IMPORTANT REMARKS

V2 has the right to modify the product without previous notice; it also declines any responsibility to damage or injury to people or things caused by improper use or wrong installation.

- This instruction manual is only for qualified technicians, who specialize in installations and automations.
- The contents of this instruction manual do not concern the end user.
- Every programming and/or every maintenance service should be done only by qualified technicians.
- The plastic case has an IP55 insulation; to connect flexible or rigid pipes, use pipefittings having the same insulation level.
- Also the automation upstream electric system shall comply with the laws and rules in force and be carried out workmanlike.



2 - DISPOSAL

As for the installation operations, even at the end of this product's life span, the dismantling operations must be carried out by qualified experts.

This product is made up of various types of materials: some can be recycled while others need to be disposed of.

Find out about the recycling or disposal systems envisaged by your local regulations for this product category.

Important! – Parts of the product could contain pollutants or hazardous substances which, if released into the environment, could cause harmful effects to the environment itself as well as to human health.

As indicated by the symbol opposite, throwing away this product as domestic waste is strictly forbidden. So dispose of it as differentiated waste, in accordance with your local regulations, or return the product to the retailer when you purchase a new equivalent product.

Important! – the local applicable regulations may envisage heavy sanctions in the event of illegal disposal of this product.

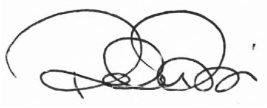
EU DECLARATION OF CONFORMITY

The manufacturer V2 S.p.A., headquarters in Corso Principi di Piemonte 65, 12035, Racconigi (CN), Italy

Under its sole responsibility hereby declares that the products:
AX WES-RX
AX WES-TX

comply with the following directives:
2014/53/EU, ROHS-3 2015/863/EU

Racconigi, 01/03/2024
Legal representative, V2 S.p.A.
Roberto Rossi



DESCRIPTION

- 868 Mhz radio bidirectional device, wireless which transmits a signal to a control device.
- The receiver constantly checks the status of the transmitters connected to it.
- It can manages up to 16 transmitters TRANCEIVER-TX.

INSTALLATION AND MAITENANCE

Check that the CE marking can be clearly read, it is also labelled with: production lot, nominal voltage, nominal current and IP rating.
It is important that the end user is informed about:

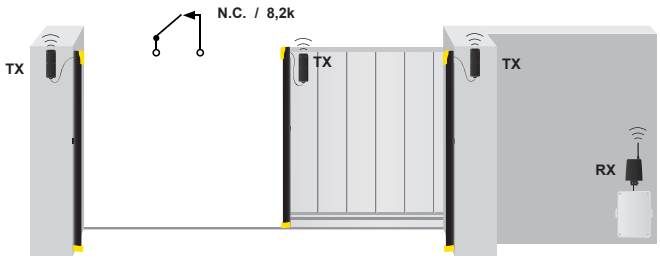
- Replacing the battery every 12 months to guarantee the correct operation, testing the complete installation after replacing.
- Before closing the TX, make sure the O-RING is undamaged and clean. If necessary remove any dust with a cloth. Contact eB technology for any spare part.
- The access area where the device is installed must be free from obstacles.

It is necessary to install a fuse in-line with the output of the relay, with value v ≤ 100 mA and power ≥ 60 V.
All users must be made aware of the safety devices in use

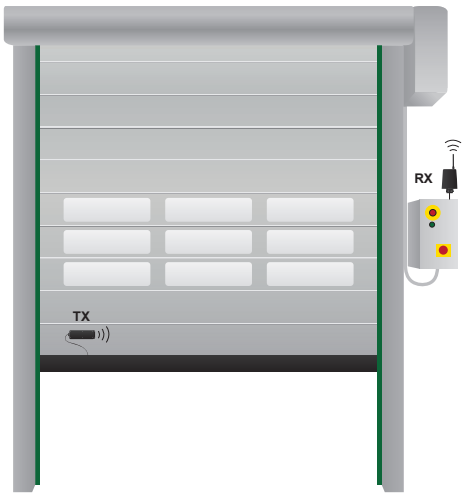
INTENDED USE

The product can be installed for sliding gates and industrial-sectional doors. The maximum speed of the installation is 60m/min, as the time response is 100ms.

