

# Fitting and user guide for the EEN-REC3 receiver

## Operating principle

### Overview:

- The EEN-REC3 receiver enables control of two car park accesses: "ENTRY" and "EXIT", and works with RF 868MHz 2 and 4-channel remote controls.
- Management of the remote controls is carried out on the internet.
- When controlling the 2 accesses, the anti-passback function is available using the switch settings.
- It is waterproof and can be attached to an outside wall.

### The RF 868 opens 2 doors, "ENTRY" and "EXIT":

These 2 doors are controlled via 2 "CT" relays fitted to the receiver card.

Pressing a button on the remote control will activate one of these two "ENTRY" or "EXIT" relays:

**Unlock time of the doors:** The unlock time is set by the central unit.

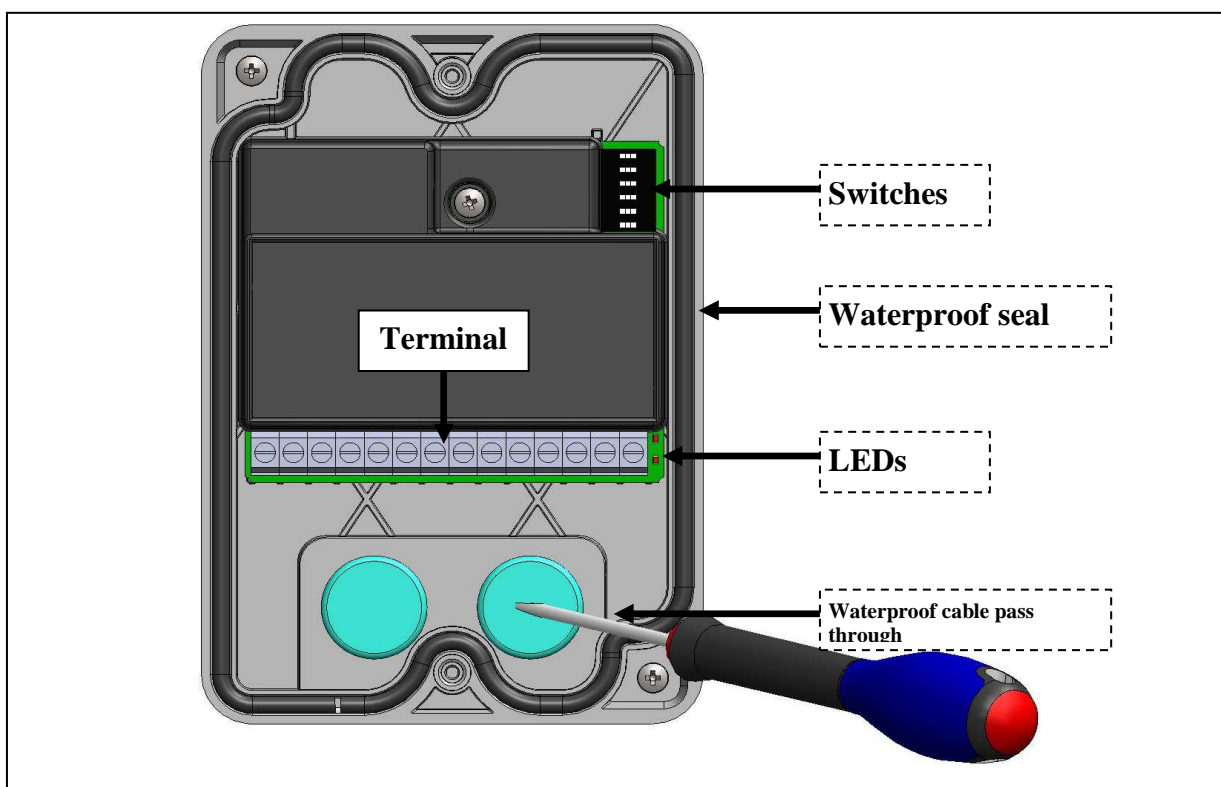
### Vehicle Detection:

Activating each "ENTRY" / "EXIT" relay may depend on the use of vehicle detection loops. These loops can be set independently to "Normally Closed (NC)" or "Normally Open (NO)" using switches nos. 4 and 5 of the receiver (see *switches and LED* section below).

### Anti-Passback (only if activated on the website and on the EEN-REC3 receiver):

The EEN-REC2 receiver can also handle anti-passback conditions (obligation to leave before re-entering) for remote controls programmed for anti-passback on the site. This handling is set using switches 1, 2 and 3 (see *switches and LED* section below).

