

## **SLIDE CONTROL UNIT**

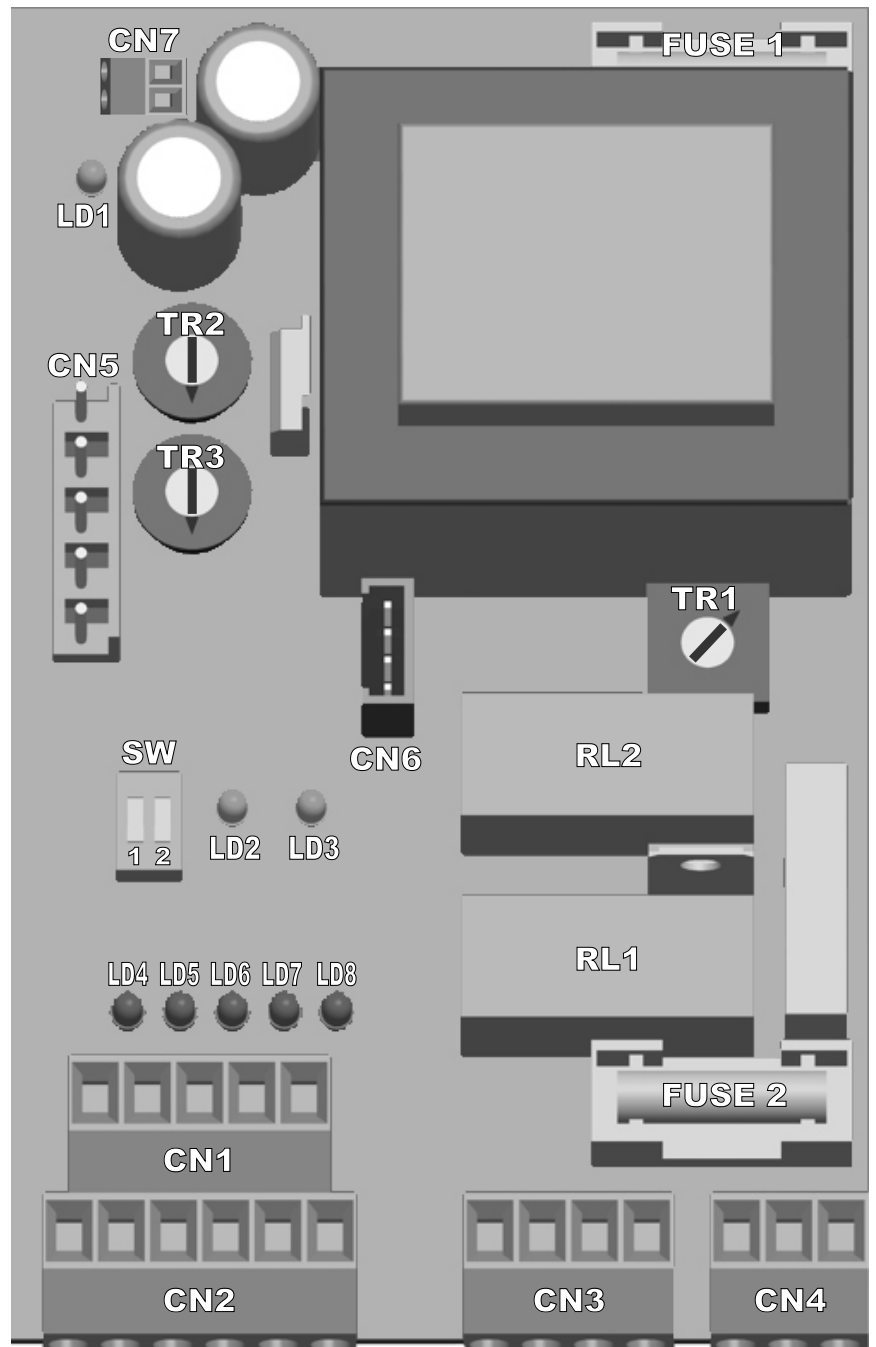
**Accessories power supply:**  
24V dc Max 200 mA

**Trimmer regulation:**  
Open pause time  
Brake regulation  
Motor torque regulation

**Logics selection:**  
Automatic  
Semiautomatic

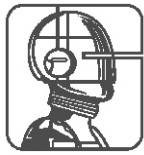
**Pin header connector:**  
Radio receiver

