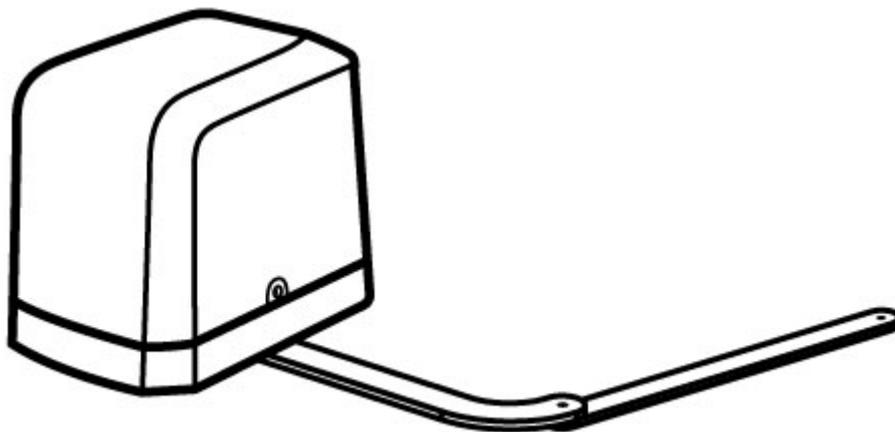


ELSEMA 
INTELLIGENT 
SWING®

iS270 / iS270D / iS270Solar

**ARTICULATED ARM
GATE OPENER**

USER MANUAL



Reuse
Reduce
Recycle



INDEX

1.1	GENERAL SAFETY PRECAUTION	P.1
1.2	INSTALLATION	
	A. STANDARD INSTALLATION	P.2
	B. INSTALLATION CHECK	P.3
	C. COMPONENTS FOR INSTALLATION.....	P.4
	D. INSTALLATION OF ARTICULATED ARM.....	P.5
	E. EMERGENCY RELEASE	P.6
	F. ELECTRICAL CONNECTION	P.6
1.3	TECHNICAL FEATURES	
	A. TECHNICAL FEATURES	P.6
	B. DIMENSION	P.7
1.4	MAINTENANCE	P.7

1.1 GENERAL PRECAUTION

WARNING:

This user manual is only for qualified technicians who are specialized in installations and automations.

