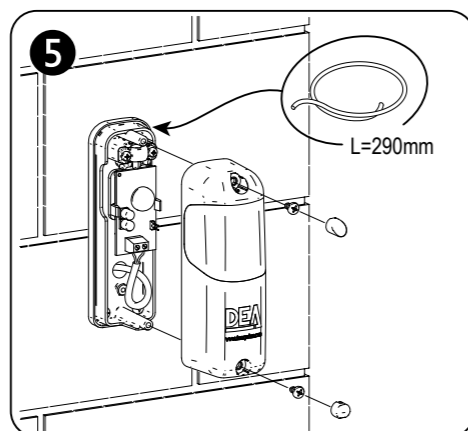
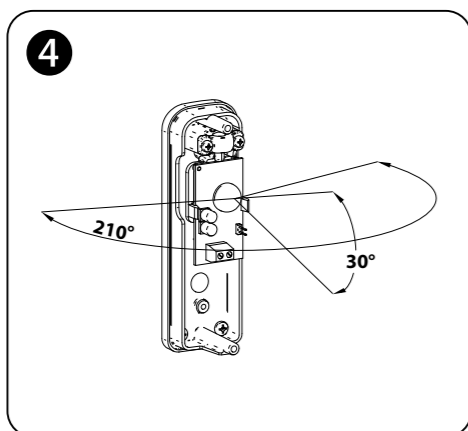
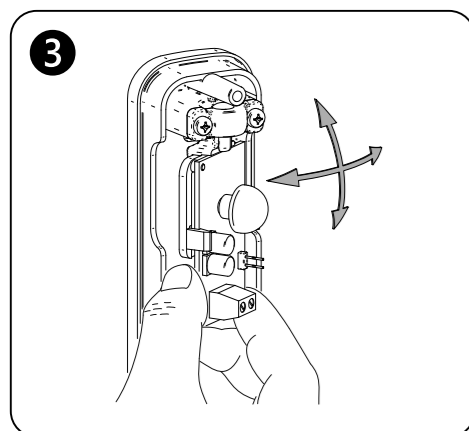
