



scs sentinel MVE0100 Automation Kit For Swing Gate User Manual

[Home](#) » [SCS sentinel](#) » [scs sentinel MVE0100 Automation Kit For Swing Gate User Manual](#) 



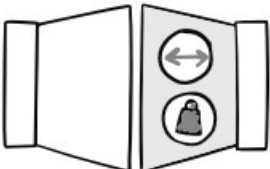
Open Gate 1
MVE0100
pour portail battant
Automation kit for swing gate
Motorizzazione a martinetto per
cancello a battente

Contents

- 1 MVE0100 Automation Kit For Swing Gate
- 2 A- SAFETY INSTRUCTIONS
- 3 B- DESCRIPTION
- 4 C- WIRING / INSTALLING
- 5 D- SETTING/USING
- 6 E- TECHNICAL FEATURE
- 7 F- MAINTENANCE
- 8 G- TECHNICAL ASSISTANCE
- 9 H- WARRANTY
- 10 I- WARNINGS
- 11 J – DECLARATION OF CONFORMITY
- 12 Documents / Resources
 - 12.1 References

MVE0100 Automation Kit For Swing Gate



	2 % 2 m max
	2 % 200 kg max



A- SAFETY INSTRUCTIONS



WARNING: Important safety instructions. It is essential to follow these instructions for reasons of & wrrsonal safety. Keep these instructions in a safe place.

WARNING: Important safety instructions. Follow all instructions carefully as improper installation may result in serious injury.

This product is only designed for the automation of a swing gate for «residential» use.

The power supply installation must comply with current standards in the country where the product is installed (NF C 15-100 for France) and be carried out by qualified staff. A means of disconnecting all the poles of the supply network must be provided. This device must be connected directly to the supply terminals and have a contact separation distance on all poles to ensure complete disconnection in accordance with the installation rules. The mains supply must be protected against overload by a suitable trip switch and an earth leakage circuit breaker.

CAUTION: The motorised system must be disconnected from its power source during installation, cleaning, maintenance and parts replacement.

Installation requires qualified staff with mechanical and electrical skills.

- Make sure that the temperature range indicated on the motorised device is suitable for the installation's

location.

- Only original parts should be used to replace or repair the motorised system.
- Before installing the motorised device, check that the driven part is in good mechanical condition, properly balanced and opens and closes correctly.
- The motorised device cannot be used with a driven part incorporating a side gate.
- Ensure that crushing caused by the opening movement of the driven part is avoided between the driven part and the surrounding fixed parts.
- After installation, ensure that the mechanism is properly adjusted and that the protection system and any manual disconnection devices function properly.
- Activation of the manual disconnection device may cause uncontrolled movement of the driven part due to mechanical failure or loss of balance.
- Frequently examine the installation for imbalance where applicable and signs of wear or damage to cables, springs and mounting. Do not use if repair or adjustment is necessary.
- This appliance may be used by children at least 8 years old and by people with reduced physical, sensory or mental capabilities or without experience or knowledge, if they are properly supervised or instructed in the safe use of the appliance, and if the risks involved have been understood. Children should not play with the appliance.

The user's cleaning and maintenance must not be carried out by unsupervised children.

- Do not allow children to play with the unit or its controls, including remote controls.
- Permanently attach the label for the manual disconnection device to the operating element of this device.

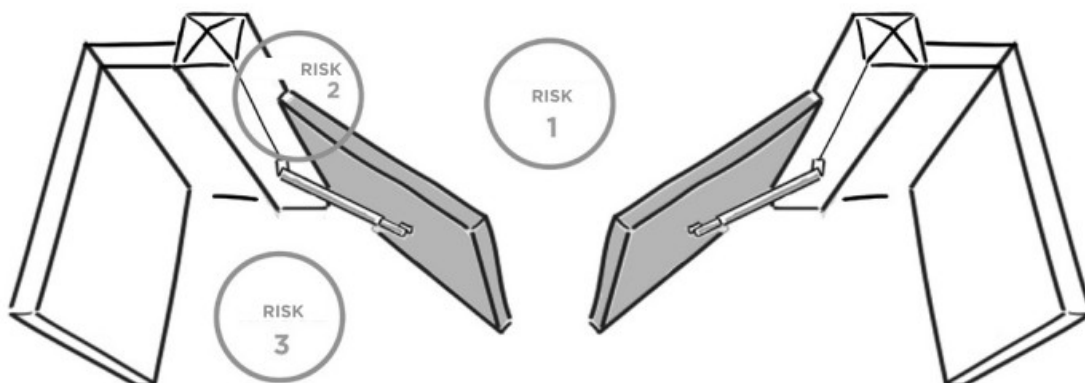
Only use the remote control when you have a complete view of the gate.

If in any doubt, do not operate the system, as it could be damaged.

SCS SENTINEL certifies that its swing gate operators for residential use comply with the European standards and safety regulations for swing gate operators (EN 60335-2-103). The use of this product outside the specified conditions or the use of components or accessories not recommended by SCS SENTINEL may compromise the safety of the system and persons, and is therefore prohibited. SCS SENTINEL accepts no liability for any damage resulting from failure to comply with the instructions provided in this manual.

Potential risks

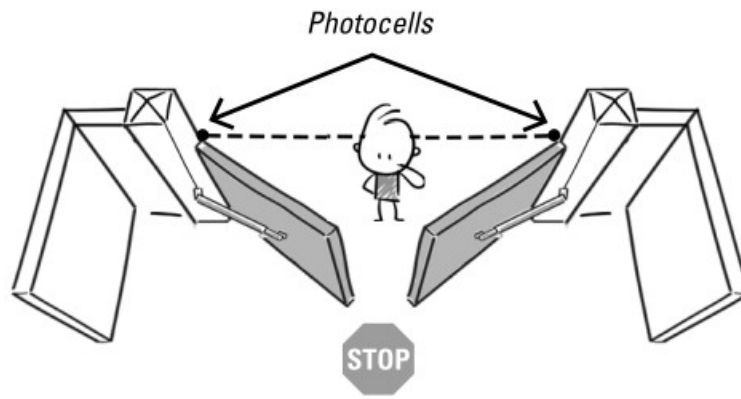
There are 4 potential risks 3 zones identified opposite:



Risk 1: Shock and crushing

Prevention :

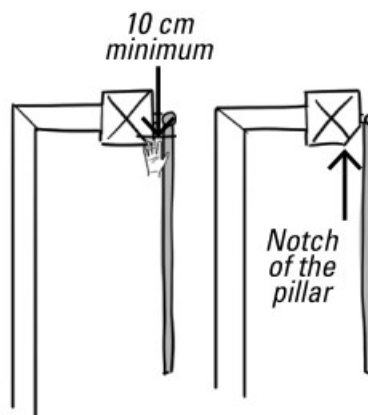
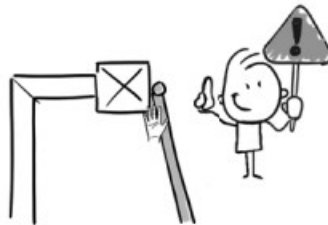
- Obstacle detection by motor.
- Use of photocells.



