

## TWO OUTPUTS RADIO RECEIVER

[AN]

Installation and use manual

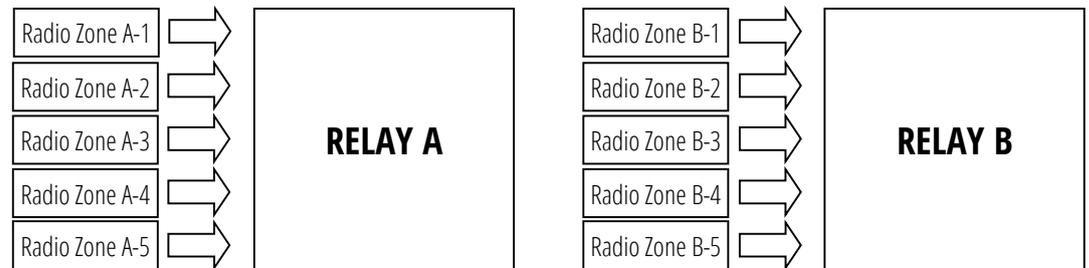
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MADE IN ITALY

**THE INSTALLER HAS TO FOLLOW REGULATIONS. INTERVENTIONS MADE BY NOT AUTHORIZED STAFF CAN DAMAGE THE DEVICE. THE PRODUCER IS NOT RESPONSIBLE IN CASE OF IMPROPER USE OR WRONG INSTALLATION. DO NOT INSTALL THE RECEIVER IN DUMP PLACES OR EXPOSED AT HIGH/LOW TEMPERATURES OR INCLEMENCY OF THE WEATHER. FOR MORE SAFETY, INSTALL THE RECEIVER IN A PLACE PROTECTED BY AN ALARM DETECTOR.**

**RX2AP** is a receiver that can store up to 10 radio codes (auto-learning) combined to 2 independent outputs (5 radio codes each): the outputs are dry-contact relay type. It is possible to learn the radio codes of sensors, remote controls or special transmitters (TSR) for control panels.

Matching scheme of Radio Zones with Relay Outputs:



This device allow a simple interface between wired control panels and wireless sensors or remote controls.

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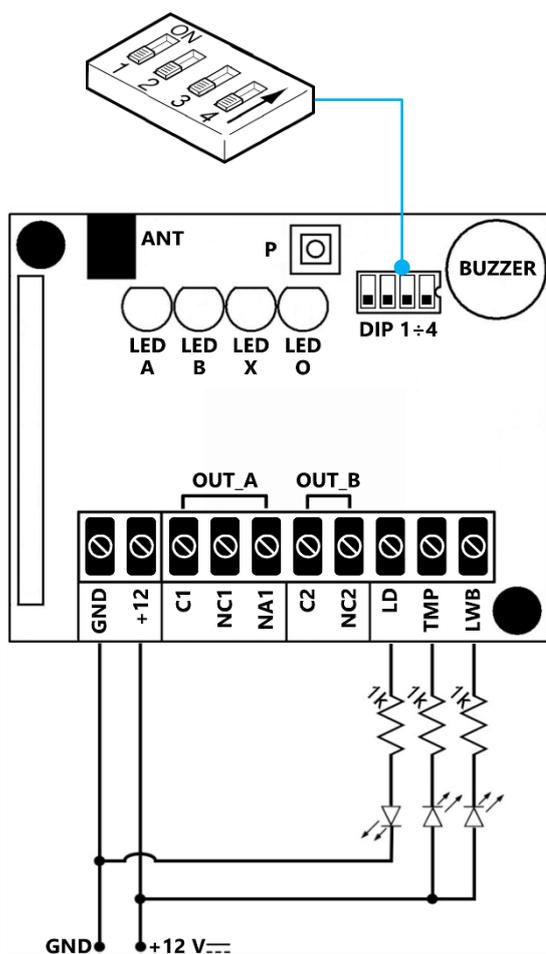
### 1. RESET

The following procedure bring back the receiver to factory settings. It is necessary to run the reset before start programming and use the device.

