1 Introduction

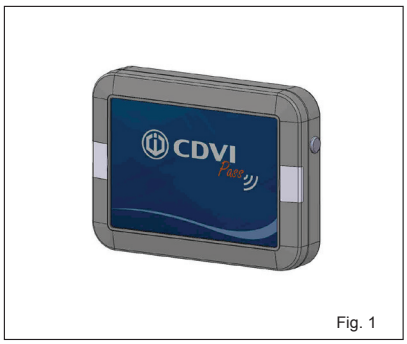


Fig. 1

ANTENNA TRIGGER AN02CP F1001000123

The 125KHz antenna is part of the CDVI PASS system.
It transmits periodically a trigger signal (with a period of 0,5 - 2,4 Sec) with a predefined pattern to awake the active cards. Each single transmission lasts 34ms.
External inputs allow synchronization with other antennas (up to 4).
When sync-in and sync-out are left open, the gap between two transmissions is 2.4 Sec. When shorted, it is reduced to 500mS. The enable input handles the transmission. Before each transmission, the system controls this input and if it is left open, the transmission is inhibited. Using the onboard rotary trimmer, it is possible to assign an ID (0-9) to the antenna to distinguish it from the other.
Additionally, inputs for two PIR sensors are provided (internal and external one) to awake the antenna only in presence of movement.

CDVI Pass System Range

Type	P/N	Description
KCPASS	F0103000118	KIT CDVI PASS (ANTENNA + RECEIVER + 2 ACTIVE TAGS)
AN01CP	F0103000119	TRIGGER ANTENNA CDVI PASS WITH FIXING BRACKET
AN02CP	F0103000123	TRIGGER ANTENNA AN02CP
ATCP	F0103000120	ACTIVE TAG CDVI PASS
RXCP	F0103000121	RECEIVER CDVI PASS
MBCP	F0103000122	BACKUP MEMORY CDVI PASS
SEA433	F0103000029	TUNED ANTENNA 433 MHz

2 Technical specifications

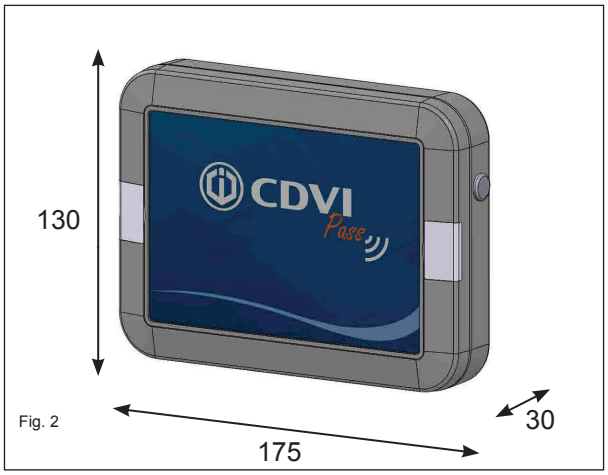


Fig. 2

Operating frequency .....125 KHz
Range in open space :.....0 - 6 m
Power supply: .....24 Vdc
Current consumption (average).....30 mA (PIR excluded)
Peak current consumption.....1 A
Operating temperature: .....-10 ÷ +70°C
Enclosure IP protection: IP67
Dimensions:.....175 x 130 x 30 mm
Weight .....200 gr.
N° of code combinations .....0 - 9
Synchronization period .....0,5 - 2 Sec
N° of synchronized aerials.....4
PIR Input.....Open-collector/Push-pull
Max output current for ext. PIR.....100 mA