**Main features:**  
Device of anti-crushing reversal

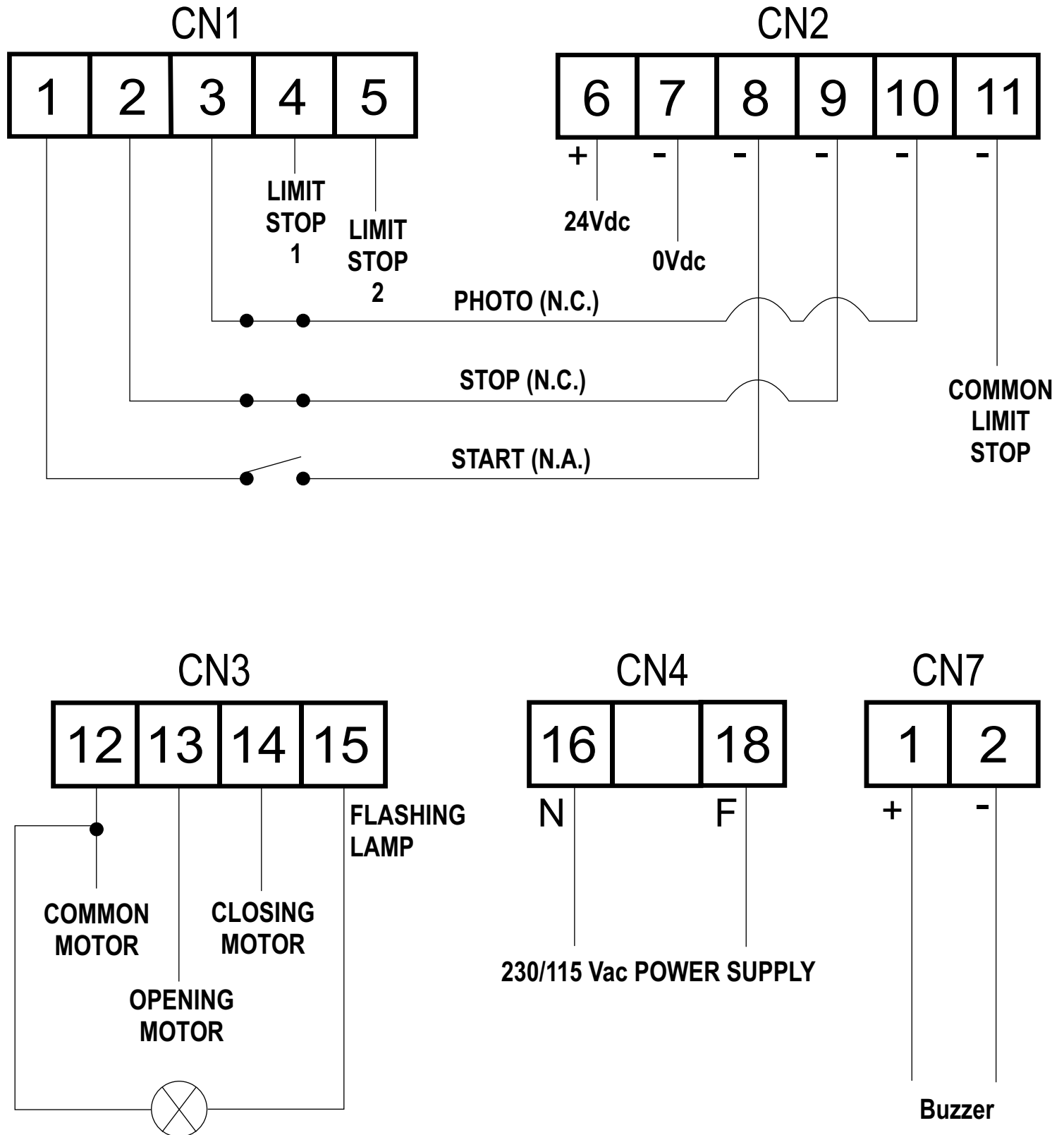


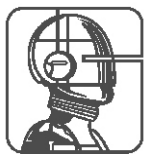
FUSE 1	24Vdc Fuse (2A)
FUSE 2	230/115Vac Fuse (4A / 10A)
TR1	Regulation motor torque
TR2	Time of pause regulation (2 secs. – 2 min.)
TR3	Brake regulation
SW.1	Automatic closing Starting Up
SW.2	Encoder Activation
RL1	Relay motor direction
RL2	Relay motor activation
CN1	Low Tension Connector
CN2	Low Tension Connector
CN3	Motor- flashing light Connector

CN4	230/115Vac Power Supply Connector
CN5	Radio receiver connector
CN6	Encoder connector
CN7	Buzzer connector
LD1	Board supply led
LD2	Opening led
LD3	Closing led
LD4	Start led
LD5	Stop led
LD6	Photocell led
LD7	Limit switch 1 led
LD8	Limit switch 2 led



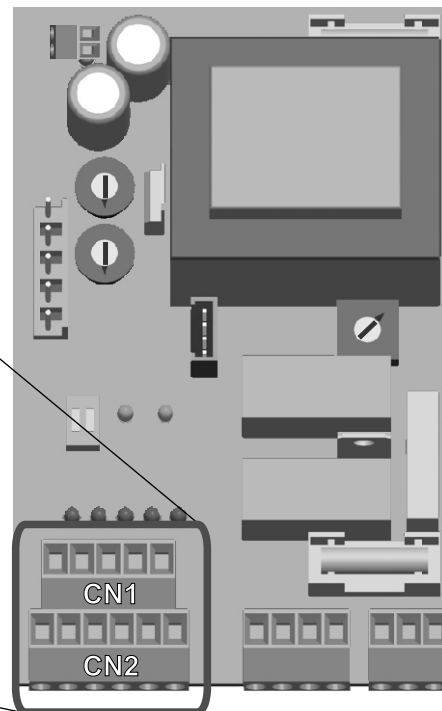
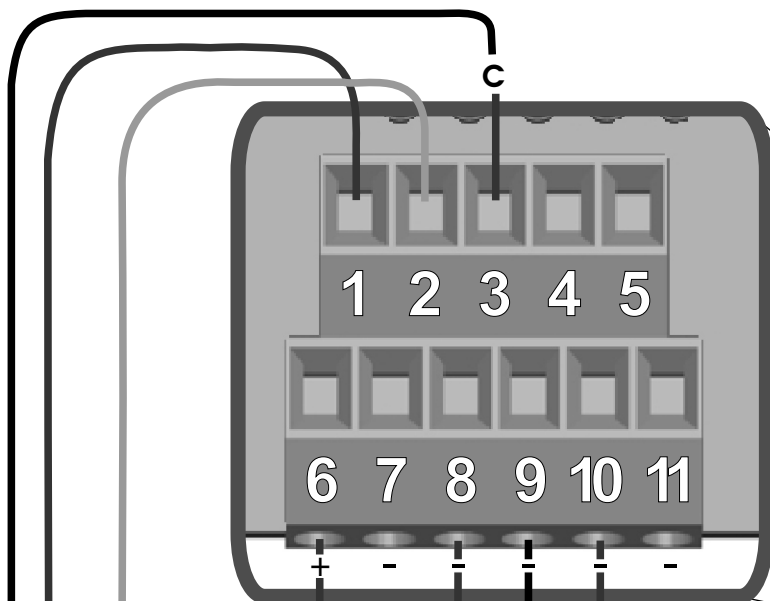
## **CONNECTIONS**





## **STOP BUTTON, START BUTTON**

## **PHOTOCELLS CONNECTIONS**



### **Stop Button**

The pressure of this button stops the automation in whatever condition it can be it needs a start command to re-establish the movement.

**Notice:** if it is not used, make a link between terminals n.2 and 9.

### **Start Button**

An impulse given to this entrance commands the opening/closing of the automation. It can be given by a key switch, a loop detector, a keyboard controller, etc.

To connect the supplied devices (for ex. Loop detector) see the related instructions.