Risk 2 : Hand crushing

Prevention : 1

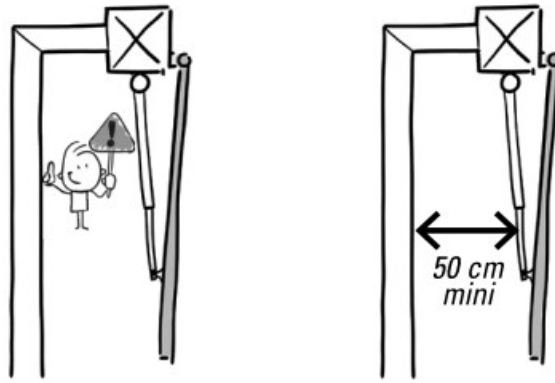
- Leave a minimum distance of 10 cm between the leaf and the pillar/wall.
- Notch the corner without pillar weakening it.



Risk 3 : Imprisonment and crushing

Prevention :

- Obstacle detection by the motor.
- Leave a minimum distance of 50 cm between the motor arm and the wall (or other fixed part).



Risk 4 : Crushing of the feet



Prevention :

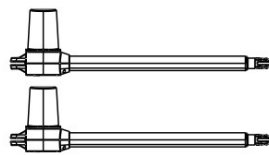
- To avoid a danger zone for feet, leave a minimum distance of 12 cm or a maximum of 5 mm between the bottom of the leaves and the floor.



B- DESCRIPTION

B1- Content

B1- Content



2 worms
MPD0205



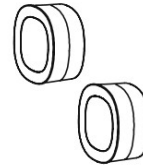
1 control
box



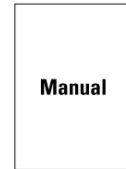
2 remote
controls
AAM0121



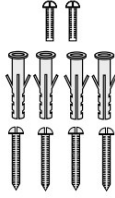
1 blinker with
integrated
antenna
AAM0123



