose) |
| Weight | 5g |

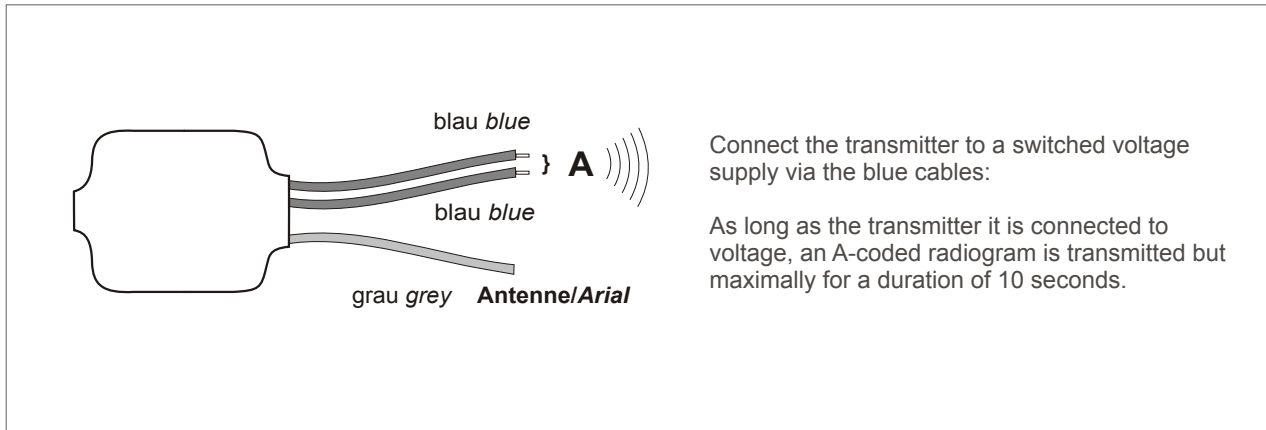
Scope of Delivery

- Built-In Transmitter
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|----------------------|------------|
| RTS17-5001E-01 | Built-In Transmitter | 868.30 MHz |

Connection Diagram





Transmit



Receive



Decode



Control

Junction Box Repeater RTR03

The Junction Box Repeater RTR03 receives Easywave radio signals and transmits them again with a time delay of 300 ms. Memorized as well as standard Easywave Telegrams are received and transmitted by the repeater. This way the range of Easywave transmitters can be increased.

The RTR03 is installed flush-mounted and is operated with 12-24 V DC or 230 V AC.



RTR03-5001E-01

Technical Details

| | |
|-----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 12-24 V DC or 230 V AC |
| Degree of Protection | IP40 |
| Operating Temperature | -20 °C to +60 °C |
| Dimensions | 46 x 46 x 25 mm |

Scope of Delivery

- Junction Box Repeater
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|-----------------------|------------|
| RTR03-5001E-01 | Junction Box Repeater | 868.30 MHz |



Transmit



Receive

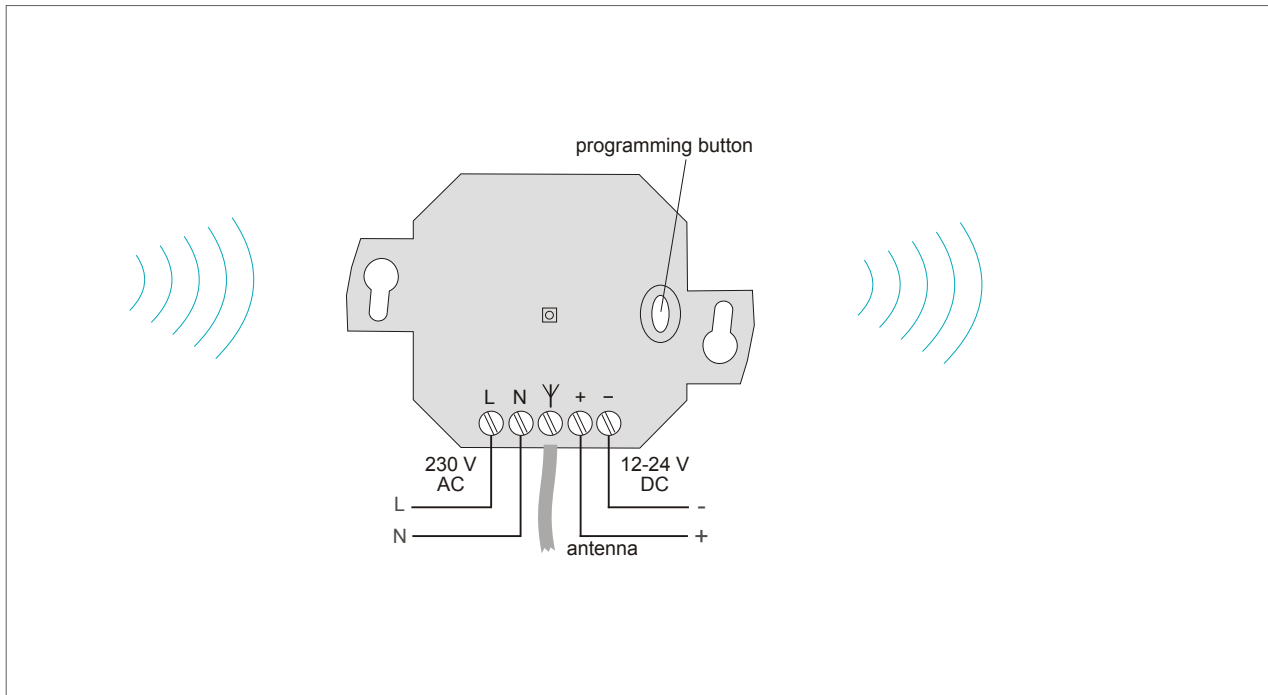


Decode



Control

Connection Diagram



Operating the Device

Exclusively install the Junction Box Repeater into in-wall boxes with a lid. Connect supply voltage (12-24 V DC or 230 VAC).

After installation the Junction Box Receiver is in operation mode. As long as no Easywave transmitter is programmed to the Junction Box Receiver every received Easywave signal is transmitted again.

While receiving a signal the LED flashes shortly while the signal is transferred it flashes again but longer.



Transmit



Receive



Decode



Control

Junction Box Receiver RCJ01 (Mains Voltage)

The Junction Box Receiver RCJ01 is designed for switching line voltage consumers on and off and executes timer functions. Due to its compact dimensions it can be installed flush-mounted. Therefore especially for upgrading it offers simple and space saving solutions for a whole variety of control-operations.

Programming the receiver is very simple and can be done directly on the device.



RCJ01-5001E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC (2-button-control) |
| Control | ON/OFF (2-button-control) ON/OFF (1-button-control) Timer (retrigger possible within 7 min.) |
| Output | 1 relay contact (normally open) |
| Max. Contact Duty | see Table of Loads |
| Degree of Protection | IP40 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 46 x 46 x 25 mm |

Scope of Delivery

- Junction Box Receiver
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|---------------------------------------|------------|
| RCJ01-5001E-01 | Junction Box Receiver (Mains Voltage) | 868.30 MHz |

Connection Diagram

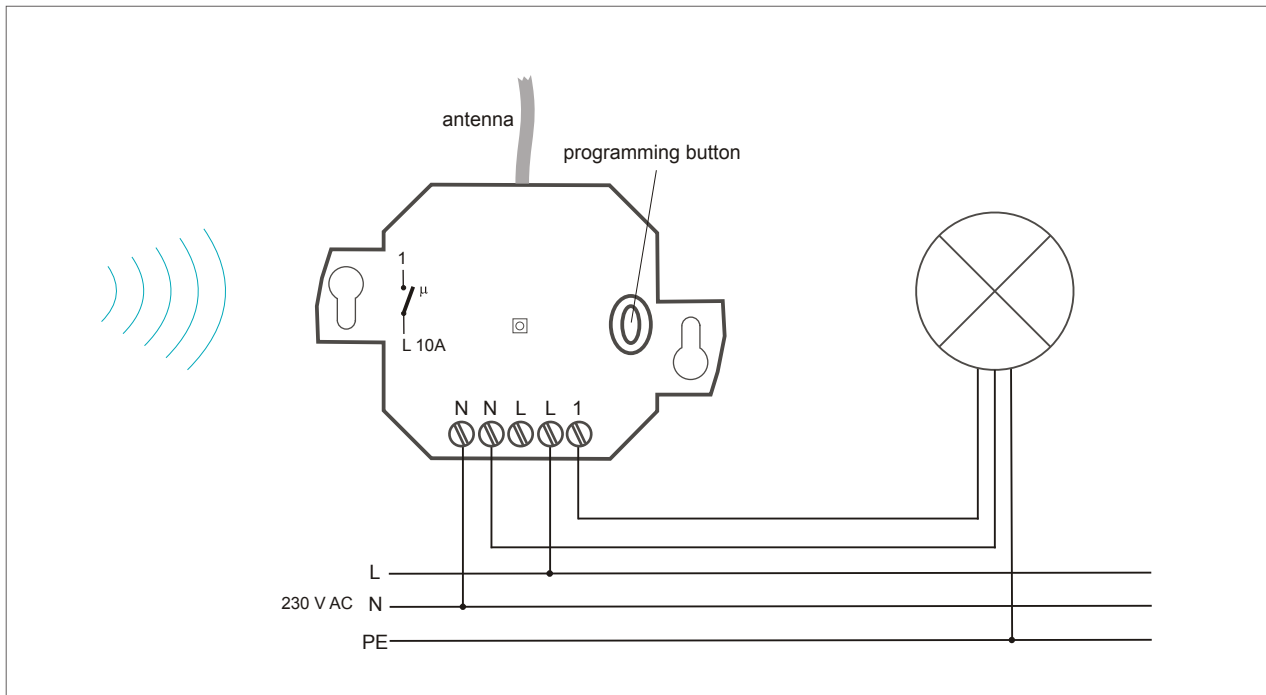


Table of Loads

| type of load | max. load |
|---|-------------------|
| resistive load: lamps, 230 V halogen lamps etc. | 10.0 / 2,300 VA |
| inductive load: halogen lamps with wound transformers (min. load of transformer 85%) | 2.6 A / 600 VA |
| non- or serial-compensated fluorescent lamps with ferromagnetic ballasts | 10.0 A / 2,300 VA |
| parallel-compensated fluorescent lamps with ferromagnetic ballasts | 2.6 A / 600 VA |
| capacity EVG: electronic cut-in units, electronic transformers etc. | 4.0 A / 920 VA |



Transmit



Receive



Decode



Control

Junction Box Receiver RCJ01 (Mains Voltage / Floating)

The Junction Box Receiver RCJ01 (floating contact) is designed for switching low voltage and mains voltage consumers on and off and has a Dead man's mode. Due to its compact dimensions it can be installed flush-mounted.