Application on sliding automation



Application on rapid doors



Typical applications are:

- Weirs and bulkhead
- Lift doors
- Vehicle door
- Doors for cases
- Curtains for theater, rail barriers
- Barriers only for vehicles. Safety devices for machines diff er from doors

This device cannot be be used for manual control or for stop system, even emergency, of motorized doors.

TECHNICAL FEATURES

RX

Dimensions: b75 x h195 x d40 mm

Power supply: 12/24 Vac/dc
With isolated electric network not less that primary circuit and secondary circuit of a transformer conformed to the IEC 61558-2-6 or equivalent.
In case the source of the power supply is DC with power more that 100 VA (>8A), is necessary to install an isolating switch between this device and the RX.

Absorbed current: 70 mA

Working temperature: -20 ÷ +60 °C

Number of radio channels: max 16 TX

Protection degree: IP44

Cover: ABS Thickness:: > 2 mm

Output relay contact: Resistive charge, maximum power in the contact NO/NC Nc ≤ 30 Vac or ≤ 60 Vdc, current 1...100mA. Suitable for SELV Circuits.

TX

Dimensions: b50 x h160 x d25 mm

Power supply: 2 batteries LR06/AA (1,5V-2600mAh)

Working temperature: -15 ÷ +50 °C

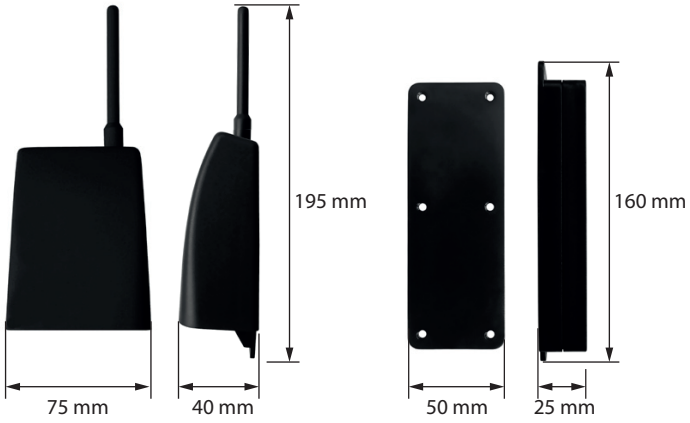
Stand-by time: TX - DIP1 OFF 1 year
TX - DIP1 ON 2 years