RX

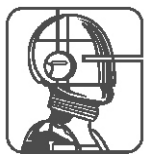
TX

### **Photocells Connection**

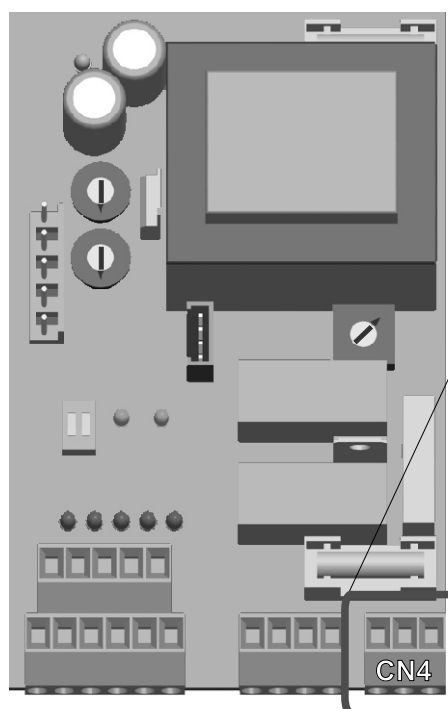
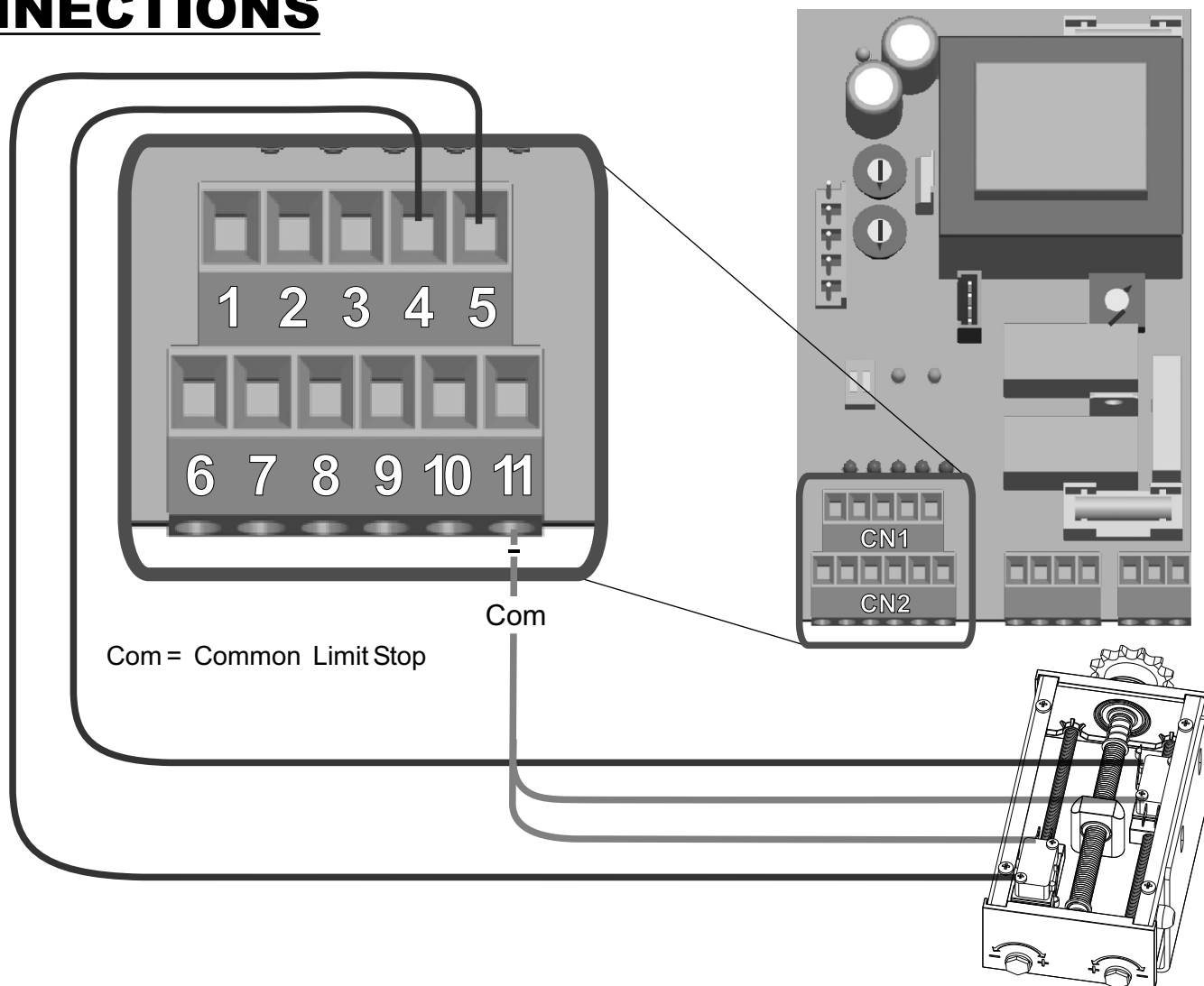
When the photocells beam is crossed, the automation reverses its movement if in closing phase.

**Notice:** if it is not used, make a connection between terminals 2 and 7

+ = 24Vdc    - = 0Vdc    C = Contact



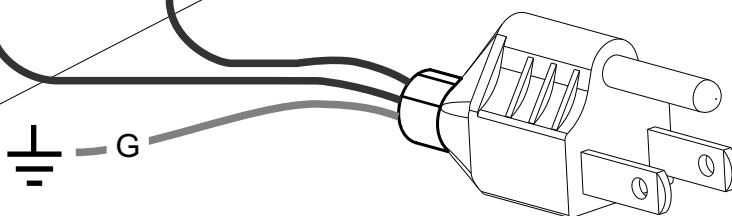
## **LIMIT SWITCH, POWER SUPPLY CONNECTIONS**

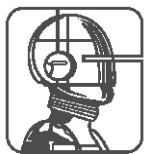


**Net power supply entrance**  
Entrance for the electric net  
connection

P = PHASE  
N = NEUTRAL  
G = GROUND

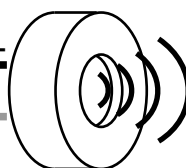
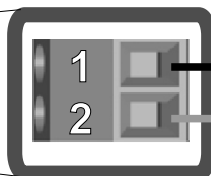
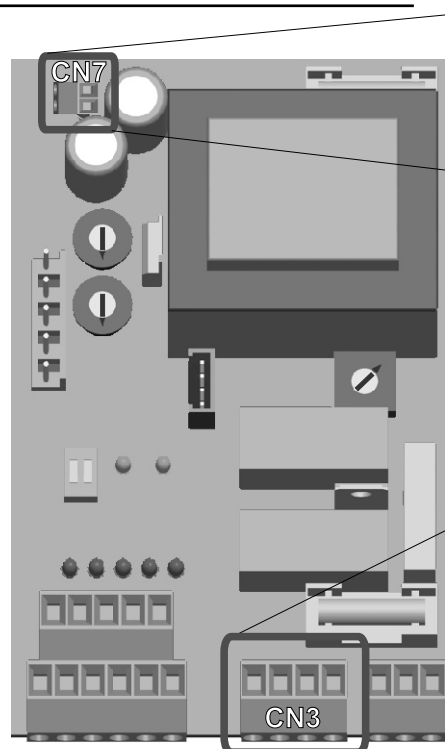
**NOTICE:** for the connection of  
the electric net make  
reference to the current laws.





# FLASHING LAMP, MOTOR, BUZZER

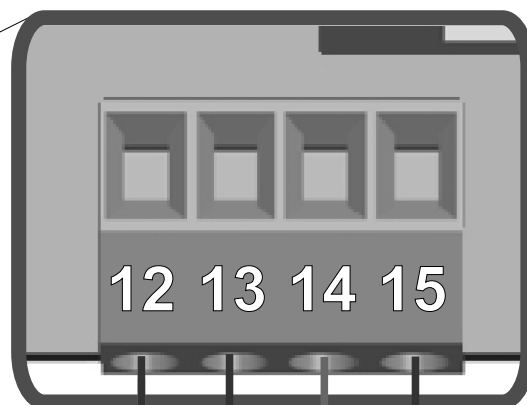
## CONNECTIONS



### Buzzer (24Vdc) Audible Alarm

Use a buzzer 24Vdc of 100 dB. The buzzer will be switched on after two consecutive activations of the anticrush sensor. To reset the alarm it is necessary to push the button STOP. Anyway after 5 minutes the buzzer will stop to sound and the automation stands still waiting for commands.

**! IMPORTANT:** UL325 standards requires an audible alarm to go OFF after 2 consecutive events detected by the primary entrapment protection of the gate operator (for ex. reversing sensor).