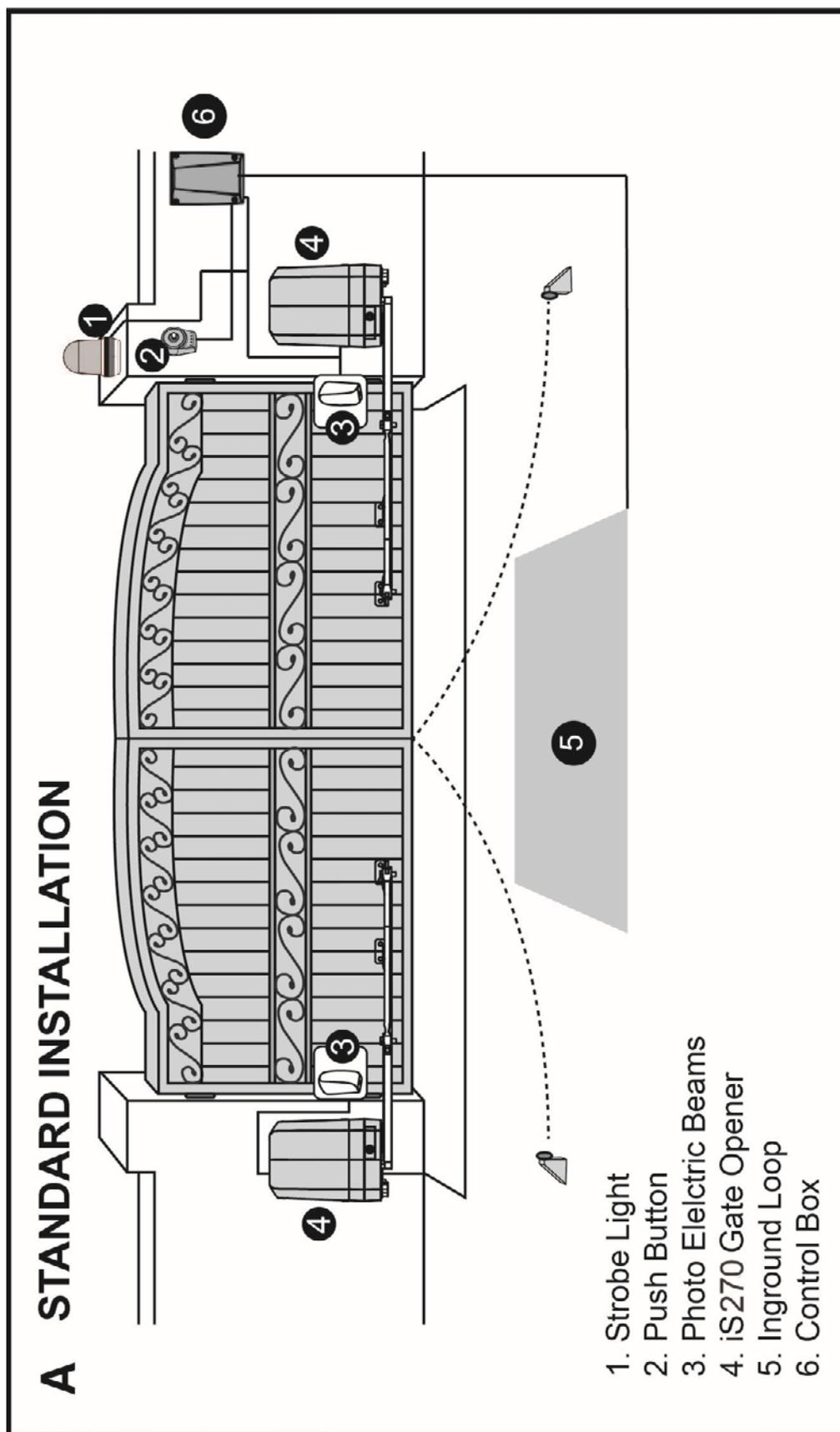
- 1) All installations, electrical connections, adjustments and testing must be performed only after reading and understanding of all instructions carefully.
- 2) Before carrying out any installation or maintenance operation, disconnect the electrical power supply by turning off the mains switch connected upstream and apply the hazard area notice required by applicable regulations.
- 3) Make sure the existing structure is up to standard in terms of strength and stability.
- 4) When necessary, connect the motorized gate to reliable earth system during electricity connection phase.
- 5) Installation requires qualified personnel with mechanical and electrical skills.
- 6) Keep the automatic controls (remote, push buttons, key selectors. etc) placed properly and way from children.
- 7) For replace or repair of motorized system, only original parts must be used. Any damage caused by inadequate parts and methods will be not claimed to motor manufacturer.
- 8) Never operate the drive if you suspect that it might be faulty or will cause damage to the system.
- 9) The motors are exclusively designed for gate opening and closing application, any other usage is deem inappropriate. The manufacturer will not be liable for any damage resulting from the improper use. Improper usage should void all warranty, and the user accepts sole responsibility for any risks thereby may accrue.
- 10) The system may be operated in proper working order. Always follow the standard procedures by following the instructions in this installation and operating manual.
- 11) Only operate the remote when you have the full view of the gate.

ELSEMA PTY LTD shall not be liable for any injury, damage, or any claim to any person or property which may result from improper use or installation of this system.

Please keep this installation manual for future reference.