Maximum range: 20 m

Inputs: 2

Protection degree: IP54 Pressure State response

Cover: POLYCARBONATE PC Thickness: > 3 mm

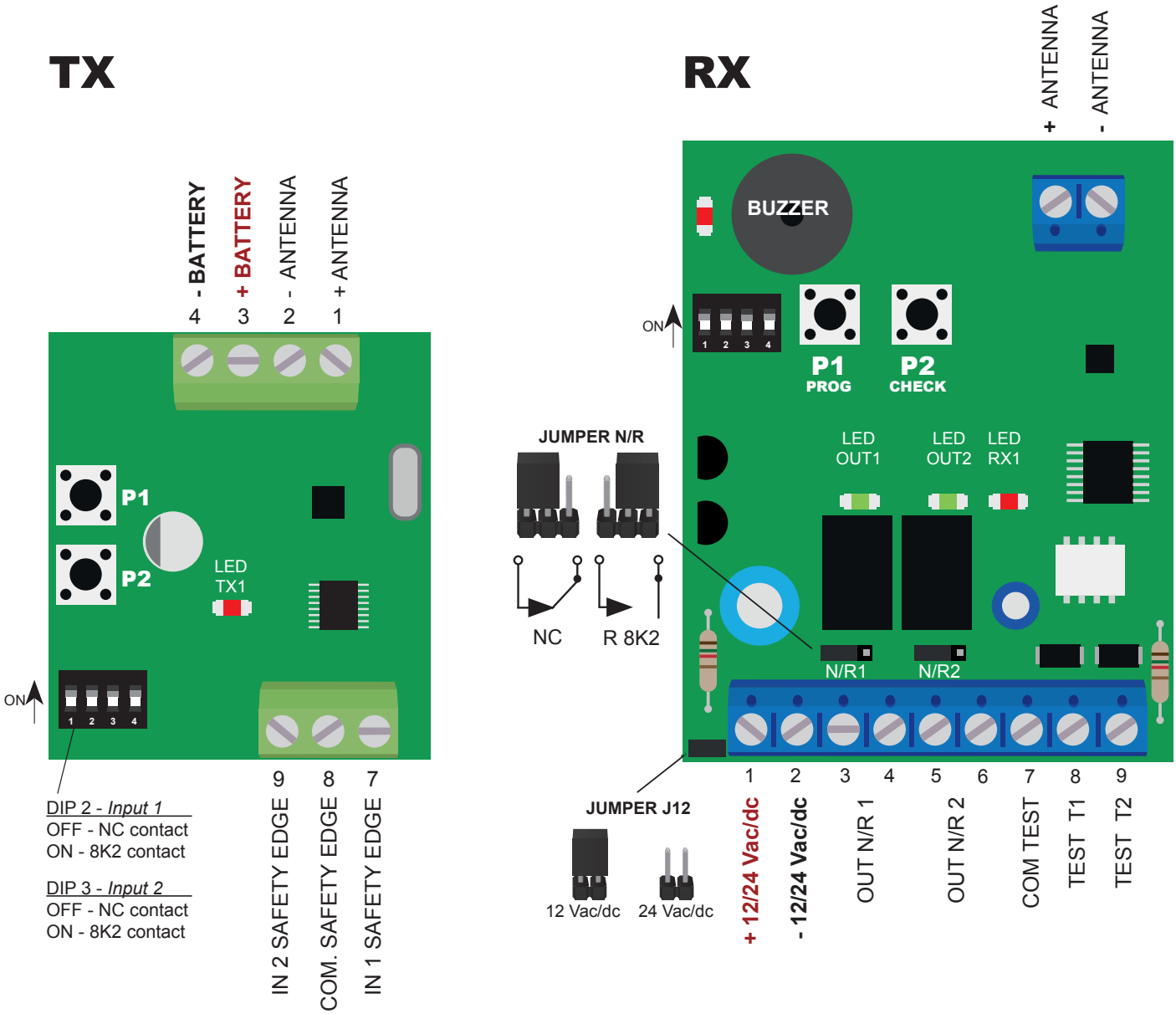


ELECTRICAL DIAGRAM AND CONNECTIONS

IMPORTANT WARNINGS

⚠ Please read this manual carefully before using the product and keep the manual for future reference.

⚠ Upon first use, you must always RESET the memory



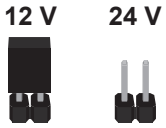
FIRST INSTALLATION

RECEIVER

1. Put all DIP-SWITCHES in OFF position (Tx and Rx)



2. Supply power to the receiver 12/24 Vac/dc, if 12V make a link to JUMPER 12V. LED-0 and LED-1 flashes fastly and the receiver make a “beep” sound



RECEIVER MEMORY RESET

<u>This operation should be done at the first installation</u>.

3. Cancel the memory of the receiver: keep pressed the P1-PROG for 12 seconds, when the receiver sounds, release the button



TRANSMITTER

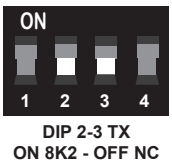
4. Connect to the terminal board the N.C. contact or the 8K2 resistive edge contact



5. Select the input with DIP-SWITCH 2 for Input 1 and DIP-SWITCH 3 for Input 2:

OFF: Select an input for a N.C. contact

ON: For a 8.2 K resistive edge contact



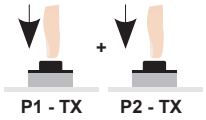
6. Give power supply on the TX with two 1,5V batteries LR06 AA: LED-1 of the transmitter fl ashes fast and then slowly.