Therefore especially for upgrading it offers simple and space saving solutions for a whole variety of control-operations.

Programming the receiver is very simple and can be done directly on the device.



RCJ01-5001E-02

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | ON/OFF (2-button-control) ON/OFF (1-button-control) Dead man's mode (max. 36 seconds) |
| Output | 1 relay contact (normally open) 6 A |
| Max. Contact Duty | see Table of Loads |
| Circuit points | 1x N, 1x L, 1x 1 and 1x 1' Connecting terminal each with 1x 2,5 mm ² |
| Degree of Protection | IP40 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 46 x 46 x 25 mm |

Scope of Delivery

- Junction Box Receiver
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|--|------------|
| RCJ01-5001E-02 | Junction Box Receiver (Mains Voltage / Floating) | 868.30 MHz |

Connection Diagram

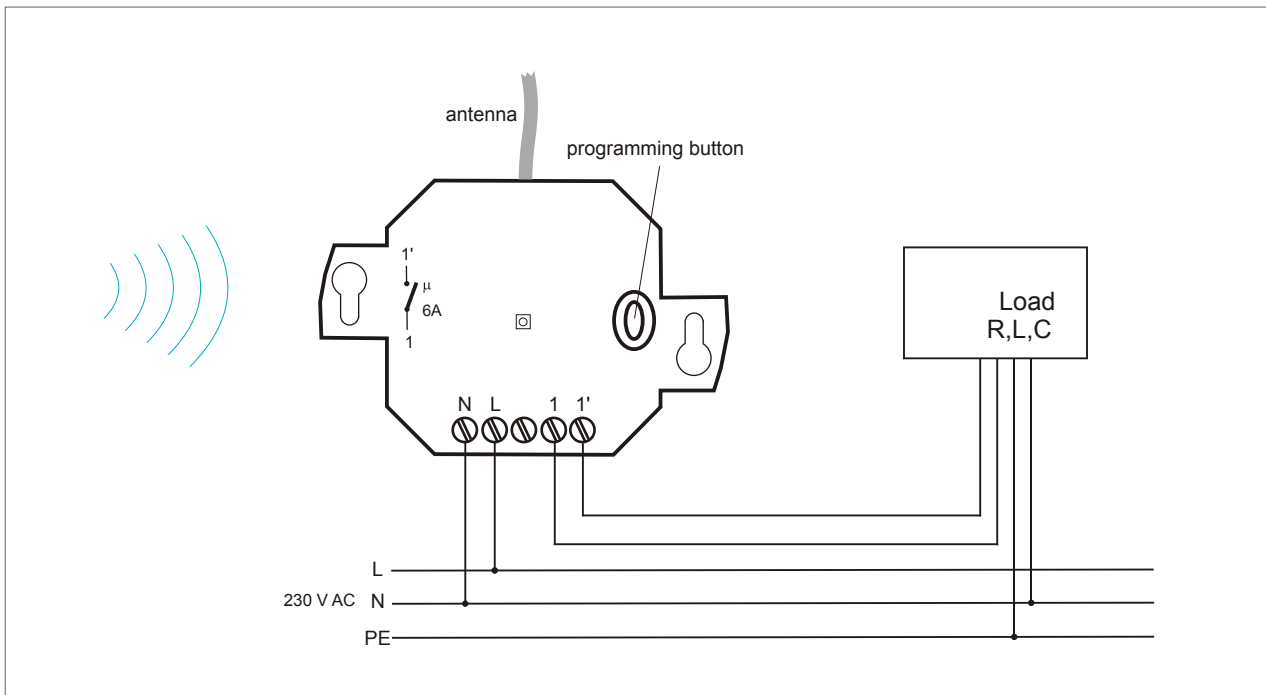


Table of Loads

| type of load | max. load |
|---|------------------|
| Resistive load: lamps, 230 V halogen lamps etc. | 6.0 A / 1,380 VA |
| inductive load: halogen lamps with wound transformers (min. load of transformer 85%) | 2.6 A / 600 VA |
| non- or serial-compensated fluorescent lamps with ferromagnetic ballasts | 6.0 A / 1,380 VA |
| parallel-compensated fluorescent lamps with ferromagnetic ballasts | 2.6 A / 600 VA |
| capacity EVG: electronic cut-in units, electronic transformers etc. | 4.0 A / 920 VA |



Transmit



Receive



Decode



Control

Junction Box Receiver RCJ01 (Low Voltage)

The Junction Box Receiver RCJ01-5001E-03 is designed for switching low voltage consumers on and off and has a Dead man's mode. Due to its compact dimensions it can be installed flush-mounted.

Therefore especially for upgrading it offers simple and space saving solutions for a whole variety of control-operations.

Programming the receiver is very simple and can be done directly on the device.



RCJ01-5001E-03

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 12-24 V AC/DC |
| Control | ON/OFF (2-button-control) ON/OFF (1-button-control) Dead man's mode (max. 36 seconds) |
| Output | 1 relay contact (two way contact) |
| Max. Contact Duty | see Table of Loads |
| Degree of Protection | IP40 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 46 x 46 x 25 mm |

Scope of Delivery

- Junction Box Receiver
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|-------------------------------------|------------|
| RCJ01-5001E-03 | Junction Box Receiver (Low Voltage) | 868.30 MHz |

Connection Diagram

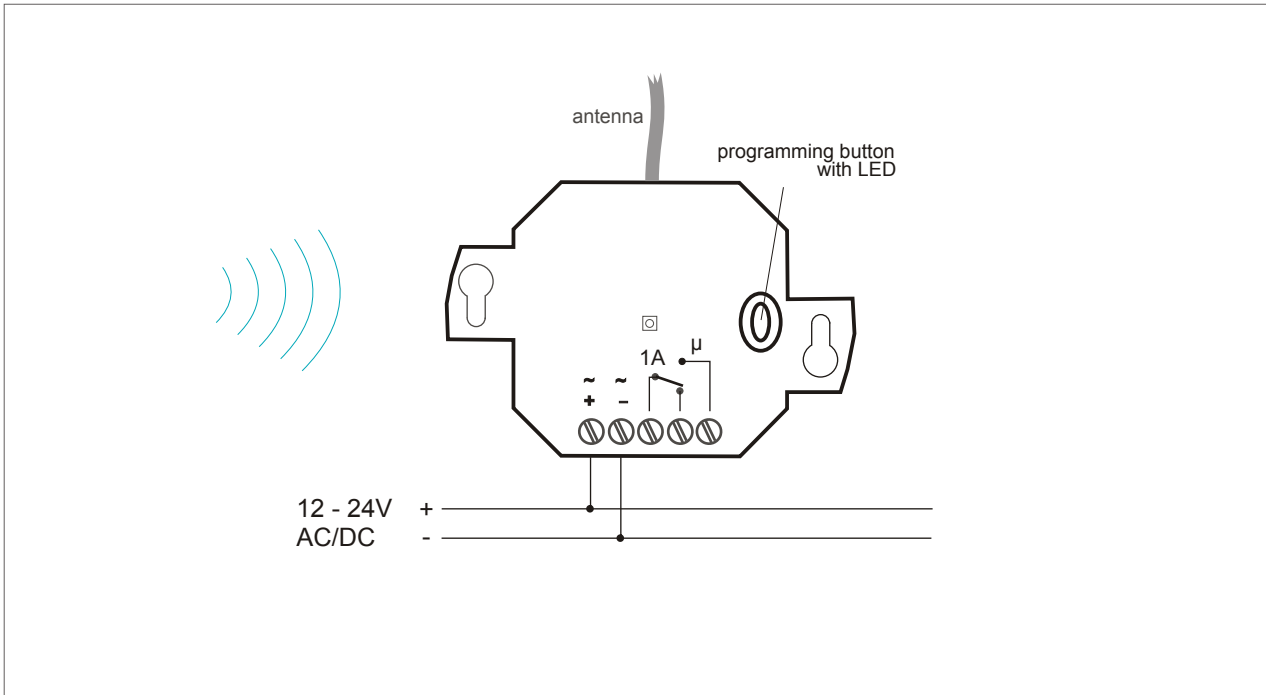


Table of Loads

| type of load | max. load |
|--------------|---------------------|
| AC | 60 V / 1 A / 30 VA |
| DC | 125 V / 1 A / 62 VA |



Transmit



Receive



Decode



Control

Junction Box Receiver RCJ01 (Remote Motor Control / 2-Button-Mode) 

The Junction Box Receiver RCJ01 is designed for driving shutters up and down. It can be activated by sending a signal with the hand transmitter or the wall sensor. Due to its compact dimensions it can be installed flush-mounted.

Therefore especially for upgrading it offers simple and space saving solutions for a whole variety of control-operations.

Programming the receiver is very simple and can be done directly on the device.



