



V2 S.p.A.

Corso Principi di Piemonte, 65/67 - 12035 RACCONIGI (CN) ITALY

tel. +39 01 72 81 24 11 fax +39 01 72 84 050

info@v2home.com www.v2home.com



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RIF50 - DFN

Fig. 1

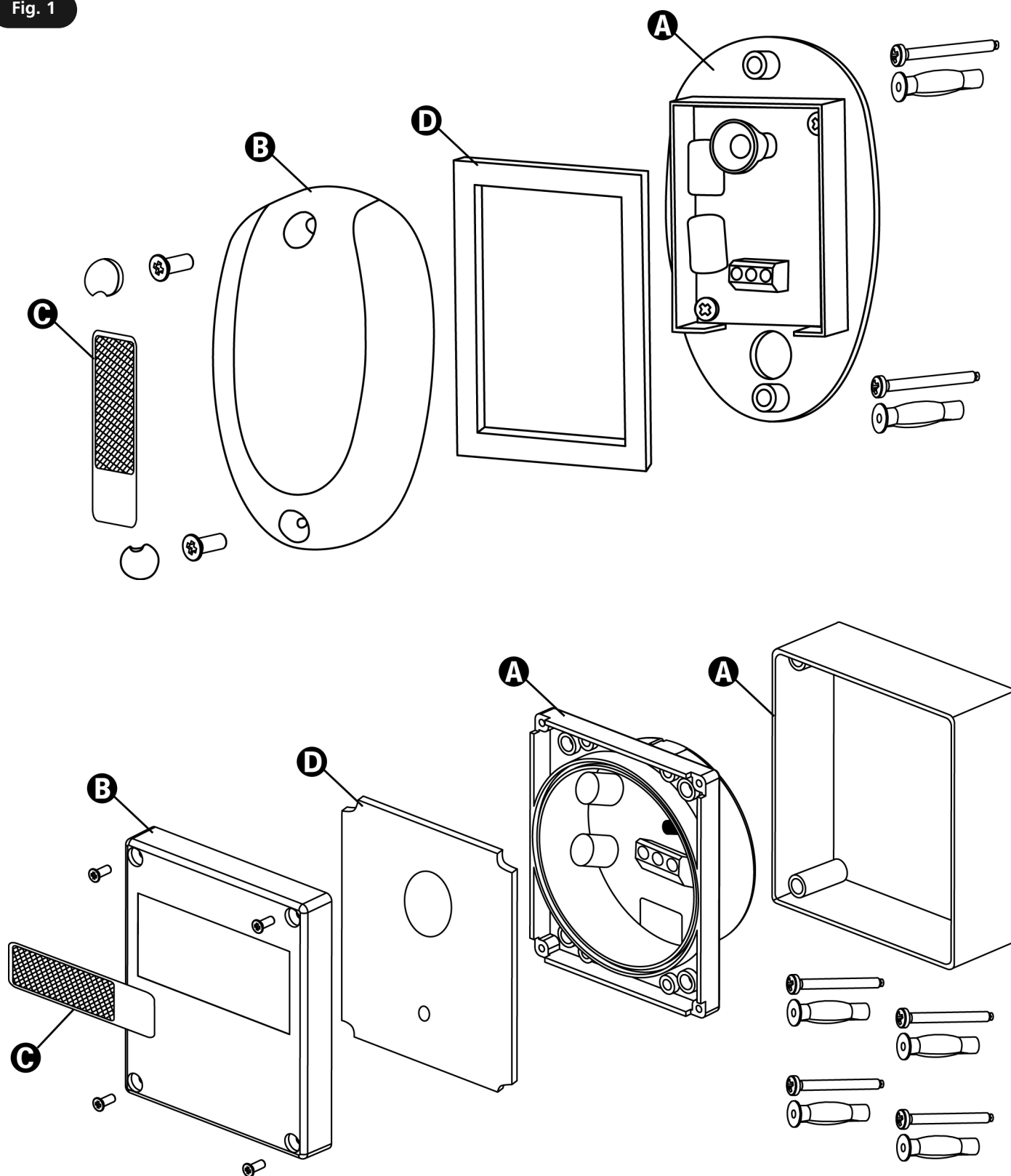


Fig. 2

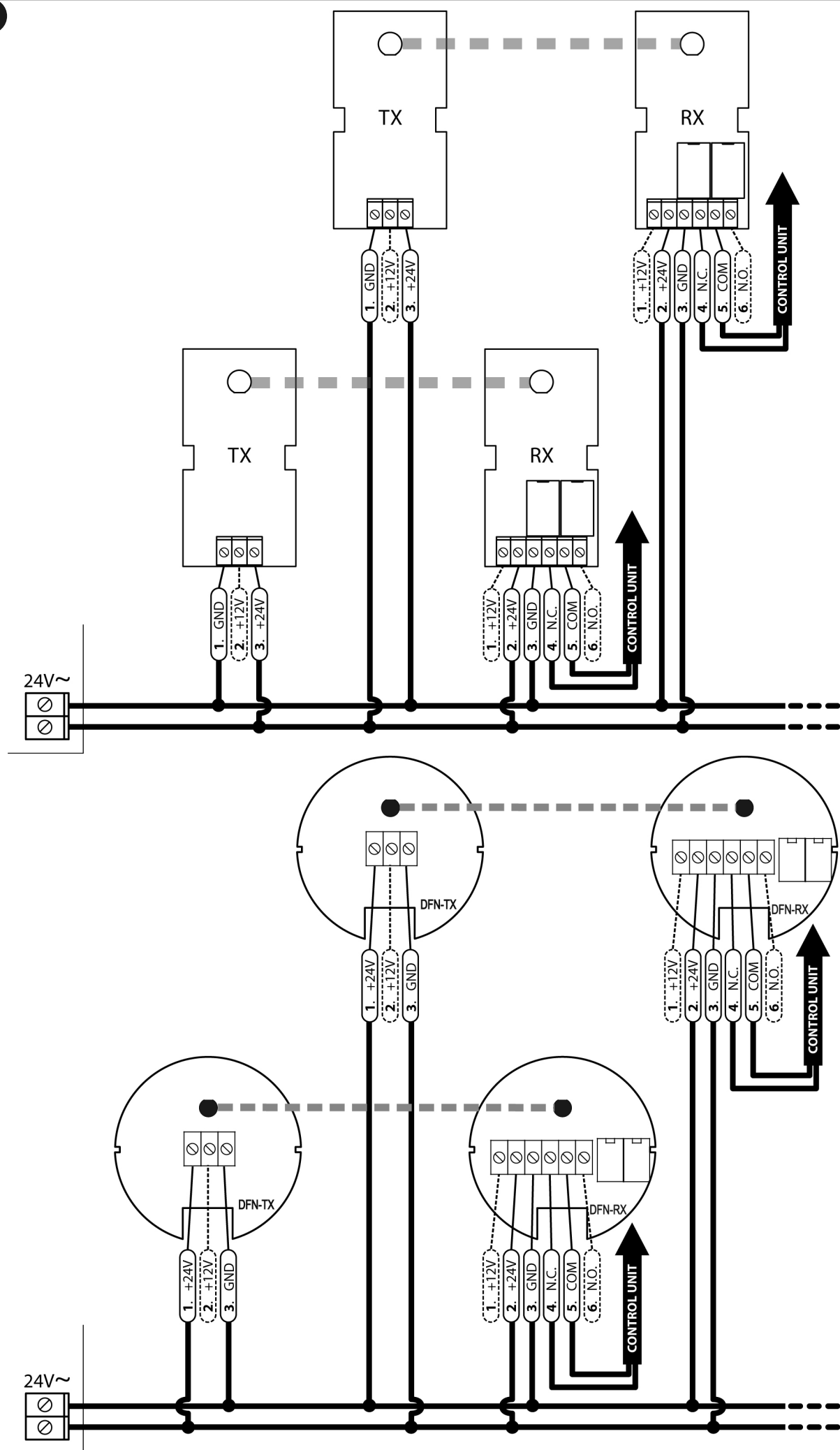
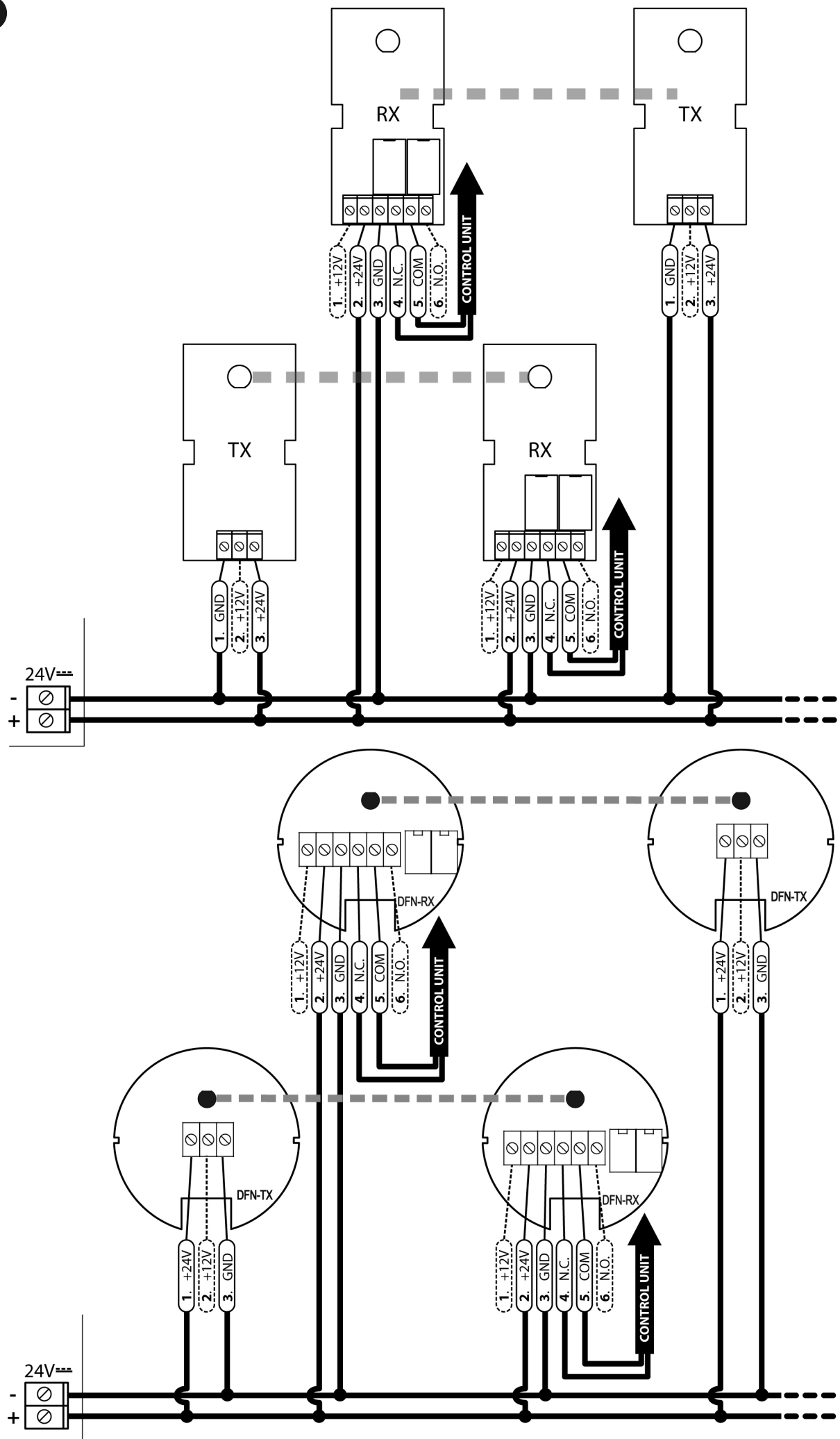