2 photocells
AAM0036



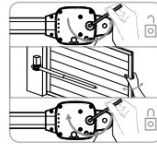
1 manual



Screws

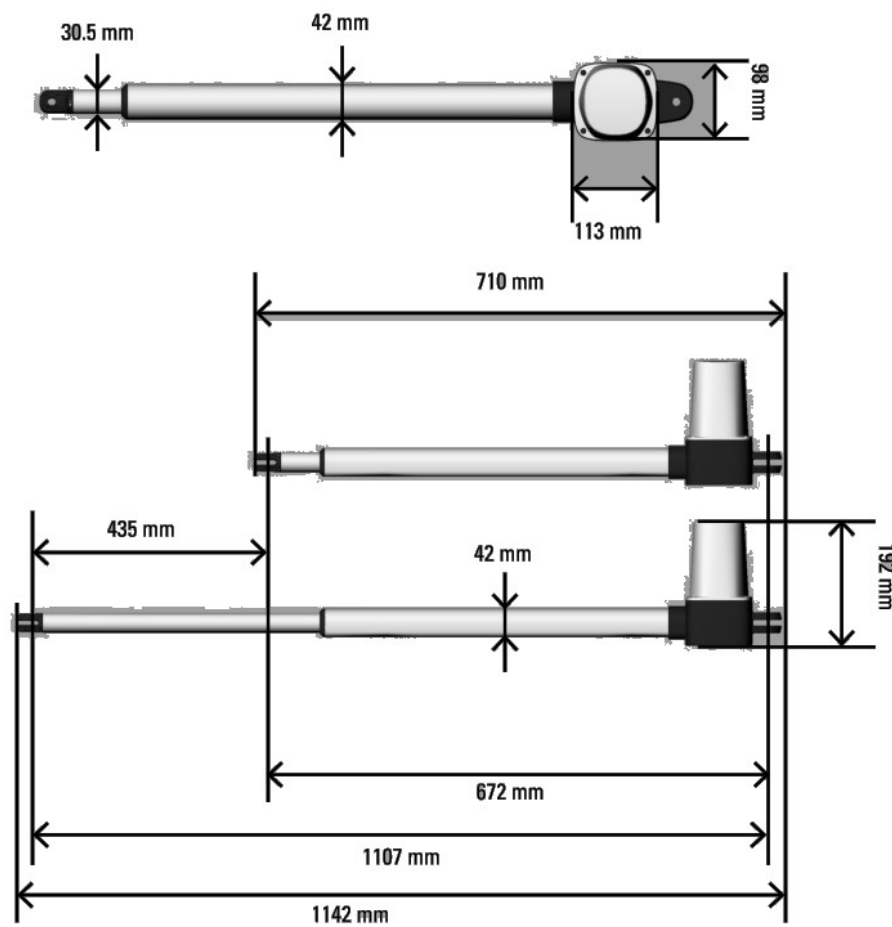


Fixing
brackets



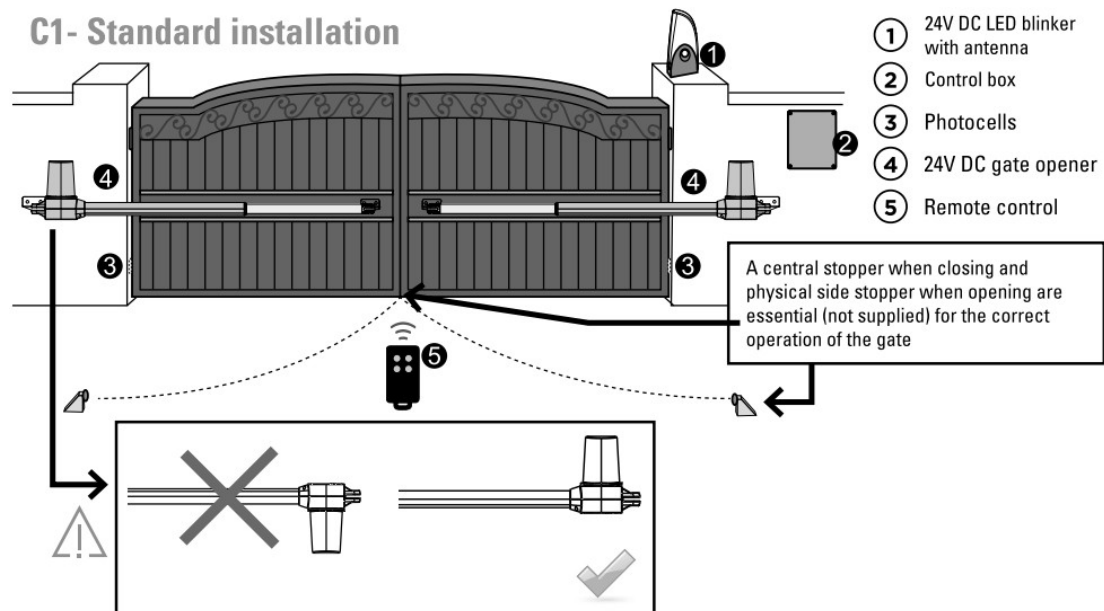
Unlocking sticker

B2- Dimensions



C- WIRING / INSTALLING

C1- Standard installation



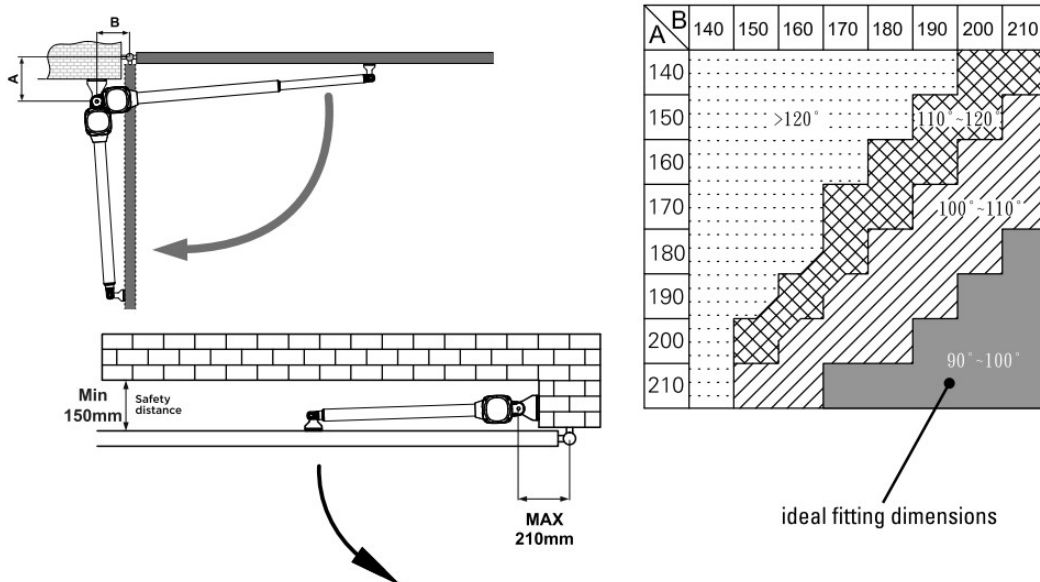
C2- Dimension chart

Comply with the measures shown on the chart for proper installation. Adjust the gate structure to fit it for best automation, if necessary.

Before proceeding with the installation, be sure that gate moves freely and that:

1. Hinges are properly positioned and greased.
2. No obstacles in the moving area.
3. No frictions between two gate leaves or with the ground while moving

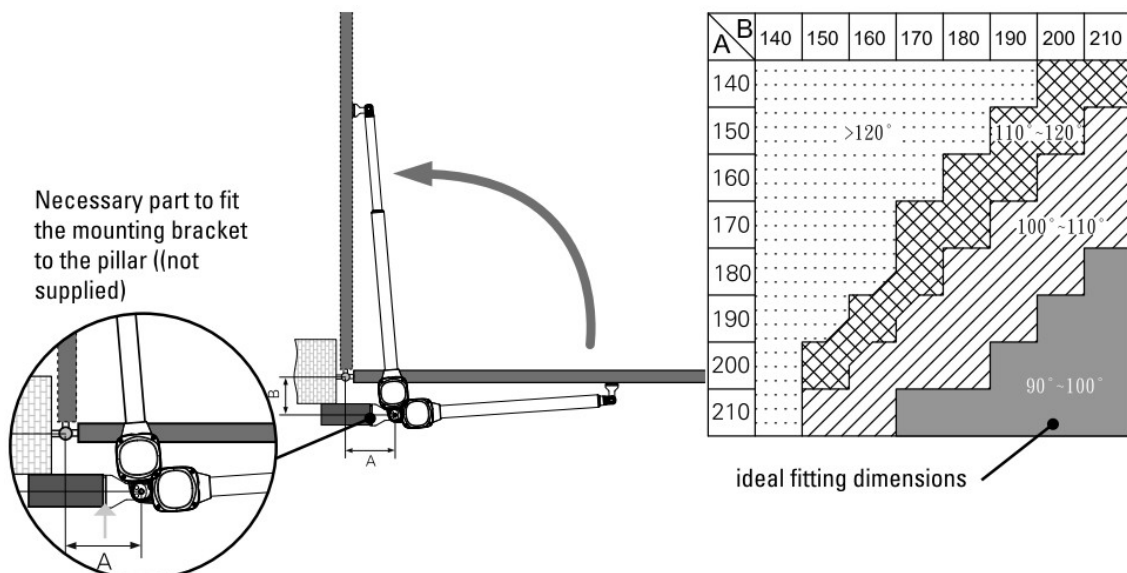
inside opening – installation with closed gate



Outside opening – installing with open gate (max 90°)



Warning ! With outside opening, it is imperative to install a blinker on pillar for security reasons. For an external opening, it will be necessary to manufacture a metal part in order to offset the motors, it is then **IMPERATIVE** to respect the dimensions of installation indicated in the table.

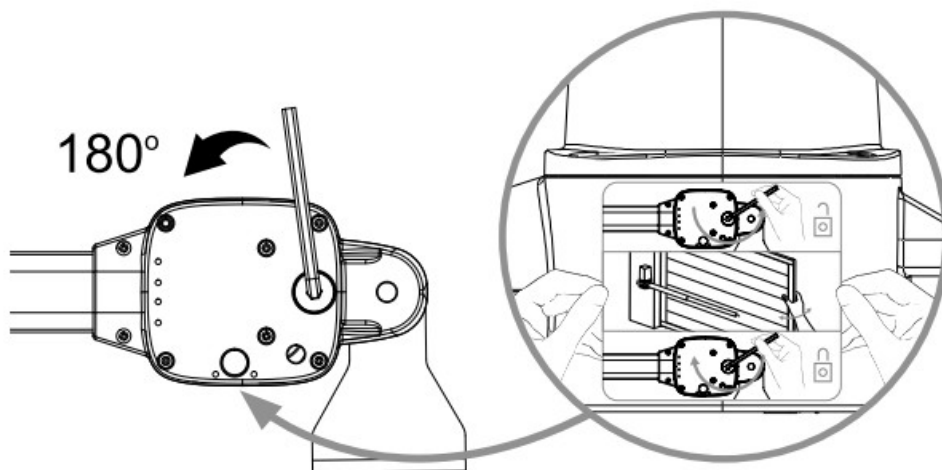


C3- Emergency release

In case of power failure or to program your automatic gate, you can manually unlock the engines:

Under the gate. Insert the hex wrench for unlocking and then turn anti-clockwise 180 degrees. You can now open the gate by hand.

To lock again the engine, insert the hex wrench for locking and then turn clockwise 180 degrees.



Permanently attach the label for the manual disconnection device to the operating element of this device.

C4- Motor fixing

Before placing the arm on the gate, unlock the arm (C3) and take out the tub from the cylinder.

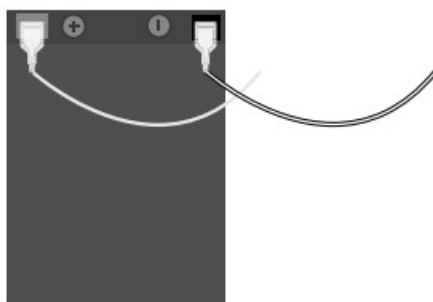
Then, retract the tube by 3 cm (this ensures that the gate is locked when closed).

