

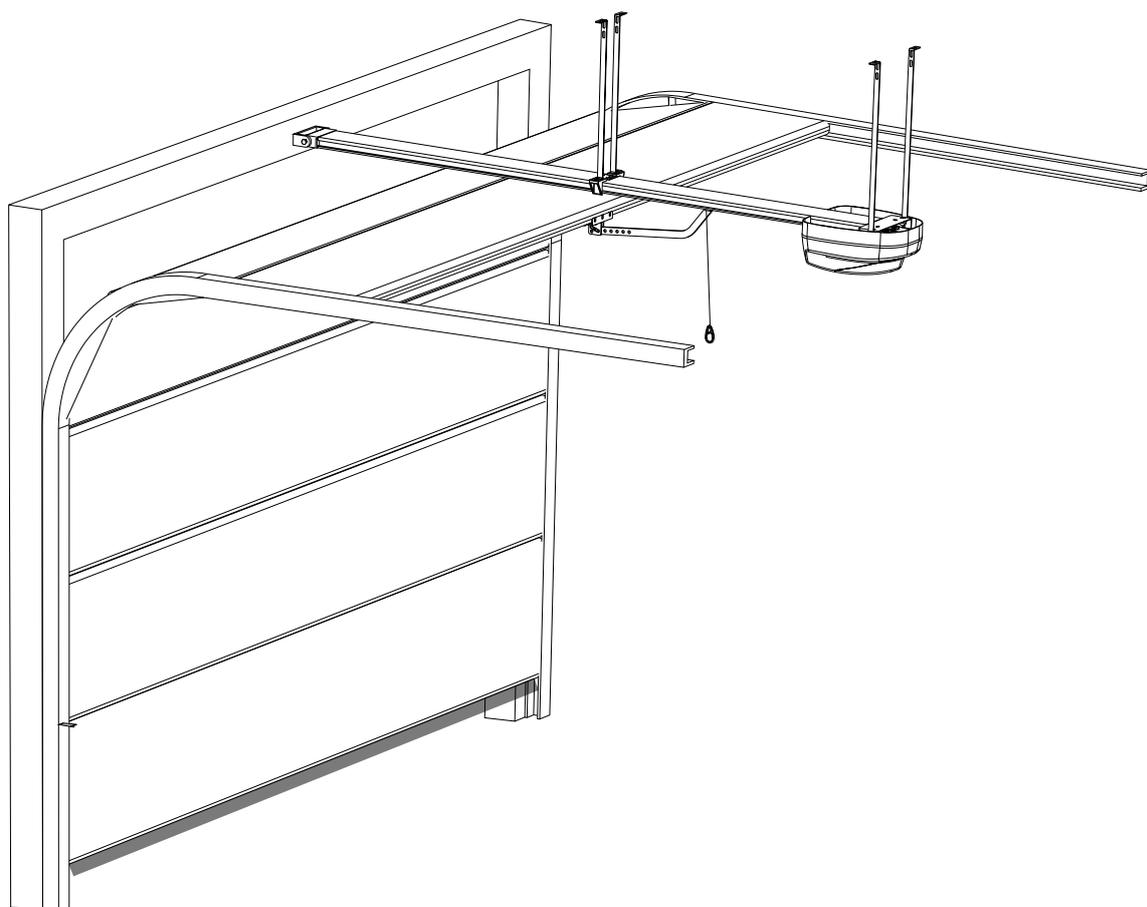
use and maintenance manual



E  
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H

# SYNCRO

AUTOMATION FOR GARAGE DOORS

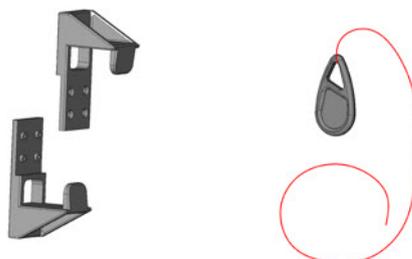


## PACKING CONTENTS

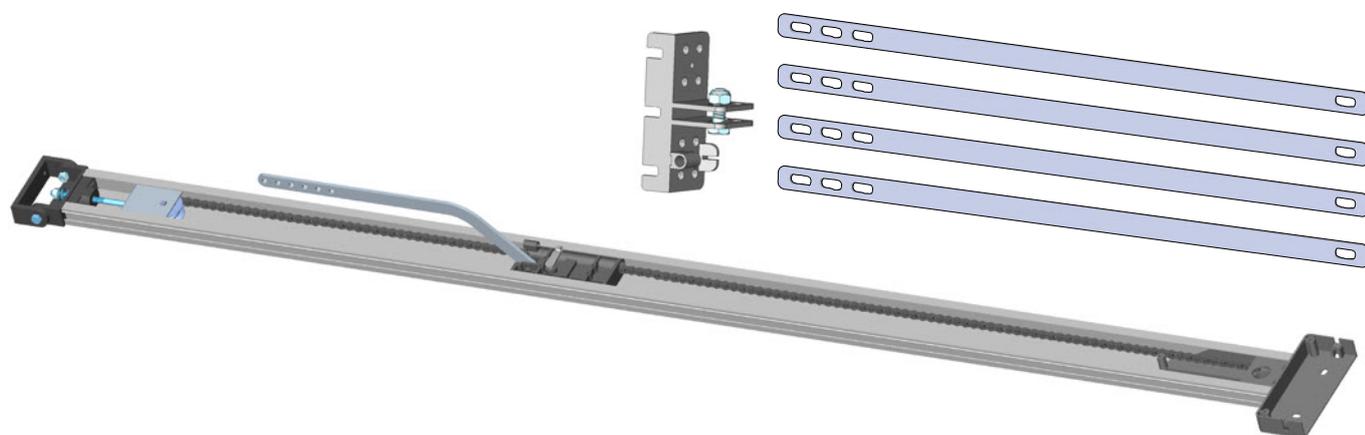
1- Operator with control unit



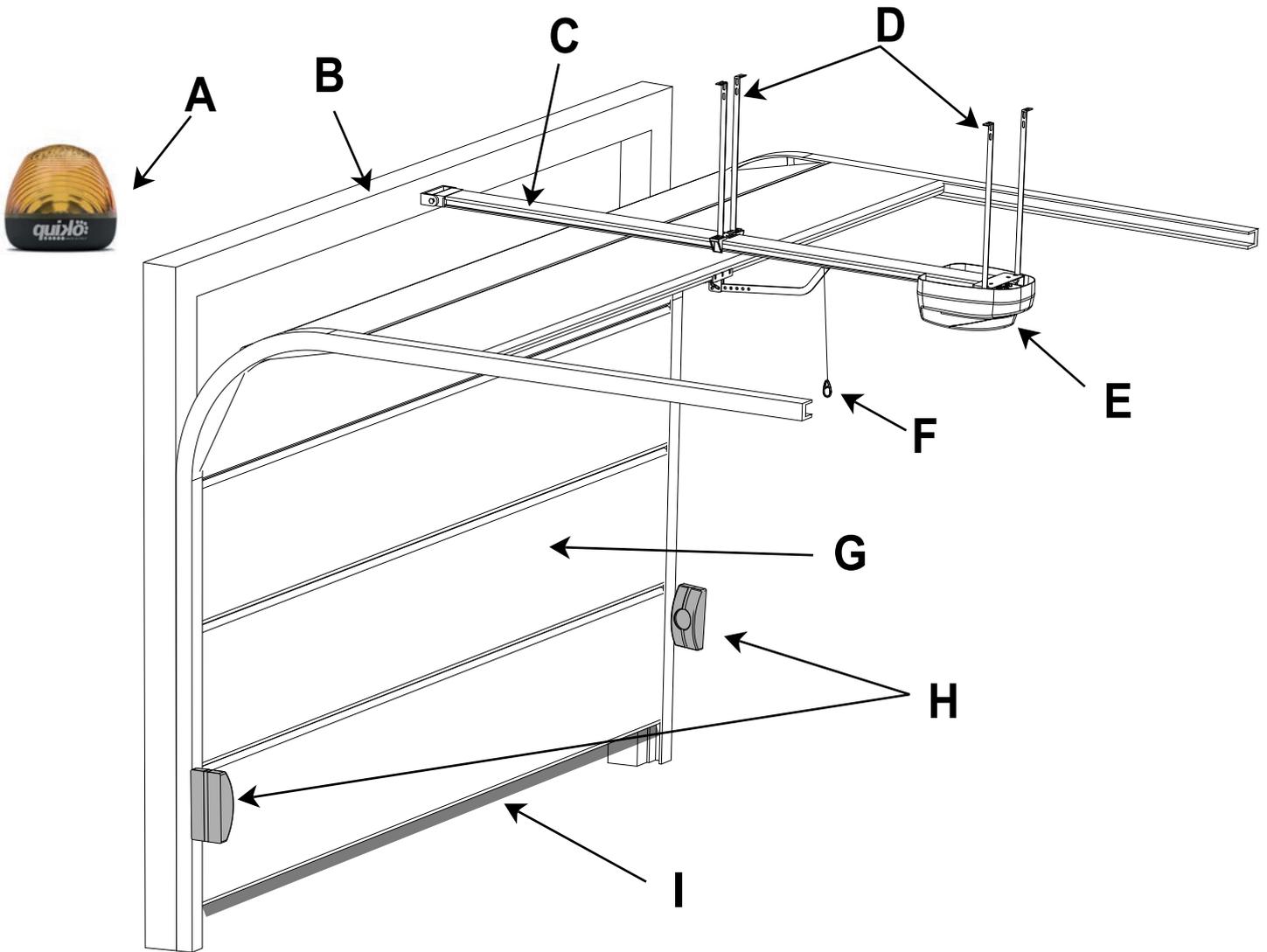
1- Mounting accessory kit



1- Guide with pre-mounted chain

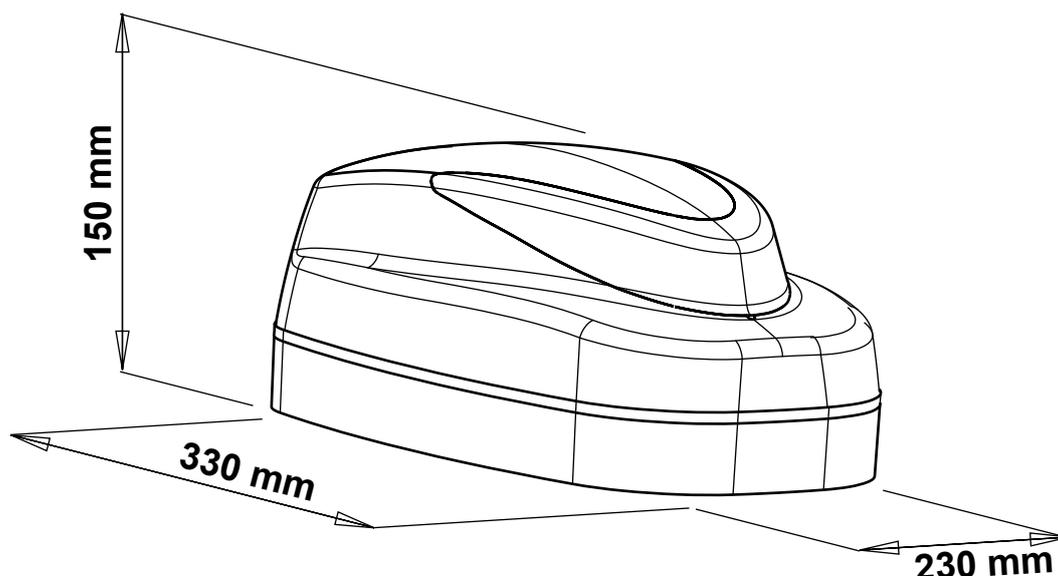


## VIEW OF TYPICAL AUTOMATION AND NAMES OF COMPONENTS



- A** = Flashing light
- B** = Door frame
- C** = Pulling guide
- D** = Fixing brackets
- E** = Operator with control unit
- F** = Manual release
- G** = Door
- H** = Photocells
- I** = Rubber edge

## DIMENSIONS



## TECHNICAL DATA

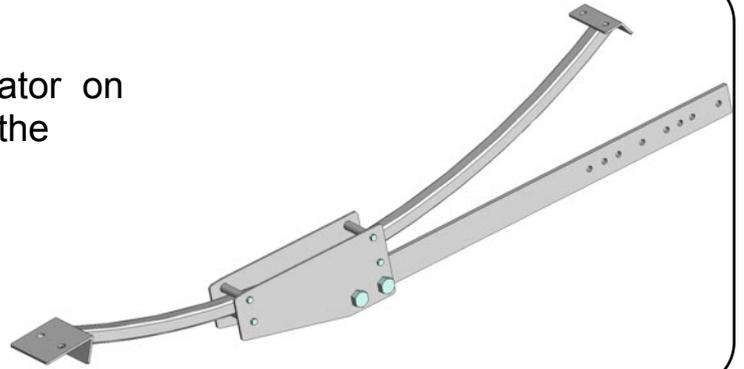
	QK-S60	QK-S110
Maximum height counterweight door	3000mm	
Maximum height sectional door	2700mm	
Door max width	3000mm	4500mm
Supply	230Vac	
Motor power supply	24Vdc	
Motor power	50 W	100 W
Motor RPM	220	
Emergency release	Mechanical internal-external	
Working temperature	-20° C / +55° C	
Weight	4 Kg	
Protection rating	IP 30	
Opening time	22 sec	
Force of thrust	800 N	1100 N
Motor current input	0,7 A	1,2 A

## CONSIDERATIONS FOR INSTALLATION

- The installation and testing operations must be performed solely by qualified personnel in order to guarantee the proper and safe operation of the automatic gate.
- The company declines any responsibility for damage caused by incorrect installations due to incompetence and/or negligence.
- Before the installation of the automation, check that the door is fully functional and balanced.