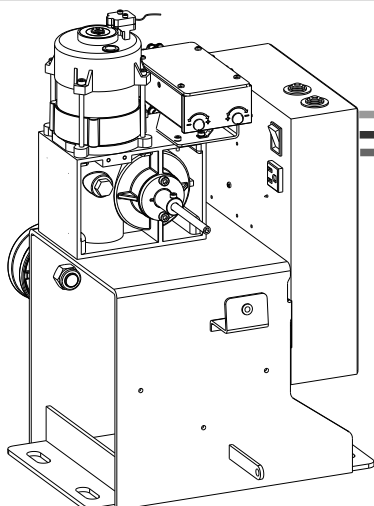


Com Op Cl

### Flashing Lamp

The flashing lamp help the warning of an automatic gate while in movement.

To connect it, connect the wires of the flashing lamp as in the picture.



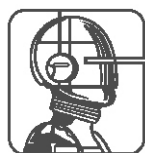
### Motor

Output for motor connection

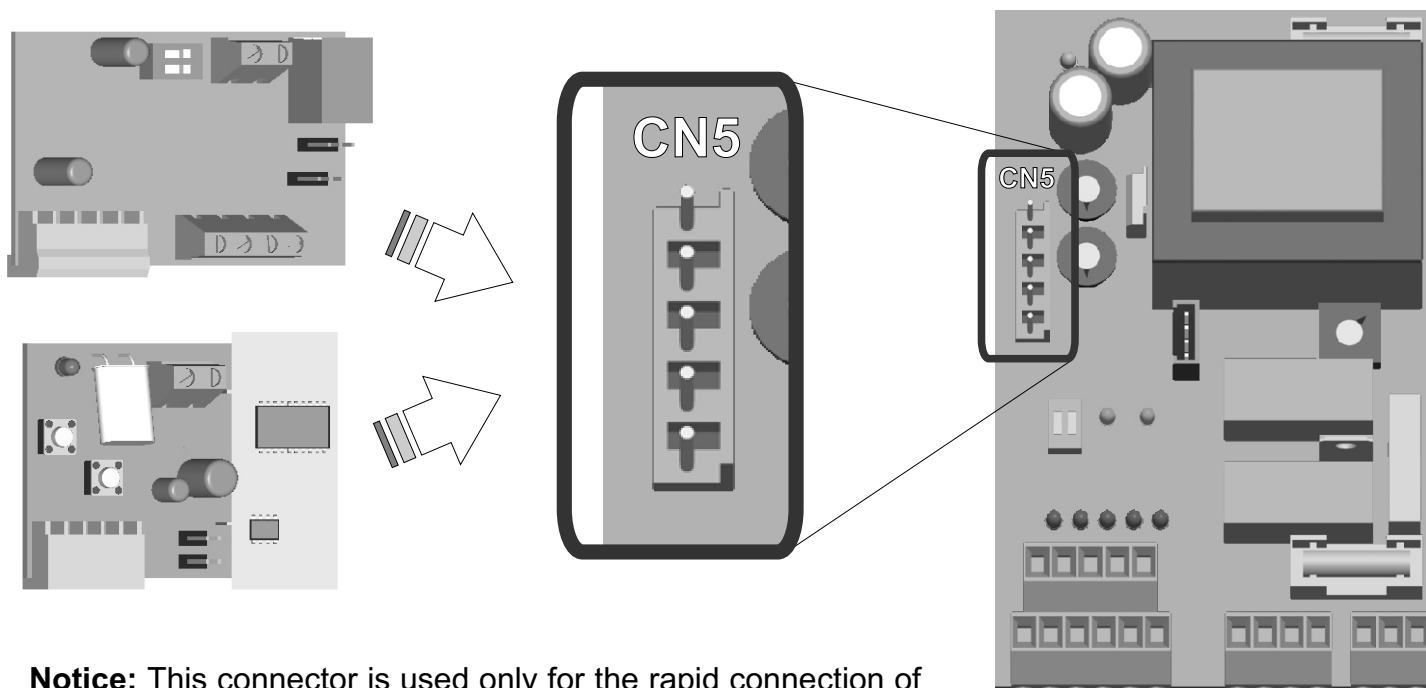
O = OPEN

C = CLOSED

Com = COMMON (motor white cable)



## **RADIO RECEIVER, DECODER MODULE, ENCODER CONNECTIONS**

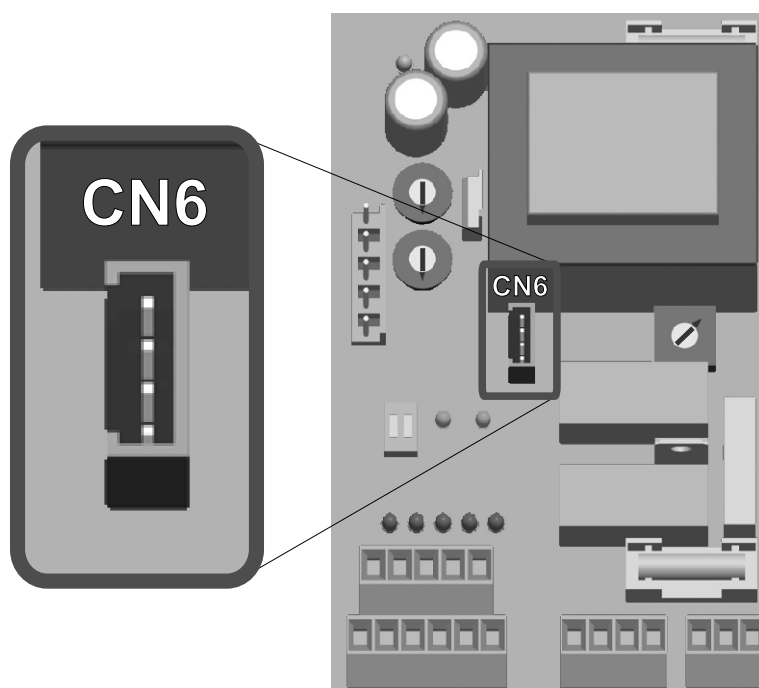


**Notice:** This connector is used only for the rapid connection of SEA designed products. Connector used for the rapid connection of inserting receivers or of the Decoder Module with keyboard.

### **CN6: ENCODER CONNECTOR**

This connector is used to link the encoder (survey system of gate position) to the equipment.

If this electronic card is purchased inside the motor reducer, the encoder will be already inserted in the CN6 connector. If it is purchased separated by the motor reducer, it must purchase the specified encoder kit for Taurus to which an electronic card is applied. The encoder kit must belong to SEA.