TRANSMITTER MEMORY RESET

<u>This operation should be done at the first installation</u>.

7. Press and keep pressed both P1 and P2 of the transmitter



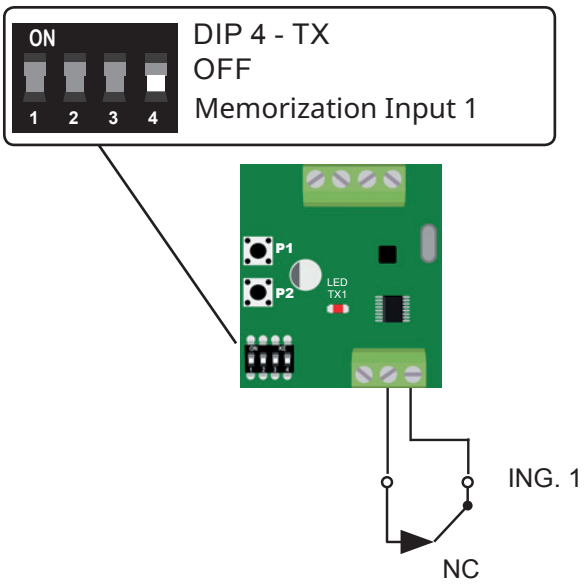
8. After 5 seconds the l.e.d. are lit on to indicate the cancellation of the memory.
Release the buttons. <u>The memory will be cleared of all previously memorized installations</u>.



MEMORISATION OF TX - RX

HOW TO LEARN A CODE ON OUT 1 (RX)

Before starting the memorization, put dip-switch 4 of the tx as shown:



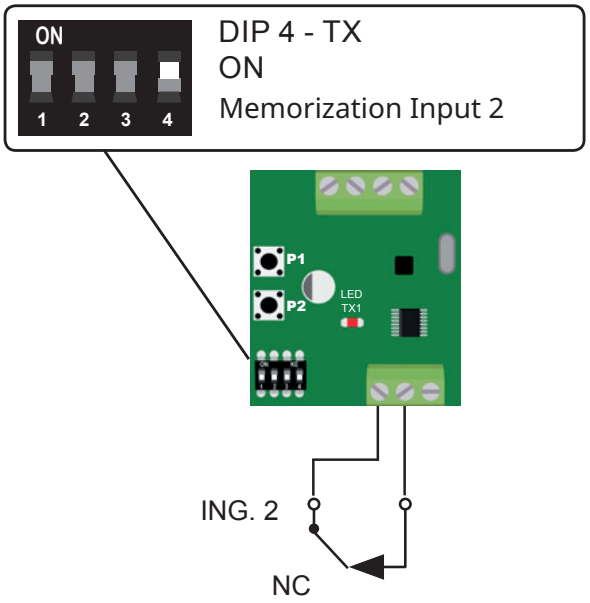
To associate one safety edge to the output OUT1 in the receiver do as follow:

1. Press once the P1-PROG of the receiver, LED-TX1 flashes once.
2. Press P1 of the transmitter within 60 seconds after pressing P1-PROG.
3. If the buzzer sounds it means that the operation is confirmed, if the TX is already memorized the buzzer beeps three times.
4. Once the memorization has been completed, the receiver works automatically and the LED-RX1 turns off .

If you need to memorize extra transmitters start from point 1 again.

HOW TO LEARN A CODE ON OUT 2 (RX)

Prima di effettuare la procedura di appredimento impostare il dip 4 del TX come riportato:



To associate one safety edge to the output OUT2 in the receiver do as follow:

1. Press twice the P1-PROG of the receiver, LED-TX1 flashes once.
2. Press P1 of the transmitter within 60 seconds after pressing P1-PROG.
3. If the buzzer beeps it means that the operation is confirmed, if the TX is already memorized the buzzer beeps three times.
4. Once the memorization has been completed, the receiver works automatically and the LED-RX1 turns off .

If you need to memorize extra transmitters starts from point 1 again.