**Switch no. 6:** For correct operation, it must always be set to OFF.



## Anti-passback operation

Anti-passback controls the receiver's 2 ENTRY and EXIT doors to prohibit successive entries (entries by several vehicles using the same remote control). The resident must therefore have left via the EXIT door before again being allowed access to the car park via the ENTRY door.

The anti-passback function works by setting an anti-passback time during which any new attempt to gain access via the ENTRY door is systematically denied. Access via the ENTRY door will be authorised again, either after this time has expired, or once the resident has left via the EXIT door.

### **The anti-passback function is only activated with the combined use of:**

- An EEN-REC3 receiver;
- A GSM Edge DATA unit
- Vehicle detection loops on ENTRY and EXIT.

**And it only works with remote controls to which anti-passback apply** (see Website).

This function does not concern any remote controls not programmed to work with the anti-passback function.

Note: The anti-passbacks are reset on each power up.

## The Switches and the LED

### • Switches 1, 2 and 3 define the time of the anti-passback function (+ or - 2 minutes):

S1	S2	S3	Meaning
OFF	OFF	OFF	No anti-passback handling.
ON	OFF	OFF	Anti-passback set to 5 minutes.
OFF	ON	OFF	Anti-passback set to 10 minutes.
ON	ON	OFF	Anti-passback set to 15 minutes.
OFF	OFF	ON	Anti-passback set to 30 minutes.
ON	OFF	ON	Anti-passback set to 45 minutes.
OFF	ON	ON	Anti-passback set to 60 minutes.
ON	ON	ON	Permanent anti-passback.

### • Switches 4 and 5 define the operation of the vehicle detection loops :

S4	S5	Meaning
OFF	OFF	Normally Closed loop (NC) or no loop fitted.
ON	ON	Normally Open loop (NO)

### • Switch no. 6: It must always be set to OFF.

Any action on this switch resets the rolling and anti-passback codes.

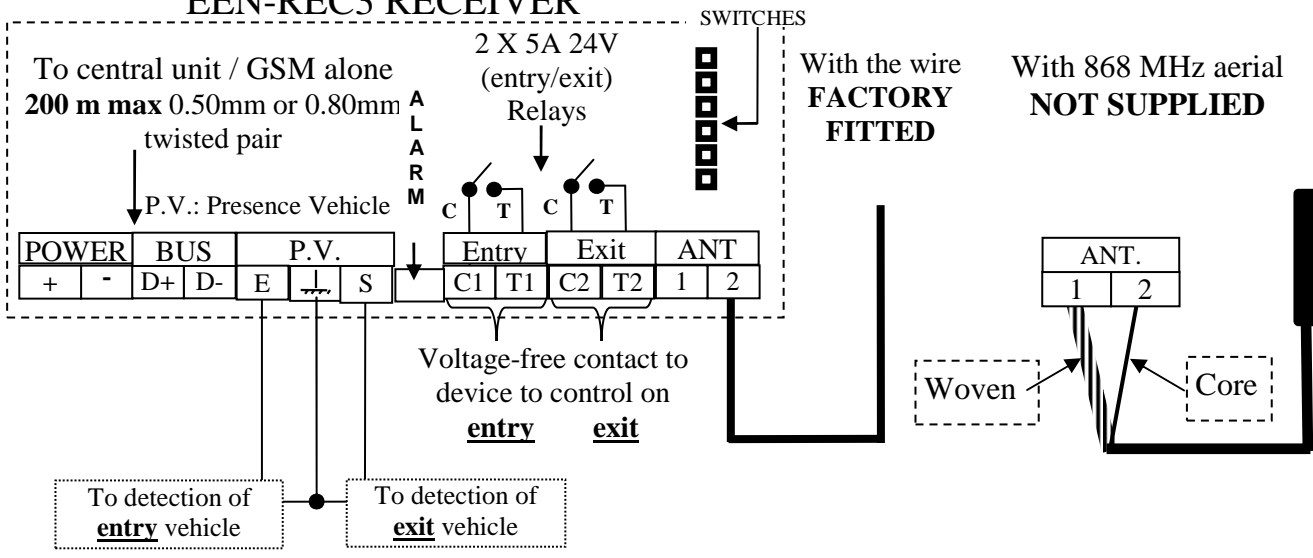
### • LED: The LED indicates the operating states as follows:

State	Meaning
Flashing for 1 to 2 sec	Power supply on or after switch of switch 6: Erasure of anti-passback and rolling code.
Permanently OFF	The receiver has no power supply: Check the connection to the receiver's + and - terminals.
Flickering	The central unit is not connected correctly to the receiver's D + and D- terminals.
Permanently ON	Correct communication with the central unit: Diagnosis displays "RF".
Goes off for 1 second	Correct reception of the RF emission by a 868 MHz remote control.

