

LOW CURRENT RECEIVER

Use and Installation Manual



Made in Italy

Part # 030205

Thank you for choosing this product .
Please read this manual carefully before installing this product.

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1- PRODUCT SPECIFICATIONS

1A - Introduction

The low current receiver item 030205 is a 2 relay output receiver, operating at 433,92 Mhz in AM/ASK modulation.

It is designed for automatic closing systems and anti-burglar systems with a very low rest current consumption.

The operating frequency is among the European harmonised frequencies; The antenna is connected with a F- type connector.

The relay outputs are only with NO contact with the common contact shorted to Ground.

The operating mode of K1 is Pulse and of K2 can be Pulse or Latch. The power supply is 12 Vdc.

The IP grade of 2X allows only indoor installations.

The product fully complies with the EMC European Regulations (CE) and the FCC Part 15 Regulations.

1B - Usable Transmitters

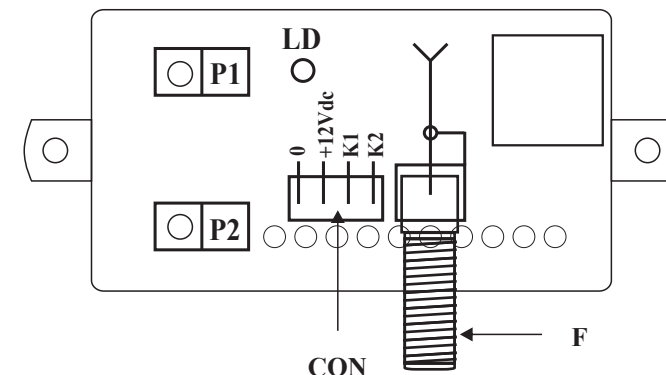
- 2 button transmitter - Part # 030210
- 4 button transmitter - Part # 030212

1C - Technical specifications

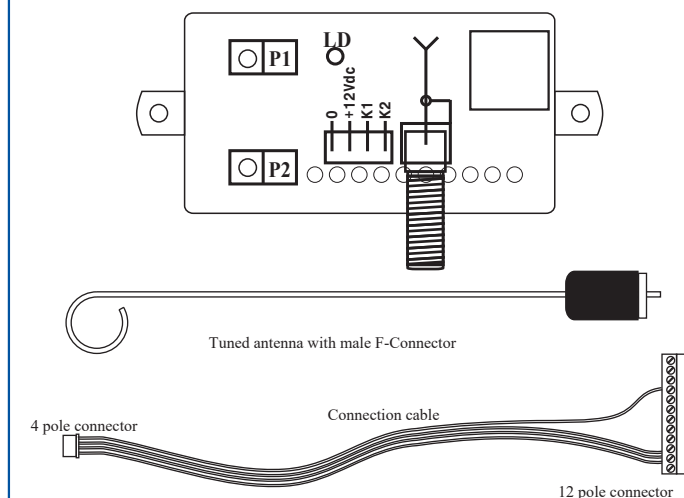
| | |
|--------------------------------|----------------------|
| Receiver type: | Superheterodyne. |
| Demodulation: | AM/ASK. |
| Operating frequency: | 433,92 MHz. |
| Local oscillator frequency: | 6,6128 MHz. |
| Intermediate frequency: | 10,7 MHz. |
| Sensitivity (for good signal): | -115 dBm. |
| Input impedance: | 75 Ohm. |
| Supply voltage: | 12 dc (± 10%). |
| Current absorbtion: | |
| at rest: | 1.5 mA |
| with 1 relay excited: | 7 mA |
| Number of relays: | 2 (1NO, 1NO). |
| Relay operating mode | Pulse / Latch |
| Commutable max power: | 24W or 24VA . |
| Memory capacity (tx keys): | 42. |
| Operating temperature: | -4 ÷ +158 °F |
| Dimensions: | 4.13 x 1.77 x 1.1 in |
| Weight: | 2.29 oz |
| IP Protection grade: | 2X |

1D - Receiver overview

| | | | |
|------|----------------|-------|------------------|
| P1 : | P1 Button | LD : | Green Led |
| P2 : | P2 Button | CON : | I/O Connector |
| K1: | Relay 1 Output | F: | F-Type connector |
| K2: | Relay 2 Output | | |



1E - Wiring diagram



| Signal | 4 pole connector | Wire color | 12 pole connector |
|---------------------|------------------|------------|-------------------|
| GND / Relays Common | 1 | BLACK | 2 |
| +12 vdc | 2 | RED | 1 |
| K1 NO Contact | 3 | GREEN | 3 |
| K2 NO contact | 4 | ORANGE | 9 |

1F - Main features

- Very low rest current consumption
- 42 storable transmitter keys
- Single transmitter key or Full memory erasure
- Programmable operation mode of the 2 relays: momentary, latching
- Easy transmitter programming

2- PROGRAMMING TRANSMITTER AND RECEIVER

The Transmitter and Receiver provided operate at 433 MHz. Receiver can store up to 22 unique transmitter codes.

Transmitter Setup:

(It is recommended that the dipswitches be changed from the default setting)

1. Open the battery compartment door and locate the dipswitches.
2. Change the dipswitches to the settings you prefer. Record for future reference.