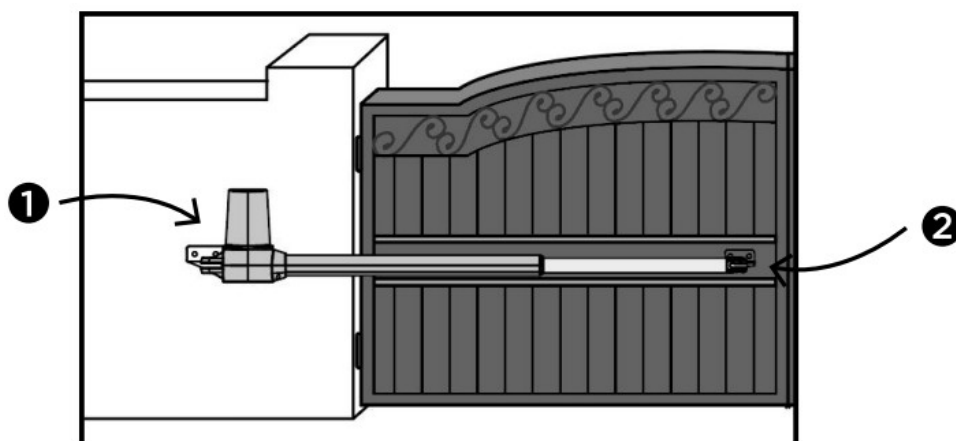


Tip

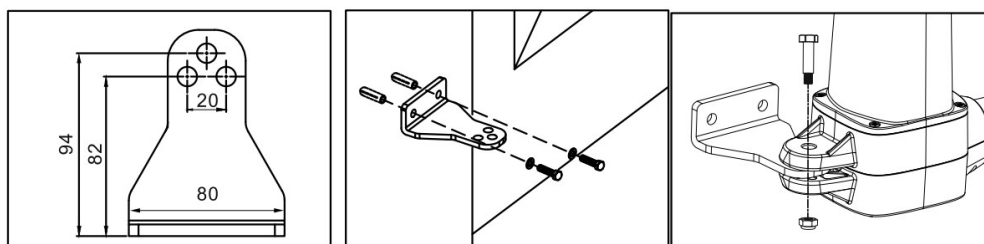
If you have problems unlocking your motor, you can use a battery.

Simply connect the white and yellow motor wires, one way or the other following the polarity to operate the motors.

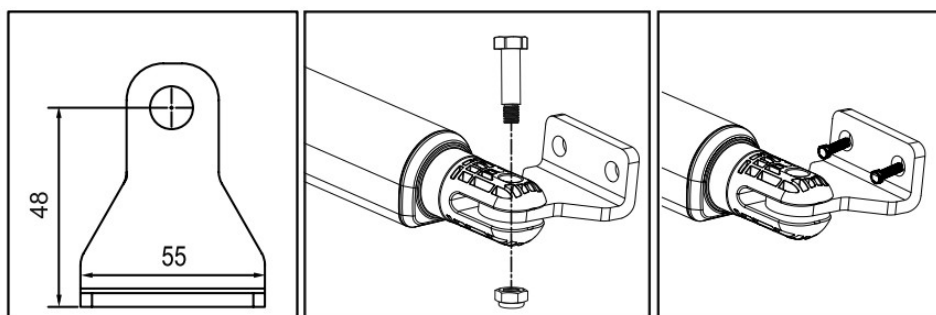




1. Fix the first bracket to the pillar. Position the automation in the bracket, then place the screw and nut.



2. Assemble the second bracket with the other side of the automation and screw the bracket to the closed gate.

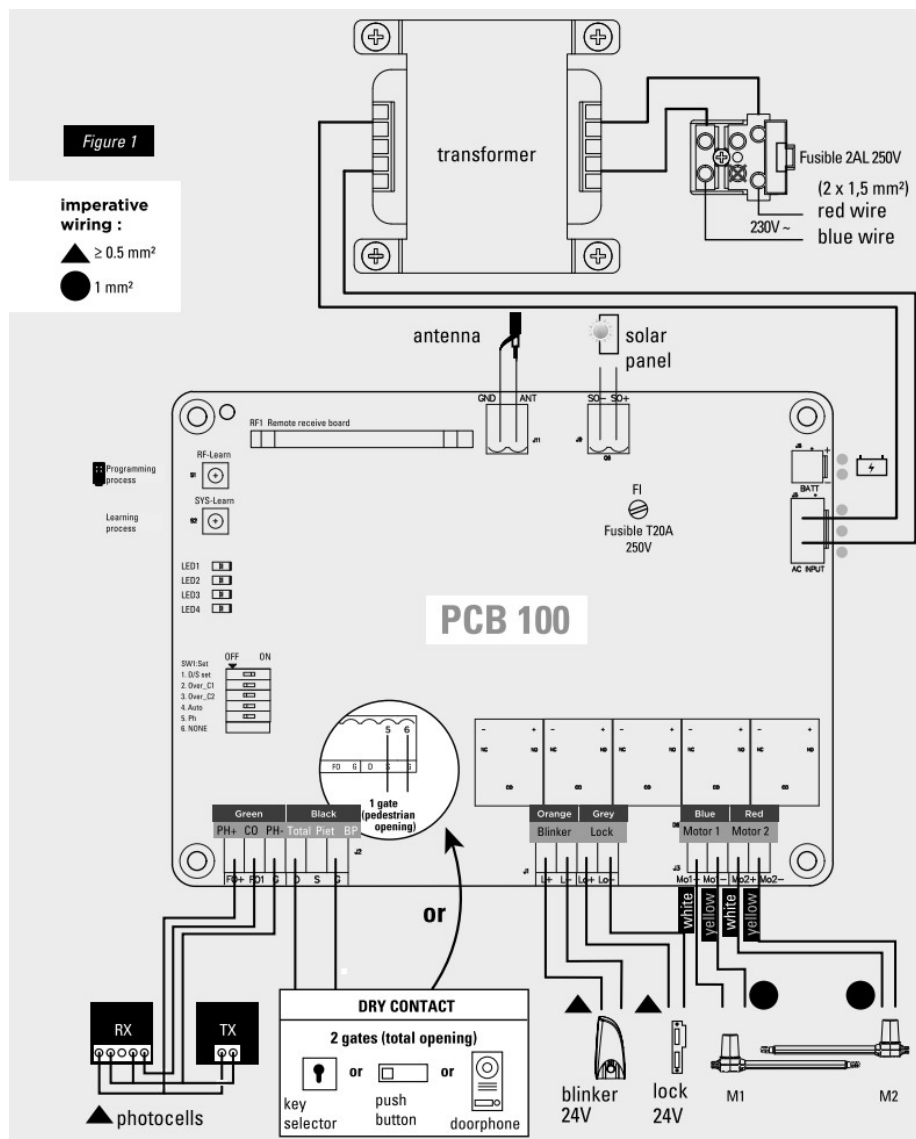


Make sure arms are fixed in horizontal position especially in those positions:

- 1) Gate in « CLOSE » position
- 2) Gate in « OPEN » position
- 3) Gate at « 45° angle » position

Prior to weld the bracket on the gate leaf (if necessary), cover the gate opener to prevent damages from sparks.

C5 Wiring diagram



C6- Installing



Prepare all the wires of the accessories beforehand and connect the wires to the gear motors and accessories on the PCB as shown in Figure 1. All of the wiring connections of the accessories are not requested to distinguish the positive (+) and the negative (-) polarity.