3 Mounting

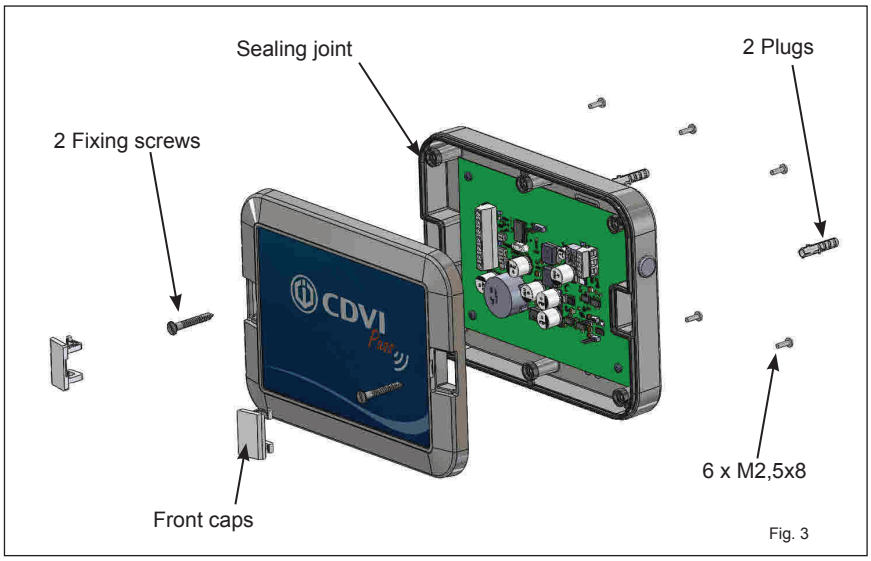


Fig. 3

Plugs

6-wires cable advised type: 6AF50
2 x 0,50 + 4 x 0,27

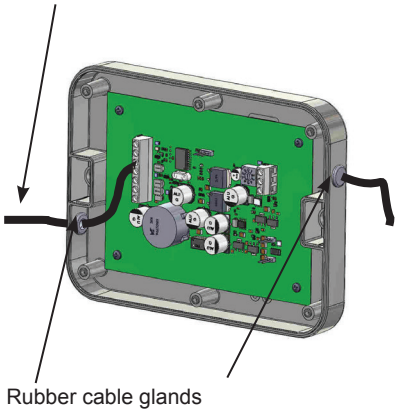
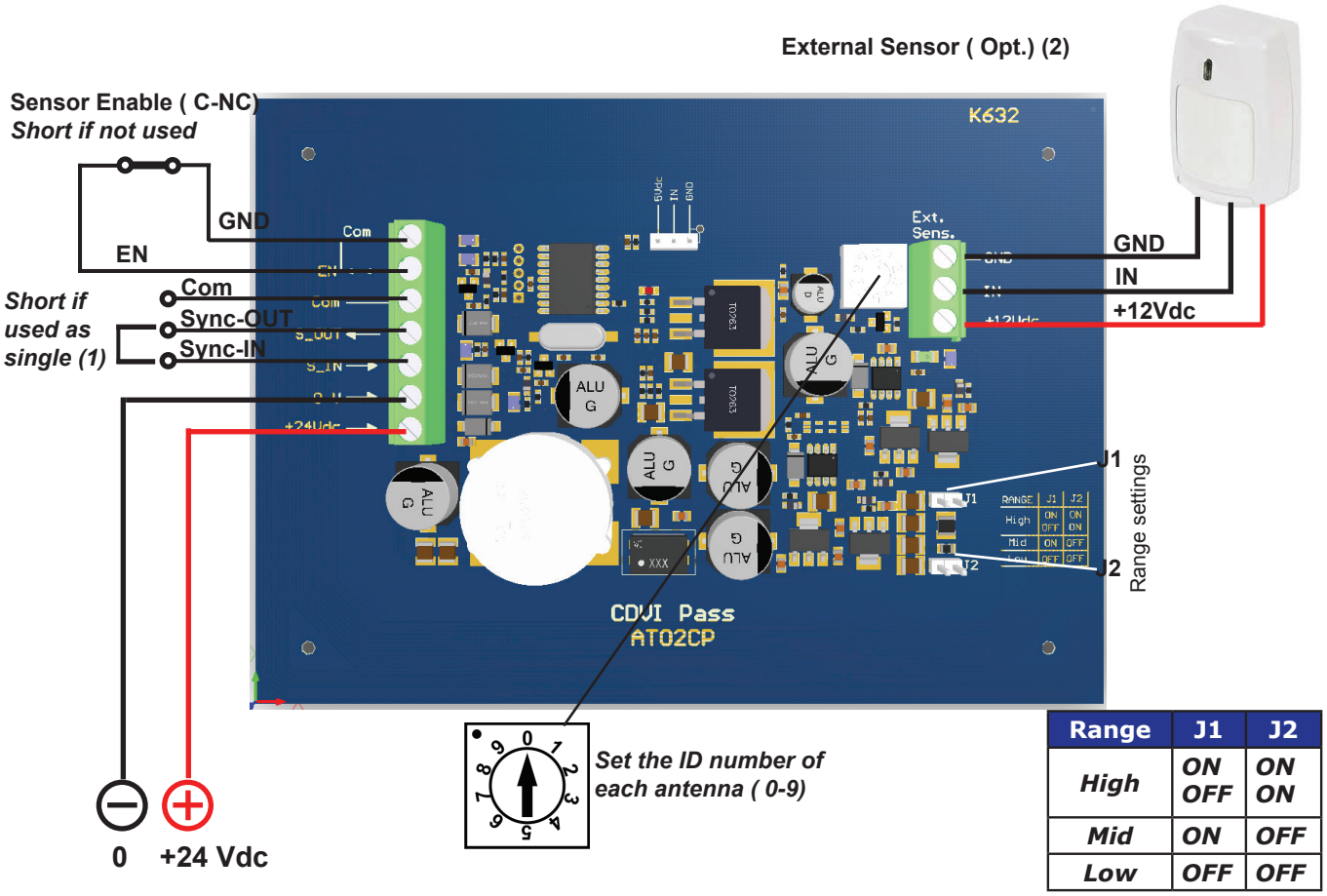