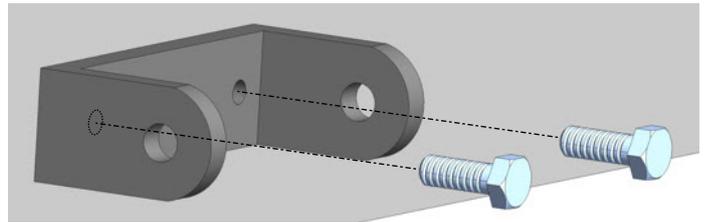
# INSTALLATION

**NOTE:** For the installation of the operator on counterweight doors you must use the **CURVED ARM (optional)**

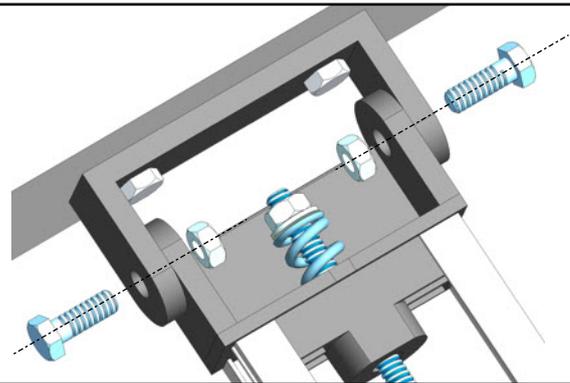


## GUIDE INSTALLATION

Fix the front support of the guide on the door frame or on the wall depending on the measurement taken.

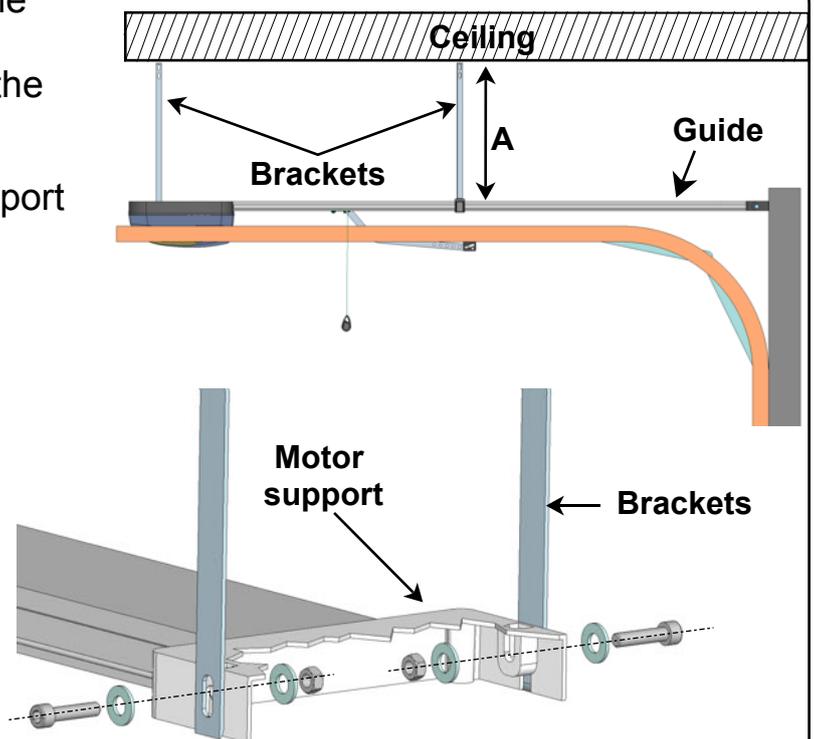
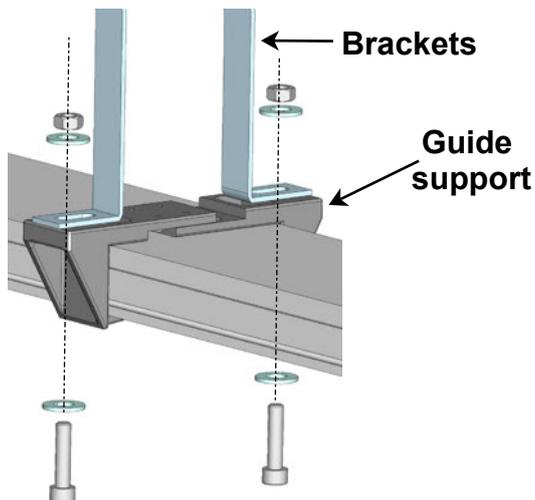


Insert and lock the preassembled guide into the front support



Bend the brackets according to the measure **A**. This measure is obtained leveling the guide with the ceiling

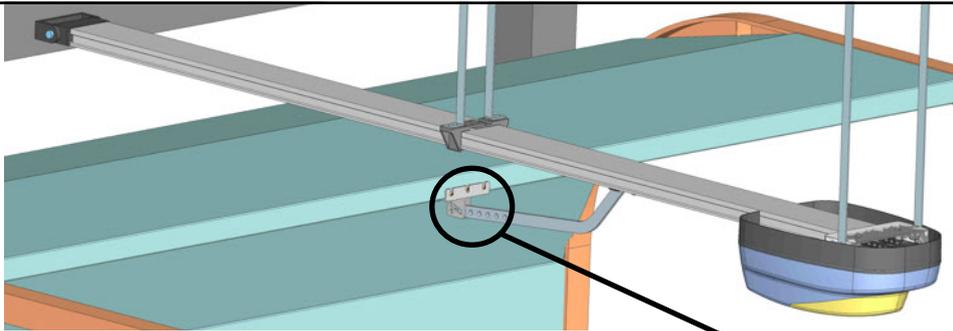
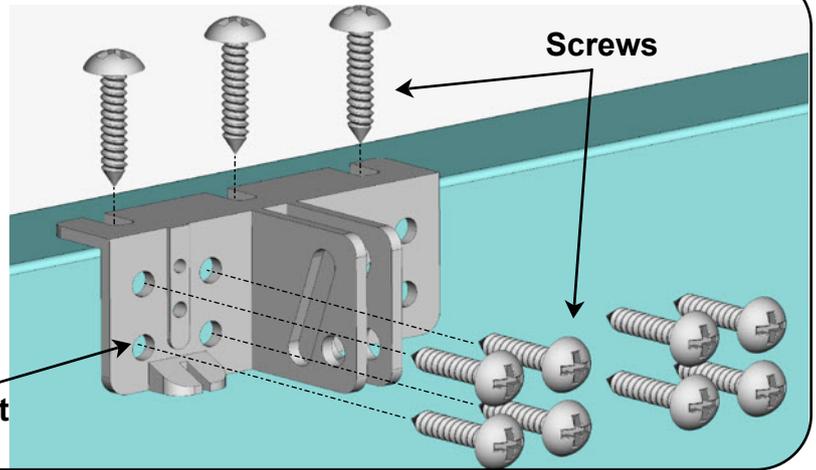
Fix the brackets on the guide support and motor support