Transmitter Left Button to Receiver Programming:

(standard Open/Stop/Close function)

1. Press and hold the left transmitter button down. Red light on transmitter should be on.
2. On the receiver, push the P1 push-button until the green LD light comes on.
3. Release both buttons. Transmitter left button to receiver programming is complete.

Transmitter Right Button to Receiver Programming:

(Hold-Gate-Open) (Only if auto close timer is enabled)

The 2-channel receiver allows for programming the P2 relay from momentary mode (default) to latching mode. Transmitter right button can then be programmed to hold the gate open, over-riding the auto-close feature, if activated.

1. Press and hold the right transmitter button down. Red light on transmitter should be on.
2. On the receiver, push the P2 push-button until the green LD light comes on.
3. Release both buttons.
4. Transmitter right button to receiver programming is complete.
5. Now you must set receiver P2 to latch mode in steps below.

Receiver Programming:

Relay P2 programming from momentary to latching mode (to hold gate open)

1. On the receiver, push the P2 push-button until the green LD light comes on, then release. Green LD light should be steady.
2. While the green LD light is on, push the P1 push-button down and release. Green LD light should be flashing. Latch mode is set.

Verifying Receiver P2 relay is programmed to latching mode:

1. On the receiver, push the P2 push-button until the green LD light comes on, then release.
2. Green LD light should be flashing. If the green LD light is steady, redo the Receiver Programming section above.

Resetting receiver P2 relay to momentary mode:

1. On the receiver, push the P2 push-button until the green LD light comes on, then release. Green LD light should be flashing.
2. While the green LD light is on, push the P1 push-button down and release. Green LD light should be solid. Momentary mode is set.

Erasing Single Transmitter from Receiver Memory:

The dipswitch settings of the transmitter to delete must be known. If known follow the steps below.

1. Set the dipswitches in a transmitter to match the switch settings of the transmitter code to delete.
2. Press and hold the left transmitter button.
3. On the receiver push the P1 push-button until the green LD light comes on. Then release both.
4. Press and hold the right transmitter button.
5. On the receiver push the P2 push-button until the green LD light comes on. Then release both.
6. Transmitter is now erased from receiver memory.

Erasing all Transmitters from Receiver Memory:

1. Press the P2 button on the receiver until the green LD light comes on. Then release P2 button.
2. While LD light is on press the P1 and P2 buttons simultaneously and hold until the green LD light begins to blink slowly.
3. It should blink 4 times then all transmitter codes are erased.

3 - TRANSMITTER NUMBER DISPLAY

It is possible to display how many transmitter keys are stored in the memory. The number is displayed, in binary notation (0 or 1), by a sequence of led flashes.

A short flash (½ second) of LD gives a binary “0”.

A long flash (1 second) of LD gives a binary “1”.

The complete sequence is composed by 6 flashes and by a final longer flash (2 seconds).

According to its position, each flash has a different “weight”.

| | |
|----------------|------------|
| First flash : | $2^0 = 1$ |
| Second flash : | $2^1 = 2$ |
| Third flash : | $2^2 = 4$ |
| Fourth flash : | $2^3 = 8$ |
| Fifth flash : | $2^4 = 16$ |
| Sixth flash : | $2^5 = 32$ |

Procedure

1) Keep P1 or P2 pressed down until LD switches on.
2) Release the button and then push P2 for a while before LD switches off. At this point begins the sequence of flashes.
Take a note of the sequence to calculate the corresponding decimal number, as shown in the following examples.

Es. N° 1 : Memory empty

| | | | | | | | |
|----------------|-----------------|---|---|---|----|----|--------------|
| Weights | 1 | 2 | 4 | 8 | 16 | 32 | End Sequence |
| Sequence : | — | — | — | — | — | — | — |
| Final number : | $0+0+0+0+0+0=0$ | | | | | | |

Es. N° 2 : 5 transmitter keys

| | | | | | | | |
|----------------|-----------------|---|---|---|----|----|--------------|
| Weights | 1 | 2 | 4 | 8 | 16 | 32 | End Sequence |
| Sequence : | — | — | — | — | — | — | — |
| Final number : | $1+0+4+0+0+0=5$ | | | | | | |

Es. N° 3 : 12 transmitter keys

| | | | | | | | |
|----------------|------------------|---|---|---|----|----|--------------|
| Weights | 1 | 2 | 4 | 8 | 16 | 32 | End Sequence |
| Sequence : | — | — | — | — | — | — | — |
| Final number : | $0+0+4+8+0+0=12$ | | | | | | |

WARRANTY

USAutomatic, LLC warrants this product to be free of defects in materials and workmanship for 1 YEAR. For a period of 1 YEAR following purchase USAutomatic, LLC. will repair or replace the product free of charge, including parts, shop labor and return to customer shipping and handling.

This 1 YEAR warranty does not cover the plastic case from normal wear or damage due to misuse.

To have the product sent for warranty consideration, it must be returned with the proof of purchase and a return authorization number. To obtain a return authorization number please call 1-888-204-0174 for assistance. The return authorization number must be clearly marked on the outside of the return package or it may not be accepted.



IS-RLCU/AUK, Rev. 1 del 01/2018

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