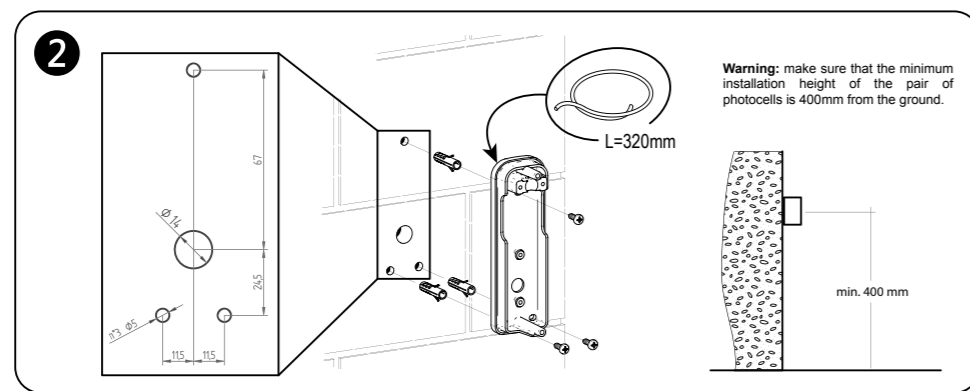
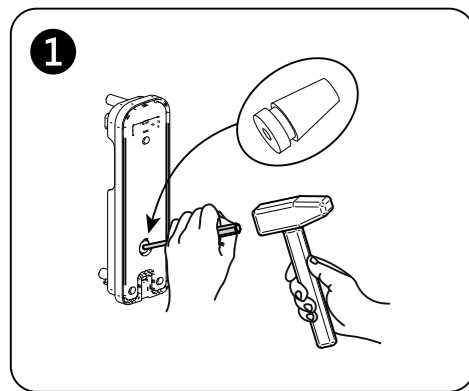
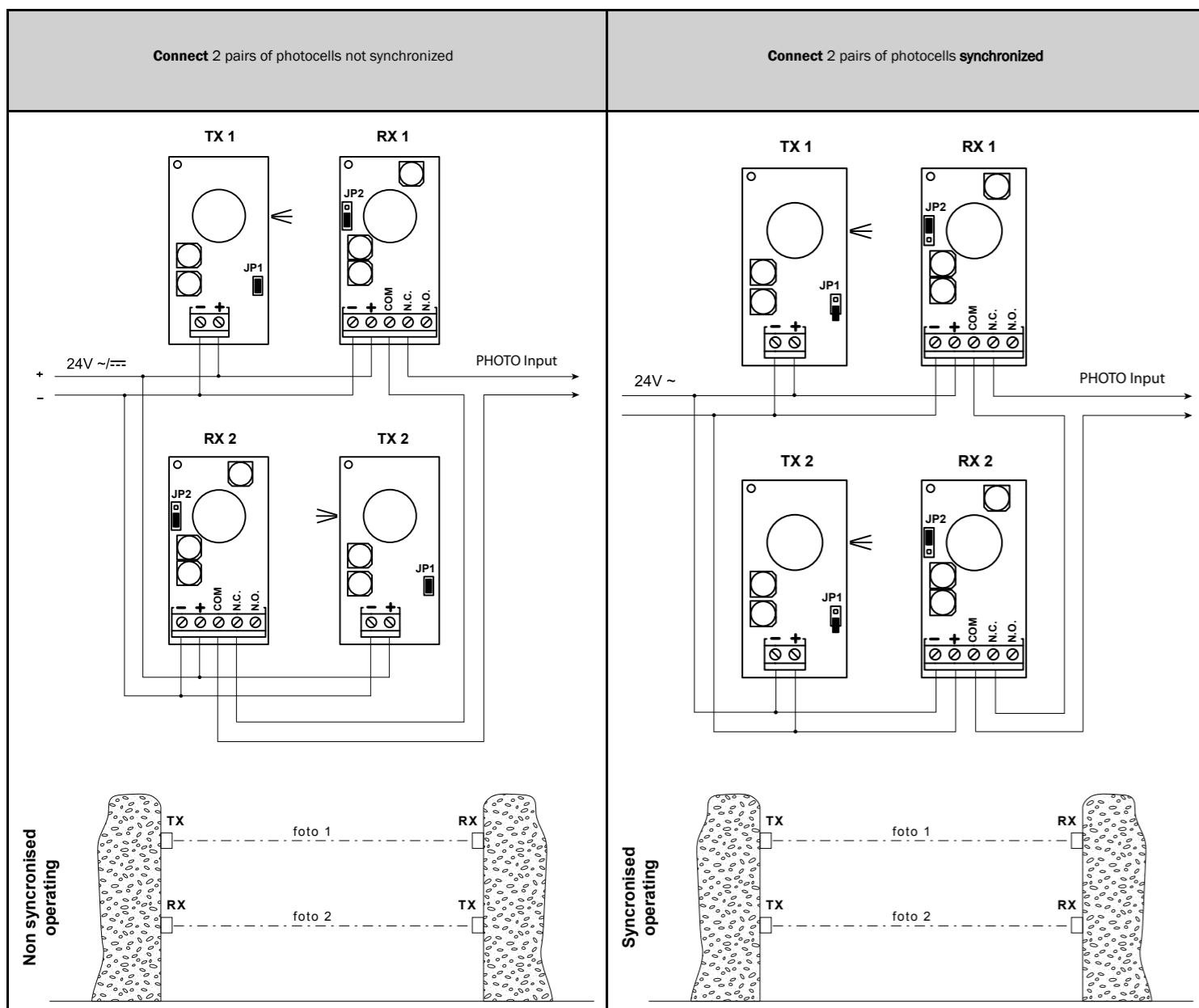