Control box

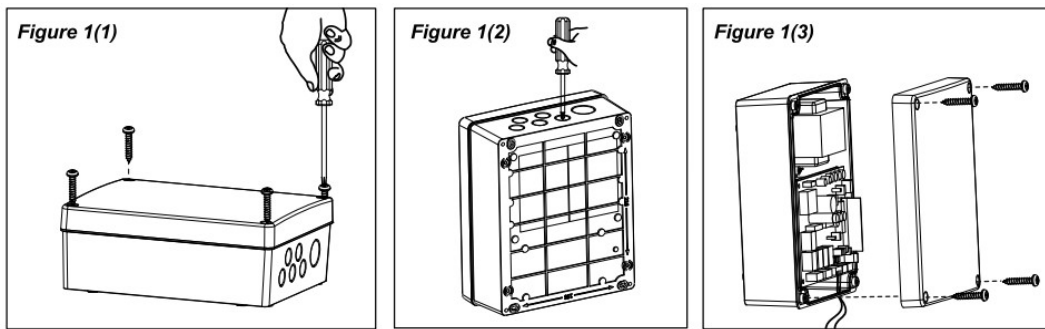
BEFORE INSTALLATION

Decide the installation position of control box first, it is suggested to be installed near the gate and should be protected from possible damage.

Be aware of the motor cable length before deciding the installation position of the control box.

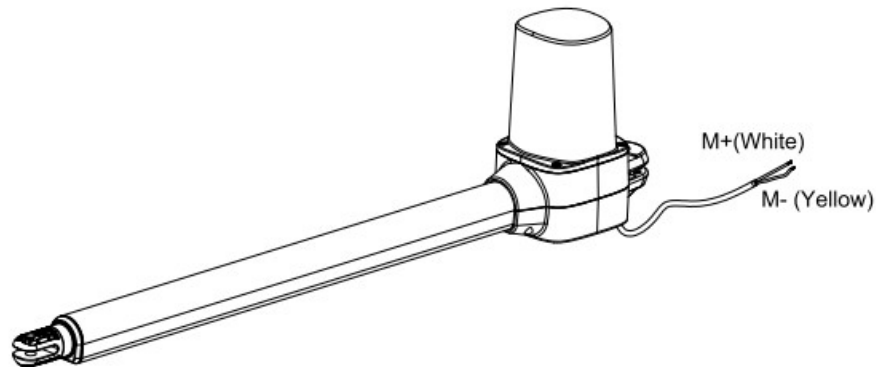
PRE-INSTALLATION

1. Remove the cover by unscrewing the four screws on the cover. See Figure 1(1).
2. Use a screwdriver to puncture the holes beneath the bottom of the control box. See Figure 1(2).
3. Fix and secure your electronic box on the wall.
4. Connect the wires of the various devices to be connected to the PCB board (devices described on the following pages)
5. Seal the holes of cables entries
6. Close the box by tightening the 4 screws. (See Figure 1(3))



Motor

MOTOR – WIRE CONNECTION



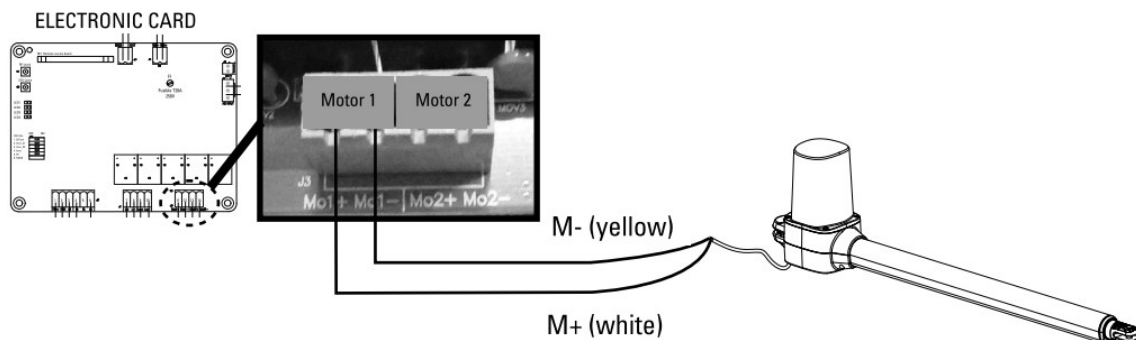
Avoid tension in the cable during open and close phase.

For gates opened outward:

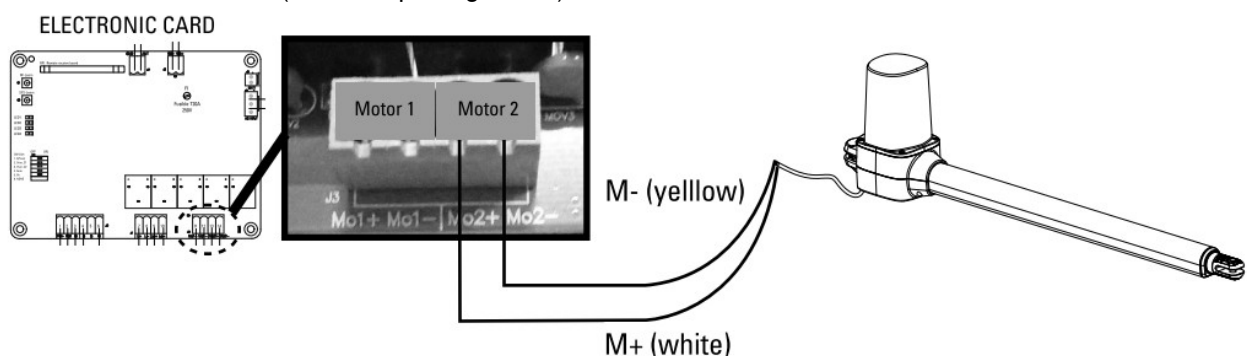
M1 Motor : Connect the motor wire (Yellow -) to the terminals Mo1 + and (White +) to the terminals Mo1-. (motor opening in first)

M2 Motor : Connect the motor wire (Yellow -) to the terminals Mo2 + and (White +) to the terminals Mo2 -.

M1 MOTOR CONNECTION (first opening motor)



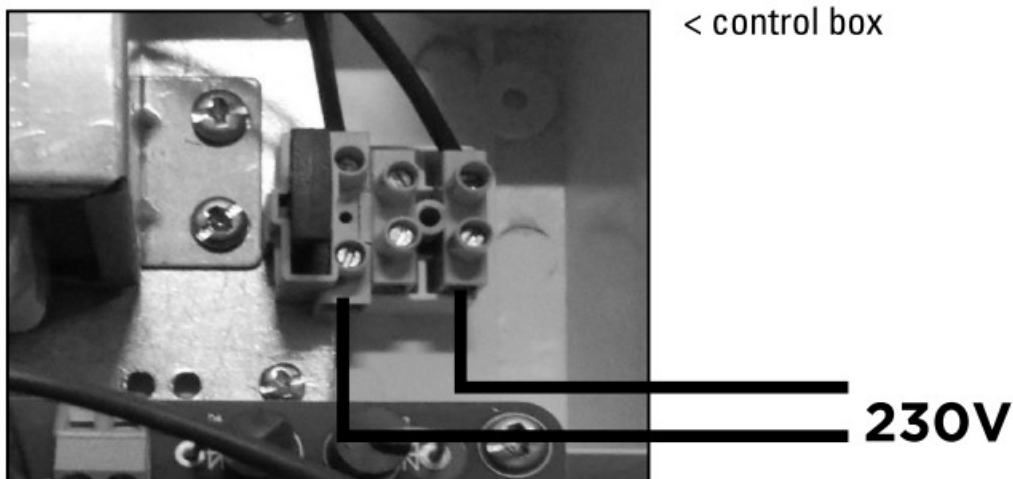
M2 MOTOR CONNECTION (second opening motor)