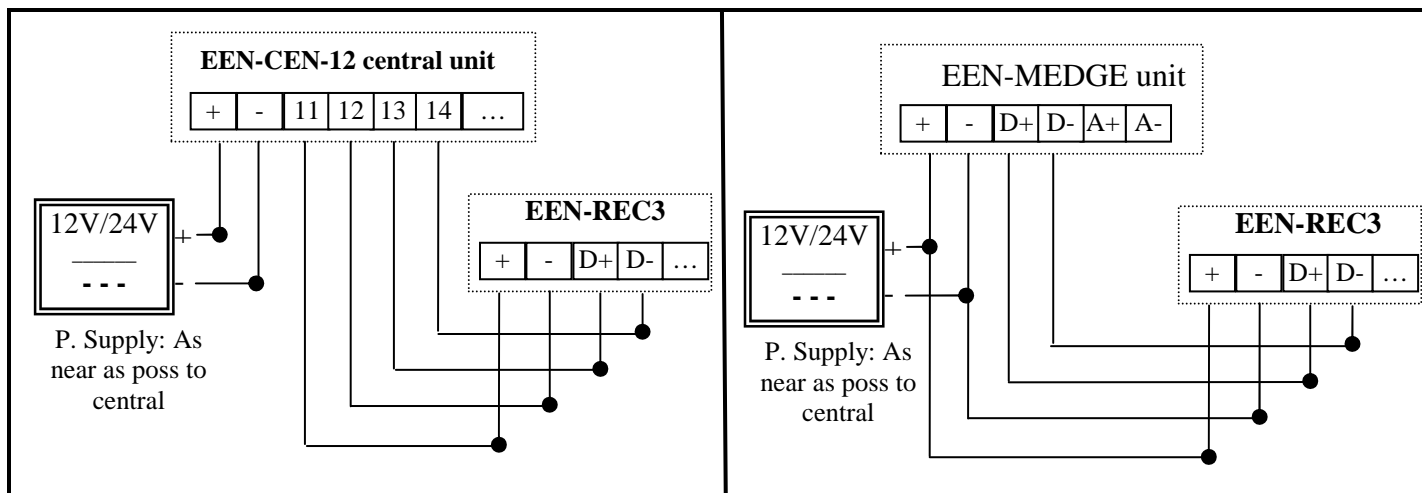
## Cabling of the EEN-REC3 receiver

- 1) No pushbutton can activate the receiver's Entry/Exit relays.
- 2) **The Alarm** is only available with a GSM unit. With a central unit, the unit's alarms are activated.