# DIP SWITCHES, LOGIC PROGRAM, LEDS

## WORKING LOGICS

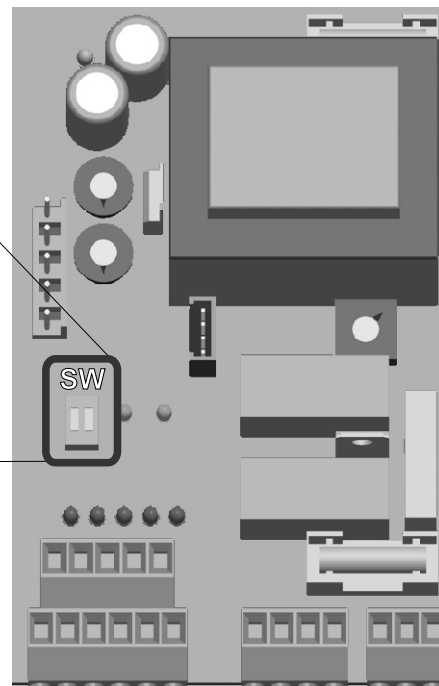
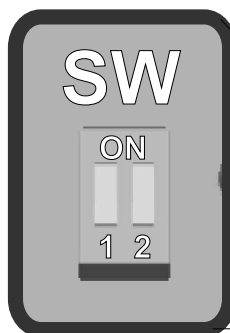
It can be selected two different equipment working logics which programming occurs using the DIP 1 function.

### Semi automatic logic bring the DIP 1 on ON

The first start impulse opens the gate, a second impulse received during the opening phase commands the stopping and the closing of the gate.

### Automatic logic bring DIP 1 on ON

The first impulse opens the gate which automatically does a pause cycle before closing. The pause time which can change from 5 to 120 seconds can be programmed turning the TR2 TRIMMER. In anti-clockwise the pause time increases, in clockwise it decreases. An impulse received during the closing it orders the re-opening of the gate.



DIP	OPENED / CLOSED	DIP 1 PROGRAMMING FOR THE CHOICE OF THE WORKING LOGIC
1	ON	If <b>DIP 1</b> is set out in this way, this equipment will operate following the <b>automatic logic (A)</b>
1	OFF	If <b>DIP 1</b> is set out in this way, this equipment will operate following the <b>semi-automatic logic (E)</b>

DIP	OPENED / CLOSED	DIP 2 PROGRAMMING (Activation of different options)
2	ON	The <b>DIP 2</b> function allows to activate the <b>anti-crushing security</b> . The anti-crushing security operates with DIP 2 ON (only with the encoder installed on the motor reducer).

### LD1 (Power Supply led)

When the card is supplied the led is switched on

### LD2 (Opening led)

When the gate is opening the led switches on

### LD3 (Closing led)

When the gate is closing the led switches on

### LD4 (Start led)

It must be normally switched on and it must switch off when an opening command is given (for ex. Radio receiver, key switch, loop detector reader, etc)

### LD5 (Stop led)

It must be normally switched on and it must switch off when a stop command is given

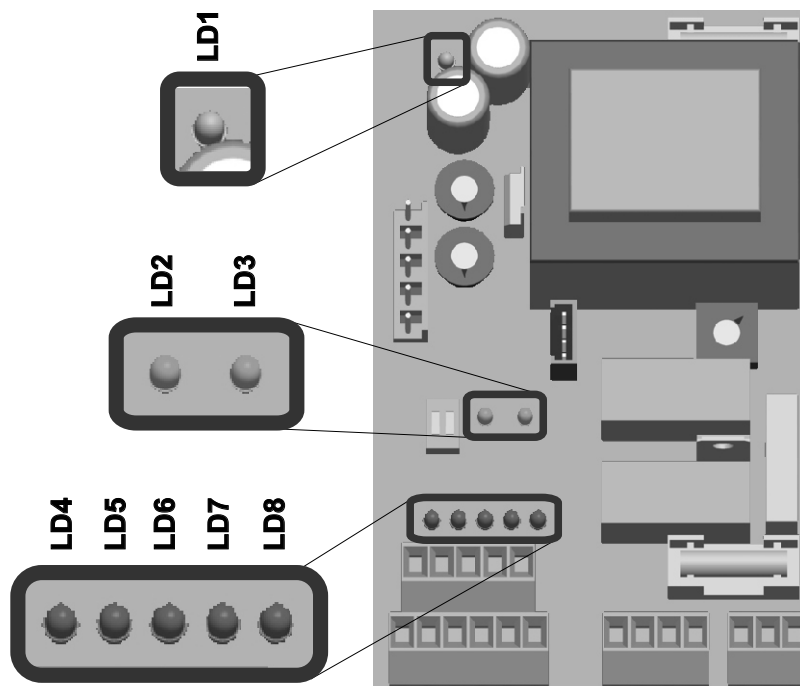
### LD6 (Photocell led)

It must be usually switched on and it must switch off when the photocell is darkened

### LD7 (Limit switch 1 led)

### LD8 (Limit switch 2 led)

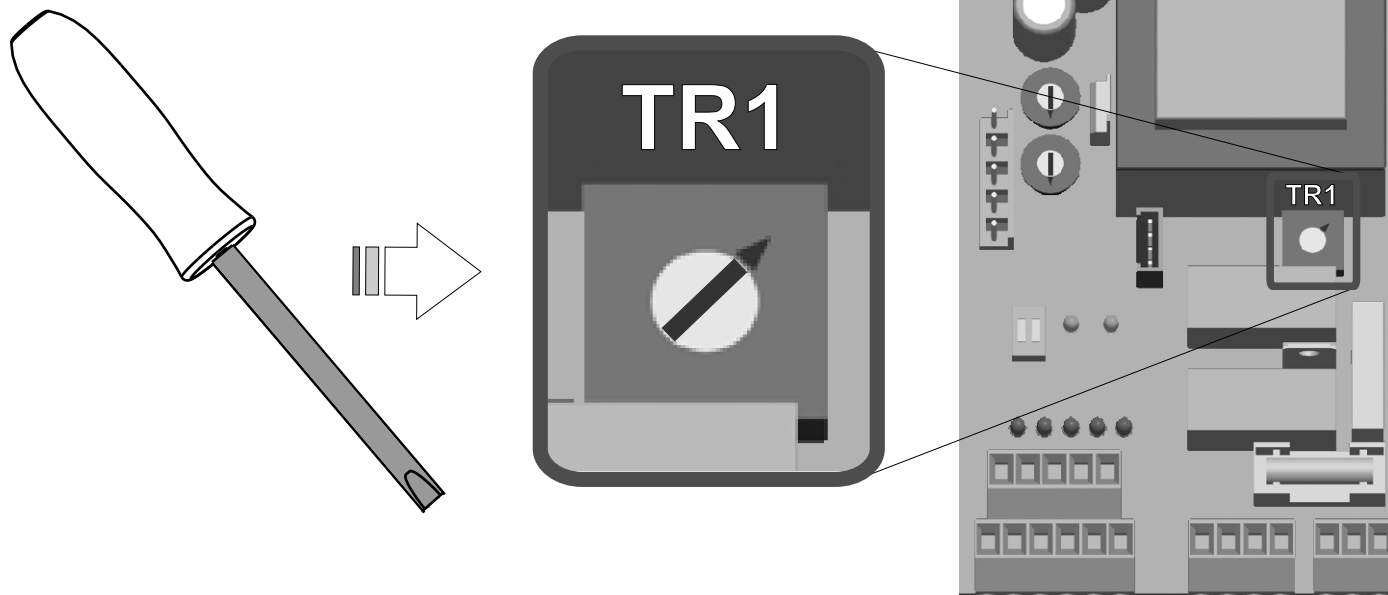
They must be normally switched on and they must switch off when the limit switch registers a presence





## **TRIMMER REGULATION**

### **TR1: Regulation motor torque**



**Attention:** Adjust the force of traction of the gate with the screwdriver on Trimmer TR1: the more the gate weighs, the more it must be turned into an anti-clockwise direction. A wrong adjustment of the force in relation to the gate weight can cause crushing danger (because of excessive adjustment in anti-clockwise direction) or difficulties of gate movement (because of lower adjustment in clockwise direction).