Fig. 4

4 Layout & Wirings



Range	J1	J2
High	*ON OFF*	*ON ON*
Mid	*ON*	*OFF*
Low	*OFF*	*OFF*

(1) If the Sync signal is left open, the repetition period becomes greater than 2 SEC.

(2) : Use only sensors with digital output Open-collector or Push-pull, powered at 12Vdc

5 Detection adjustment

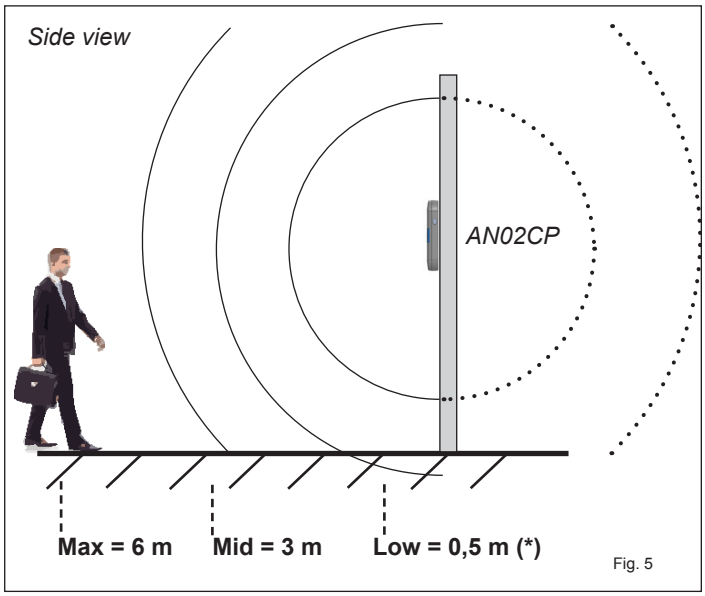


Fig. 5

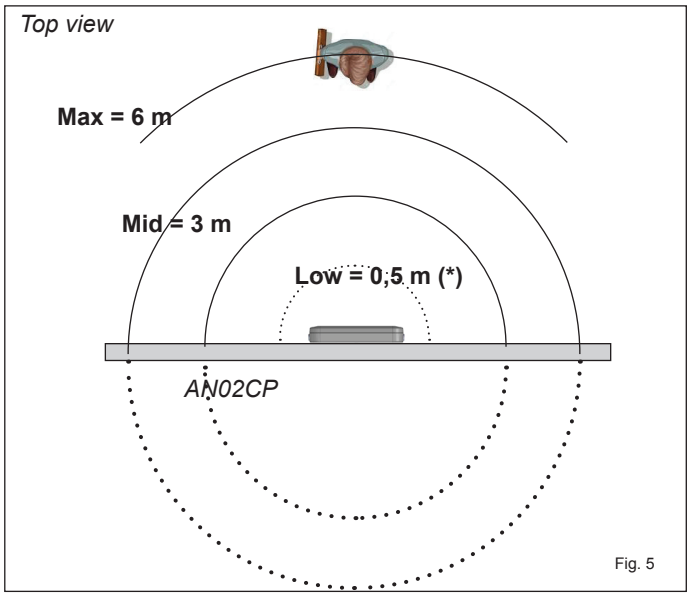


Fig. 5

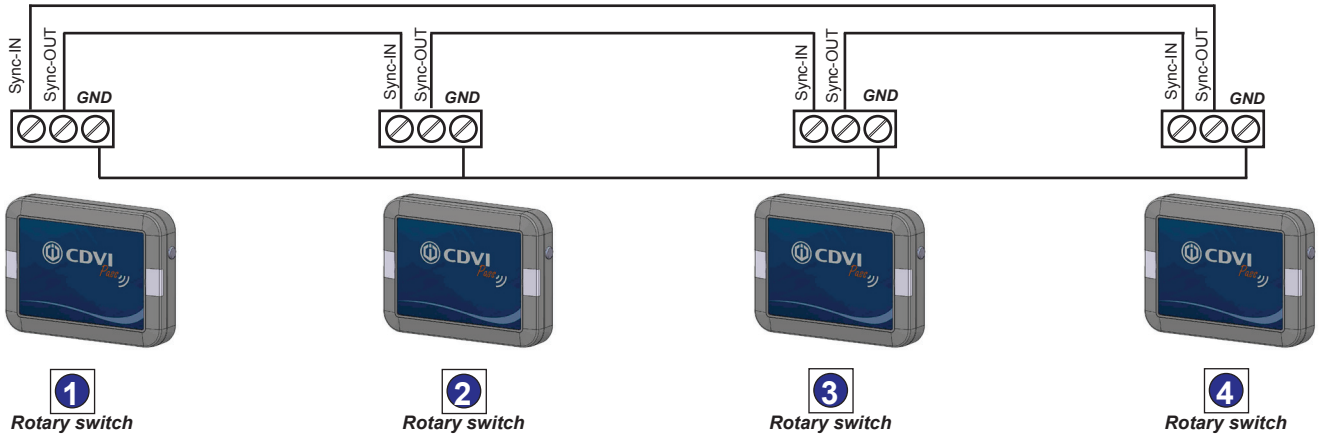
(*) : Depends a lot by the holding position of the active tag
The electromagnetic field created by the antenna has roughly spherical as shown above, both on the horizontal plane and in the vertical plane like indicated above. The emissions are present even behind the antenna, slighty attenuated if the fixing wall is thick

6 Synchronization

If there are 4 entrances at short distance (less than 6 m), to avoid mutual interferences, it is recommended to use the synchronism signal, that enables each aerial sequentially. Up to 4 aerials are allowed. The synchronism signal enables the transmission of each aerial every 500 mS.

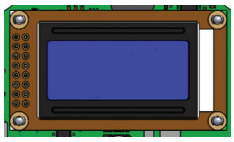