RCJ01-5002E-04

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | OPEN/CLOSE (2-button-control, stop with reverse) Dead man's mode (max. 36 seconds) |
| Output | 2 relay contacts (normally open) |
| Max. Contact Duty | see Table of Loads |
| Degree of Protection | IP40 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 46 x 46 x 25 mm |

Scope of Delivery

- Junction Box Receiver
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|--|------------|
| RCJ01-5002E-04 | Junction Box Receiver (Remote Motor Control / 2-Button-Control) | 868.30 MHz |

Connection Diagram

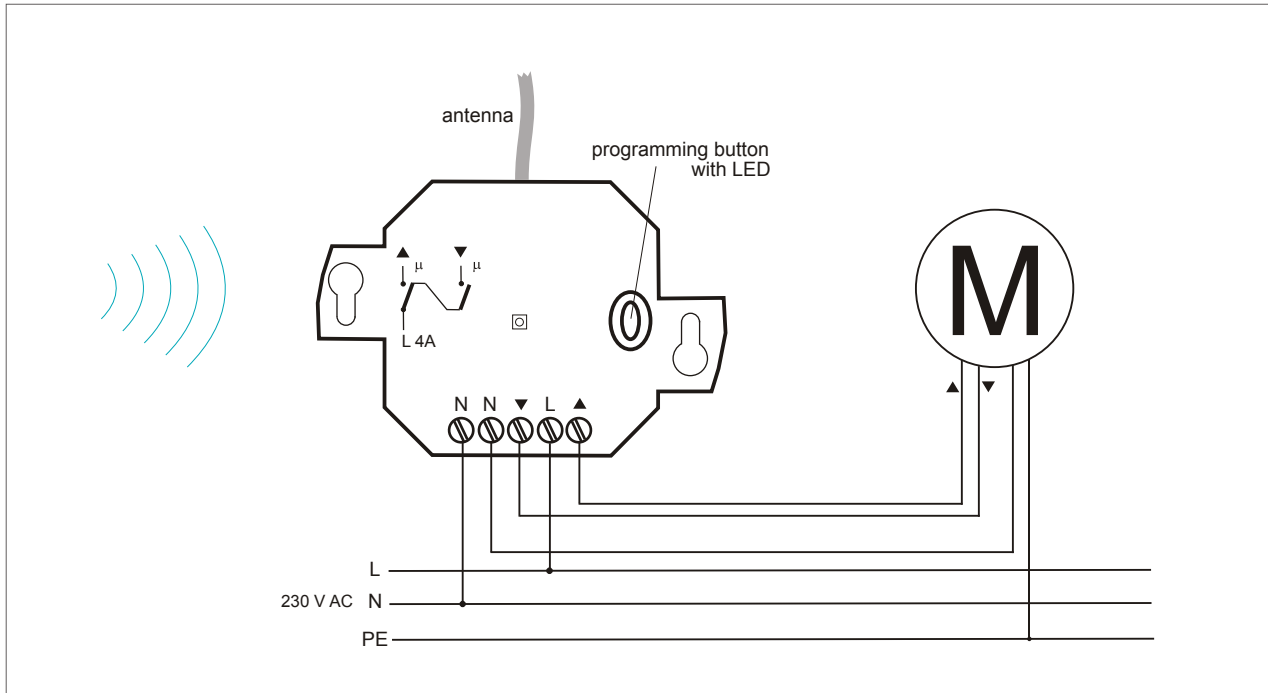


Table of Loads

| type of load | max. load |
|-----------------------------------|----------------|
| resistive load $\cos\phi = 1.0$: | 4.0 A / 920 VA |
| inductive load $\cos\phi = 0.8$: | 3.2 A / 736 VA |



Transmit



Receive



Decode



Control

Junction Box Receiver RCJ01 (Remote Motor Control / 4-Button-Mode)

The Junction Box Receiver RCJ01 is designed for driving shutters up and down. It can be activated by sending a signal with the hand transmitter or the radio wall sensor. The receiver automatically turns itself off after a certain delay time.

Due to its compact dimensions it can be installed flush-mounted. Therefore especially for upgrading it offers simple and space saving solutions for a whole variety of control-operations.

Programming the receiver is very simple and can be done directly on the device.



RCJ01-5002E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | UP/STOP/DOWN (4-button-control) |
| Output | 2 relay contacts (normally open) |
| Max. Contact Duty | see Table of Loads |
| Degree of Protection | IP40 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 46 x 46 x 25 mm |

Scope of Delivery

- Junction Box Receiver
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|---|------------|
| RCJ01-5002E-01 | Junction Box Receiver (Remote Motor Control / 4-Button-Mode) | 868.30 MHz |

Connection Diagram

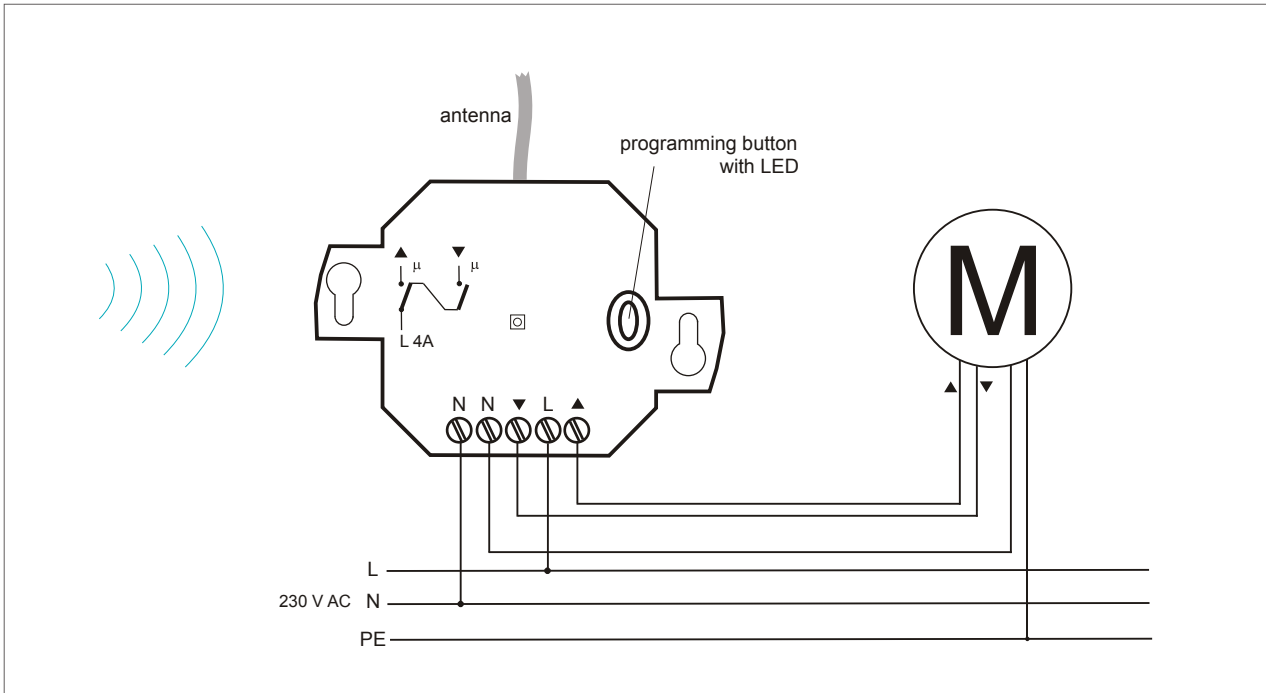


Table of Loads

| type of load | max. load |
|-----------------------------------|----------------|
| resistive load $\cos\phi = 1.0$: | 4.0 A / 920 VA |
| inductive load $\cos\phi = 0.8$: | 3.2 A / 736 VA |



Transmit



Receive



Decode



Control

Junction Box Receiver/Timer RCJ02

The Junction Box Receiver RCJ02 operates at mains voltage. It includes a time switch and can be fixed to standard flush-mounted switch boxes.

In connection with the Radio Light Sensor SL01 the receiver can operate with brightness control.

It is possible to program up to 50 switching times with different times for the day or during the week.

Also the receiver can memorize signals from up to 36 transmitters.

Additionally it includes a safety function which stops the automatic closing of the shutters to avoid locking out.



RCJ02-5002E-01

Technical Details

| | |
|----------------------|---------------------------------------|
| Coding | Factory coding with Easywave Telegram |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | UP/STOP/DOWN |
| Output | 2 relay contacts (normally open) |
| Max. Contact Duty | see Table of Loads |
| Degree of Protection | IP40 |
| Operating Temperatur | 0 °C to +50 °C |
| Dimensions | 80 x 80 x 45 mm |
| Color | White (Reinweiß RAL 9010) |

Accessories



SL01-5001FS-01

Scope of Delivery

- Junction Box Receiver/Timer
- Mounting Accessories
- Operating Manual

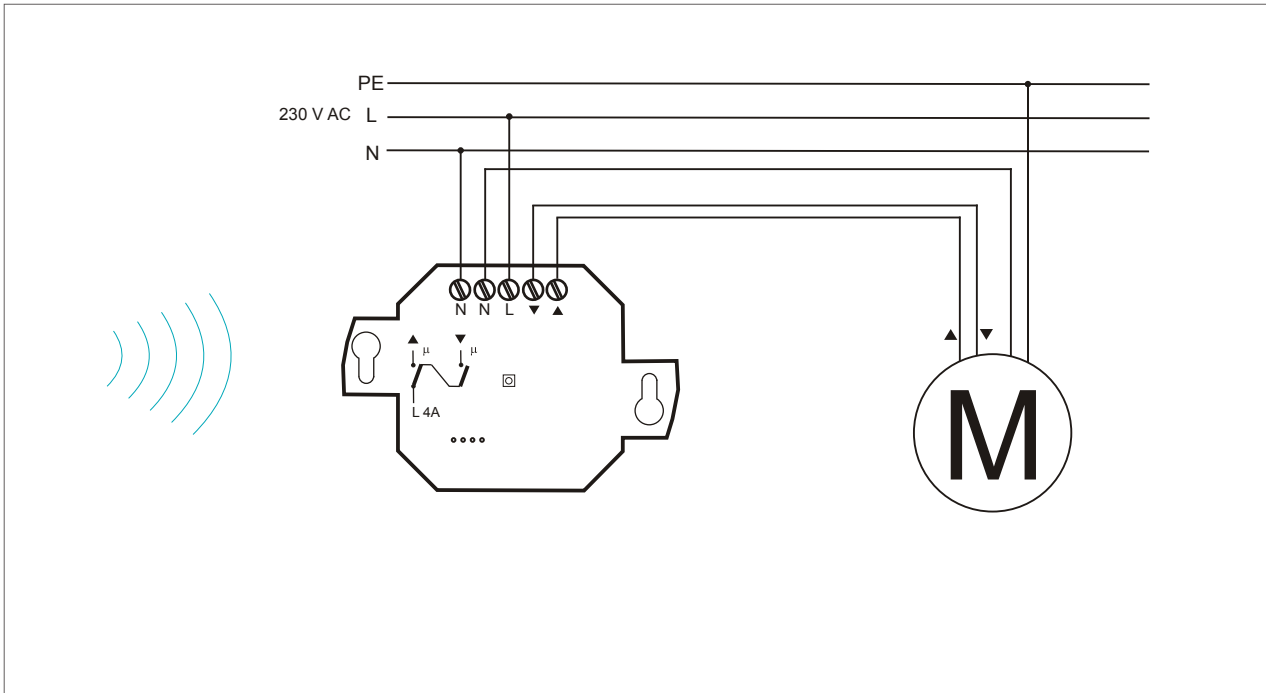
Accessories (additional)

- Radio Light Sensor

Models

| Product Key | Description | Frequency |
|----------------|-----------------------------|------------|
| RCJ02-5002E-01 | Junction Box Receiver/Timer | 868.30 MHz |
| SL01-5001FS-01 | Radio Light Sensor | 868.30 MHz |

Connection Diagram



Operating the Device

The radio control with timer function enables operation with time control and brightness control. The brightness control only works in connection with the light sensor SL01.