Electric Lock (option)

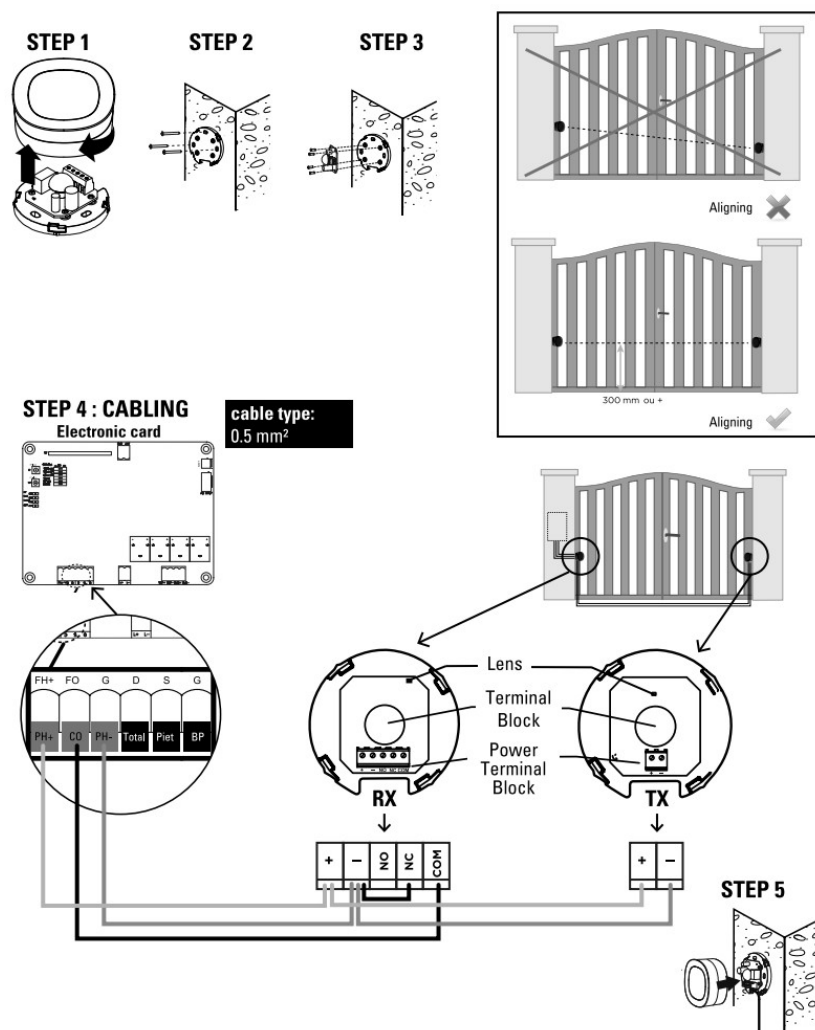
Connect the two wires from the electric lock (24V) to the terminal Lo + and Lo- on the PCB.

Wiring to 230V power supply



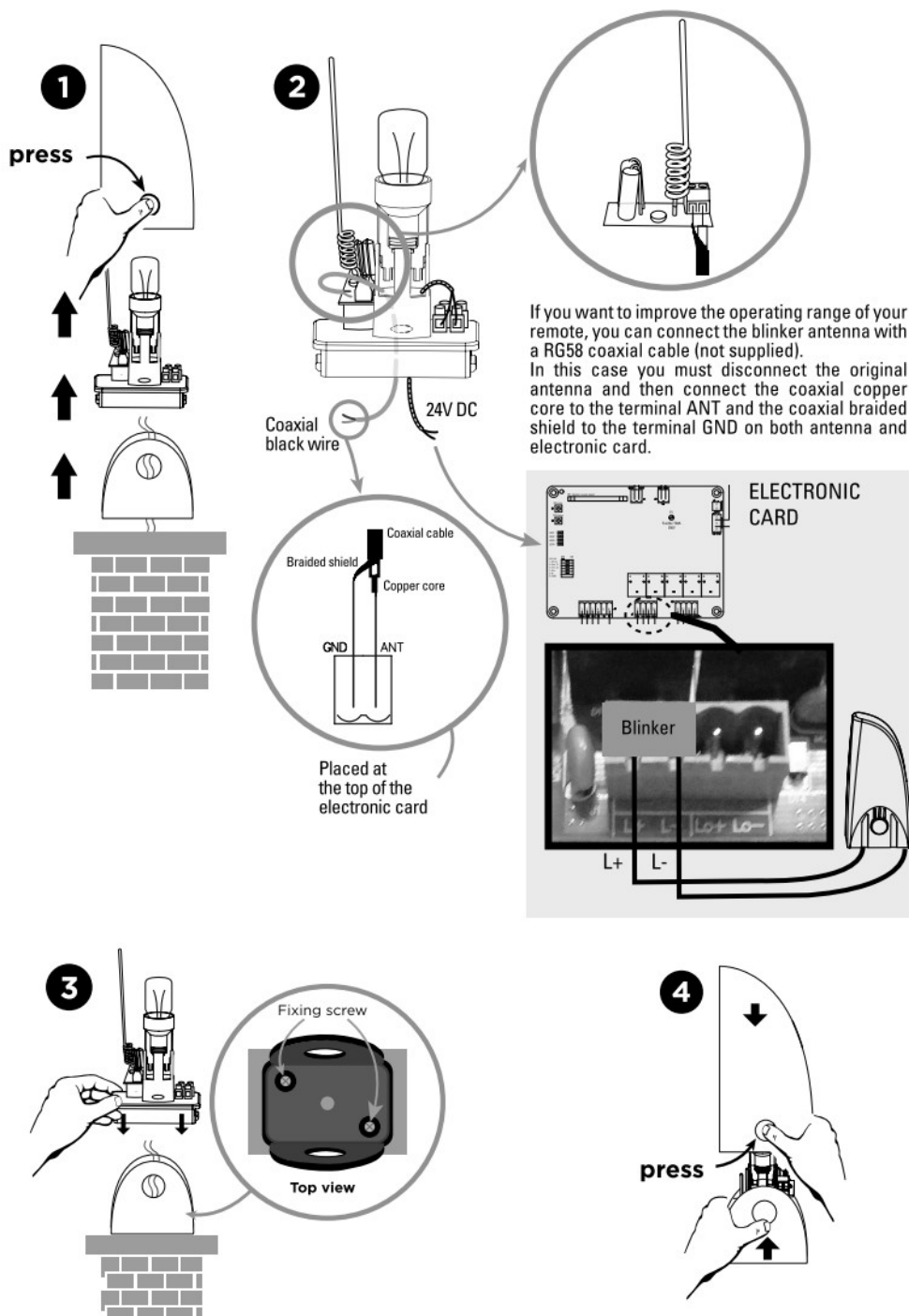
Photocells

The photocells are safety devices for control automatic gates. Consist of one transmitter and one receiver based in waterproof covers; it is triggered while breaking the path of the beams. If an obstacle is detected, the gate stops and opens again slightly allowing the obstacle to be released safely.



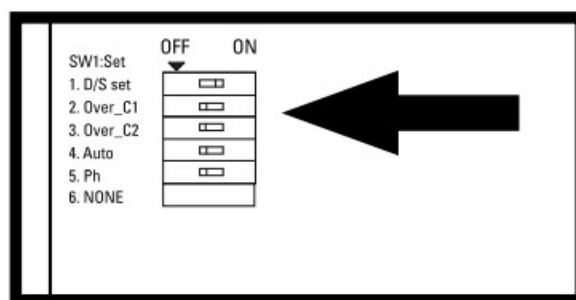
Blinker

Remove any packaging before connecting.