1. Remove power to the receiver (wait about 1 minute the circuit discharges)
2. Hold down the **P** button while powering the receiver
3. After about 5 seconds the receiver emits three quick “beep” followed by one long one
4. Release the **P** button. The reset is complete.

## 2. TECHNICAL

|                |   |
|----------------|---|
| RELAY OUTPUTS  | 2 alarm relays (mono-stable or bi-stable working modes)<br>MAX: 24 V $\overline{\text{---}}$ / 500 mA   |
| SIGNALLING     | Buzzer on board for operation feedback (not excludible)<br>4 internal LEDs for operation feedback (2 LEDs for relay outputs state, 2 LEDs for Radio Zones management) |
| RADIO RECEIVER | Working frequency: 433.92 MHz – Radio code format: 48 bit   |
| POWER SUPPLY   | 12 V $\overline{\text{---}}$ / MAX 25 mA<br><b>WARNING &gt; The receiver must be powered by a very low voltage power source (SELV)</b>                                |
| DIMENSION      | 120 x 85 x 28 mm  |
| COMPATIBILITY  | Sensors (only AN models): MINI-M, MINI-C, CTSR, DIRRV2, DIRRPV, DSA, DSF, E-WALL, DIRRVE, DIRRVE-DT, MOSKITO<br>Remote controls: TXS/M<br>Siren Transmitters: TSR     |



|            |  |
|------------|--|
| <b>+12</b> | Power supply: positive reference +12V $\overline{\text{---}}$  |
| <b>GND</b> | Power supply: ground/negative reference  |
| <b>C1</b>  | Relay A: common terminal   |
| <b>NC1</b> | Relay A: Normally Closed terminal  |
| <b>NA1</b> | Relay A: Normally Opened terminal  |
| <b>C2</b>  | Relay B: common terminal   |
| <b>NC2</b> | Relay B: Normally Closed terminal  |
| <b>LD</b>  | LED output: combined to Relay A activation<br>Output at +12V when the Relay A is active – Output at zero when Relay A is at rest.<br>Useful to visualize (using a TSR) the arming status of a control panel. |
| <b>TMP</b> | TAMPER output, Open Collector – Close to negative to signal the reception of a tamper radio code from a sensor. In case of tamper alarm, also the Relay output combined to the sensor will be activated.     |
| <b>LWB</b> | LOW BATTERY output (sensors), Open Collector – Close to negative to signal the reception of a Low Battery code from a sensor.  |

|             |     |  |
|-------------|-----|--|
| <b>DIP1</b> | OFF | Normal working                                   |
|             | ON  | LEARNING (pairing of radio devices)              |
| <b>DIP2</b> | OFF | Relay A = Monostable                             |
|             | ON  | Relay A = Bistable                               |
| <b>DIP3</b> | OFF | Normal working                                   |
|             | ON  | “LIGHT TIMER” mode                               |
| <b>DIP4</b> | OFF | “Sensors + Remote controls” mode or use with TSR |
|             | ON  | “Remote controls” mode                           |

## 3. LEARNING

|  | LED_A<br>Yellow | LED_B<br>Green | LED_X<br>Blue | LED_O<br>Red        |
|--|-----------------|----------------|---------------|---------------------|
| <b>1</b> To enter in learning mode set <b>DIP1</b> to <b>ON</b> . Two “beep” are emitted   |                 |                |               | 2x BEEP             |
| <b>LED_A</b> lights on meaning the receiver is in memory space for Relay A (Radio Zones A-1 ÷ A-5).  | ((( )))         | ( )            | ( )           | ((( )))             |
| <b>2</b> The receiver starts from Radio Zone A-1. If the memory position is empty the <b>LED_O</b> (free memory) lights on, if occupied the <b>LED_X</b> (used memory, it is possible to overwrite) lights on. | ((( )))         | ( )            | ((( )))       | ( )                 |
| To go to the next Radio Zone, press <b>P</b> .   |                 |                |               |                     |
| <b>3</b> As confirm the receiver emits as many “beep” as the Radio Zone number (Radio Zone A-2 = 2 “beep”, Radio Zone A-3 = 3 “beep”...).  |                 |                |               | 1x BEEP ... 5x BEEP |