Fig. 3



The devices in the series RIF50 - DFN are a security systems for control and observation of passages, automatic gates and doors. It can be used also for pedestrian and car crossing. It is composed by a transmitter and a receiver housed in special waterproof boxes, that permit the installation in the external or internal part of a building. The system doesn't need a centring adjustment; the receiver LED displays the perfect alignment of the photocells, therefore it allows an easy and fast installation.

INSTALLATION (Fig. 1)

For the system to function correctly, it is essential that the flatness and linearity of the surfaces intended for installation be checked, then **FIX THE PROJECTOR ALONG THE SAME GEOMETRICAL AXIS AND AT THE SAME HEIGHT ABOVE THE GROUND, IN FRONT OF THE RECEIVER.**

For correct installation, follow the instructions below very carefully:

- Decide where the photocells are to be installed, taking into account the need for the photocells to be fixed on a flat, linear surface.

⚠ PLEASE NOTE: position the photocells so as to avoid the receiver RX facing into the sun.

- Decide where to place the channels for the power supply cables.
- Open the photocell casing and use the base **A** to mark out the positions of the fixing holes.
- Fix the base **A** and connect-up the terminals.

ELECTRICAL CONNECTIONS

The new range of devices is equipped with a synchronism circuit allowing the installation of two pairs, even very close together, without them interfering with one another.

⚠ PLEASE NOTE: It is essential that the TX and RX power supplies be in phase (e.g. TX earth with RX earth and 24 V AC TX with 24 V AC RX).

Synchronised operation: supply both pairs of photocells with AC current, inverting the polarity between the first and second pairs (fig. 2).

Non-synchronised operation: supply both pairs of photocells with DC current, and install both pairs inversely with respect to one another (fig. 3).

ADJUSTMENT

Having completed the installation, check that the system is operating correctly:

1. Ensure there are no obstacles between the transmitter and the receiver.
2. Power-up the system:
 - The receiver LED is off: The photocell is not centred; perform centring.
 - The receiver LED is on: the photocell is centred.

⚠ WARNING: If the receiver LED flashes, the power supply of TX and RX is out of phase. Check the electrical connections.

3. Apply the adhesive gasket **D** inside the cover. As regards DFN: if there is not a strong solar exposure, please put the gasket with the small opening positioned on the lens of TX and RX. Otherwise please put the gasket with the small opening positioned on RX lens (the range is so reduced to 13 meters).

⚠ PLEASE NOTE: incorrect insertion of the gasket seriously compromises the watertight seal of the casing.

5. Place the cover **B** over the photocell and ensure it is operating correctly without removing the adhesive attenuation filter **C** (the filter simulates adverse weather conditions such as rain, fog etc.)
6. Then remove the attenuation filter.
7. Break the infrared beam a number of times: the receiver LED must switch itself off and the relay must switch.

The manufacturer cannot be held responsible for any damage caused by improper, erroneous or unreasonable use

TECHNICAL SPECIFICATIONS

| | RIF50 | DFN |
|-----------------------|---|-------------|
| Dimensions | 89x55x24 mm | 76x66x30 mm |
| Optical range | 25 m | |
| Power supply | 12÷24 Vac/dc | |
| Signal | modulated infrared 833 Hz $\lambda = 950 \text{ nm}$ | |
| Relay contact | 1A max 30 Vdc | |
| Absorption | TX 20 mA RX 25 mA | |
| Operating temperature | -20°C / +60°C | |

DECLARATION OF CONFORMITY

V2 S.p.A. hereby declare that RIF50 - DFN equipment conforms to the essential requirements established in the electromagnetic compatibility directive **89/336/CEE**

Racconigi, 10th September 2009
Legal representative, V2 S.p.A.

Cosimo De Falco

