

# 12/24V BASIC RECEIVER



Made in Italy

PN # 030207

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

## SUMMARY

### 1- PRODUCT SPECIFICATIONS

#### 1A - Introduction

#### 1B - Usable transmitters

#### 1C - Technical specifications

#### 1D - Receiver overview

#### 1E - Wiring diagram

#### 1F - Main features

#### 1G - Power selection

#### 1H - K2 Output type selection

### 2- PROGRAMMING TRANSMITTER AND RECEIVER

#### Transmitter Setup

Transmitter Left Button to receiver programming

Transmitter Right Button to receiver programming

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

Verifying Receiver P2 relay is in latching mode

Resetting Receiver P2 relay to momentary mode

Erasing single Transmitter from Receiver Memory

Erasing all Transmitters from receiver Memory

### 3- TRANSMITTER NUMBER DISPLAY

## 1- PRODUCT SPECIFICATIONS

### 1A - Introduction

The 12/24V basic receiver 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.

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

The relay outputs are 2 : P1 and P2

P1 with relay contacts C and N/O

P2 with relay contacts C and N/C or N/O according to the selection of J2 ( see par. 1H).

The operating mode of P1 is Pulse and of P2 can be Pulse or Latch.

The power supply is 12 or 24 Vdc or Vac ( see par. 1F).

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 - Item : 030210
- 4 button transmitter - Item: 030212

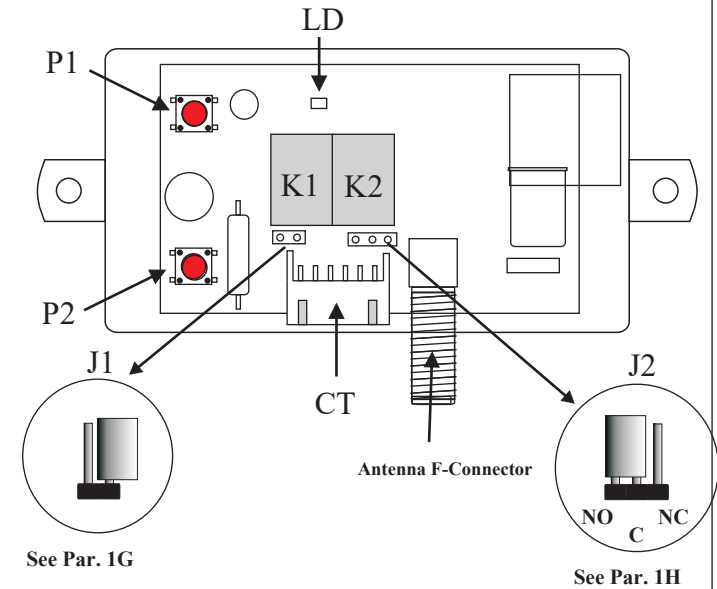
### 1C - Technical specifications

Receiver type:	Superheterodyne.
Demodulation: Operating frequency:	AM/ASK. 433,92 MHz.
frequency: Local oscillator frequency:	6,6128 MHz.
frequency: Sensitivity (for good signal):	10,7 MHz.
Input impedance:	-115 dBm.
Supply voltage :	75 Ohm.
Current absorbtion:	12 / 24 Vdc (± 10%).
at rest:	11 mA
with 1 relay excited:	30 mA
Number of relays:	2 (1NO, 1NO/NC).
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

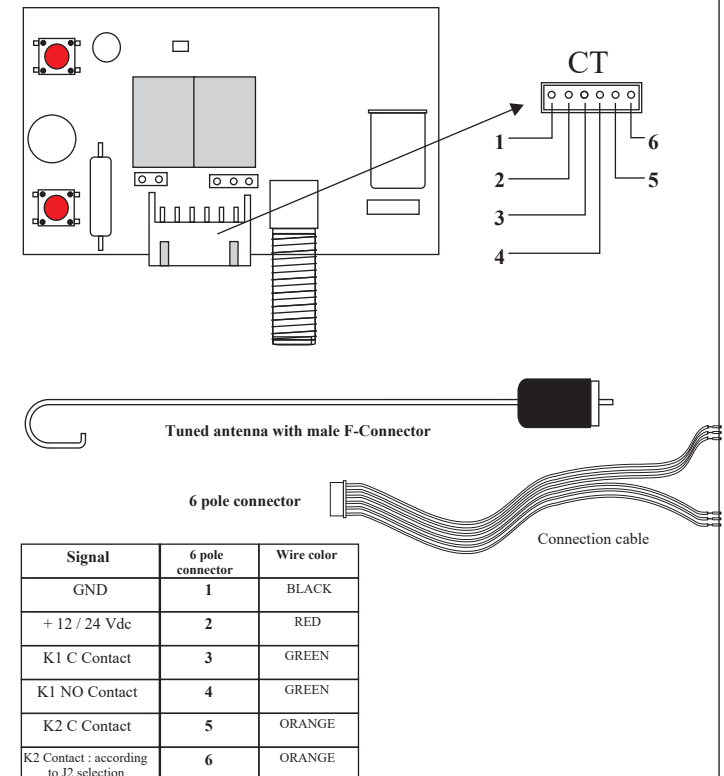
### 1D - Receiver overview

#### LEGEND :

P1 : Push button P1	J2 : K2 output type Jumper
P2 : Push button P2	K1 : Relay K1
LD : LED Red	K2 : Relay K2
J1 : Power selection Jumper	F : F-type antenna connector



### 1E - Wiring diagram



## 1F - Main features

- 42 storable transmitter keys
- Single transmitter key or Full memory erasure
- Programmable operation mode of the P2: momentary or latching
- Easy transmitter memorization

## 1G - Power selection



JUMPER J1 = CLOSED  
Supply = 12 Vdc / Vac



JUMPER J1= OPEN  
Supply = 24 Vdc / Vac

## 1H - P2 Output type selection



JUMPER J2 = POSITION A  
P2 outputs = C, NO



JUMPER J2 = POSITION B  
P2 outputs = C, NC

## 2- PROGRAMMING TRANSMITTER AND RECEIVER

The Transmitter and Receiver provided operate at 433 MHz.  
Receiver can store up to 42 unique transmitter codes.

### Transmitter Setup:

(It is recommended that the dip-switches be changed from the default setting)

1. Open the battery compartment door and locate the dip-switches.
2. Change the dip-switches to the settings you prefer.
3. 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 red LD light comes on.
3. Release both buttons.
4. 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 red LD light comes on.
3. Release both buttons.
4. Transmitter right button to receiver programming is complete.

### 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 red LD light comes on, then release.
2. Red LD light should be steady.
3. While the red LD light is on, push the P1 push-button down and release.
4. Red LD light should be flashing. Latching mode is set.

### Verifying Receiver P2 relay is programmed to latching mode:

1. On the receiver, push the P2 push-button until the red LD light comes on, then release.
2. Red LD light should be flashing. If the red 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 red LD light comes on, then release.
2. Red LD light should be flashing.
3. While flashing press the P1 button once and release.
4. Momentary mode is set.

### Erasing Single Transmitter from Receiver Memory:

The dip-switch settings of the transmitter to delete must be known. If known follow the steps below.

1. Set the dip-switches 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 red 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 red 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 red LD light comes on. Then release P2 button.
2. While red LD light is on press the P1 and P2 buttons simultaneously and hold until the red LD light begins to blink slowly. 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

USAAutomatic, LLC warrants this product to be free of defects in materials and workmanship for 1 YEAR. For a period of 1 YEAR following purchase USAAutomatic, 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.

[www.USAAutomaticGateOpeners.com](http://www.USAAutomaticGateOpeners.com)

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