### **TR2: Pause time regulation**

### **TR3: Brake regulation**

#### **TR2: Pause time regulation**

The trimmer TR2 regulates the pause time (time for which the leaves stay opened before closing automatically). This time can be changed from 5 to 120 sec. Time increases turning the trimmer anti-clockwise.

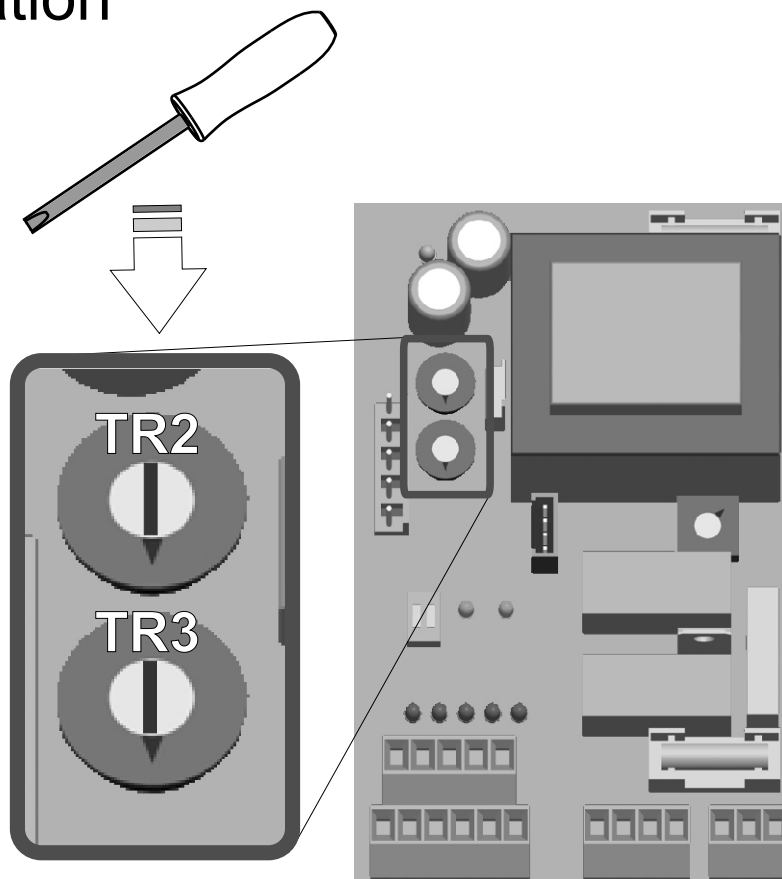
**NOTICE:** To allow a correct reading of the trimmers do the adjustments with the gate closed.

#### **TR3: Brake regulation**

To obtain an effective adjustment of the brake intensity it occurs to proceed in the following way:

- 1) Take power supply off
- 2) Turn the trimmer of the brake (TR3) completely in anti-clockwise
- 3) Acting on the engine release, bring the gate in about the middle of the run by hand (free limit switches)
- 4) Reintroduce the engine release (see instructions)
- 5) Reintroduce power supply
- 6) Give a start impulse
- 7) The gate will close until it will stop abruptly at the limit switch

At this point, adjust through the trimmer TR3 the intensity of the desired stop







## **SAFETY LOOP CONNECTION**

### **CONNECTING SCHEME OF THREE READERS OF MAGNETIC LOOP DETECTORS:**

(TWO OF THEM USED AS SECURITY DEVICE AND ONE AS FREE EXIT)

**C1 = Opening contact**

**C2 = Safety contact**

**+ = 24 Vdc**

**- = 0 Vdc**

#### **SAFETY LOOP 1**

Connecting scheme of loop detector 1 reader.

2 = 0V

1 = 24V

11 = Contact exit n.c.

4 = Common contact n.c.

7 = Wire loop

8 = Wire loop

#### **SAFETY LOOP 2**

Connecting scheme of loop detector 2 reader.

2 = 0V

1 = 24V

11 = Contact exit n.c.

4 = Common contact n.c.

7 = Wire loop

8 = Wire loop

#### **FREE EXIT LOOP**

Connecting scheme of loop detector reader.

