

GENERAL SAFETY WARNINGS AND PRECAUTIONS

CAUTION! – However, incorrect installation or programming may cause serious physical injury to those working on or using the system. For this reason, during installation, always strictly observe all local safety standards and the instructions in this manual. If in any doubt regarding installation, do not proceed and contact the Moovo Technical Assistance for clarifications.

CAUTION! – Observe the following warnings:

- The power supplied by the automation control unit must be the same as specified for this device.
- never make any modifications to part of the device other than those specified in this manual. Operations of this type will lead to malfunctions. The manufacturer declines all liability for damage caused by makeshift modifications to the product.
- during installation, ensure that parts of the product cannot come into contact with water or other liquids.
- Should this occur, disconnect the power supply immediately and contact a Moovo service centre. Use of the product in these conditions constitutes a hazard.
- before making electrical connections or other operations requiring opening of the product protection housing the automation control unit must be disconnected from the power supply. If the disconnect device is not in a visible location, affix a notice stating: "WARNING! MAINTENANCE IN PROGRESS".
- The product packaging material must be disposed of in full observance of current local legislation governing waste disposal.

SAFETY WARNINGS AND PRECAUTIONS

- Keep this manual in a safe place to enable future product maintenance and programming operations.
- At the end of the product lifetime, ensure that the materials are recycled or scrapped according to current standards in the place of use.
- Periodically check correct operation of the photocells and perform the scheduled maintenance at least every six months.
- Photocells do not constitute actual safety devices, but safety aids. They are designed using highly reliable technology, but in extreme conditions may be subject to malfunctions or potential faults. **CAUTION!** – In certain cases these faults are not immediately evident.
- For cleaning the product surfaces, use a slightly damp (not wet) cloth. **Important** – Never use substances containing alcohol, benzene, diluents or other flammable substances. Use of these substances may damage to the devices and cause fires or electric shocks.
- For cleaning the surfaces of the devices, use a slightly damp (not wet) cloth. **Important** – Never use substances containing alcohol, benzene, diluents or other flammable substances. Use of these substances may damage to the devices and cause fires or electric shocks.
- Before cleaning, to prevent persons from activating the automation, release the gearmotor as described in the relative instruction manual.

PRODUCT DESCRIPTION AND INTENDED USE

This product comprises a pair of photocells designed for use in systems for the automation of doors, gates, garage doors and similar, which implement a control unit with "Bus" connection system using the protocol "Bus-Moovo". **CAUTION!** – Any other use than as specified herein is strictly prohibited!

It is an accessory of the Moovo series, useful to enhance and complete performance of your automation: it is a safety aid that enables the detection of obstacles when the latter cross the trajectory joining the pair of photocells, made up of one transmitting element (TX) and one receiving element (RX). The photocells TX and RX are marked by a label inside the cover. Other details are provided in the paragraph "Technical specifications of product".

PRELIMINARY INSTALLATION WORK

• Before proceeding with installation, check the condition of the product components, suitability of the selected model and conditions of the

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AVVERTENZE E PRECAUZIONI PER LA SICUREZZA

ATTENZIONE! – Un'installazione e una programmazione errata possono causare gravi ferite alle persone che eseguono il lavoro e a quelle che useranno il prodotto. Per questo motivo, durante l'installazione, è importante rispettare le leggi e le norme sulla sicurezza, in vigore sul territorio, e tutte le istruzioni riportate in questo manuale. Non procedere con l'installazione se si hanno dubbi di qualunque natura e richiedere eventuali chiarimenti al Servizio Assistenza Moovo.

Attenzione! – Rispettare le seguenti avvertenze:

- La tensione di alimentazione elettrica erogata dalla Centrale di comando dell'automaticismo deve essere la stessa del presente dispositivo.
- non eseguire modifiche su nessuna parte del dispositivo, se non quelle previste nel presente manuale. Operazioni di questo tipo possono solo causare malfunzionamenti. Il costruttore declina ogni responsabilità per danni derivanti da prodotti modificati arbitrariamente.
- durante l'installazione evitare che le parti del prodotto possano venire immerse in acqua o in altre sostanze liquide.
- se sostanze liquide penetrano all'interno del prodotto, scollegare immediatamente l'alimentazione elettrica e rivolgersi al Servizio Assistenza Moovo. L'utilizzo del prodotto in tali condizioni può causare situazioni di pericolo.

- prima di effettuare i collegamenti elettrici o altre operazioni che richiedono l'apertura del guscio di protezione del prodotto, è opportuno togliere l'alimentazione elettrica alla Centrale di comando dell'automaticismo. Se il dispositivo di sconnessione non è a vista, apporvi un cartello con la seguente dicitura: "ATTENZIONE! MANUTENZIONE IN CORSO".
- il materiale dell'imballaggio del prodotto deve essere smaltito nel pieno rispetto della normativa in vigore sul territorio.

AVVERTENZE E PRECAUZIONI PER L'USO

- Conservare con cura questo manuale per facilitare eventuali interventi futuri di programmazione e manutenzione del prodotto.
- Al termine della vita del prodotto, assicurarsi che il materiale venga riciclato o smaltito secondo le norme vigenti sul territorio.