# LINEAR

I662044 Rev 06 (20-05-19)

**DEA SYSTEM S.p.A.**  
Via Della Tecnica, 6 - ITALY  
36013 PIOVENE ROCCHETTE (VI)  
tel. +39 0445 550789  
fax +39 0445 550265  
Internet <http://www.deasystem.com>  
e-mail: [deasystem@deasystem.com](mailto:deasystem@deasystem.com)



(EN)

## 1. Product conformity

Linear is a CE marked product. DEA System assures the conformity of the product to European Directives 2014/53/CE "RED" (EN 61000-6-2 :2005; EN 61000-6-3:2007 + A1:2011).

This device is "D" type according to EN12453. DEA System also grants quality and conformity to rule 2011/65/EU (RoHS) of materials used for the product assembly. The Declaration of conformity may be viewed at: "<http://www.deasystem.com>".

## 2. Dangers and warnings

Read carefully; ignoring the following warnings may cause dangerous situations.

**WARNING** Exclusively qualified personnel must perform any operation of installation, maintenance, cleaning or repairing of the whole automation. Always operate when main power supply is disconnected and follow carefully all the laws, concerning electrical installations, in the country where the installation is made.

## 3. Technical characteristics

Power supply	24 V~/=
"TX" Absorption	20 mA
"RX" Absorption	25 mA
Contacts capacity	500 mA max 24V
Assured distance	40 m (under optimal conditions) 20 m (in poor visibility conditions)
Maximum length of connection cables	50 m cable 2 x 0,5mm
Protection degree	IP54
Operating temperature	-20+55 °C
Dimensions/weight	125 x 40 x 44 mm / 100 g

## 4. Product description

Linear is a presence detector for automatic doors and gates consisting of a transmitter device "TX" and a receiver "RX". In the case of installation of two pairs of photocells at close range, you can set the mode of operation synchronized to prevent interference of the same, without the need for cross devices "TX" - "RX". **The synchronized mode is available only if you use a power supply 24V-.**

The photocells provide an opportunity to orientation of 210° horizontally and 30° vertically (Pic. 4), this can be fixed to surfaces that would normally prevent the correct alignment between "TX" and "RX".

## 5. Assembly and wiring instructions

**THE DISTANCE OF INSTALLATION FROM THE SOIL AND / OR FROM ANY OTHER PAIRS OF PHOTOCELLS, MUST BE AT LEAST 40cm.**

**WARNING** Keep the cables separate from any other cable for connecting devices that can generate noise (motors, flashing lights, etc. ...) and which could jeopardize the proper functioning of the system.

Proceed as follows for the installation of the photocell Linear:

1. Remove the circuit holder from the photocell base so as to facilitate the operations of fixing at wall;
2. release the folding hole on the back of the photocell base (Pic. 1) and apply the supplied cables-gland;
3. fix the base on the wall by using the supplied screws and anchors (Pic. 2);
4. re-assemble the circuit holder on the base avoiding screwing too much the fixing screws;
5. Depending on the desired operation, refer to the wiring diagram 1 (non-synchronized version) and 2 (synchronized version). In the latter case it is essential to respect the polarity indicated (inverted for the two pairs of photocells). In each case, depending on the type of operation, correctly set the selection jumpers (Table 1).

Table 1	Remote "TX"	Receiver "RX"
Non synchronised operating	JP1 Closed	JP2 in pos. B
Synchronised operating	JP1 Open	JP2 in Pos. A

6. Adjust lens direction (at 210° on horizontal axe and 30° on vertical one) to find the optimal alignment, verifying the type of flashing LED on the "RX" (see Table 2). Lock the circuit holder (Pic. 3);

**WARNING** In order to correctly align a pair of photocells, obscure or remove power to all existing transmitters that would interfere. This procedure must be repeated for each couple of photocells in the installation.

**ATTENTION** When aligning the photocells, it is very important to consider the presence of reflective surfaces (metallic / glossy parts, possible pools of water) that could alter the signal.

Table 2	Type of flashing	Photocell status
	OFF	The "RX" receives a good signal
	Slow flashing	The "RX" receives a poor signal
	Speed flashing	The "RX" receives a bad signal
	ON	No signal

7. Close the shell with screws and install the caps hole (Pic. 5).

**WARNING** For the assembly and / or breakdown, always use the most appropriate equipment meticulously following the rules in force in the country of sale.

## 6. Maintenance

A good preventive maintenance and regular inspection ensure a long product life. The photocells Linear however, does not require any special control, simply check the condition of the same (lack of moisture, oxides, etc. ...), clean the lens and the outer shell of the device and perform a test to ensure proper functioning.

In order to ensure an adequate safety level to the installation, it is advisable to conduct such inspections at intervals not exceeding 6 months.