2 = 0V

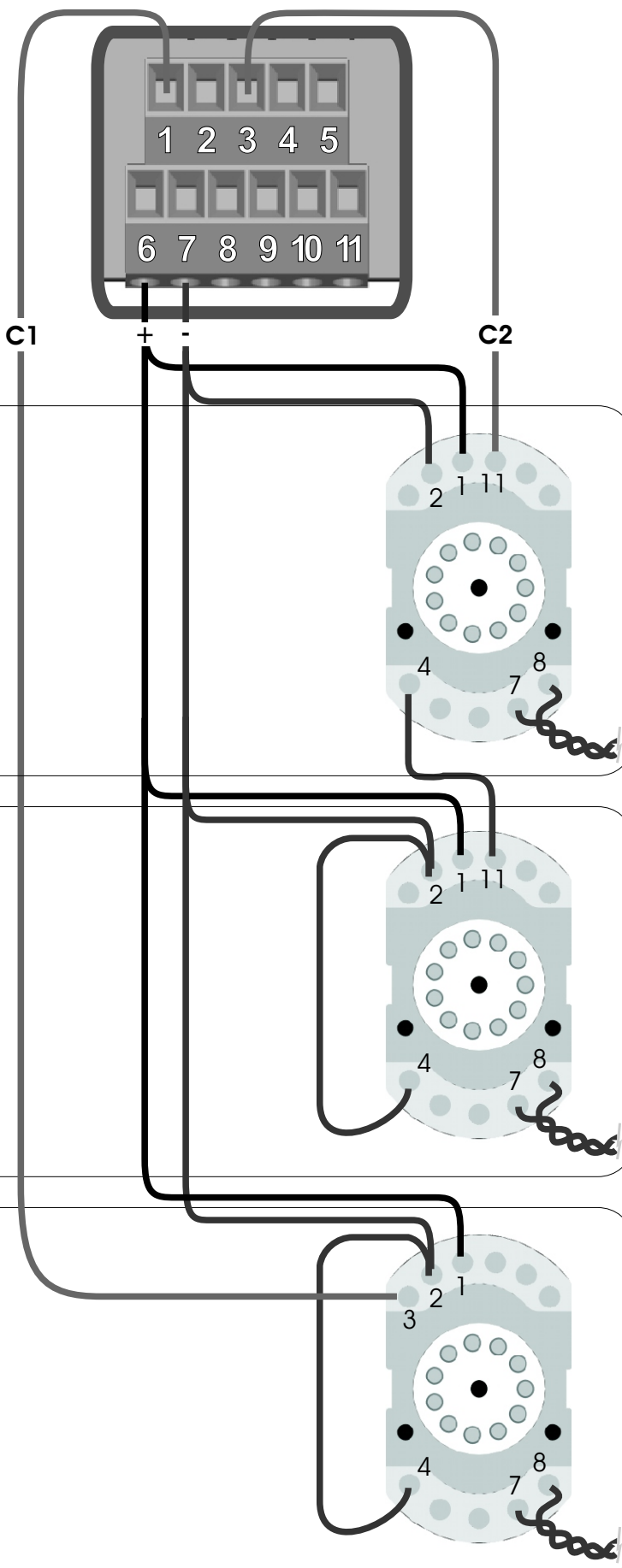
1 = 24V

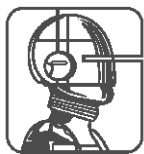
3 = Contact exit n.o.

4 = Common contact n.o.