D- SETTING/USING

D1- Single/double gate setting (dip switch 1)



ELECTRONIC CARD

Switch settings: «on right position, «offy left position.

DIP SWITCH 1 D/S set:

ON = double gate operation


OFF = single gate operation (connection on 11 and 12)

D2- Power setting (dip switch 2 et 3)

DIP SWITCH (OVER C1)	DIP SWITCH (OVER C2)	CURRENT (AMP)
DIP switch 2 OFF	Dip switch 3 OFF	5A
DIP switch 2 OFF	Dip switch 3 ON	4A
DIP switch 2 ON	Dip switch 3 OFF	3A
DIP switch 2 ON	Dip switch 3 ON	2A

D3- Gate auto-close adjustment (dip switch 4)

DIP SWITCH 4

«ON »: Active automatic closing in 30 seconds. Simultaneously pressing the two remotes top keys  (opened or closed gate) will turn OFF the automatic mode (the blinker will flash 3 times as confirmation).

Repeat the operation to turn ON the automatic mode (the blinker will flash 3 times as confirmation).

Note in case of automatic closing, photocells are required.

«OFF » : Automatic closing OFF (caution it will still be possible to turn ON with the remote)

D4- Photocell adjustment (dip switch 5)

DIP SWITCHS:

ON : Photocells ON. When the photocells detect an obstacle while the gate is closing, the gate stops and opens during 2 seconds.

If the gate auto-close is adjusted, and the photocells detect an obstacle when the gate is totally opened, then the closing time will be reseted.

OFF : No detection by the photocells, the photocells will not control the opening of the gate.

D5- Dephasing of the leaves (dip switch 6)

DIP SWITCH 6:

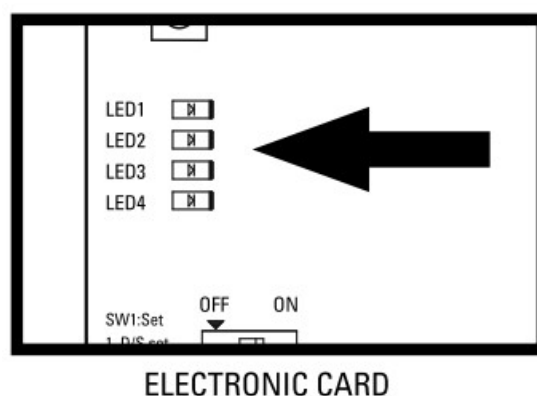
ON:: Dephasing in closing / opening of 8 seconds.

OFF : Dephasing in closing / opening of 3 seconds.

D6- Decelaration speed

The speed is 70% output of the full speed (no adjustment possible).

D7- LED indication



LED 1 RF indicator : radio frequency

LED1 will be on when remote controls are activated.

LED 2 System learning:

LED 2 blinks twice per second during normal operation and once per second during learning. Static LED2 means incorrect programming.

LED 3 Photocells:

LED 3 will be on when photocells are not aligned.

LED 4 will be on if the switch of the transmitter, key selector, or the push button is activated.

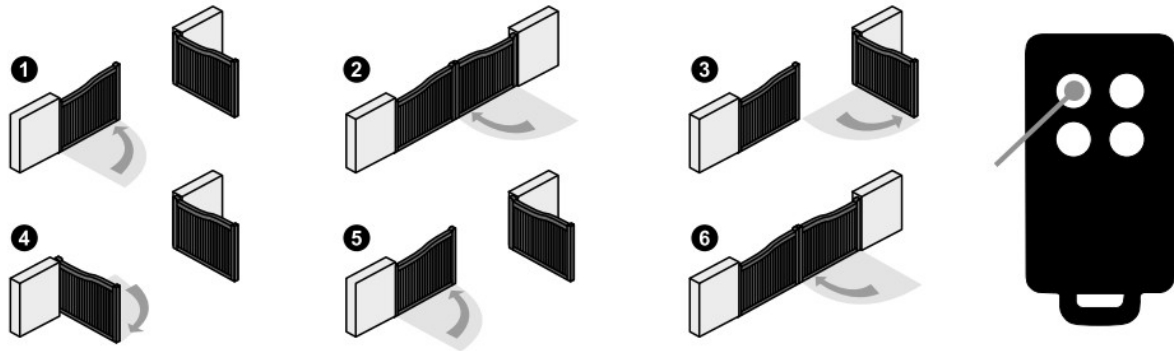
D8- Remote controls learning process

Press "RF-learn" button for 2 seconds, and the LED1 will be on; then press the transmitter top left button. The LED1 will blink twice and stay on for 10 seconds then be off. And the remote memorize has completed.

D9- System learning process for double leaf gate



The remote control memory storing operation must be over before starting the final system learning process. Let your gate totally opened then lock them (part C3)
Press «SYS-learn» (until the LED2 light begins to flash once every second, instead of twice every second as it normally would), then press the upper-left key for a double gate.
The system learning process will be as follows, step by step:



After step 6, the system learning process is complete. You can use it with the remote control:



double gate full opening



pedestrian opening (single gate)

The LED2 light will remain ON until the system learning process is not over. Check the wiring connection and repeat the step.

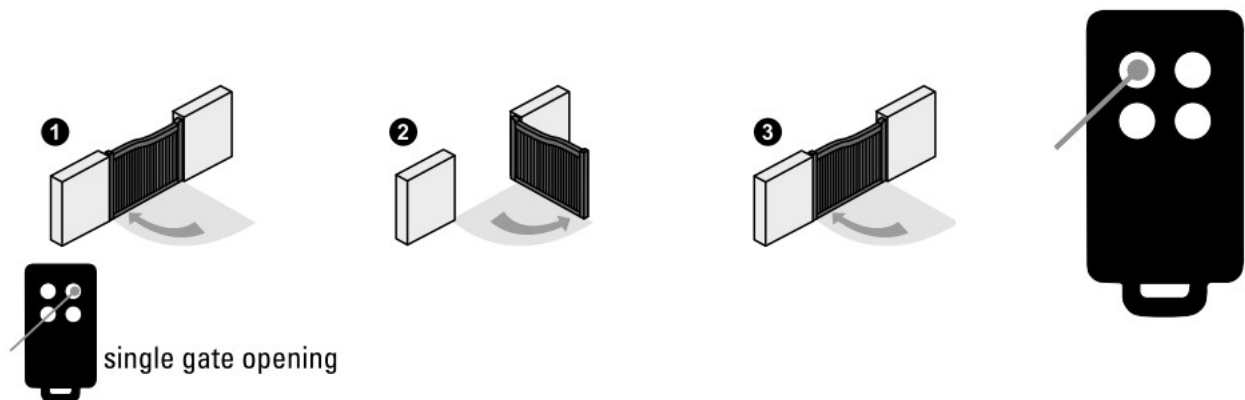
D10- System learning process for single leaf gate

Switch 1 OFF.

Open the leaf totally.

Press «SYS-learn» (until the LED2 light begins to flash once every second, instead of twice every second as it normally would), then press the upper-right key for a single gate.