• Verificare periodicamente il corretto funzionamento delle photocellule e far eseguire almeno ogni 6 mesi i controlli di manutenzione previsti.

ATTENZIONE! – Un collegamento errato può provocare guasti o situazioni di pericolo; quindi, rispettare scrupolosamente i collegamenti indicati.

- Collegare fra loro i fili dei due cavi e fissarli nella morsettiera.
- Innestare la morsettiera sul connettore maschio presente sul retro della photocella.

Importante! – Prima di chiudere la photocella è necessario selezionare con l'apposito ponticello elettrico la modalità di funzionamento delle photocellule (vedere il capitolo specifico, presente nel manuale istruzioni del proprio automotismo).

- Per la pulizia superficiale del prodotto, utilizzare un panno leggermente umido (non bagnato). **Importante** – Non utilizzare sostanze contenenti alcool, benzene, diluenti o altre sostanze infiammabili. L'uso di tali sostanze potrebbe danneggiare i dispositivi e generare incendi o scosse elettriche.

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• Prima di procedere alla pulizia, per impedire che qualcuno possa azionare inavvertitamente l'automazione, sbloccare il motoriduttore come descritto nel proprio manuale istruzione.

DESCRIZIONE DEL PRODOTTO E DESTINAZIONE D'USO

Il presente prodotto è una coppia di photocellule destinata ad essere usata nelle automazioni per porte, cancelli, portoni da garage e similari, che adottano una Centrale di comando con sistema di collegamento "Bus" con protocollo "Bus-Moovo". **ATTENZIONE!** – Qualsiasi altro uso diverso da quello descritto è da considerarsi impraticabile e vietato!

E' un accessorio della linea Moovo, utile per aumentare e completare le prestazioni della propria automazione: non è un dispositivo ausiliario alla sicurezza e permettono di rilevare gli ostacoli quando questi vengono a trovarsi sulla linea di traiettoria che le congiungono le coppie di photocellule è formata da un elemento che trasmette (TX) e da uno che riceve (RX). Le photocellule TX

intendendo installation environment.

- **CAUTION!** – Ensure that the power supply voltage on the terminals for the "Bus" connection of the automation control unit corresponds to specifications for this device.
- Check that the packaging is intact before opening, and then check the product inside.
- Ensure that the selected installation position enables future access for maintenance (e.g. lamp replacement).
- Ensure that the selected surfaces for installation are solid and guarantee a stable fixture.
- Ensure that each pair of photocells is in a sheltered location and protected against the risk of accidental impact.

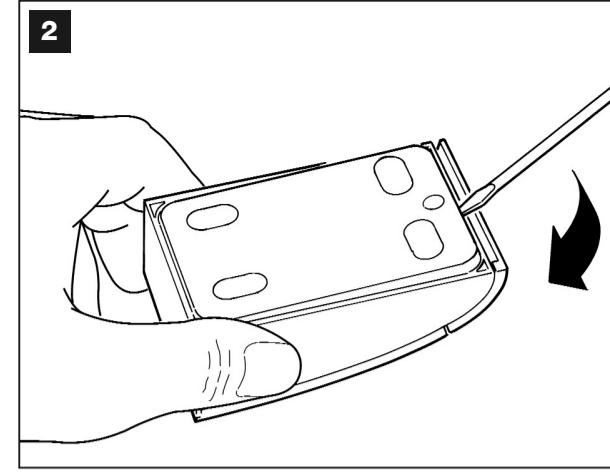
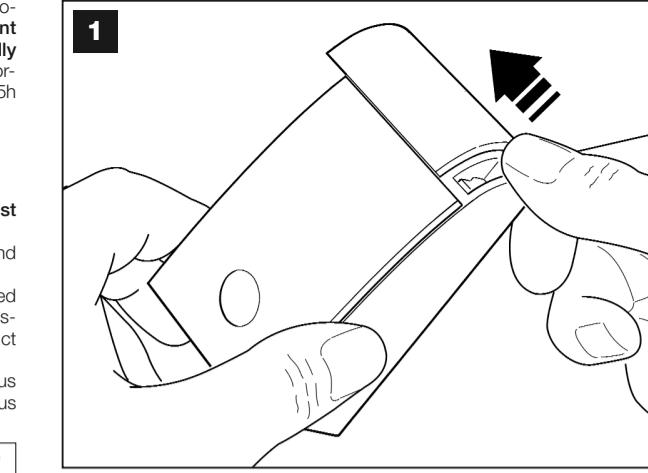
APPLICATION LIMITS

- This product can be used exclusively with Moovo control units, equipped with a "Bus" connection system.

PRODUCT INSTALLATION AND CONNECTION

To install and connect a pair of photocells proceed as follows:

1. Fig. 1: Remove the screw cover cap by pushing down one side as shown in the figure.



2. Fig. 2: Using a screwdriver, open and detach the base of the photocell.

3. a) Drill a hole on the pre-cut section on the base for routing the connection cables.
b) Fix the photocell base to the wall with the relative screws, routing the cables through the prepared hole.