|  |   |                     |
|--|---|---------------------|
| To learn a sensor/remote control/TSR in selected memory space: |   |                     |
| 4  | <ul style="list-style-type: none"> <li>hold down the <b>P</b> button for 3 seconds</li> <li>the <b>LED_X</b> or <b>LED_O</b> light on (depending on which one was already on): the receiver is now waiting</li> <li>make the sensor * (only AN code, see sensor manual), the remote control or the TSR transmitter (only disarming) transmit</li> </ul>   |                     |
|  | <ul style="list-style-type: none"> <li>the receiver confirms the learning of the code by blinking 2 times the <b>LED_A</b>, and emits 2 “beep”. The <b>LED_O</b> switches off but the <b>LED_X</b> (occupied memory)</li> </ul>   |                     |
| 5  | <p>After the Radio Zones for <b>Relay A</b>, there are the ones for <b>Relay B</b> (Radio Zones B-1 ÷ B-5).<br/>The <b>LED_A</b> switches off and the <b>LED_B</b> lights on meaning the receiver is in memory space for Relay B.<br/>The receiver starts from Radio Zone B-1. If the memory position is empty the <b>LED_O</b> (free memory) lights on, if occupied the <b>LED_X</b> (used memory, it is possible to overwrite) lights on.</p> | <br>OR<br>          |
|  | <p>To go to the next Radio Zone, press <b>P</b>.</p>  |                     |
| 6  | As confirm the receiver emits as many “beep” as the Radio Zone number (Radio Zone B-2 = 2 “beep”, Radio Zone B-3 = 3 “beep”...).  | 1x BEEP ... 5x BEEP |
| To learn a sensor/remote control in selected memory space:     |   |                     |
| 7  | <ul style="list-style-type: none"> <li>hold down the <b>P</b> button for 3 seconds</li> <li>the <b>LED_X</b> or <b>LED_O</b> light on (depending on which one was already on): the receiver is now waiting</li> <li>make the sensor * (only AN code, see sensor manual) or the remote control transmit</li> </ul>   |                     |
|  | <ul style="list-style-type: none"> <li>the receiver confirms the learning of the code by blinking 2 times the <b>LED_B</b>, and emits 2 “beep”. The <b>LED_O</b> switches off but the <b>LED_X</b> (occupied memory).</li> </ul>  |                     |
| 8  | When finished to learn peripherals set <b>DIP1</b> to <b>OFF</b>  |                     |

\* Generally, to transmit an AN code press the TAMPER switch of the sensor. To learn the DSF (smoke) sensor, hold down the TEST button for some seconds. Read the manuals of each product for further information.

#### 4. “SENSORS + REMOTE CONTROLS” MODE

**DIP1 = OFF | DIP3 = OFF | DIP4 = OFF**

In this mode both sensors and remote controls work: the remote controls must be stored only in Relay A zones (Radio Zones A-1 ÷ A-5).

Set the working mode of the Relay A (for remote controls) with **DIP2**:

- DIP2 = ON      RELAY A BI-STABLE**  
 The sensors must be stored only in Relay B zones (Radio Zones B-1 ÷ B-5).  
 By pressing the BIG button of a remote control, the Relay A is activated – pressing the SMALL button the Relay A releases  
 The Relay B is activated for 2 seconds when it is received an alarm code from a sensor stored in Radio Zones B
- DIP2 = OFF      RELAY A MON-OSTABLE**  
 The sensors can be stored in both memory zones of Relay A and Relay B.  
 By pressing any button of a remote control the Relay A is activated for 2 seconds (then release)  
 The Relay B is activated for 2 seconds when it is received an alarm code from a sensor stored

#### 5. “REMOTE CONTROLS” MODE

**DIP1 = OFF | DIP3 = OFF | DIP4 = ON**

In this mode only the remote controls work: the remote controls must be stored only in Relay A zones (Radio Zones A-1 ÷ A-5). Do not store sensors (they will be ignored by receiver). Set the working mode of the Relay A with **DIP2**:

- DIP2 = ON      BI-STABLE**  
 By pressing once the BIG button of a remote control, the Relay A is activated – Pressing it again, the Relay A releases  
 By pressing once the SMALL button of a remote control, the Relay B is activated – Pressing it again, the Relay B releases
- DIP2 = OFF      MONO-STABLE**  
 By pressing the BIG button of a remote control the Relay A is activated for 2 seconds (then release)  
 By pressing the SMALL button of a remote control the Relay B is activated for 2 seconds (then release)

## 6. "LIGHT TIMER" MODE

DIP1 = OFF | **DIP3 = ON** | DIP4 = OFF

This mode (**DIP3 = ON**) set the receiver to maintain active the Relay outputs for 3 minutes (useful as light timer) when it is received a radio code from a remote control, a sensor or the "alarm" code of a TSR. The remote controls and TSR transmitters must be stored only in Relay A zones (Radio Zones A-1 ÷ A-5).

During this time the receiver will not react to any command.

- **DIP2 = ON BI-STABLE**

By pressing once the BIG button of a remote control, the Relay A is activated – Pressing it again, the Relay A releases

The Relay B is activated for 3 minutes when it is received an alarm code from a sensor stored in Radio Zones B (the sensors stored in Radio Zones A are ignored)

- **DIP2 = OFF MONO-STABLE**

The Relay A is activated for 3 minutes when it is received a radio code (sensor, remote control or TSR "start alarm") from Radio Zones A

The Relay B is activated for 3 minutes when it is received an alarm code from a sensor stored in Radio Zones B

## 7. USE OF THE TSR TRANSMITTER

DIP1 = OFF | **DIP3 = OFF** | **DIP4 = OFF**

The receiver can be paired with TSR (transmitter for sirens) to visualize from remote the alarm system status.

The TSR transmitters must be stored only in Relay A zones (Radio Zones A-1 ÷ A-5). The remote controls must be stored only in Relay A zones (Radio Zones A-1 ÷ A-5).

The receiver works differently depending on **DIP2** setting:

- **DIP2 = ON BI-STABLE**

The Relay A is activated when it is received the "ARM" code of a TSR, and releases when it is received the "DISARM" code

By pressing once the BIG button of a remote control, the Relay A is activated – Pressing it again, the Relay A releases

By pressing once the SMALL button of a remote control, the Relay B is activated – Pressing it again, the Relay B releases

The Relay B is activated for 2 seconds when it is received the "START ALARM" code of a TSR or an alarm code of a sensor stored in Radio Zones B

- **DIP2 = OFF MONO-STABLE**

The Relay A is activated for 2 seconds when it is received an "ALARM" code of a TSR or any code of a remote control or an alarm code of a sensor stored in Radio Zones A

The Relay B is activated for 2 seconds when it is received a "STOP ALARM" or "DISARM" codes of a TSR or an alarm code of a sensor stored in Radio Zones B

### CE Dichiarazione di Conformità Declaration of Conformity

La società:  
The company:

**DUEVI S.n.c. di Mora e Santese**  
Via Bard, 4 - 10142 Torino - ITALY

in qualità di produttore, dichiara sotto la propria responsabilità che i seguenti prodotti:  
*in quality of manufacturer, declares under its responsibility that the following products:*

**Wireless Receiver  
Wireless Receiver  
Wireless Receiver**

**(mod. RX2AP)  
(mod. RX40)  
(mod. RX808)**

se installati in accordo alle istruzioni del produttore, sono in conformità con quanto  
previsto dalle direttive comunitarie riguardanti la normativa CE.  
*if installed in accordance with the manufacturer instructions, are in conformity with what  
provided by European Directives regarding the CE rules.*

In particolare sono state applicate le seguenti norme:  
*In particular there have been applied the following standards:*

**EN 50130-4 + A1 + A2  
EN 301 489-1 V1.8.1  
EN 301 489-3 V1.4.1  
EN 300 220-1 V2.1.1  
EN 300 220-2 V2.1.2  
EN 50371  
EN 60950-1 + A11**

Torino - ITALIA, 24 marzo 2010  
Turin - ITALY, March 24, 2010

**Mr. Ciro Santese**  
Production Manager



**DUEVI**  
S.p.A. - S.p.A. - S.p.A. - S.p.A. - S.p.A.

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This device meets the R&TTE requirements (European Union)