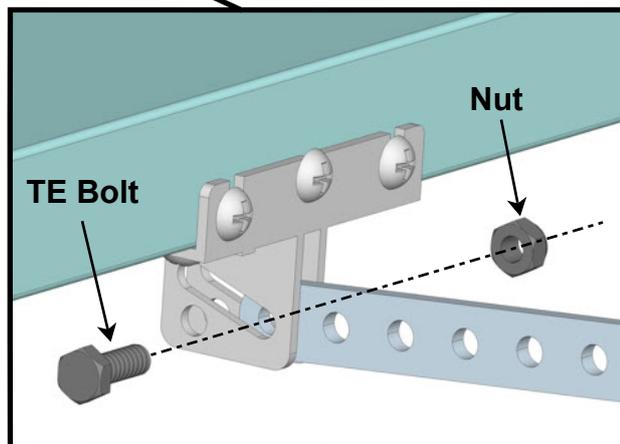
## PULLING BRACKET INSTALLATION

Fix the top panel of the door to the pulling bracket with self tapping screws

Pulling Bracket

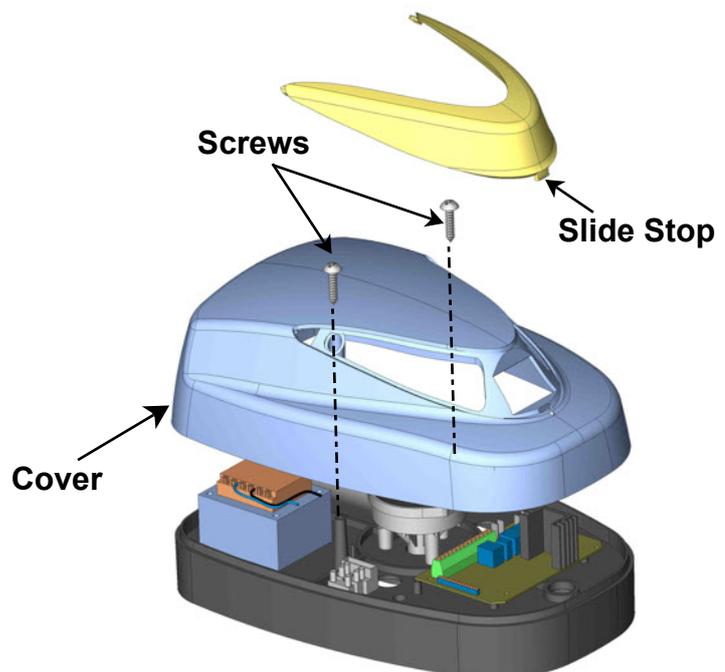


Hang the arm to the bracket and fix it with the nut and bolt TE 8x25



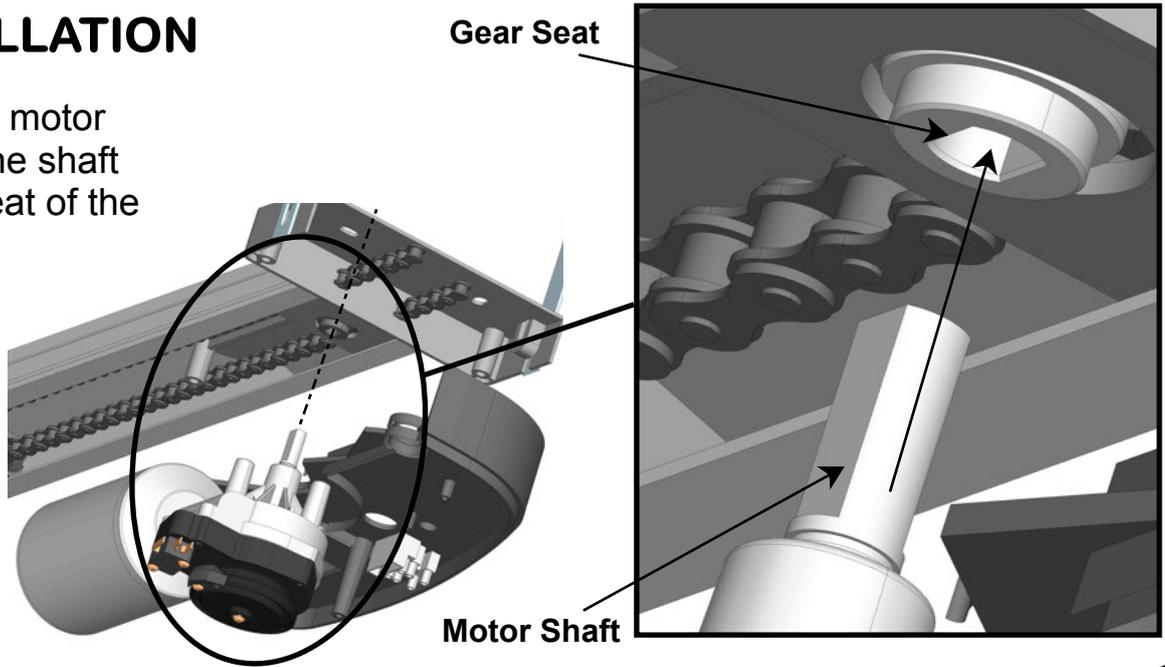
## OPERATOR COVER OPENING

1. Take the engine, release the slide by pushing on the front stop.
2. Unscrew the fixing screws and remove of the cover.