If this function is not used the SYNC-IN terminal must be shorted to GND otherwise the repetition period becomes 2 Sec.

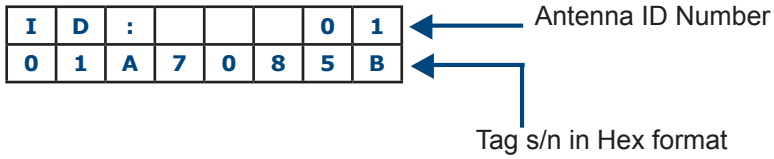
Set the rotary switch of each aerial to a different number (see example below)



NOTE 1: *It is important to set different ID numbers on aerials located on the same site (synchronized or not).*
Encoding numbers allowed : from 0 to 9
Factory setting : 0.
The Id Number of the antenna makes part of the train of bits sent by the active tag and received by the corresponding receiver.
In case of wiegand output, the Id of the antenna is displayed by the LCD of the receiver (RXCP)

Output Wiegand





7 External Sensor & Enable Input

The RF transmission of the antenna can be triggered by an external device (as a radar, a PIR sensor, a IR sensor, etc.) with Open-collector output.
The external PIR triggers the transmission only if the signal ENABLE (C-NC) is open.
If not used, the Enable signal must short to GND !

The ENABLE signal can connected to any external device (as a timer, with C-NC dry contacts) that stops the transmission when the contacts open.