7 = Wire loop

8 = Wire loop

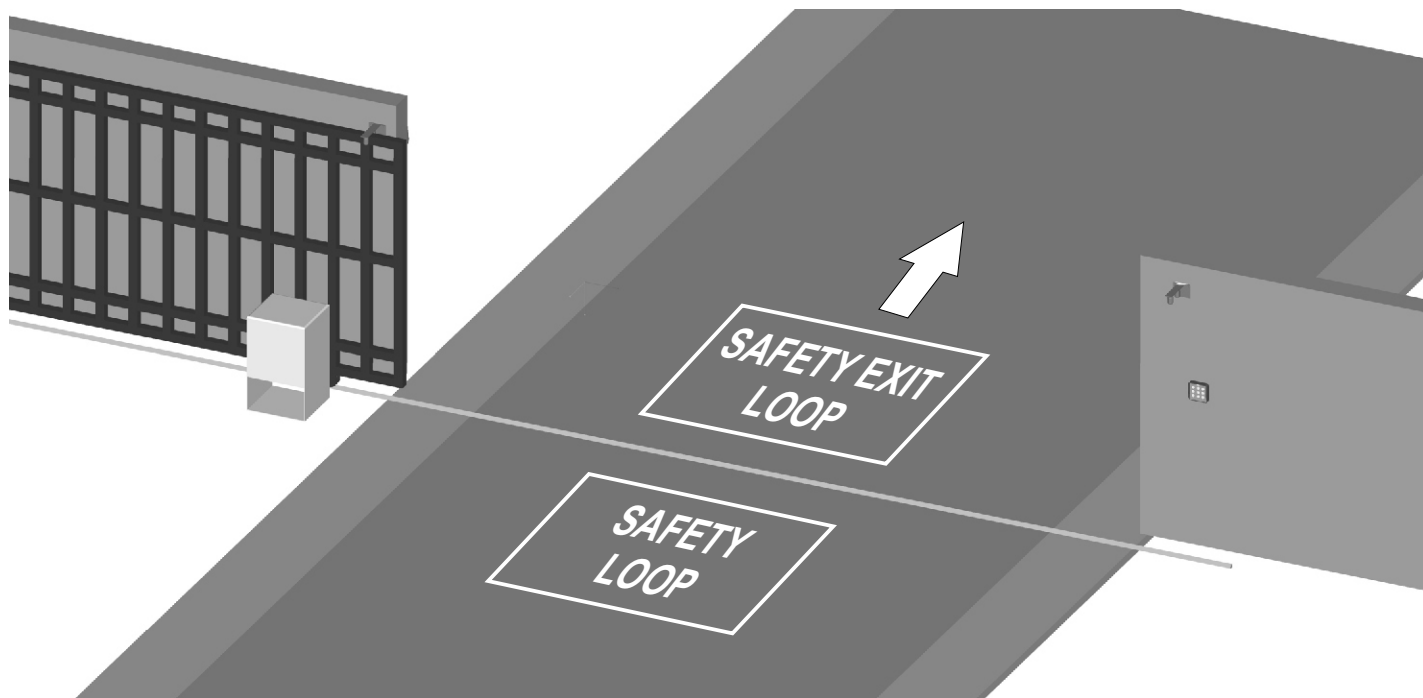




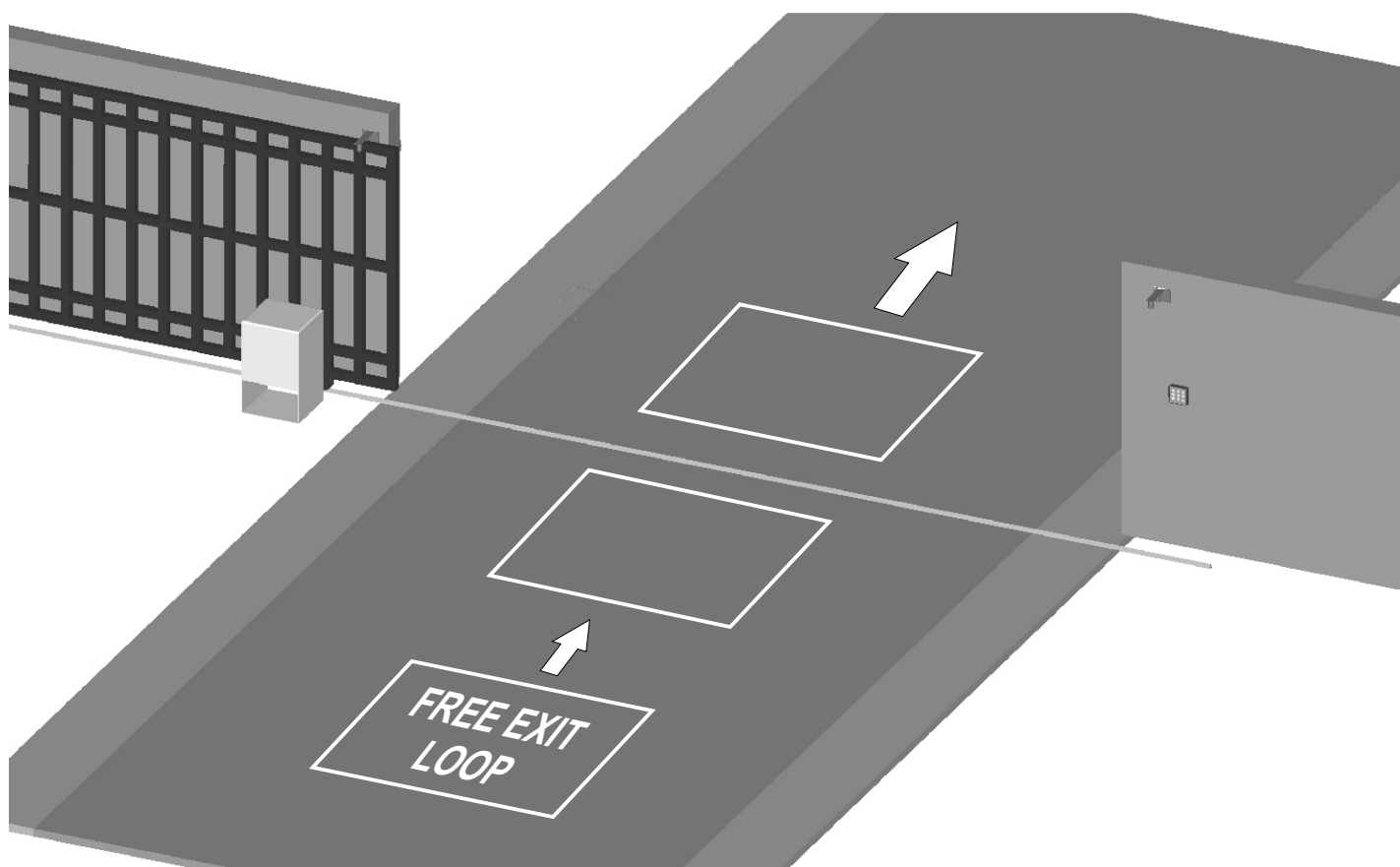
## **SAFETY LOOP CONNECTION**

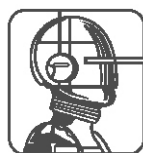
**CONNECTING SCHEME OF THREE READERS OF MAGNETIC LOOP DETECTORS:  
(TWO OF THEM USED AS SECURITY DEVICE AND ONE AS FREE EXIT)**

### **SAFETY LOOP SYSTEM**



### **EXIT LOOP SYSTEM**





## **SAFETY PRECAUTIONS**

Every change on trimmers and on dip switch must be done with the gate closed, or without power supply.

All electrical installation work should conform to the current edition of the LEE Regulations and all electrical work should only be carried out by a competent electrician. A 16A - 0,03A differential switch must be incorporated into the mains electrical supply of the gates. Earth bonding of the entire gate system must be correctly carried out.

To prevent mains interference all low voltage cabling (Push button, Photocell, Radio etc.) should be run in separate cable ducts from main carrying cables.

Note: Use "cable clips" and/or "duct/box pipes" fitting close to the control panel box so to protect the interconnection cables against pulling efforts.

## **SPARE PARTS**

To obtain spare parts contact:

**SEA USA Inc. 10850 N.W. 21st unit 160 DORAL MIAMI Florida (FL) 33172**

**Phone:++1-305.594.1151 Fax: ++1-305.594.7325 Toll Free: 800.689.4716**

**E-mail: sales@sea-usa.com**

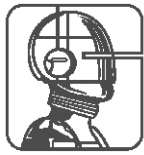
## **INTENDED USE**

The SLIDE electronic control unit has been designed to be solely used as control unit for the automation of sliding gates.

## **LIMIT OF GUARANTEE**

The SLIDE electronic control unit is guaranteed for a period of 24 months. The guarantee period starts from the date stamp printed on the unit. The SLIDE guarantee will be void if the unit has been incorrectly installed, not used for the intended purpose, tampered with or modified in any way. The validity of this guarantee only extends to the original purchaser of the unit.

**NOTE: THE MANUFACTURER CAN NOT BE DEEMED RESPONSIBLE FOR ANY DAMAGE OR INJURY CAUSED BY IMPROPER USE OF THIS PRODUCT.**



**SEA**® USA  
ELECTRONIC  
OPENING  
SYSTEMS  
International registered trademark n. 2.777.971

**TAURUS**

## **SALES CONDITIONS**

**GENERAL WARNING:** Installation must be realized using parts and accessories approved by SEA. SEA is not responsible for incorrect installations and/or non-compliance with safety standards according to the law in-force. SEA is in no way liable for any damages and/or malfunctioning due to using parts and accessories non-compliant with the UL325 safety standards.

**ORDERS:** Orders are processed upon approval by SEA. Buyers must confirm orders by sending a written Purchase Orders to SEA. Purchase Orders are intended as confirmation of orders and binding for the buyer, which accepts SEA sales condition.

**QUOTATION:** Quotation and special offers with a non-specified duration expires automatically after 30 days.

**PRICES:** Prices are based on the Price List in force. Discounts and quotation from Sales Rep. and other selling branches must be approved by SEA. Prices are F.O.B SEA Warehouse in Miami and do not include shipments costs. SEA reserves the right to modify the price list at any time and provide notice to its sales network.

**PAYMENT:** Method of payments and terms are notified by SEA and displayed on the commercial invoice.

**DELIVERY:** The delivery time on the invoice is not binding and represents an estimated delivery. Shipments costs will be charged to the buyer and SEA is not responsible for delays and/or damages occurred to the products during shipment.

**COMPLAINS:** Complaints and/or claims must be notified to SEA within 7 business days after receiving the products. Claims and complains must be supported by original documents. Customer must contact the factory for instructions and authorization. Merchandise returned for credit must be current, uninstalled and unused and returned in its original packaging. Freight must be pre-paid on all authorized returns.

**REPAIRS:** Repairs and parts are subject to the availability in stock. Shipment of products for repairs must be pre-paid by the customer. Products shipped without authorization, sender's details and description of the problems will be refused. Customers must contact SEA for instructions.

**WARRANTY:** for the original buyer only:

Hydraulic and oil-bath motors: 36 months warranty from the date of invoice on manufacturing, assembling and workmanship defects.

Electro-mechanic motors and electronic control systems: 24 months warranty from the date of invoice on manufacturing, assembling and workmanship defects.

Lepus and Full Tank Standard model: 60 months warranty from the date of invoice on manufacturing, assembling and workmanship defects.

No warranty will be recognized for damages due to incorrect installation and/or improper use for which the product was intended. SEA warranty obligations shall be limited to repair or replace the defective product/parts at SEA option, upon examination of the products by SEA technical Staff. All replaced parts must remain property of SEA. The warranty status of the product remains an unquestionable assessment of SEA. Buyer must ship pre-paid defective products. Products under warranty will be returned pre-paid by SEA. Recognized defects, whatever their nature, will not produce any responsibility and/or damage claims to SEA USA Inc and SEA s.r.l. Warranty shall not cover any required labor activities. Warranty will in no case be recognized if alterations and any other changes will be found on products. Warranty will not cover damages caused by carriers, expendable materials and faults due to improper use with the products specifications. No indemnities are recognized during repairing and/or replacing of the products under warranty. SEA USA Inc. and SEA s.r.l. decline any responsibility for damages to person and objects deriving from non-compliance with safety standards, installation instructions or use of the products sold. It is intended that warranty will be recognized only on products bought through the SEA authorized network. Products must be installed by professionals. No warranty will be recognized if products are installed directly by the final user. Warranty does not apply in case of unexpected events such as fire, flood, electrical power surge, lightning, vandalism and others.

**SEA USA Inc. is not responsible for errors in technical information printed in catalogs and installation manuals.**