The system learning process will be as follows, step by step:



E- TECHNICAL FEATURE

Motor

Motor	24V DC motor with manual release
Gear type	Worm gear
Stroke length	435mm
Power supply	24V DC
Maximum gate weight / Maximum gate length	150 kg / 1,6 m per leaf
Operating Temperature	-20°C~+50°C
Dimension	710 mm x 98 mm x 192 mm

Blinker

Antenna included	YES (coaxial cable not supplied)
Bulb	LED E14 24V 1W (supplied)
Power cable	2x 1 mm ² (not supplied)
Bulb connection	Unpolarized at the electronic card connection.
Screws	included
Do not supply 230V	
Operating temperature	-20°C~+50°C
Dimensions	74 x 167 x 59 mm

Remote controls

Channels	4
Frequency – Maximum transmitted power	433.92 MHz – power < 10mW
Power supply	1 battery lithium CR2032 included
Security	rolling code technology

Photocells

Detection Method	Infrared Beam
Sensing Range	MAX~10m
Input Voltage	12~24V AC/DC
Response Time	<100ms
Operation Indicator	RX: Red LED On (beam broken) / Off (beam aligned) TX : Red LED On
Dimensions	63 x 63 x 30 mm
Output Method	Relay Output

F- MAINTENANCE

F1- Motor

Conduct the following operations at least every 6 months. If in high intensity of use, shorten the period in between.

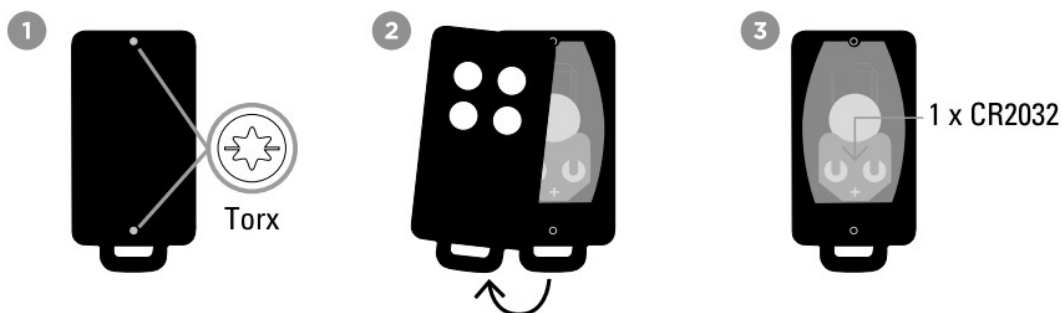
Disconnect the power supply:

1. Clean and lubricate the screws, the pins, and the hinge with grease.
2. Check the fastening points are properly tightened.
3. Make the wire connection are in good condition.

Connect the power supply:

1. Check the power adjustments.
2. Check the function of the manual release.
3. Check the function of photocells or other safety device.

F2- Remote control

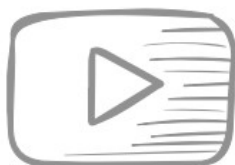


G- TECHNICAL ASSISTANCE

G1- Troubleshooting

Problem	Solutions
Overheated Back-up Batteries	Check the wiring connection of the batteries.
The gate doesn't move when pressing the button of the transmitter	<ol style="list-style-type: none"> 1. Check if LED1 is "ON" once press the transmitter. 2. Check if the voltage of the batteries is above 25V. 3. Check if LED2 is "ON" and blinks accordingly. 4. Make sure all the wiring connections are firmly connected to the terminals on the PCB. 5. Make sure the fuse is workable. on the panel and power socket.
The transmitting distance is too short	<p>Make sure the connecting terminals of the Antenna is firm.</p> <p>Check the battery on the transmitter.</p>
The Flashing light does not work	<p>Unscrew and screw in the bulb</p> <p>Check if the wiring connection of the flashing light is correct.</p>
<p>The leaves suddenly stop during moving</p> <p>The leaves does not move or only move toward one direction</p>	<ol style="list-style-type: none"> 1. Check if the gate can be moved freely and no obstacles in between. 2. Make sure the wiring connection of the gear motors is firm. 3. Make sure the safety beam are operating properly if installed. 4. Cut off the power of the engine. Release the motor and make sure the gate can move freely.
The master gate closes to the end first and the slave gate stops, which the opening or closing sequence is not being operated properly	<ol style="list-style-type: none"> 1. Check if the gate can be moved freely and no obstacles in between. 2. Make sure the wiring connection of the gear motors is firm. 3. Make sure the fuse is workable. 4. Make sure the safety beam are operating properly if installed. 5. Cut off the power of the engine. Release the motor and make sure the gate can move freely.
The gear motors does not run and the relay is noisy when operating the gate opening and closing	Check the condition fuse.
No remote control connection	<ol style="list-style-type: none"> 1. Check LED1 is blinking when pressing the remote control key. 2. Check RF1 receiver is ok. 3. To check that the remote control is associated when the remote control is pressed, LED 1 and LED 4 must light up. 4. If the LED flashes for 1 second when the remote control is pressed, the battery must be changed. 5. Remove and replace the plug-in receiver
4 steps instead of 6 when teaching	Reverse polarity on all motors

G2- Tutos



https://www.youtube.com/playlist?list=PLhdc503NdLNZL_IPdBdLh34hrIYLYmiNj

G3- Online chat
Any question ?



For an individual answer, use our online chat on our website www.scs-sentinel.com

H- WARRANTY



SCS Sentinel grants to this product a longer warranty period, beyond the legal time, as a sign of quality and reliability.

The ice will be required as proof of purchase date. Please keep it during the warranty period.

Carefully keep the barcode and the proof of purchase, that will be necessary to claim warranty.

Are never covered by our warranty:

- Damage resulting from the consequences of a bad installation (bad wiring, reverse polarity ..).
- Damage resulting from improper use of the device (use in contradiction with the manual) or its modification.
- Damage resulting from the consequences of the use of components not from SCS SENTINEL.
- Damage due to lack of maintenance, physical shock.
- Damage due to weather: hail, lightning, strong wind etc..
- Returns made without a copy of the invoice or receipt.

I- WARNINGS



Don't throw batteries or out of order products with the household waste (garbage). The dangerous substances that they are likely to include may harm health or the environment. Make your retailer take back these products or use the selective collect of garbage proposed by your city.



Do not ingest battery, Chemical Burn Hazard. This product contains a button cell battery. If the button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention. Do not clean the remote control with abrasive or corrosive substances. Use a simple cloth. Do not allow children to play with the product or packaging.

When replacing the battery, use a battery with the same characteristics as the one supplied with the product. Remove the batteries from the equipment if it is not to be used for a prolonged period, except in emergency situations. Batteries must not be exposed to excessive heat or thrown into a fire.



J – DECLARATION OF CONFORMITY

SCS Sentinel hereby declares that this product s in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU and Directive 2006/42/EC. The Declaration of Conformity can be found at:

www.scs-sentinel.com/downloads

All the information on:



www.scs-sentinel.com




<https://www.youtube.com/c/Scs-laboutique>

scs sentinel

110, rue Pierre-Gilles de Gennes
49300 Cholet – France

Documents / Resources

	<p>scs sentinel MVE0100 Automation Kit For Swing Gate [pdf] User Manual MVE0100, MVE0100 Automation Kit For Swing Gate, Automation Kit For Swing Gate, Swing Gate, Gate</p>
---	---

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.