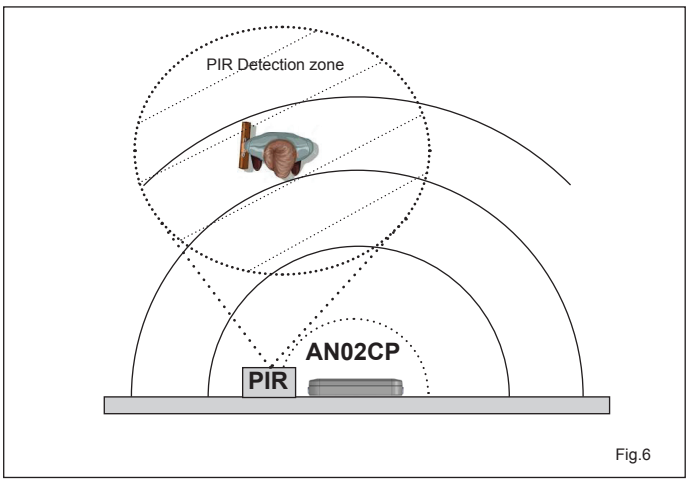
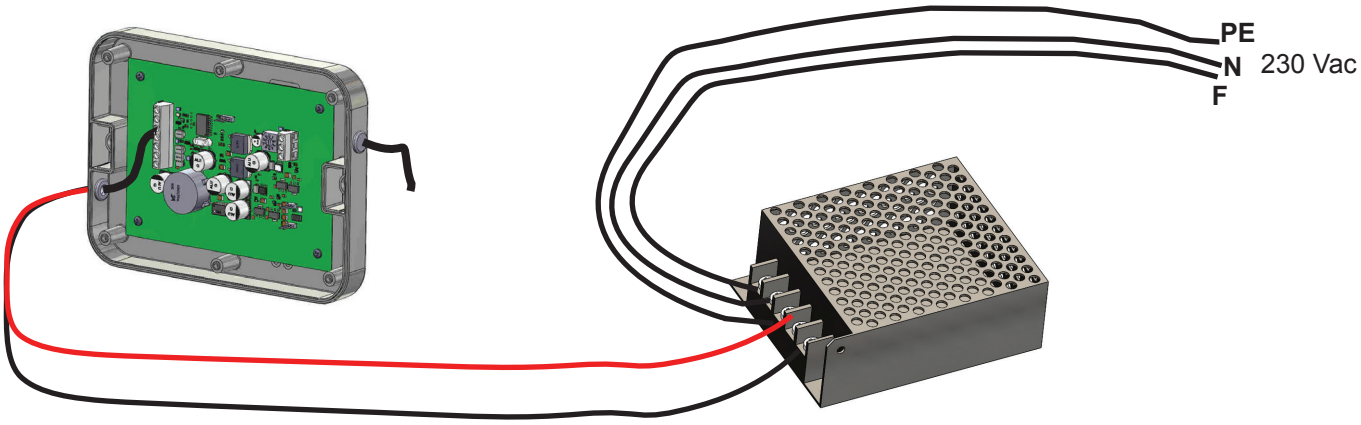


Fig.6

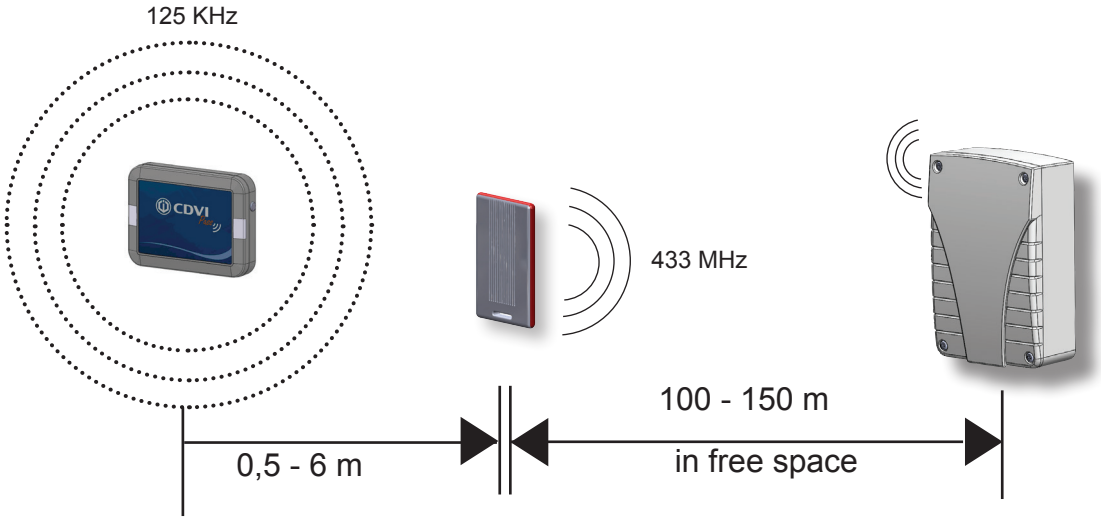
In this configuration the signal at 125 KHz, emitted by the antenna is enabled only when the user stands in the detection field of the sensor (PIR or any type IR or whatever).

8 Power supplier



Power supplier recommended	
RS-35-24	Power supply switching 35W 24 Vdc

9 System operating



10 Declaration of Conformity

Hereby, CDVI Wireless Spa, declares that the radio equipment type AN02CP is in compliance with directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.erone.com.

GUARANTEE

The warranty period for this product is 24 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 our discretion. The guarantee does not cover the plastic container integrity. After-sale service is supplied at the factory.

CE

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