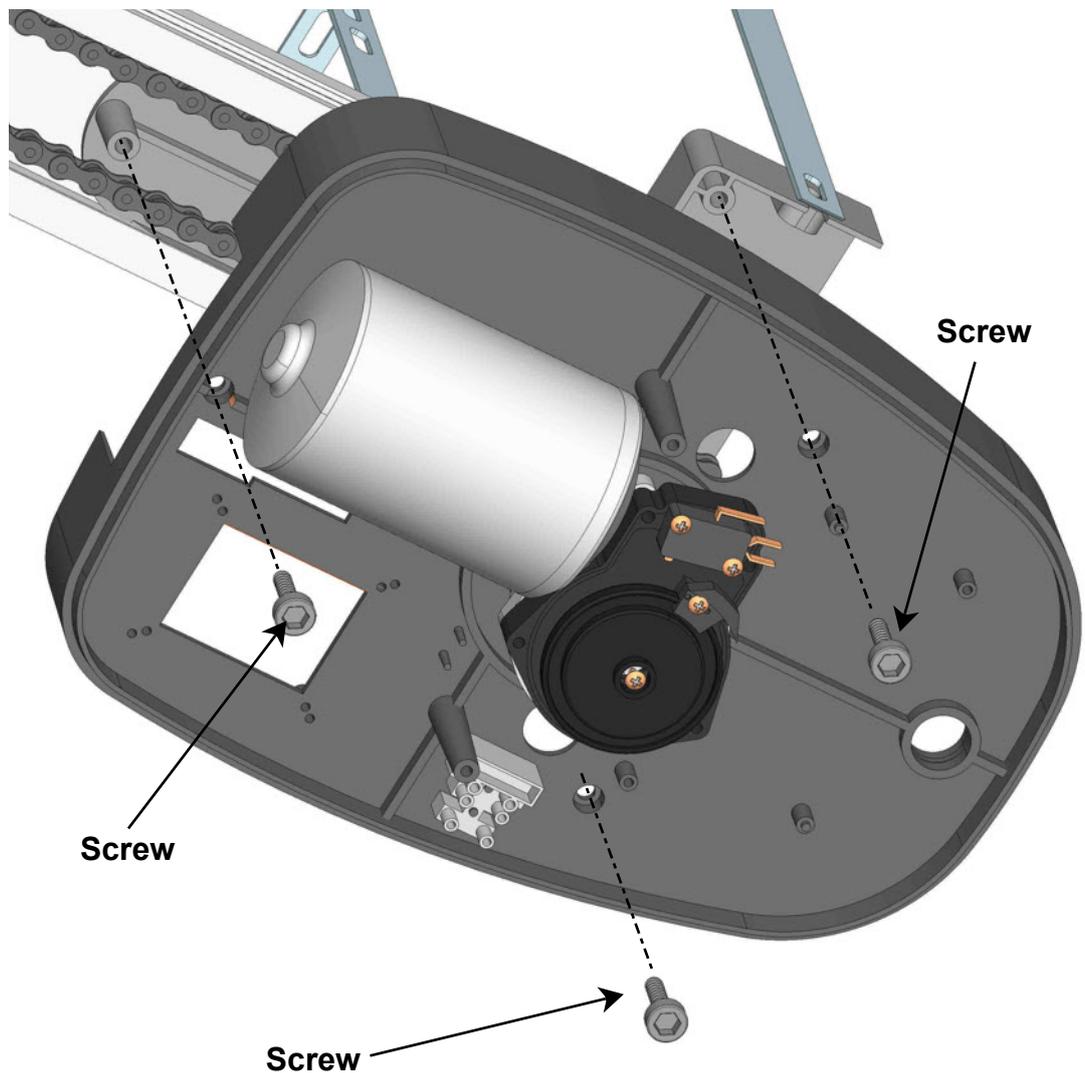


## OPERATOR INSTALLATION

Insert the motor  
bringing the shaft  
into the seat of the  
gear



Fix the motor with three self tapping screws



Make all electrical connections referring to the control unit manual

## LIMIT SWITCH ADJUSTMENT

Microswitch

Cam

Screw

Adjust the opening limit switch in the desired position by moving the plastic cam, unscrewing a little the screw



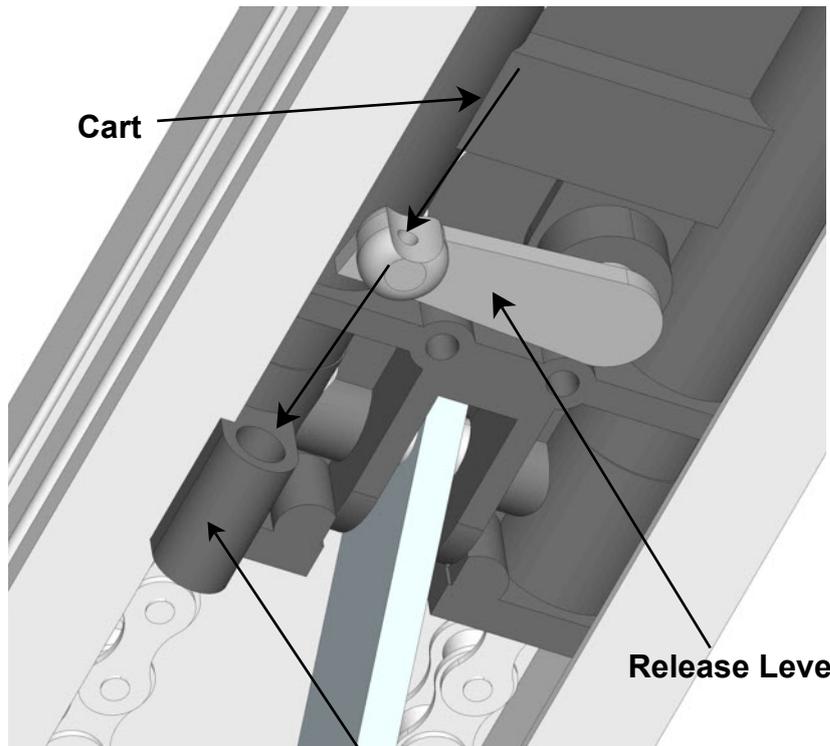
## MOUNTING CORD RELEASE

Make a knot on the nylon cord and plug it into the hole of the cart release lever passing the site. Insert the cable in its seat, as shown in the picture

