RX2 AP

RADIO RECEIVER 2 EXITS

USE AND INSTALLATION GUIDE

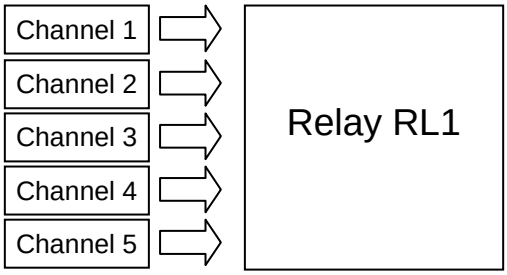
(VERSION 3.0)

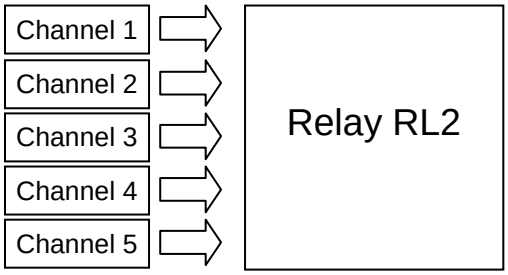
Warning

THE INSTALLER HAS TO FOLLOW REGULATIONS. POSSIBLE INTERVENTIONS CARRIED OUT BY NOT AUTHORIZED STAFF CAN DAMAGE THE DEVICE.
THE PRODUCER IS NOT RESPONSIBLE IN CASE OF IMPROPER USE OR WRONG INSTALLATION. DON'T INSTALL THE RECEIVER IN DUMP PLACES OR EXPOSED AT EXTREME TEMPERATURES OR INCLEMENCY OF THE WEATHER.
THE SURFACE OF THE WALL HAS TO BE SMOOTH FOR A SOLID CLAMP. FOR MORE SAFETY, SET THE RECEIVER IN A PLACE PROTECTED BY AN ALARM DETECTOR.

The receiver RX2AP correctly works ONLY with new devices with suffix 100 (ex. CTSR-100 / DIRRV-100 / TXS-100 etc.)

RX2 AP is an autolearning receiveing device, with 10 channels and 2 outputs with independent relays. It's possible to connect to each output up to 5 radio detectors and/or radiocontrols.
Each output has a dry-contact relay, which can be used for different needs. It has a plastic container and an integrated antenna; it allows a simple interface between wired alarm panels and radiocontrols.





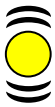
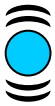
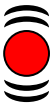
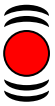
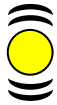
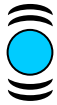
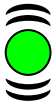
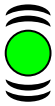
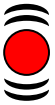
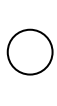
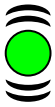
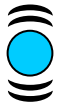
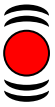
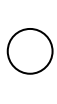
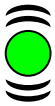
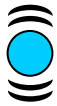
CE

This electric item is in accordance with all necessary qualifications of EU (European Union) rules concerning electromagnetic compatibility and electric safety.

1. TOTAL ERASE

Before using the receiver, it's better to erase totally the memory.
In order to do it, please press and hold button **K1** during power supplying of the receiver. After 5 seconds the receiver will "beep" quickly 3 times and one time longer. Then release the button. The total erase has been done.
Before this operation, please disconnect the power supply of the receiver, wait for a minute and then go on as described.