OPERATING SYSTEM

MEMORIZATION WITH CONTINOUS TESTING OF THE TX. DIP-1 OFF IN TX AND RX

The system is a safety device according to the laws only if the test will be done at the beginning of each cycle the inputs.

TEST INPUTS
Connect to the test connections COMMON (negative) and FOTOTEST output from the control unit of the gate.

- With DIP-2 of the RX in OFF the Receiver will check the transmission of all TX when there is tension in all inputs.
- DIP-2 of the RX in ON position, will check all transmissions in case of lack of tension.

In this case, there is an active check of the safety and of the installation according to the law, the receiving part of the TX is always activated, and there is a higher consumption of the batteries.

In case of 2 batteries LR06 AA 1,5 V the battery life is approximately 12 months.

MEMORIZATION WITH PERIODIC TESTING OF THE TX DIP -1 IN ON IN TX AND RX

There is a periodic check available called "**CHECK OF THE CONDITION**" of the safeties, the Tx receives the signal each 12 sec. If after 30 seconds the receiver doesn't receive any signal from the transmitter, the RECEIVER switches on the alarm output for the corresponding TX.

Installation
To test this operating mode put DIP-1 OFF in the transmitter and in the receiver, after completing your test, put DIP-1 ON in the transmitter and in the receiver for normal operation. When you switch on the installation, the receiver will wait for the constant transmission of the TX, and if successful will activate the output in 10 seconds, and if the TX are not found or are not working, the receiver will check all the transmitters again. (red L.E.D. turns off). This is also for the TEST (PHOTOTEST) from the control unit, the output will close within 10 seconds. This may delay the opening of the gate by 10 seconds.

This configuration involves much lower TX consumption than the previous one. In the case of 2 LR06 AA 1.5V the duration is approximately 24 months.

TEST

When the control panel activates the TEST with TEST INPUT (see previous connections), out 1 and out 2 will go open circuit and return to close circuit when the test is complete.

OUT1 AND OUT 2 OF THE RECEIVER

The outputs are N.C. or 8,2K when not in alarm. Each output has a l.e.d. which is normally lit on. If you use an optical 8,2K output and it is activated the contact is normally closed. To select the output use JUMPER N/R1 and JUMPER C/R2 below the relays.

SIGNAL QUALITY INDICATED BY THE BUZZER

With DIP 4 in the receiver is in ON position, it indicates the signal quality of the buzzer.



It beeps from 1 to 5 and it indicates signal quality and each 12 seconds in the PASSIVE CONTROL MEMORIZATION, while 120 seconds each in the ACTIVE CONTROL MEMORIZATION.

The buzzer indicates the quality of the signal through a "beep sound" 1 beep is not suffi cient, 5 beeps indicates excellent quality of the signal.



LED-RX1 SIGNAL QUALITY

The LED-RX1 of the receiver flashes when one Tx is in alarm (you can test this by opening a N.C. contact of the terminal board of the TX). The l.e.d. flashes from 1 to 5 times and it indicates the signal quality of the transmission:

 1 ash: not good signal

 5 fl ashes: very good signal

CHECK WITH DIP-1 OFF IN THE TX AND IN THE RX

If you push P2 of the receiver for 5 seconds, the receiver will work in CHECK: the buzzer will sound to confirm the operation.
This operation can test the transmission of the TX. The function will be in CHECK for 5 minutes until P2 on the RX is pressed. During the CHECK operation the receiver will sound constantly to indicate the correct operation of the TX while it will beeps for 3 times to indicate the incorrect transmission of the TX.
When the receiver is out of the CHECK operation, the receiver will give one long beep if the transmission with the TX is correct while it will beep 3 times if there is a problem with the tx. During the CHECK operation, the gate can move.

TX BATTERY WARNING

The receiver will be for 3 times if the battery of one TX is not working properly:

- The beep is every 12 sec in the PASSIVE CONTROL MEMORIZATION
- The beep is every 120 sec in the ACTIVE CONTROL MEMORIZATION
- The beep is every time it appears the safety