Take a release plate and tie the other end of the cord

Cart

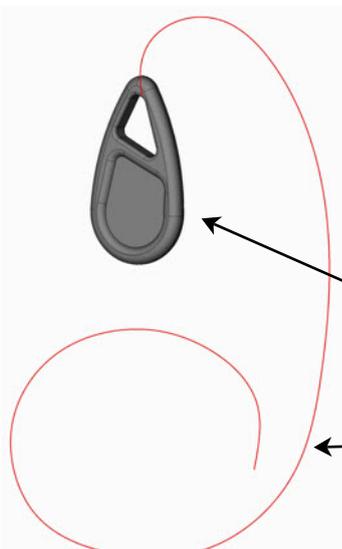
Release Lever



Release Plate

Cord Passage Seat

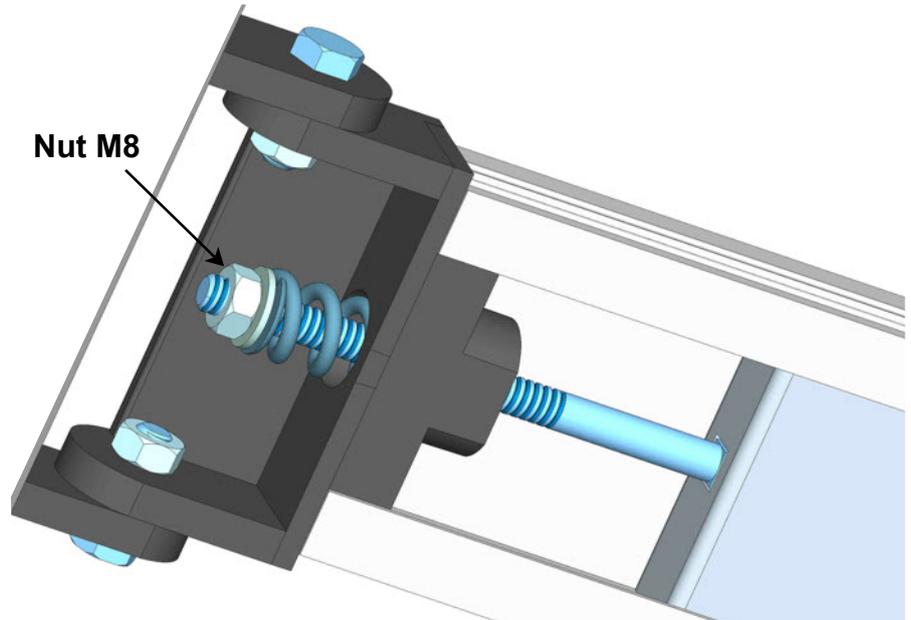
Nylon Cord



## CHAIN TENSION

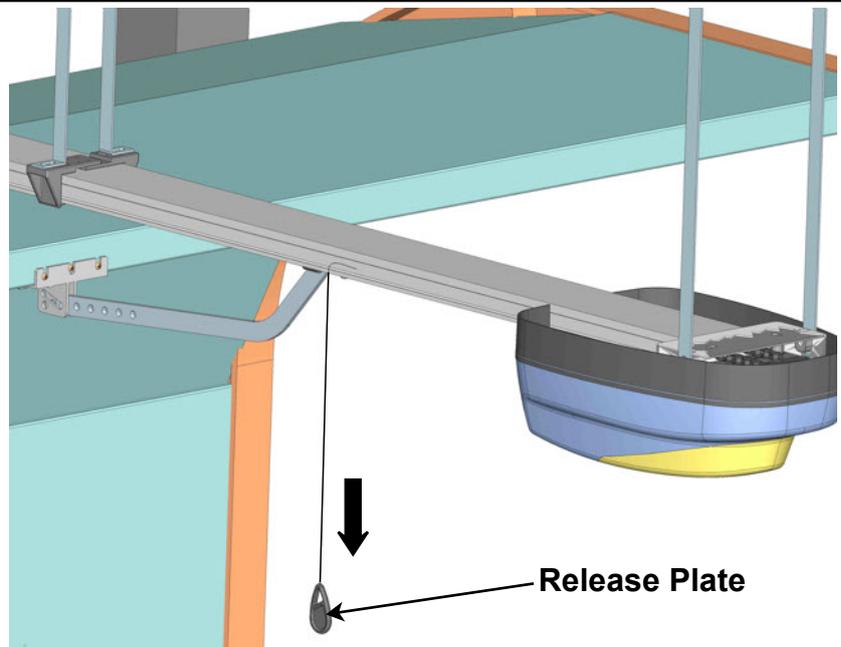
To increase or decrease the chain tension adjust nut M8