CAUTION! – Local legislation may envisage serious fines in the event of abusive disposal of this product.

Note – for connection of the photocells, use a cable type $2 \times 0.5 \text{ mm}^2$ (up to a distance of 20 m) or cable type $2 \times 1.0 \text{ mm}^2$ (for distances over 20 m).

- CAUTION!** – Incorrect connections can cause faults or hazards; therefore ensure that the specified connections are strictly observed.
4. Fig. 4:
a) Connect the wires of the two cables and secure on the terminal board.
b) Insert the terminal board in the male connector at the rear of the photocell.

IMPORTANT! – Before closing the photocell, the photocell operating mode must be selected by means of the relative jumper (refer to the specific section in your automation manual).

5. Refit the cover, ensuring that the serrated section engages with that of the photocell base.

6. Fix the photocell cover to the base by means of the screw supplied. Lastly refit the screw cover cap as shown in the figure.

TX AND RX PHOTOCELL ALIGNMENT

To ensure correct operation of a pair of photocells, it is important to check that they are perfectly aligned. To do this, refer to the chapter "Programming" in your automation instruction manual.

According to the following standards:
EN 61000-6-2:2005, EN 61000-6-3:2001+A11:2004

TECHNICAL SPECIFICATIONS OF PRODUCT

- **Type:** Presence detector for automations on gates and doors (type D according to standard EN 12453) comprising a pair of TX transmitter and RX receiver photocells. **Technology adopted:** Optic, by direct TX-RX interpolation with modulated infrared beam. **Detection range:** Opaque objects placed on the optical axis between TX-RX with dimensions greater than 50 mm and speed less than 1,6 m/s. **TX transmission angle:** approx. 20°. **RX reception angle:** approx. 20°. **Useful Range:** Up to 7 m for maximum TX-RX offset of ±4° (the device can also indicate an obstacle in the case of particularly adverse weather conditions). **Power supply:** Output. The device must be connected to Moovo Bus networks, from which it is powered and sends the output signals. **Absorbed power:** 450mW in operation; 40mW in stand by. **Maximum cable length:** Up to 20 m (observe warnings for the minimum section and cable type).

- **Address assignment options:** up to 6 presence detectors with safety

function and up to 4 with opening command function. Automatic synchronisation prevents interference between the various detectors. **Ambient operating temperature:** -20 ÷ 50°C. **In use in acid, saline or potentially explosive atmospheres:** No. **Assembly:** Vertical on flat surface; or horizontal wall-mounted. **Protection rating:** IP 44. **Dimensions:** 50 x 85 x 35 mm. **Weight (pair):** 140 g.

PRODUCT DISPOSAL

This product is an integral part of the automation and therefore must be disposed together with the latter.

As in installation, also at the end of product lifetime, the disassembly and scrapping operations must be performed by qualified personnel.

This product comprises various types of materials: some may be recycled others must be disposed of. Seek information on the recycling and disposal systems envisaged by the local regulations in your area for this product category.

CAUTION! – some parts of the product may contain pollutant or hazardous substances which, if disposed of into the environment, may cause serious damage to the environment or physical health. As indicated by the symbol alongside, disposal of this product in domestic waste is strictly prohibited. Separate the waste into categories for disposal, according to the methods envisaged by current legislation in your area, or return the product to the retailer when purchasing a new version.

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CE DECLARATION OF CONFORMITY

This Declaration of Conformity contains the individual declarations of conformity for the specified products; it was updated on the issue date of this manual and the text herein has been drawn up for editorial purposes. A copy of the original declaration for each product can be requested from NICE S.p.a. (TV):

MP is produced by NICE S.p.a. (TV); MOIVO is a commercial trademark owned by NICE S.p.a.

The undersigned, Lauro Buoro, in the role of Managing Director, declares under his sole responsibility, that the product:

Manufacturer's Name: NICE s.p.a.
Address: Via Piazza Alta 13, Z.I. Rustignè, 31046 Oderzo (TV) Italy
Type: "MOIVO" series photocells
Models: MP
Accessories: No accessory

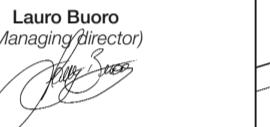
Complies with the requirements of the following EC directives, as amended by Directive 93/68/EEC of the European Council of 22 July 1993

89/336/EEC DIRECTIVE 89/336/EEC OF THE EUROPEAN COUNCIL of 3 May 1989 regarding the approximation of member state legislation related to electromagnetic compatibility

According to the following standards:

EN 61000-6-2:2005, EN 61000-6-3:2001+A11:2004

LAURA BUORO (Managing Director)



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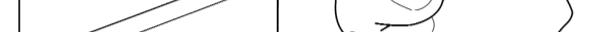
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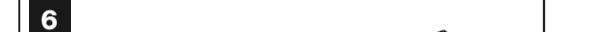
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