1.2 STANDARD INSTALLATION

A. STANDARD INSTALLATION



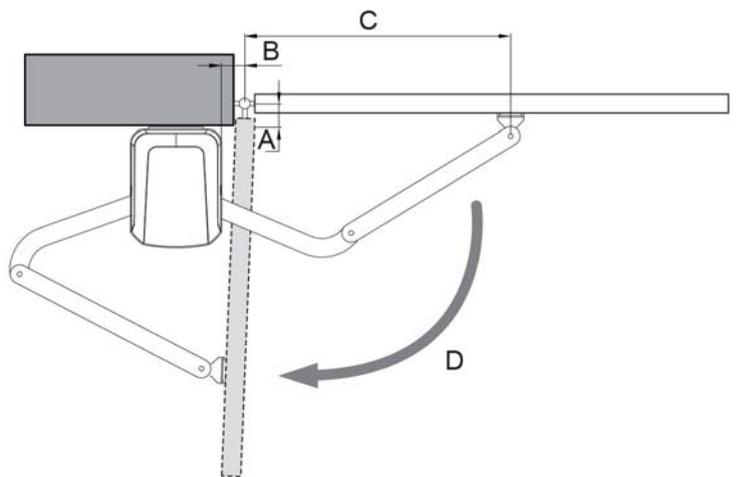
B. CHECKS BEFORE INSTALLATION

Before proceeding with the installation check the following:

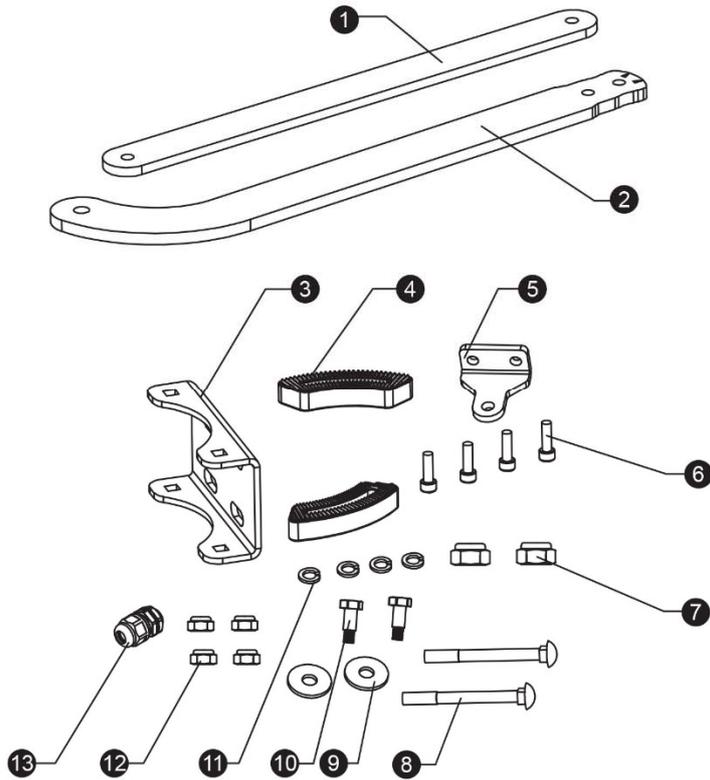
- 1) Be sure that gate moves freely.
- 2) There are no obstacles in the moving gate area.
- 3) Hinges are properly positioned and greased.
- 4) There should be no friction between the two gate leaves.
- 5) There should be no friction with the ground while moving the gates.
- 6) Check that the gate structure is suitable to install automatic gate motors.

Follow the measures shown in the chart for proper installation. If necessary, please adjust the gate structure for optimum performance.

A(mm)	B(mm)	C(mm)	D
50	50	600	90°
50	100	550	100°
50	150	500	100°
100	50	630	90°
100	100	580	90°
100	150	530	100°
150	50	600	90°
150	100	550	90°
150	150	500	100°
200	50	600	90°
200	100	550	90°
200	150	500	100°



