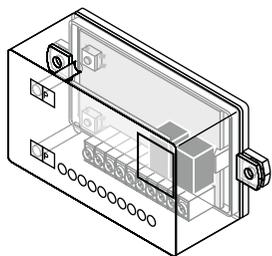


12/24V BASIC RECEIVER

INSTALLATION
MANUAL



Made in
Italy

030207

Thank you for choosing this product .
You are recommended to read this manual carefully before
installing this product.

SUMMARY

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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 harmonised frequencies;
The antenna is connected with a F- type connector.
The relay outputs are 2 : K1 with contacts C-NO and K2 with contacts C and NC or NO according to the selection of J2 (see par. 1H).
The operating mode of K1 is Pulse and of K2 can be Pulse or Latch.
The power supply is 12 or 24 Vdc (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

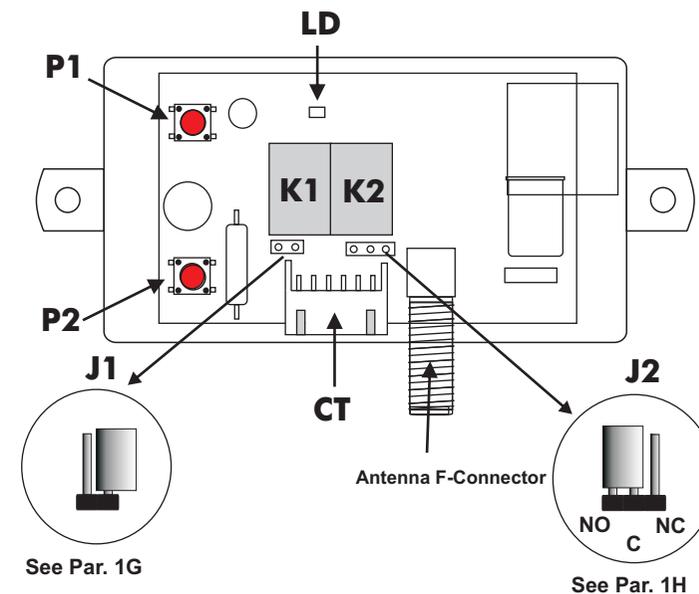
1C - Technical specifications

Receiver type:	Superheterodyne.
Demodulation:	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 / 24 Vdc (± 10%).
Current absorption:	
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 :

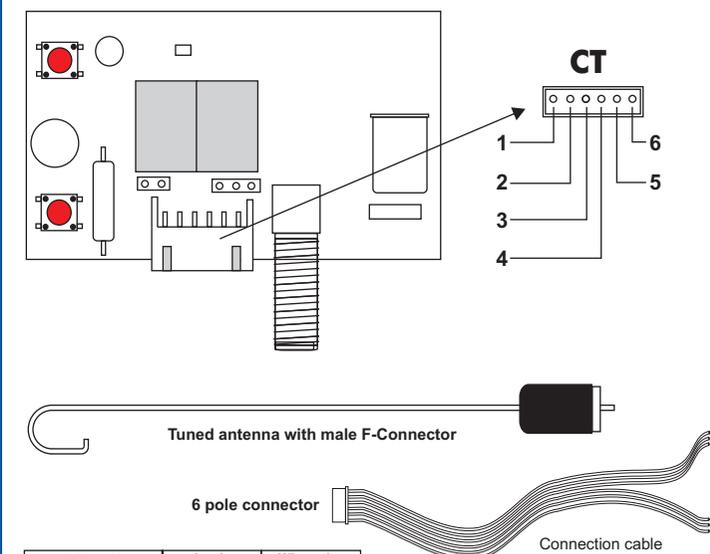
P1 : Push button P1	J2 : K2 output type Jumper
P2 : Push button P2	K1 : Relay K1
LD : LED GREEN	K2 : Relay K2
J1 : Power selection Jumper	F : F-type antenna connector



See Par. 1G

See Par. 1H

1E - Wiring diagram



Signal	6 pole connector	Wire color
GND	1	BLACK
+ 12 / 24 Vdc	2	RED
K1 C Contact	3	GREEN
K1 NO Contact	4	GREEN
K2 C Contact	5	ORANGE
K2 Contact : according to J2 selection	6	ORANGE

1F - Main features

- 42 storable transmitter keys
- Single transmitter key or Full memory erasure
- Programmable operation mode of the K2: pulsing, latching
- Easy transmitter memorization

1G - Power selection



JUMPER J1 = CLOSED
Supply = 12 Vdc



JUMPER J1 = OPEN
Supply = 24 Vdc

1H - K2 Output type selection



JUMPER J2 = POSITION A
K2 outputs = C, NO



JUMPER J2 = POSITION B
K2 outputs = C, NC

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. 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 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. Latching 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.

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. 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 (1/2 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	=	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

GUARANTEE

The guarantee period of all products is 12 months, beginning from the manufacturer date. During this period, if the product does not work correctly, due to a defective component, the product will be repaired or substituted at the discretion of the producer. The guarantee does not cover the plastic container integrity. After-sale service is supplied at the producer's factory.



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