Additionally the control can be operated with Easywave hand transmitters or Easywave radio wall switches. The transmitters have to provide a function range of open (A), stop (C/D) and close (B), therefore a 3-button-control. The Easywave transmission code has to be memorized first to operate the device.

Table of Loads

| type of load | max. load |
|-----------------------------------|----------------|
| resistive load $\cos\phi = 1.0$: | 4.0 A / 920 VA |
| inductive load $\cos\phi = 0.8$: | 3.2 A / 736 VA |



Transmit



Receive



Decode



Control

Receiver System 45 RCJ03

The Receiver System 45 RCJ03 is designed for switching line voltage consumers on and off or to execute timer functions.

The receiver can be installed into all products with openings of 45mm.

It can be mounted very easily using „plug and play.“



RCJ03-5001E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | ON/OFF (2-button-control) ON/OFF (1-button-control) Timer (retrigger possible within 7 min.) |
| Output | 1 relay contact (normally open) |
| Max. Contact Duty | see Table of Loads |
| Degree of Protection | IP20 |
| Operating Temperatur | -10 °C to +40 °C |
| Dimensions | 45 x 45 x 45 mm |

Scope of Delivery

- Receiver System 45
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|--------------------|------------|
| RCJ03-5001E-01 | Receiver System 45 | 868.30 MHz |

Connection Diagram

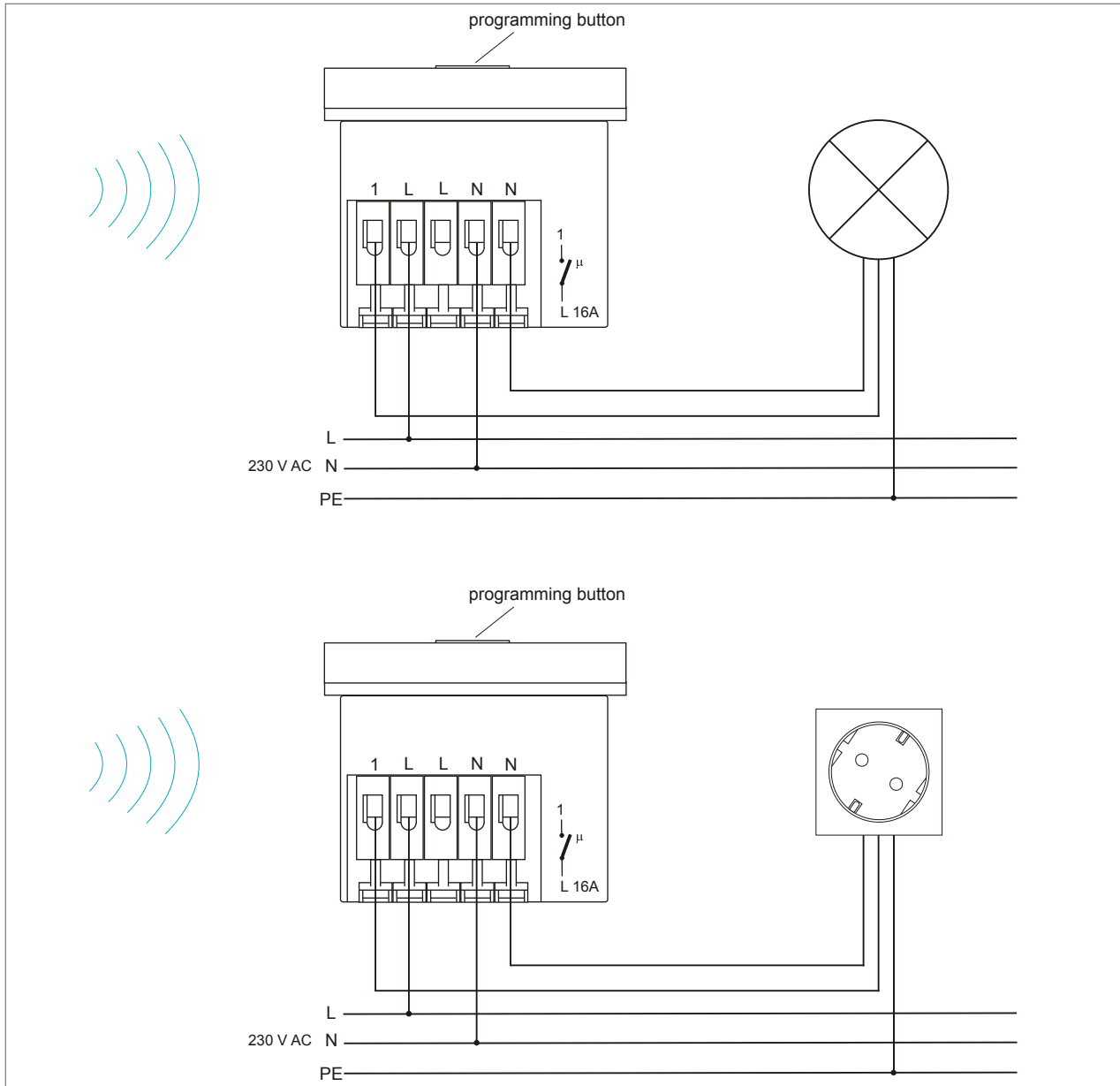


Table of Loads

type of load

max. load

resistive load $\cos\phi = 1.0$: 16.0 A / 3,680 VA

inductive load $\cos\phi = 0.8$: 6.4 A / 1,472 VA



Transmit



Receive



Decode



Control

Mini Receiver RCL03 (IP20)

The Mini Receiver RCL03 operates between 12 and 24 V AC/DC.

Four different control modes are available and it can be operated with two floating relay outputs.

The relays turn off automatically when the "awning control"-mode is selected.

The Mini Receiver can save up to 32 different transmission codes.



RCL03-5002E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 2 |
| Power Supply | 12-24 V AC/DC |
| Control | Dead man's mode Shutter-/Awning-control ON/OFF and Pulse (1 second) |
| Output | 2 floating relay contacts (two way contact) |
| Max. Contact Duty | AC: 24 V / 1 A / 24 VA DC: 30 V / 1 A / 30 W |
| Degree of Protection | IP20 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 63 x 35 x 70 mm |

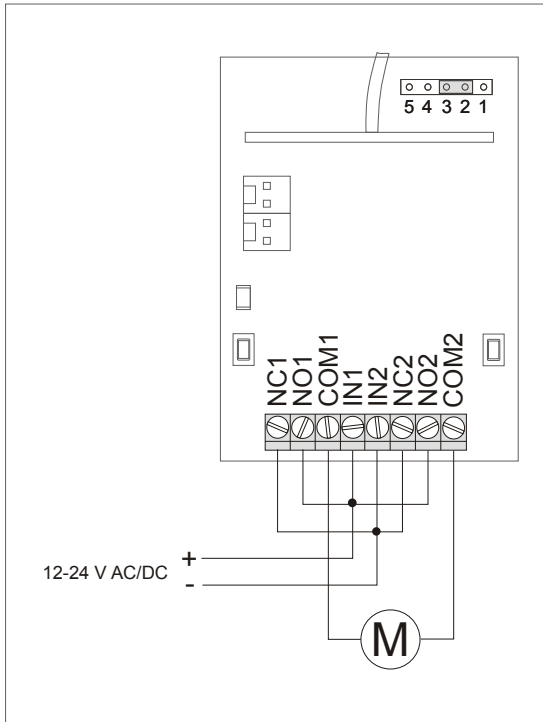
Scope of Delivery

- Mini Receiver
- Mounting Accessories
- Operating Manual

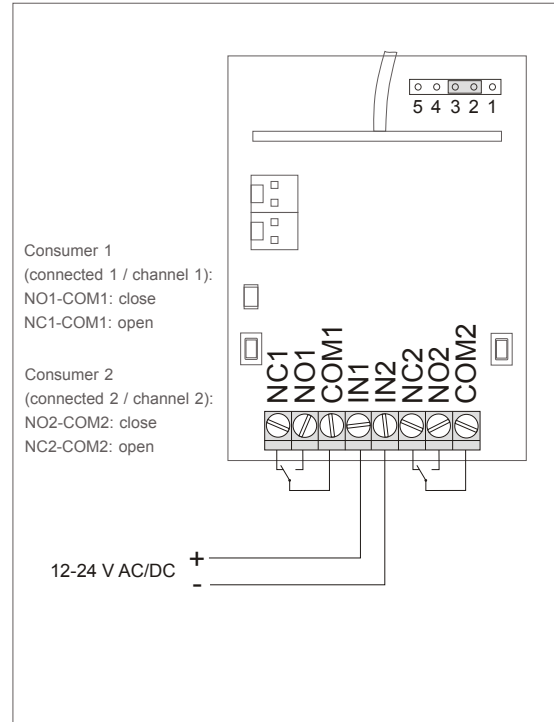
Models

| Product Key | Description | Frequency |
|----------------|---------------|------------|
| RCL03-5002E-01 | Mini Receiver | 868.30 MHz |

Connection Diagram



Operation Mode: Shutter/Awning mode



Operation Mode: Dead man's mode, Pulse (1 second, ON/OFF)

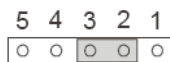
Operating the Device

Two separate radio channels can switch two floating relay outputs. The following modes of operation can be chosen with the jumper J1:

Dead man's mode :
position 1-2:



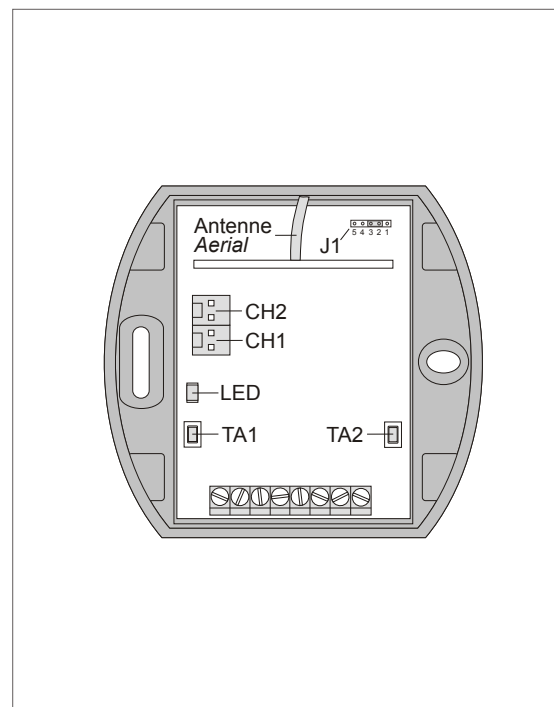
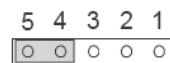
Shutter/Swning control:
position 2-3:



ON/OFF:
position 3-4:



Pulse (1 second):
position 4-5:





Transmit



Receive



Decode



Control

Mini Receiver RCL04 (IP65)

The Mini Receiver RCL04 operates between 12 and 24 V AC/DC.