C. COMPONENTS FOR INSTALLATION



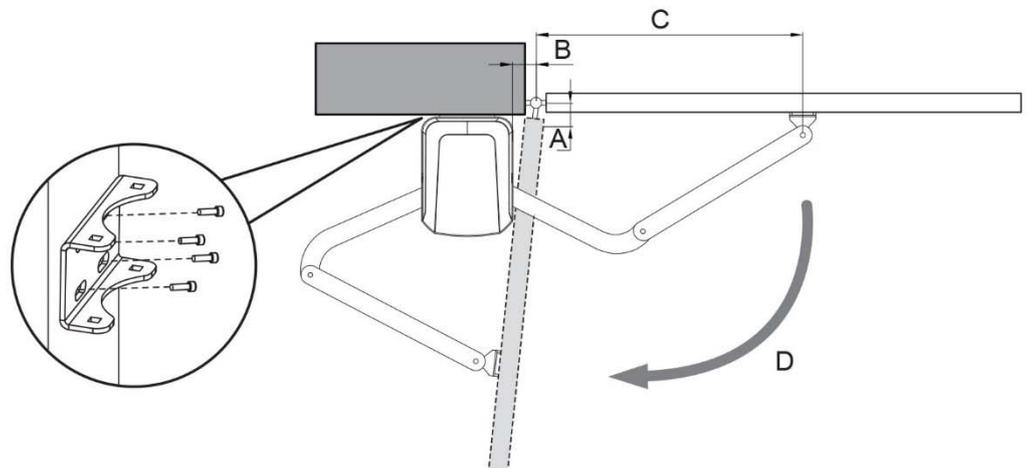
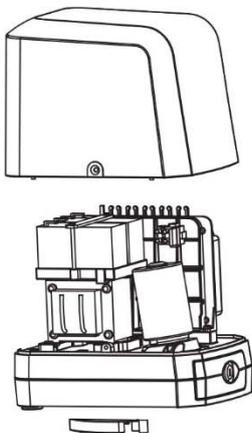
1	Straight arm	1 pcs
2	Curved arm	1 pcs
3	U-shaped fixing plate	1 pcs
4	Mechanical stopper	2 pcs
5	Front-end fixing bracket	1 pcs
6	Screw	4 pcs
7	Nut Ø10	2 pcs
8	Screw	2 pcs
9	Gasket	2 pcs
10	Screw	2 pcs
11	Spring washer	4 pcs
12	Nut Ø8	4 pcs
13	Cable gland	1 pcs

D. INSTALLATION OF ARTICULATED ARM

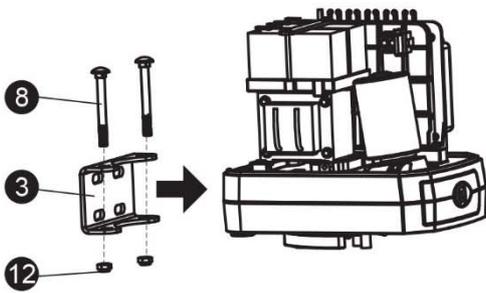
- Refer to the Dimension Chart to choose the correct dimensions of the motors and position to be installed.
- Check if the mounting surface where the brackets are to be installed is smooth, vertical and rigid.
- Run the cables for power supply and cable for the motors.
- Motor installation and setting for mechanical stopper in opened and closed position.

1. Remove the upper cover and mechanical stoppers from the bottom of the motor.

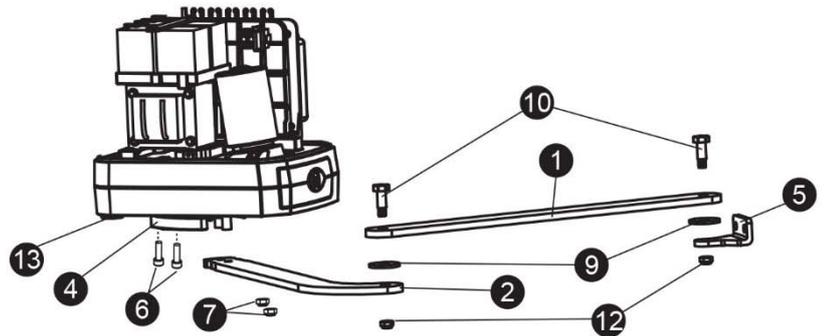
2. Place the gate in the full closed position and fix the U-shaped fixing plate on the wall.