### 6.1 Disposal

Linear Photocells are made of materials of various types, some of which can be recycled, while others must be disposed.

- Proceed as follows:
1. Remove the accessory from the power supply and disassemble in reverse order from that described in "Installation";
  2. Remove the electronic components;
  3. Sorting and disposing of the materials exactly as per the regulations in the Country of sale.

**WARNING** In accordance with EU Directive 2012/19/EU on waste of electrical and electronic equipment (WEEE), this electrical product should not be disposed of as unsorted municipal waste. Please dispose of the product and bring it to your local municipal collection for recycling.

(FR)

## 1. Conformité du produit

Linear est un produit marqué CE. DEA System assure la conformité du produit aux Règlements européens 2014/53/CE "RED" (EN 61000-6-2 :2005; EN 61000-6-3:2007 + A1:2011).

Le dispositif est de type "D" conformément à la EN12453. DEA System assure aussi la qualité et la conformité suivant la directive 2011/65/EU (RoHS) des matériels utilisés pour assembler le produit. La déclaration de conformité peut être consultée sur le site DEA en tapant: "<http://www.deasystem.com>".

## 2. Dangers et avertissements

Lire avec attention; le non respect des avertissements suivants peut créer des situations de danger.

**ATTENTION** Chaque opération d'installation, maintenance, nettoyage ou réparation de l'installation doit être exécutés seulement par du personnel qualifié. Opérer toujours hors tension et se référer à toutes les normes en vigueur en matière d'installations électriques dans le pays où l'automatisation est installée.

## 3. Caractéristiques techniques

Alimentation	24 V~/=
Absorption "TX"	20 mA
Absorption "RX"	25 mA
Capacité des contacts	500 mA max 24V
Distance garantie	40 m (dans des conditions optimales) 20 m (dans de mauvaises conditions de visibilité)
Longueur maximale câbles de connexion	50 m câble 2 x 0,5mm
Degré de protection	IP54
Limite température ambiante	-20+55 °C
Dimensions/ Poids	125 x 40 x 44 mm / 100 g

## 4. Description du produit

Linear est un détecteur de présence pour portails automatiques composé d'un émetteur "TX" et d'un récepteur "RX". Dans le cas de l'installation de deux paires de photocellules à courte portée, il est possible d'activer le mode de fonctionnement synchronisé pour éviter les interférences, sans besoin de croiser les dispositifs "TX" - "RX". **La modalité de fonctionnement synchronisé est disponible seulement en cas d'utilisation d'une tension d'alimentation alternée 24V -**

Les photocellules offrent une possibilité d'orientation de 210° sur l'axe horizontale et de 30° sur l'axe verticale (Voir dessin 4), cela permet l'alignement entre "TX" et "RX" dans n'importe quelle situation.

## 5. Instructions de montage et câblage

**LA DISTANCE D'INSTALLATION DU SOL ET / OU DE TOUT AUTRE PAIRE DE PHOTOCELLULES DOIT ÊTRE D'AU MOINS 40 cm.**

**ATTENTION** Pensez à bien séparer les câbles de connexion des photocellules aux câbles de connexion d'autres appareils qui peuvent engendrer des interférences (moteurs, lampes clignotantes etc...) et qui peuvent compromettre le bon fonctionnement de l'installation.

Pour l'installation de la photocellule Linear procéder comme il suit:

1. Enlevez le porte-circuit de la base afin de faciliter les opérations de montage au mur;
2. Percez le trou à l'arrière de la cellule (dessin 1) et connectez e câble fourni;
3. Fixez la base au mur en utilisant les vis et les chevilles fournies (dessin 2);
4. Remplacez le porte-circuit sur la base en évitant de serrer les vis au maximum;
5. Selon l'opération souhaitée, se référer au schéma de câblage 1 (version non-synchronisée) et 2 (version synchronisée). Dans ce dernier cas, il est essentiel de respecter la polarité indiquée (inversé pour les deux paires de photocellules). Dans chaque cas, selon le type d'installation connectez correctement les jumpers (tableau 1).

Table 1	Emetteur "TX"	Récepteur "RX"
Fonctionnement non Synchronisé	JP1 Fermé	JP2 in pos. B
Fonctionnement Synchronisé	JP1 Ouvert	JP2 in Pos. A