Four different control modes are available and it can be operated with two floating relay outputs.

The relays turn off automatically when the "awning control"-mode is selected.

The receiver can memorize up to 32 different transmission codes. The type of protection IP65 qualifies it for outdoor use.



RCL04-5002E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 2 |
| Power Supply | 12-24 V AC/DC |
| Control | Dead man's mode Shutter-/Awning-control ON/OFF and Pulse (1 second) |
| Output | 2 floating relay contacts (two way contact) |
| Max. Contact Duty | AC: 24 V / 1 A / 24 VA DC: 30 V / 1 A / 30 W |
| Degree of Protection | IP65 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 114 x 72 x 36 mm |

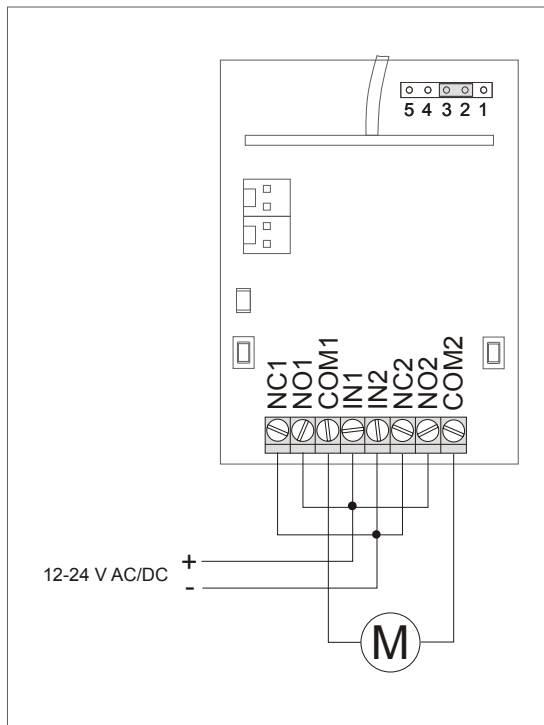
Scope of Delivery

- Mini Receiver
- Mounting Accessories
- Operating Manual

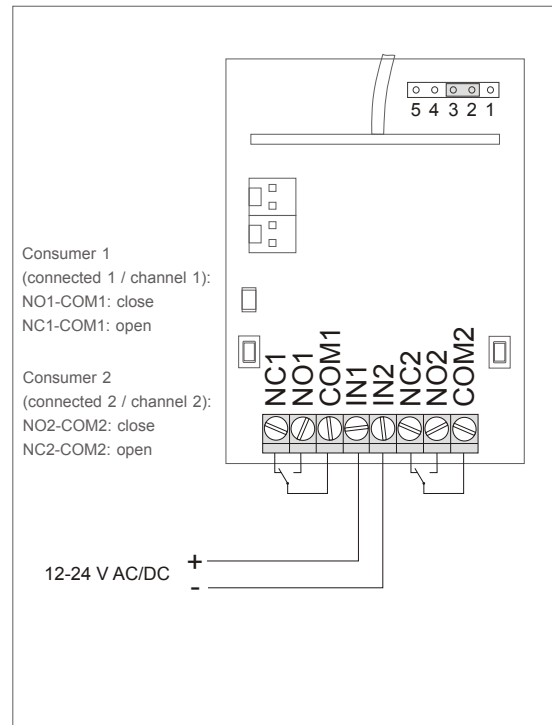
Models

| Product Key | Description | Frequency |
|----------------|---------------|------------|
| RCL04-5002E-01 | Mini Receiver | 868.30 MHz |

Connection Diagram



Operation Mode: Shutter/Awning mode



Operation Mode: Dead man's mode, Pulse (1 second, ON/OFF

Operating the Device

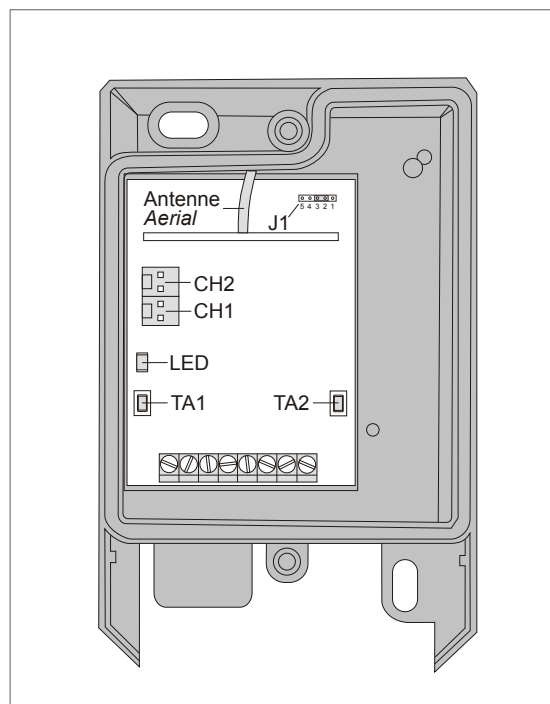
Two separate radio channels can switch two floating relay outputs. The following modes of operation can be chosen with the jumper J1:

Dead man's mode :
position 1-2:

Shutter-/Awning control:
position 2-3:

ON/OFF:
position 3-4:

Pulse (1 second):
position 4-5:





Transmit



Receive



Decode



Control

Plug-In Receiver RCP02 (Pulse)

The Plug-In Receiver RCP02 sends an impulse after it received a signal from an Easywave transmitter. This pulse is sent to an electric device e.g. a garage door opener.

Additionally there is a mains output which is not switched.

The RCP02 enables the conversion of every automatic garage door drive with a frequency of 27 MHz or rather 40 MHz to 868 MHz. After the conversion the automatic can be operated with both, the old and new frequency.

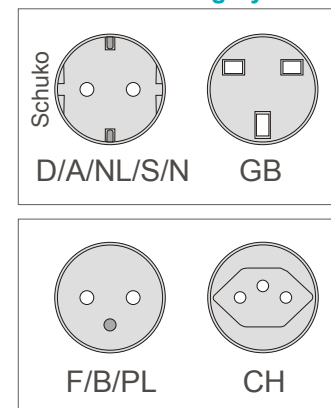


RCP02-5001E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | Pulse 1 second |
| Output | 1 floating relay contact region dependent plug-system |
| Max. Contact Duty | pulse output: 1 A / 24 V DC mains voltage (not switchable): 16 A / 230 V AC |
| Degree of Protection | IP20 |
| Operating Temperatur | -10 °C to +40 °C |
| Dimensions | 120 x 50 x 75 mm |

Plug Systems



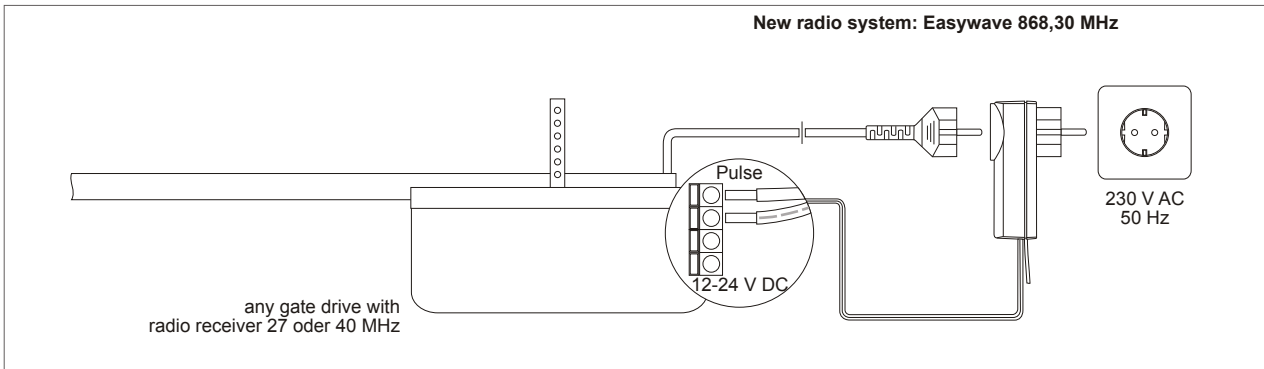
Scope of Delivery

- Plug-In Receiver (pulse output)
- Cable
- Operating Manual

Models

| Product Key | Description | Plug Systems | Frequency |
|----------------|---------------------------------|--------------|------------|
| RCP02-5001E-01 | Plug-In Receiver (pulse output) | D/A/NL/S/N | 868.30 MHz |
| RCP02-5001E-02 | Plug-In Receiver (pulse output) | GB | 868.30 MHz |
| RCP02-5001E-04 | Plug-In Receiver (pulse output) | F/B/PL | 868.30 MHz |
| RCP02-5001E-05 | Plug-In Receiver (pulse output) | CH | 868.30 MHz |