2. RADIO CODES LEARNING

		YELLOW DL2	GREEN DL4	BLUE DL1	RED DL3
1)	Switch **DIP1** to ON to enter this modality The receiver beeps 2 times.				
2)	**DL2** is on, it indicates the actual position (Relay1 – RL1); if the memory position is free also **DL3** will be on, if occupied **DL1** will be on instead. At this point the receiver's position is on Channel 1.	 OR 			 
3)	To move to the following Channel, push briefly **K1**. As a confirmation, the receiver will beep a number of time according to the number of channel (Channel 2 = 2 beeps, Channel 3 = 3 beeps).		BEEP BEEP BEEP BEEP BEEP BEEP BEEP BEEP BEEP		
	To memorize a detector/remote control on selected channel, press and hold button **K1** for 3 seconds. As a confirmation **DL1** will light-on (or **DL3**). Make a transmission with the detector/radiocontrol you want to memorize.				
4)	As a confirmation of memorization of the code on the receiver, the **DL2** will light 2 times, the **DL3** will be off and the **DL1** will be on.				
5)	After the five channels of Relay **RL1**, you can move to the next five channels combined to Relay **RL2**. **DL2** will be off and **DL4** will be on, indicating actual position is on Relay2 **RL2**; moreover, if the memory position in free, also **DL3** will be on; otherwise, if occupied, the **DL1** will be on. Now the receiver is positioned on Channel 1.	 	 OR 	 	 
6)	To move to the following channel, push briefly **K1.** As a confirmation, the receiver will beep a number of time according to the number of channel (Channel 2 = 2 beeps, Channel 3 = 3 beeps).		BEEP BEEP BEEP BEEP BEEP BEEP BEEP BEEP BEEP		
7)	To memorize a detector/remote control on selected channel, press and hold button **K1** for 3 seconds. As a confirmation **DL1** will be on (or **DL3**). Make a transmission with the detector/radiocontrol you want to memorize.				
8)	The receiver will confirm the memorization of the code by the flashing of **DL4** 2 times, the **DL3** will be off while **DL1** will be on.				
9)	Once the memorization is ended, switch **DIP1** to OFF.				

3. "ONLY RADIOCONTROLS" MODE (DIP4 = ON)

In this modality, only TXS/M remote controls are considered. If more devices are memorized, **these will be completely ignored by the receiver.**
It's possible to memorize up to 10 radiocontrols TXS/M by selecting with **DIP2** the function mode of the 2 Relays.

DIP2 ON = **BISTABLE FUNCTIONING**
Push one time the Big Button to activate the relay **RL1** – push it on more time to deactivate it.
Push one time the Small Button to activate the relay **RL2** – push it on more time to deactivate it

DIP2 OFF = **MONOSTABLE FUNCTIONING**
Push one time the Big Button to activate the relay **RL1**, which will be deactivated automatically after 2 seconds.
Push one time the Small Button to activate the relay **RL2**, which will be deactivated automatically after 2 seconds.

4. DETECTOR MODE (DIP4 = OFF)

In this modality, it's possible to use both detectors and radiocontrols, simply by selecting with **DIP2** the functioning of Relay 1(**RL1**) with radiocontrols.

DIP2 ON = **FUNCTIONING RL1 BISTABLE**
RL1 is activated by pushing the Big Button of the radiocontrol – otherwise, the Small Button will deactivate it.

DIP2 OFF = **FUNCTIONING RL1 MONOSTABLE**
RL1 is activated by pushing the Big Button of the radiocontrol; **RL1** will be deactivated automatically after 2 seconds.

N.B. : the functioning of the 2 relays (RL1 and RL2) with DETECTORS is always monostable, apart from the set up of DIP2. So, at each transmission of a detector, the respective relay will be activated for 2 seconds and then deactivated.

5. USE WITH TSR 48 bit

It's possible to use the receiver with TSR (sounder transmitter): in this way, the state of a system will be displayed on remote. To memorize the TSR code, push on the button tx tamper on TSR. The receiver will work in a different way according to the set up of **DIP2**.

DIP2 ON = **FUNCTIONING BISTABLE**
Relay 1 (**RL1**) is on when it receives the signalisation of ARMING, and it's off when it receives the signalisation of DISARMING.
Relay 2 (**RL2**) is on for 2 seconds, when it receives the ALARM signalisation from the TSR.

DIP2 OFF = **FUNCTIONING MONOSTABLE**
Relay 1 (**RL1**) is on for 2 seconds, when it receives the ALARM signalisation from the TSR.
Relay 2 (**RL2**) is on for 2 seconds, when it receives from the TSR the signalisation of DESARMING.