- screw the nut to increase tension
- unscrew the nut to decrease tension

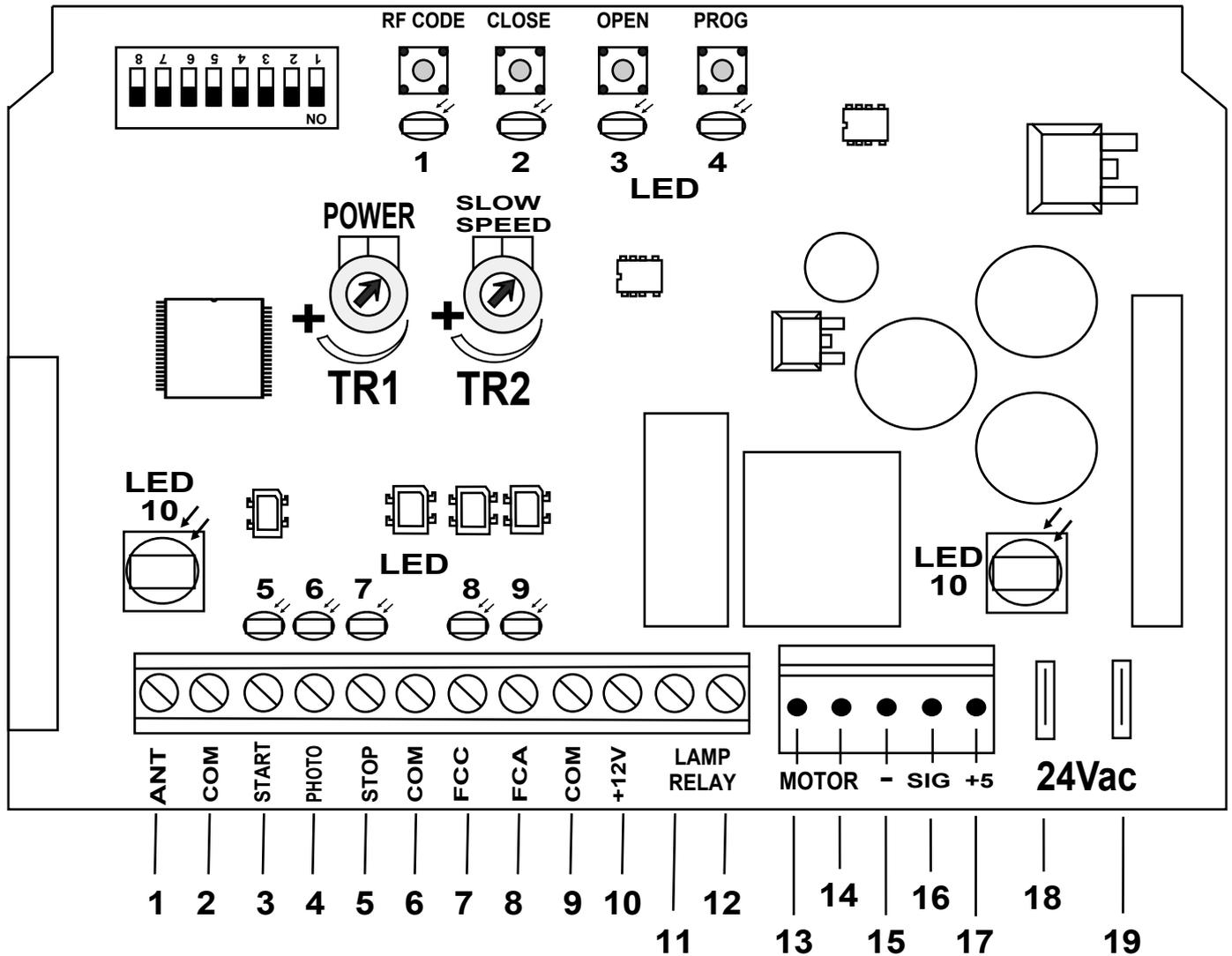


## EMERGENCY MANUAL RELEASE

In case of emergency to unlock the operator pull the release plate



# QK-CE24SYV CONTROL BOARD LAYOUT



## ELECTRICAL CONNECTION

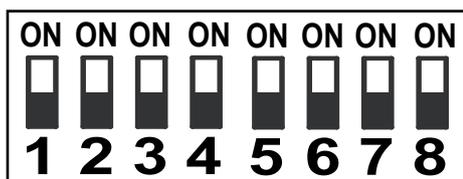
1	Antenna	
2	Start-stop-photocell common contact	1 mm <sup>2</sup>
3	Start contact N.O.	1 mm <sup>2</sup>
4	Photocell contact N. C. (put a jumper if nor used)	1 mm <sup>2</sup>
5	Stop contact N. C. (put a jumper if nor used)	1 mm <sup>2</sup>
6	Limit switches common contact	1 mm <sup>2</sup>
7	Closure limit switch contact N.C. (put a jumper if nor used)	1 mm <sup>2</sup>
8	Opening limit switch contact N.C. (put a jumper if nor used)	1 mm <sup>2</sup>
9	Accessory power supply common	1 mm <sup>2</sup>
10	+ 12Vdc accessory power supply (photocells)	1 mm <sup>2</sup>
11-12	Flashing light free contact 	1 mm <sup>2</sup>
13-14	Motor connection 24 Vdc	1 mm <sup>2</sup>
15	Encoder connection <b>Negative</b>	1 mm <sup>2</sup>
16	Encoder connection <b>signal</b>	1 mm <sup>2</sup>
17	Encoder connection <b>+5V</b>	1 mm <sup>2</sup>
18-19	Power Input 24 Vac ( <i>Transformer</i> )	1,5 mm <sup>2</sup>

N.O. = Normally Open Contact 

N.C. = Normally Closed Contact 

# LED MEANINGS TABLE

N° LED	DESCRIPTION	N° LED	DESCRIPTION
1	RADIO	6	PHOTOCELL
2	CLOSE	7	STOP
3	OPEN	8	CLOSURE LIMIT SWITCH
4	PROGRAMMING	9	OPENING LIMIT SWITCH
5	START	10	COURTESY LIGHT



## DIP SWITCHES FUNCTIONS

### DIP 1 AUTOMATIC CLOSING:

**ON** Door closes automatically after waiting the a.c. time.

**OFF** Door does not close automatically.

### DIP 4 SAFETY FUNCTION (photocell):

**ON** ANALOG Contact (8.2KΩ)

**OFF** N.C Contact (*put a jumper if not used*)



### DIP 5 COURTESY LIGHT (LED 10):

**ON** Switched off

**OFF** Switched on (*with sthe START command, LED work for 30 sec*)

### DIP 6 FLASHING LIGHT OUTPUT (LAMP RELAY):

**ON** Light blinks until the operator is running or waiting for automatic closing. It turns off after 30 seconds the operator stop.

**OFF** Light is fix until the operator is running or waiting for automatic closing. It turns off after 30 seconds the operator stop

### DIP 7 SLOW START CLOSING

**ON** The automation during closing start at slow speed.

**OFF** The automation during closing start at normal speed.

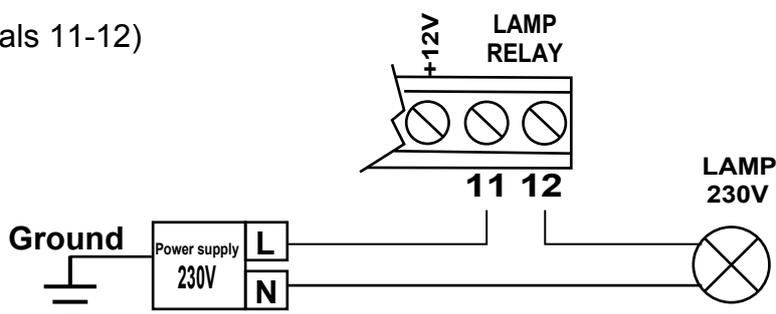
### DIP 8 OPERATOR RUNNING DIRECTION:

**ON** Normale polarity

**OFF** Reversed polarity

## FLASHING LIGHT CONNECTION

Flashing light output relay (terminals 11-12)

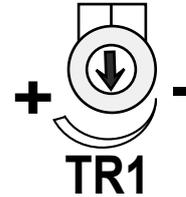


# AMPEROSTOP SENSIBILITY SETTING (ANTI CRUSHING)

To adjust the sensibility of the amperostop do the following :

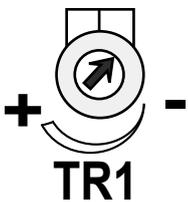
- **Before programming stroke :**

- Set the dip switch N ° 2-3 (look table)
- Adjust the trimmer TR1 in halfway



- **Program the stroke** (see pag 5)

- Adjust trimmer TR1 so that the sensibility of the amperostop is adequate to the proper functioning of the operator



Increase trimmer toward + to provide more strength to the operator and less sensibility to the intervention of the amperostop

Increase trimmer toward - to provide less strength to the operator and more sensibility to the intervention of the amperostop

Sensibility amperostop	Dip 2	Dip 3
100%	OFF	OFF
75%	ON	OFF
50%	OFF	ON
25%	ON	ON

## SLOWING DOWN ADJUSTMENT

To adjust the slowing down speed :

- **Before programming stroke :**

- Open the door with OPEN button and adjust trimmer TR2, to have the required speed.