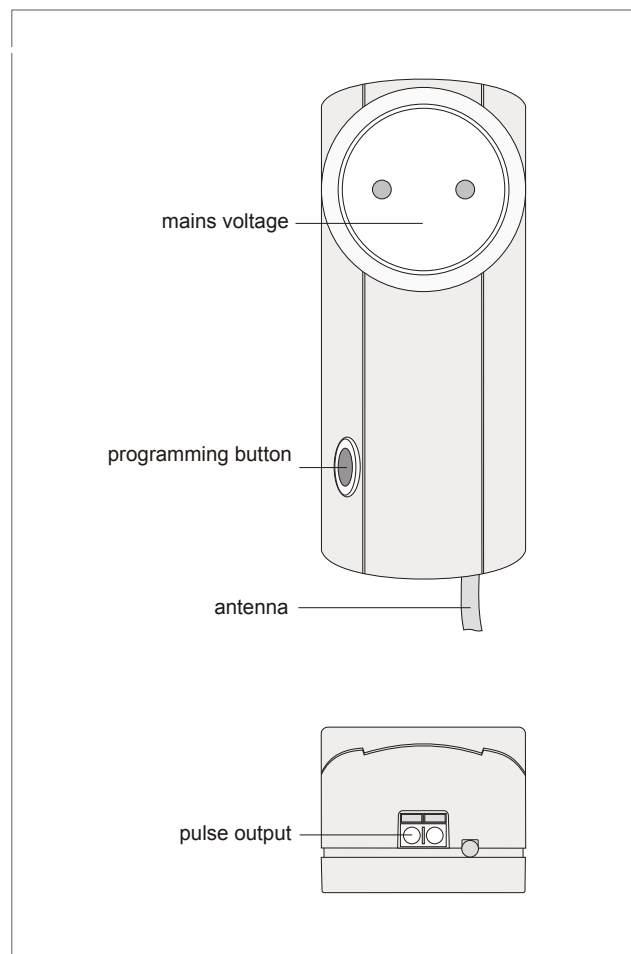
Connection Diagram



Operating the Device

Just insert Plug-In Receiver into the power socket, connect control line to the garage door and then learn in the hand transmitter.

The Plug-In Receiver RCP02 receives radio signals of memorized Easywave transmitters and sends an impulse (1 second) via the pulse output which can trigger an electric device (e.g. a garage door drive).





Transmit



Receive



Decode



Control

Plug-In Radio Bell RCP04

The Plug-In Radio Bell RCP04 receives transmission codes from programmed radio hand transmitters or wall transmitters. Once the transmission button is pressed, a ring tone will play and/or a light will begin to flash.

The mains output of the radio bell can be used as a wall outlet for any electric device.

The unit can be programmed with a total of 32 transmission codes. Each transmission code can be associated with its own ring tone and ring tone length. Three different melodies are available as ring tones. The ring tone length can be set of 7 seconds to one minute.

It can be selected five different combinations as gong volumes and as flashing lights.

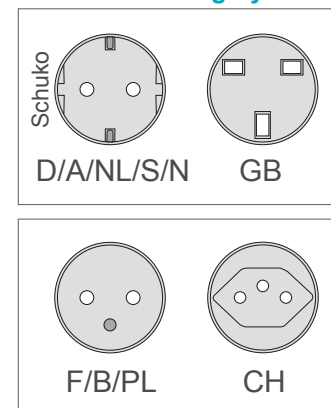


RCP04-5001E-01

Technical Details

| | |
|----------------------|---|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Output | mains output: load dependent plug-system |
| Max. Contact Duty | mains voltage (not switchable): 16 A / 230 V AC |
| Degree of Protection | IP20 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 120 x 50 x 75 mm |

Plug Systems



Scope of Delivery

- Plug-In Radio Bell
- Operating Manual

Models

| Product Key | Description | Plug System | Frequency |
|----------------|--------------------|-------------|------------|
| RCP04-5001E-01 | Plug-In Radio Bell | D/A/NL/S/N | 868.30 MHz |
| RCP04-5001E-02 | Plug-In Radio Bell | GB | 868.30 MHz |
| RCP04-5001E-04 | Plug-In Radio Bell | F/B/PL | 868.30 MHz |
| RCP04-5001E-05 | Plug-In Radio Bell | CH | 868.30 MHz |



Transmit



Receive



Decode



Control

Plug-In Receiver RCP05

With the Plug-In Receiver RCP05 electric devices (mains voltage) can be switched on and off.

Up to 32 different transmission codes can be memorized.

Besides the fact that it fits into every plug socket it also is very economical because it uses only 0,2 W an hour in stand-by mode.

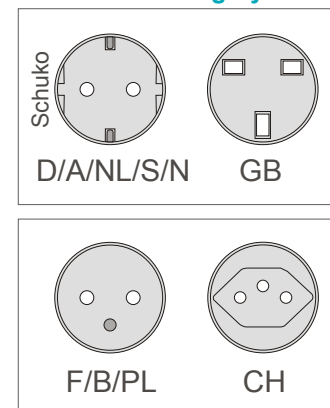


RCP05-5001E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | ON/OFF (2-button-control) ON/OFF (1-button-control) Timer (retrigger possible within 7 min.) |
| Output | 1 relay contact (grounded) |
| Max. Contact Duty | 16 A / 230 V AC |
| Degree of Protection | IP20 |
| Operating Temperatur | -10 °C to +40 °C |
| Dimensions | 120 x 50 x 75 mm |

Plug Systems



Scope of Delivery

- Plug-In Receiver
- Operating Manual

Models

| Product Key | Description | Plug Systems | Frequency |
|----------------|------------------|--------------|------------|
| RCP05-5001E-01 | Plug-In Receiver | D/A/NL/S/N | 868.30 MHz |
| RCP05-5001E-02 | Plug-In Receiver | GB | 868.30 MHz |
| RCP05-5001E-04 | Plug-In Receiver | F/B/PL | 868.30 MHz |
| RCP05-5001E-05 | Plug-In Receiver | CH | 868.30 MHz |



Transmit



Receive



Decode



Control

Radio Multiple Socket RCP03

The Radio Multiple Socket RCP03 is equipped with 5 plug sockets for 230 V AC.

The plug sockets 1 to 3 are radio controlled and can be operated by Easywave hand transmitters or with the buttons on the device.

The other two plug sockets are permanently connected to mains when the main switch is activated.

Using the radio plug sockets three different devices can be operated individually with any Easywave transmitter (Hand Transmitter, Radio Wall Switch, Radio Timer).

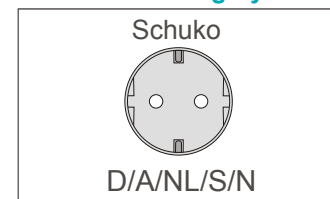


RCP03-5003E-02

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 3 |
| Power Supply | 230 V AC |
| Control | ON/OFF (2-button-control) |
| Output | mains output: 5x Schuko |
| Max. contact duty | mains voltage: 16 A / 230 V AC |
| Degree of Protection | IP20 |
| Operating Temperatur | -10 °C to +40 °C |
| Dimensions | 595 x 75 x 45 mm |

Plug Systems



Scope of Delivery

- Radio Multiple Socket
- Operating Manual

Models

| Product Key | Description | Plug Systems | Frequency |
|----------------|-----------------------|--------------|------------|
| RCP03-5003E-02 | Radio Multiple Socket | D/A/NL/S/N | 868.30 MHz |



Transmit



Receive



Decode



Control

Universal-Receiver RCU08 (IP66)

With the Universal Receiver RCU08 either two lamps or a motor for shutters/awnings or garagedoors can be operated.

The receiver is protected against water-splashes and can therefore be used outdoors. 32 Transmission codes can be memorized. It is possible to allocate an individual operation mode as well as timer functions to each transmitter.

Additionally the receiver can be controlled by an external button.



RCU08-5002E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Cannels | 3 |
| Power Supply | 230 V AC |
| Control | OPEN/STOP/CLOSE (2-button-control) OPEN/STOP/CLOSE (4-button-control) ON/OFF (1-button-control) ON/OFF (2-button-control) ON or OFF (1-button-control) Pulse (1-button-control) Dead man's mode (1-button-control) |
| Output | 2 separate relay contacts (1x normally open, 1x two way contact) |
| Max. contact duty | see Table of Loads |
| Degree of Protection | IP66 |
| Operating Temperatur | -20 °C to +60 °C |
| Dimensions | 180 x 94 x 66 mm |

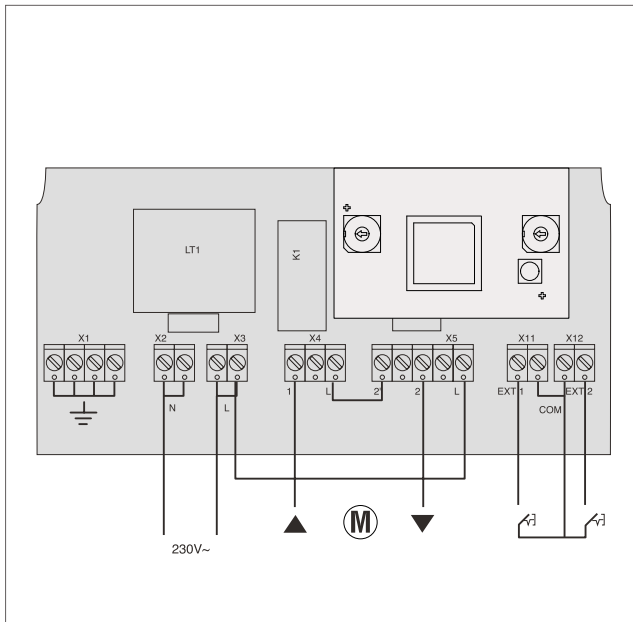
Scope of Delivery

- Universal-Receiver
- PG-Screw Fittings Set
- Operating Manual

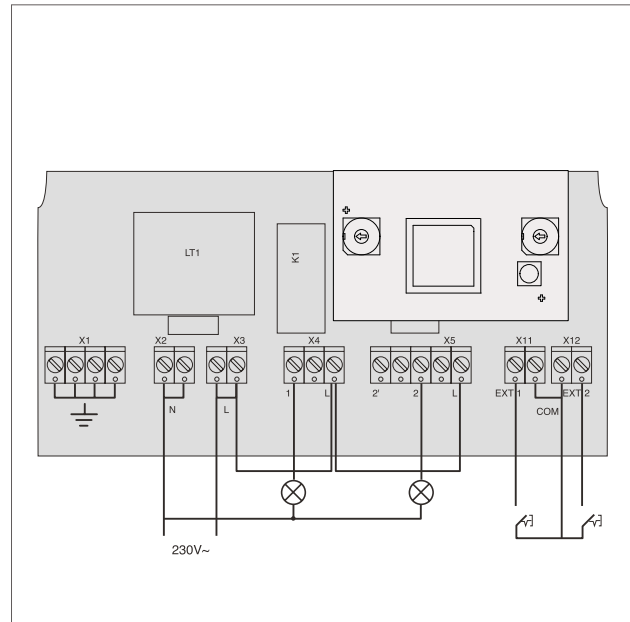
Models

| Product Key | Description | Frequency |
|----------------|--------------------|------------|
| RCU08-5002E-01 | Universal-Receiver | 868,30 MHz |