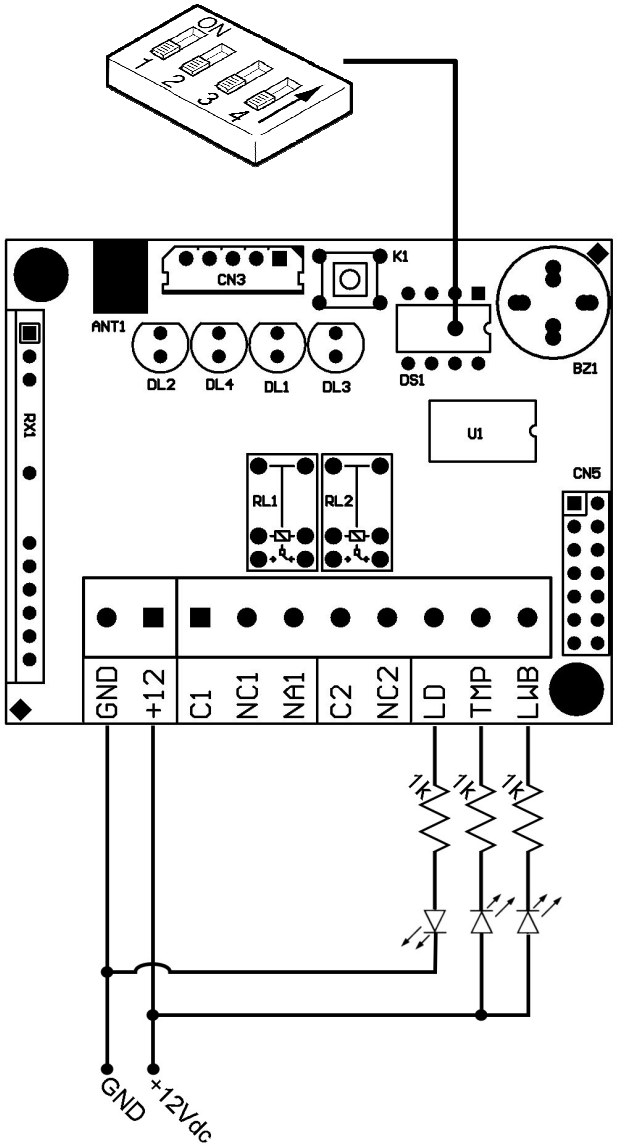
6. FUNCTION OF LIGHT DELAY (DIP3 = ON)

Enabling this function (**DIP3** ON) it's possible to keep the output relays activated for 3 minutes, continuously (it's useful, for example, to activate a light). During this time, the receiver will remain inhibited, so it won't answer to controls anymore.

DIP2 ON = **FUNCTIONING BISTABLE**
Pressing the Big Button of the radiocontrol, **RL1** will be ON – Pressing the Small Button, **RL1** will be OFF.
When Relay 2 (**RL2**) receives an alarm transmission by a detector, it will be on for 3 minutes.

DIP2 OFF = **FUNCTIONING MONOSTABLE**
When Relay 1 (**RL1**) receives an alarm transmission by a detector, it will be on for 3 minutes.
When Relay 2 (**RL2**) receives an alarm transmission by a detector, it will be on for 3 minutes.

7. CONNECTION SCHEME



+12	Positive pole power supply +12 V_{DC}
GND	Negative pole power supply
C1	Common terminal Relay 1
NC1	Connecting terminal Normally Closed Relay 1
NA1	Connecting terminal Normally Open Relay 1
C2	Common terminal Relay 2
NC2	Connecting terminal Normally Closed Relay 2
LD	LED output combined to activation of Relay 1 It's positive +12 V when Relay 1 is on – it back to zero when the Relay 1 is disarmed. NOTE: it could be useful to display the state of activation of the alarm panel (using a TSR).
TMP	TAMPER output Open Collector – It closes to negative to signal the reception of a tamper alarm of a radio detector. In case of tamper alarm, the Relay output referred to that detector is activated too.
LWB	Open Collector output of DETECTORS LOW BATTERY – It closes in negative to signal the reception of Low Battery from a radio detector.

DIP1	OFF	Normal Functioning
	ON	Auto learning Modality (programmation)
DIP2	OFF	Relay 1 = Monostable
	ON	Relay 1 = Bistable
DIP3	OFF	Normal Functioning
	ON	FUNCTION LIGHT DELAY
DIP4	OFF	Detector mode
	ON	Only Radiocontrols Mode

8. TECHNICAL CHARACTERISTICS

RELAY OUTPUT	2 alarm relays, monostable or bistabile mode selectable
SIGNALISATIONS	Board buzzer, to check operations, 4 LEDs for operation's signalisation
RANGE	100 meters min (free air)
FREQUENCE	433.92 MHz
CODING	48 bit
POWER SUPPLY	12 V_{DC} – 15 mA
DIMENSIONS	120 x 85 x 28 mm