Increase trimmer toward + to increase the speed

Increase trimmer toward - to decrease the speed

# RADIO TRANSMITTERS PROGRAMMING

- **CODING** : This control panel allows the storage rolling code .
- **PROGRAMMING:**  
Press RF-CODE button , LED lights for 10 seconds, press the transmitter button you want to program. programming is completed.
- **DELETING CODES:**  
To delete all codes in memory hold RF-CODE for 10 seconds until LED begins to blink. the operation is completed

## STROKE PROGRAMMING

### WITH SLOW DOWN IN START CLOSING (DIP SWITCH 7 ON)

- Press OPEN button, bring the door to the desired opening and adjust the opening limit switch.
- Press CLOSE button, bring the door to the closure.  
(NOTE : If connected, adjust the closure limit switch)
- Press PROG button for 2 seconds, LED blinks.
- Give a START impulse from button or radio transmitter, the door starts opening fast
- Give a second START impulse when you want to start the slowing down in opening, the door stops once arrived to the opening limit switch.
- With automatic closure inserted, wait the desired time with the door open.
- Give a START impulse, door begins to close in slowing down
- Give a second START impulse, door begins to close faster.
- Give a third START impulse when you want to start the slowing down in closing
- Once arrived in closure the door memorizes the closed position.

### WITHOUT SLOW DOWN IN START CLOSING (DIP SWITCH 7 OFF)

- Press OPEN button, bring the door to the desired opening and adjust the opening limit switch.
- Press CLOSE button, bring the door to the closure.  
(NOTE : If connected, adjust the closure limit switch)
- Press PROG button for 2 seconds, LED blinks.
- Give a START impulse from button or radio transmitter, the door starts opening fast
- Give a second START impulse when you want to start the slowing down in opening, the door stops once arrived to the opening limit switch.
- With automatic closure inserted, wait the desired time with the door open.
- Give a START impulse, door begins to fast close
- Give a second impulse when you want to start the slowing down in closing
- Once arrived in closure the door memorizes the closed position.

## SAFETY DEVICES FUNCTION

PHOTOCELL (terminal 2-4)

Occupancy of photocell causes :

- Opening : no effect
- Closing : immediate stop and return to the opening operation.

## AMPEROSTOP FUNCTION

Opening :

- Blocking the movement of the door

Closing :

- Blocking and reverse in opening the movement of the door

## START COMMAND FUNCTION

A START impulse by button or radio transmitter, with closed door, has the following function:

- **STEP BY STEP:** OPEN → STOP → CLOSE → STOP → OPEN
- **AUTOMATIC:** OPEN → STOP → AUTOMATIC CLOSURE OR CLOSURE WITH IMPULSE → STOP → OPEN

## TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
On giving a command with the remote control or with the key-switch, the gate doesn't open or the motor doesn't start	230 volt mains voltage absent	Check master switch
	Emergency STOP present	Check for any STOP selectors or commands. If not used, check jumper on STOP contact input on the control board
	Fuse blown	Replace with one of same value.
	Power cable of motor or motors not connected or faulty.	Connect the cable to appropriate terminal or replace.
	The photocell is not functioning or the beam is interrupted	Check the connection, remove any obstacle across the beam
On giving a command with the remote control, the door doesn't open but works with the key command	The remote control has not been memorised or the battery is flat	Carry out the remote control learning procedure on the radio receiver or replace the battery with a new one..
The door starts, but stops immediately	The force of the motor or motors is insufficient	Modify the value with the FORCE trimmer on the control unit
On giving a command, the motor starts, but the gate does not move	There is an obstacle in front of the wings, the hinges are blocked or the motor anchorage bracket or brackets have come loose	Remove the obstacle from the wings, restore the hinges, replace or lubricate them. Fasten the motor bracket

**N.B. - If the problem persists, contact your Retailer or the nearest Service Centre**

## **SAFETY PRECAUTIONS**

These warnings are an essential, integral part of the product and must be given to the user. They provide important indications on the installation, use and maintenance and must be read carefully. This form must be preserved and passed on to subsequent users of the system. The incorrect installation or improper use of the product may be dangerous.

### **INSTALLATION INSTRUCTIONS**

- The installation must be performed by professionally skilled personnel and in compliance with current local, state, national and European legislation.
- Before beginning the installation, check the integrity of the product.
- The laying of cables, electrical connections and adjustments must be workmanlike performed.
- The packing materials (cardboard, plastic, polystyrene, etc.) are a potential hazard and should be disposed of correctly and not left within reach of children.
- Do not install the product in potentially explosive environments or environments disturbed by electromagnetic fields. The presence of inflammable gases or fumes is a grave danger to safety.
- Set up a safety device for overvoltage, a disconnecting and/or differential switch suitable for the product and conforming to current standards.
- The manufacturer declines any and all responsibility for product integrity, safety and operation in the event incompatible devices and/or components are installed.
- Solely original spare parts should be used for repairs and replacements.
- The installer must provide all the information relating to the operation, maintenance and use of the individual parts, components and system as a whole.

### **WARNINGS FOR THE USER**

- Read the instructions and enclosed documentation carefully.
- The product must be used for the express purpose for which it was designed. Any other use is considered improper and therefore hazardous. In addition, the information given in this document and in the enclosed documentation may be subject to modifications without prior notice. It is given as an indication only for product application. The company declines any responsibility for the above.
- Keep products, devices, documentation and anything else provided out of reach of children. In the event of maintenance, cleaning, breakdown or faulty operation of the product, cut off the power and do not attempt to operate on the product. Contact solely the professionally skilled personnel responsible for these operations. Failure to adhere to the above indications may be dangerous.

## DECLARATION OF CONFORMITY

(OF THE MANUFACTURER)



**Manufacturer: QUIKO ITALY SAS**

Via Seccalegno, 19  
36040 Sossano (VI)  
Italia

hereby declares, under his liability, that the products:  
QK-S60 and QK-S110

are in compliance with the essential safety requirements of the regulations:

- ✓ Electromagnetic Compatibility Directive .....2004/108/EC
- ✓ Low Voltage Directive .....2014/35/EC
- ✓ Machinery Directive .....2006/42/EC

and their amendments and modifications, and with the regulations set forth by the National Legislative Body of the country in which the machinery is destined for use.

Sossano, 1/1/2018

Managing Director  
Luca Borinato







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the quality of its products without  
any prior notice.*

*Il Fabbricante può apportare ai suoi prodotti  
modifiche tecniche, migliorative  
della qualità, senza preavviso.*