Connection Diagram



motor wiring diagram



light wiring diagram

Table of Loads

| type of load | max. load |
|---|-------------------|
| motors 230 V, 50 Hz | 4,0 A / 920 VA |
| resistive load: lamps, 230 V halogen lamps etc. | 10,0 A / 2.300 VA |
| inductive load: halogen lamps with wound transformers (min. load of transformer 85%) | 2,6 A / 600 VA |
| non- or serial-compensated fluorescent tubes with ferromagnetic ballasts | 10,0 A / 2.300 VA |
| parallel-compensated fluorescent tubes with ferromagnetic ballasts | 2,6 A / 600 VA |
| capacity EVG: electronic cut-in units, electronic transformer etc. | 4,0 A / 920 VA |



Transmit



Receive



Decode



Control

Built-In Receiver RCU09 (Remote Motor Control)

The Built-In Receiver RCU09 is designed for driving shutters up and down. It can be operated with a Hand Transmitter or Radio Wall Sensor (2-button-control) and turns off automatically after 90 seconds.

This device can be fitted to lamps and intermediate ceilings as well as to raised floors.



RCU09-5002E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | ON/OFF (2-button-control, stop with reverse) Dead man's mode (max. 36 seconds) |
| Output | 2 relay contacts (normally open) |
| Max. Contact Duty | see Table of Loads for high loads use auxilliary contactor |
| Degree of Protection | IP20 |
| Operating Temperatur | -10 °C to +40 °C |
| Dimensions | 210 x 45 x 32 mm |

Scope of Delivery

- Built-In Receiver (remote motor control)
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|--|------------|
| RCU09-5002E-01 | Built-In Receiver (Remote Motor Control) | 868.30 MHz |

Connection Diagram

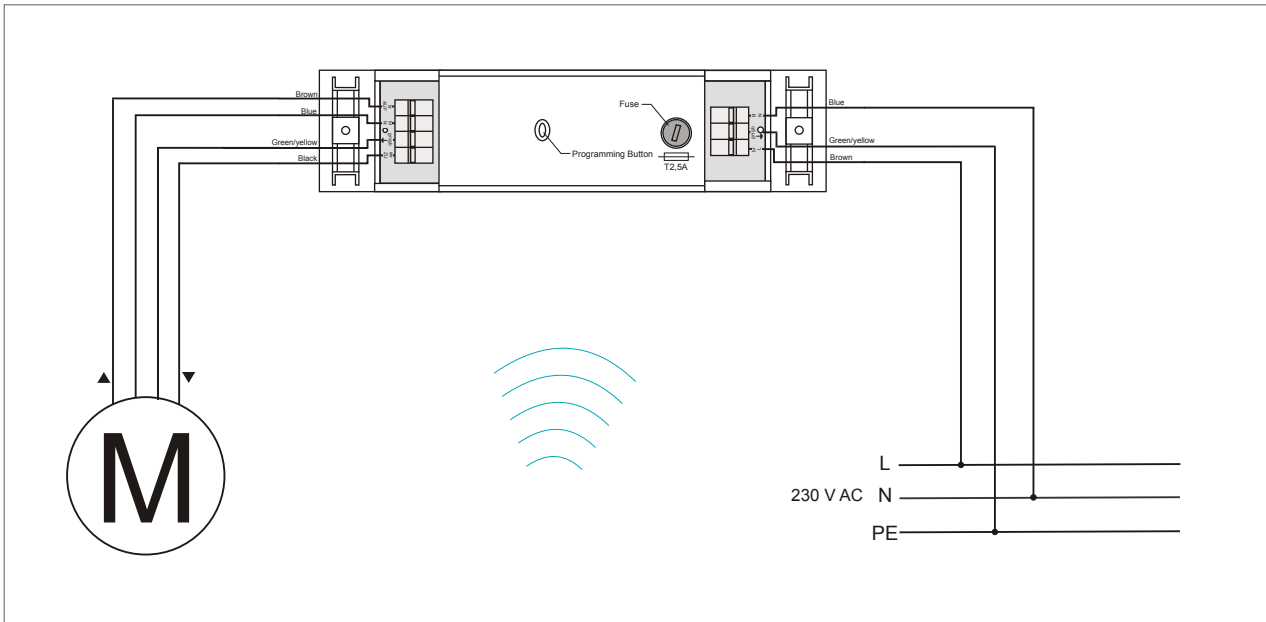


Table of Loads

| type of load | max. load |
|-----------------------------------|----------------|
| resistive load $\cos\phi = 1.0$: | 1.0 A / 230 VA |
| inductive load $\cos\phi = 0.8$: | 0.8 A / 184 VA |



Transmit



Receive



Decode



Control

Built-In Receiver RCU10

The Built-In Receiver RCU10 can be used for switching line voltage consumers on/off and has a timer function.

It can be operated with the Hand Transmitter or a Wall Sensor.

This device can be fitted to lamps and intermediate ceilings as well as to raised floors.



RCU10-5001E-01

Technical Details

| | |
|----------------------|--|
| Coding | not necessary, unit "learns" transmission code up to 32 transmission codes can be memorized |
| Channels | 1 |
| Power Supply | 230 V AC |
| Control | ON/OFF (2-button-control) ON/OFF (1-button-control) Timer (retrigger possible within 7 min.) |
| Output | 1 relay contact (normally open) |
| Max. Contact Duty | see Table of Loads |
| Degree of Protection | IP20 |
| Operating Temperatur | -10 °C to +40 °C |
| Dimensions | 210 x 45 x 32 mm |

Scope of Delivery

- Built-In Receiver
- Operating Manual

Models

| Product Key | Description | Frequency |
|----------------|-------------------|------------|
| RCU10-5002E-01 | Built-In Receiver | 868.30 MHz |

Connection Diagram

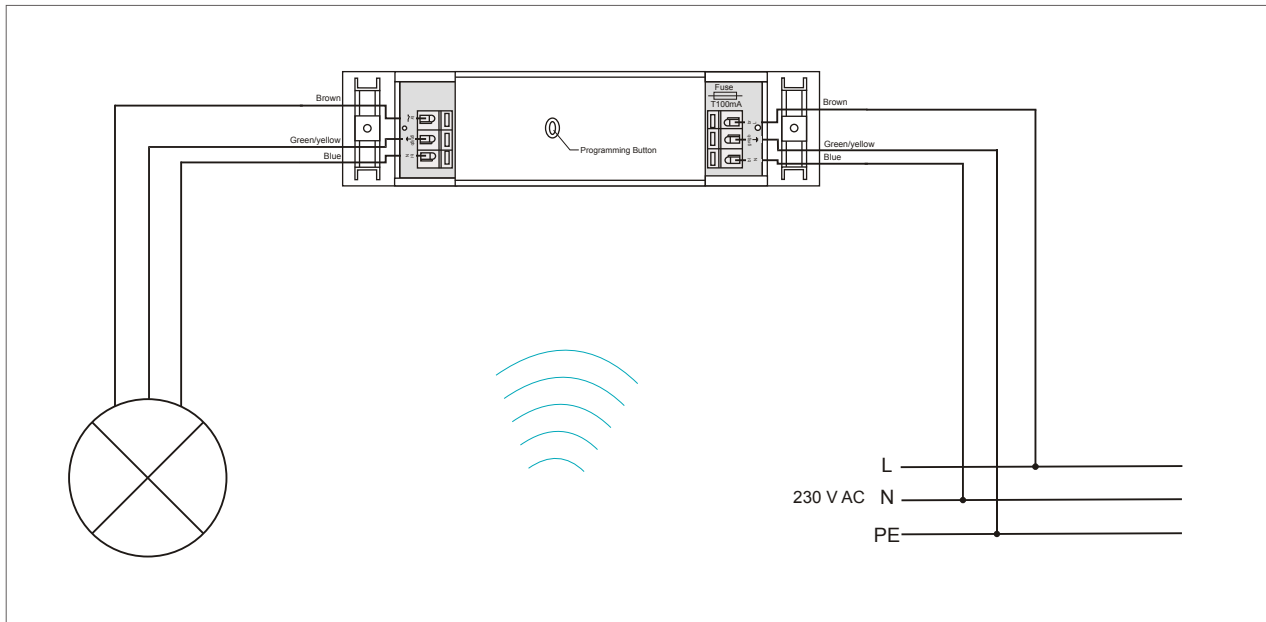


Table of Loads

| type of load | max. load |
|--------------------------------------|-------------------|
| resistive load $\cos\varphi = 1.0$: | 16.0 A / 3,680 VA |
| inductive load $\cos\varphi = 0.8$: | 6.4 A / 1,472 VA |



Transmit



Receive



Decode



Control

Frequency Detector RFD01

The Frequency Detector RFD01 shows occurrences of disturbing signals within its respective frequency band.

The detector identifies amplitude modulated (AM, ASK, OOK) as well as frequency modulated (FM, FSK) signals.

The LED display allows qualitative as well as quantitative evaluation of the received signal.