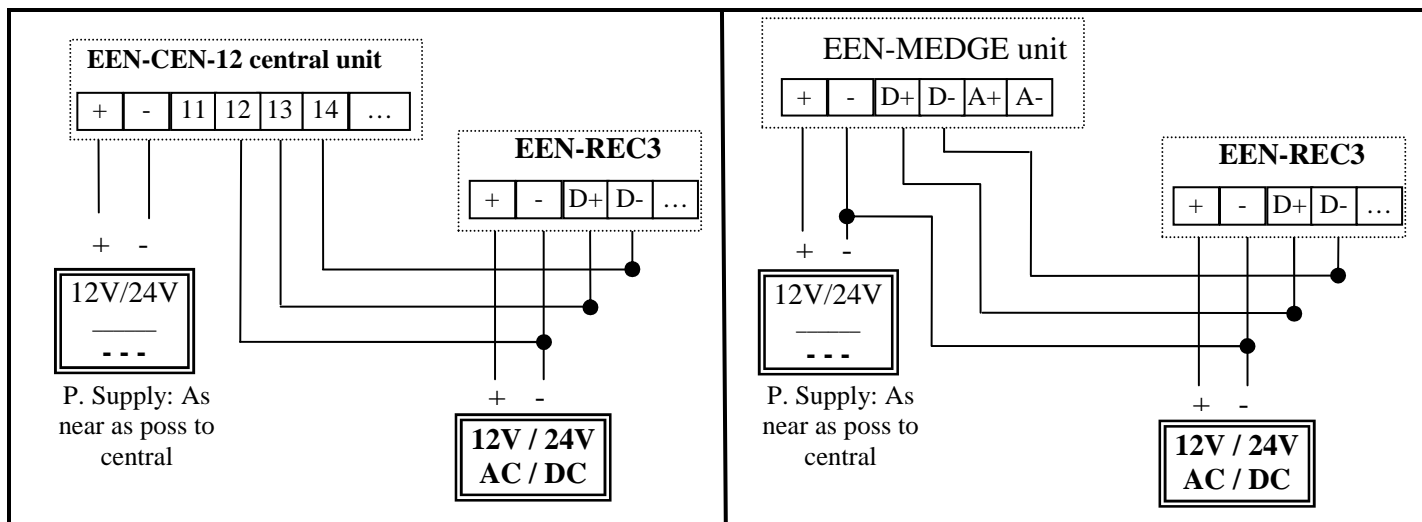
### EEN-REC3 RECEIVER



## Connection using a common power supply



## Connection using a separate power supply





- ☞ The receiver **must not be enclosed** in a metal case or placed behind a protective area that uses metallic wire netting. In the event that you cannot do otherwise, you must connect the 868 MHz aerial that you will fit outside.
- ☞ To achieve satisfactory operation, there must be no metal obstacles between the active aerial and the normal position used for operating the remote controls. It is therefore preferable to **fit the receiver in a high location** to avoid obstacles (e.g. metallic wire netting).
- ☞ **Drill the holes as accurately as possible in the cable pass throughs** to prevent any water seeping into the receiver. Failure to comply with this requirement will void the warranty.

#### Notes:

- If the **range** of the remote controls is too **short** (no signal detected by the EEN-REC3 receiver): place the aerial in several locations to find the best position (if possible in an open area away from metal parts in order not to interfere with the reception).
- The above examples are provided for connection to connector No.1 of the EEN-CEN12-G central unit (or an EEN-MEDGE GSM unit). The receiver can be connected to any other of the central unit's connectors (only the terminal numbers of the connector change).
- Once the receiver is correctly connected to the central unit or the GSM unit, the central unit's LED must be permanently **on** (correct communication with the central unit) and the central unit must indicate on the diagnostics screen that it has detected the receiver by displaying: '**1=RF**' (example for connector No.1) in the '**Terminals**' section of the diagnostics screen. If the receiver's LED is not on or '**1=Free**' or '**1= DEFAULT**' appears on the central unit's screen, check the connections, the voltage between the receiver's + and - terminals as shown on the diagram and continuity of the wires.
- Never connect the V.P. (vehicle presence) terminals directly to a power supply. These terminals detect a change of state (voltage-free contact) from vehicle presence detection systems.
- Never connect the relays' C1/T1 or C2/T2 terminals directly to a power supply. These relays supply a voltage-free contact relay designed to be connected to a pushbutton-type input to the devices that need controlling. If these devices do not have an input of this kind, use an intermediate power relay of the correct capacity.

#### Important:

- **The central unit's pushbutton input connector** is only used to trigger the central unit's CRT relay manually. It cannot trigger the relays on the receiver.
- **To use the anti-passback function:** Set an anti-passback value using switches No. 1 to 3 and correctly connect the two entry and exit relays. Remember in particular that the use of the permanent anti-passback requires that the user must have left via the exit door to be able to again gain access via the entry door.
- **To use the entry and exit relays without a vehicle detection device:**
  - Leave switches 4 and 5 in the OFF position.
  - Or, position switches 4 and 5 to ON and by-pass the V.P. terminals.

## Rolling code operation

The receiver manages the **rolling codes** emitted by the remote controls. They are intended to counter attempts at making fraudulent copies of remote controls (through reproducing the signal emitted by the remote control).

Every time a key on one of the remote controls is pressed, a code is emitted which must meet criteria known only to the EEN-REC3 receiver. The security of your site is thus optimal.

It may be necessary **to erase the rolling codes stored on the receiver**. (Fitting the receiver on another site for example). This erasure occurs at each **power up** or when switching **switch no.6 to the ON position** (Then switch **no.6** back to the **OFF position**).

## Compliance with standards/ Limitations

### EC standards:

The RF 868Mh **EEN-REC3** receiver complies with the **R&TTE Directive 1999/5/EC**: electrical safety **standard EN 60950(2000)** applied, **EMC standard EN 301 489-3 (2000)** applied, **radio standard EN 300 220-3 (2000)** applied.

### Cabling:

The cables used to connect the receiver to a central unit or GSM unit must be fitted in accordance with the instructions describing the level 2, protected environment, of the NF EN 61000-4-4 standard.

Please follow the recommendations given in the cabling and connection diagrams, in particular with respect to the distance and the gauge of the cables between the RF receiver and the central unit or GSM unit. If this is not the case, no warranty will be given.

### End of life product recycling:



The receiver and its accessories must not be disposed of with unsorted municipal waste, but must follow the WEEE (Waste Electrical and Electronic Equipment) collection and recycling channel.

## Sizes