RFD01-03

Technical Details

| | |
|-----------------------|---|
| Modulation | identifies amplitude modulated (AM, ASK, OOK) and frequency modulated (FM, FSK) signals |
| Power Supply | 1x 9-V-battery |
| Bandwidth | ± 300/150 kHz |
| Sensitivity | -106 dBm (1,2 µV) |
| Operating Temperature | -20 °C to +60 °C |
| Dimensions | 65 x 110 x 25 mm |

Scope of Delivery

- Frequency detector incl. battery
- Operating manual

Models

| Product Key | Description | Frequency |
|-------------|---|--------------------------|
| by request | Frequency detector | 315 MHz |
| RFD01-03 | Frequency detector switchable between frequencies | 433,92 MHz or 868,30 MHz |



Senden



Empfangen



Auswerten



Steuern

Transmitter Module RTM08

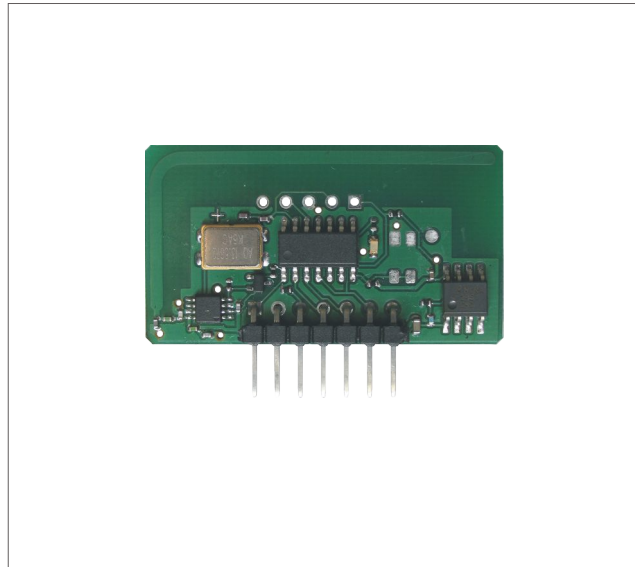


The Transmitter Module RTM08 is a device designed for transmitting a maximum of 16 different digital states. It is permanently under voltage.

The integrated micro controller carries out all necessary important functions for the transmission process. The maximal transmission time is 36 seconds.

The module can be used together with AB-coded receivers.

In case PIN 3 receives a high a radiogram according to the coding at PIN 4-7 is transmitted.

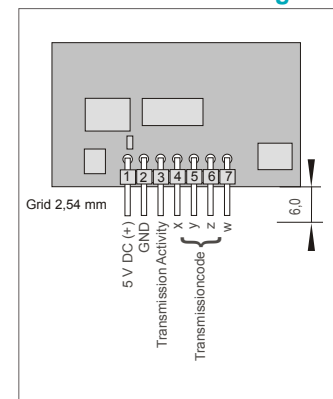


RTM08-5001E-01

Technical Details

| | |
|-----------------------|---|
| Coding | factory coding with Easywave Telegram |
| Channels | 8 |
| Range | up to 150 m under favourable open field conditions |
| Power Supply | 5 V DC |
| Current Consumption | standby: approx. 1.5 mA, transmission: approx. 13 mA |
| Operating Temperature | -20 °C to +85 °C |
| Dimensions | 40 x 22 x 5.8 mm |

Connection Diagram



Transmission Code

| Group | Transmission-code | X | Y | Z | W |
|-------|-------------------|---|---|---|---|
| 1 | A | 0 | 0 | 0 | 0 |
| | B | 0 | 0 | 0 | 1 |
| 2 | A | 0 | 0 | 1 | 0 |
| | B | 0 | 0 | 1 | 1 |
| 3 | A | 0 | 1 | 0 | 0 |
| | B | 0 | 1 | 0 | 1 |
| 4 | A | 0 | 1 | 1 | 0 |
| | B | 0 | 1 | 1 | 1 |
| 5 | A | 1 | 0 | 0 | 0 |
| | B | 1 | 0 | 0 | 1 |
| 6 | A | 1 | 0 | 1 | 0 |
| | B | 1 | 0 | 1 | 1 |
| 7 | A | 1 | 1 | 0 | 0 |
| | B | 1 | 1 | 0 | 1 |
| 8 | A | 1 | 1 | 1 | 0 |
| | B | 1 | 1 | 1 | 1 |

Scope of Delivery

- Transmitter Module
- Operating Manual

Models

| Product key | Description | Frequency |
|----------------|--------------------|------------|
| RTM08-5008E-01 | Transmitter Module | 868,30 MHz |



Transmit



Receive



Decode



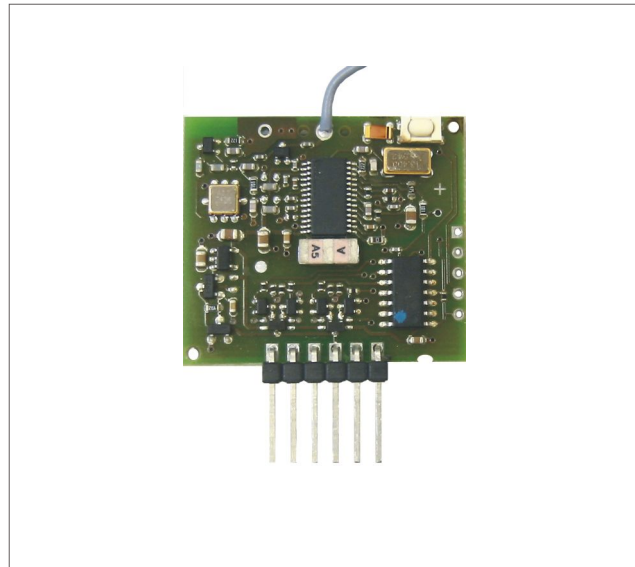
Control

Open-Collector-Receiver RCDM14

The Open-Collector-Receiver RCDM14 allows upgrading existing controls or devices by a radio system.

Connected devices can be switched according to the chosen mode of operation. The switched outputs OC1, OC2, OC3 and OC4 are allocated to the codes of the buttons A, B, C and D.

32 Transmission codes can be learned into the control. Power failure does not effect the memorized transmission codes.

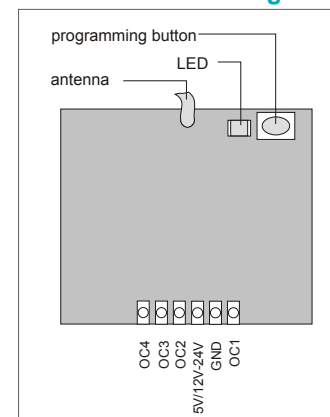


RCDM14-5004E-01

Technical Details

| | |
|-----------------------|--|
| Coding | not necessary, unit "learns" transmission code |
| Power Supply | 12-24 V DC or 5 V DC |
| Current Consumption | 13 mA at 12 V, 10 mA at 5 V plus ext. consumers |
| Output | 4x Open Collector |
| Max. Contact Duty | 30 mA at 24 V |
| Control | ON/OFF (2-button-control) ON/OFF + Dead man's mode (1-button-control) Dead man's mode (1-button-control) |
| Operating Temperature | -20 °C to +60 °C |
| Dimensions | 43 x 35 x 5 mm |

Connection Diagram



Scope of Delivery

- Open-Collector-Receiver
- Operating Manual

Models

| Product Key | Description | Frequency |
|-----------------|---------------------------------------|------------|
| RCDM14-5004E-01 | Open-Collector-Receiver 12 V- 24 V DC | 868,30 MHz |
| RCDM14-5004E-02 | Open-Collector-Receiver 5 V DC | 868,30 MHz |



Transmit



Receive



Decode



Control

Transceiver Module RTRM08 Easywave

The Transceiver Module RTRM08 sends and receives Easywave telegrams at 868.3 MHz with FSK modulation.

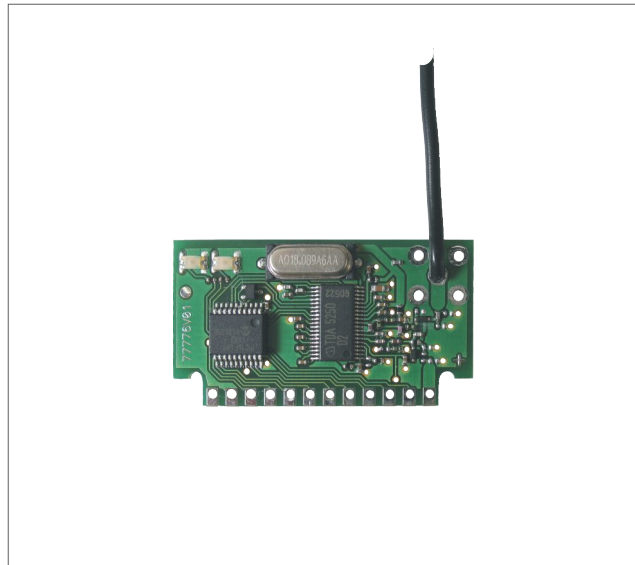
The standard model comes with whip antenna. Other options like coaxial antenna connectors are available on request.

Up to 32 Easywave transmitters can be taught in the RTRM08 Easywave module. Additionally the RTRM08 stores 16-bit user data associated with each Easywave transmitter. The storage is persistent (EEPROM).

The separate request output allows to work without any polling.

The device has a power down state with low current consumption when being inactive. LEDs indicate transmission and reception operation (optional).

For further information please visit our internet site at: www.eldat.de

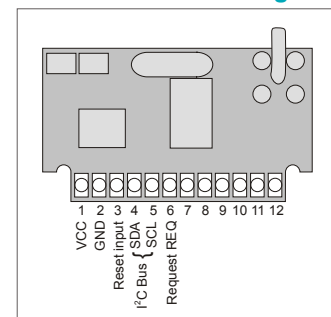


RTRM08-5001E-01

Technical Details

| | |
|-----------------------|--|
| Coding | factory coding with Easywave Telegram up to 32 transmitter codes can be memorized |
| Channels | 32 (receive) / 32 (transmit) |
| Power Supply | 2.1 - 5.25 V |
| Current Consumption | standby: approx. 3.4 mA, transmission: approx. 17.3 mA |
| Bus-interface | I ² C-Bus (100 kHz clock rate, fixed address, slave) |
| Operating Temperature | -20 °C bis +70 °C |
| Dimensions | 39 x 21.76 x 3.5 mm, Grid 2.54 mm |
| Antenna length | 96 mm |

Connection Diagram



RTRM08

Scope of Delivery

- Transceiver Module
- Operating Manual

Models

| Product Key | Description | Frequency |
|-----------------|--------------------|------------|
| RTRM08-5001E-01 | Transceiver Module | 868,30 MHz |



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