3. Install the motor on the U-shaped fixing plate with corresponding screws and nuts.

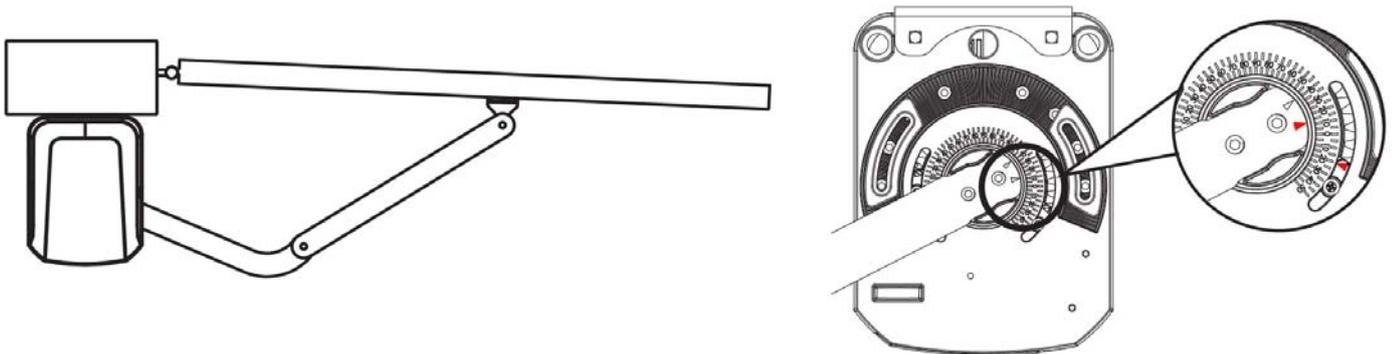


4. After positioning the front of the curved arm on the bottom of the motor, release the motor and position the minor arm on the end of curved arm and the mounting bracket with corresponding screws and nuts.



5. Fully closed position adjustment :

- 5.1 Fix the mechanical stopper at the fully closed position.
 - 5.2 Move the gate manually to the fully closed position.
 - 5.2 Align the pointer on the limit switch to the pointer on the curved arm.
- (Red points shown on the figure below indicate the pointers)



6. Fully open position adjustment :

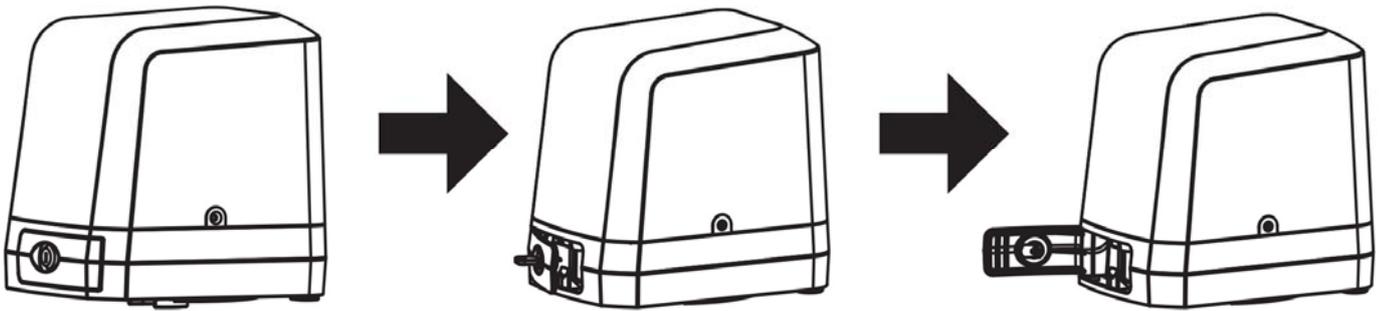
- 6.1 Fix the mechanical stopper at the fully open position.
 - 6.2 Move the gate manually to the fully open position.
 - 6.2 Align the pointer on the limit switch to the pointer on the curved arm.
- (Red points shown on the figure below indicate the pointers)



E. EMERGENCY RELEASE

In case of power failure, The operator can be switched to manual operation.

- 1) Insert the release key to the release slot
- 2) Turn the release key anti-clockwise
- 3) Pull out the release bar
- 4) Turn the release key clockwise to fix the release bar, the release bar has to be in pulled out position when turning the release key clockwise.



J. ELECTRICAL CONNECTION

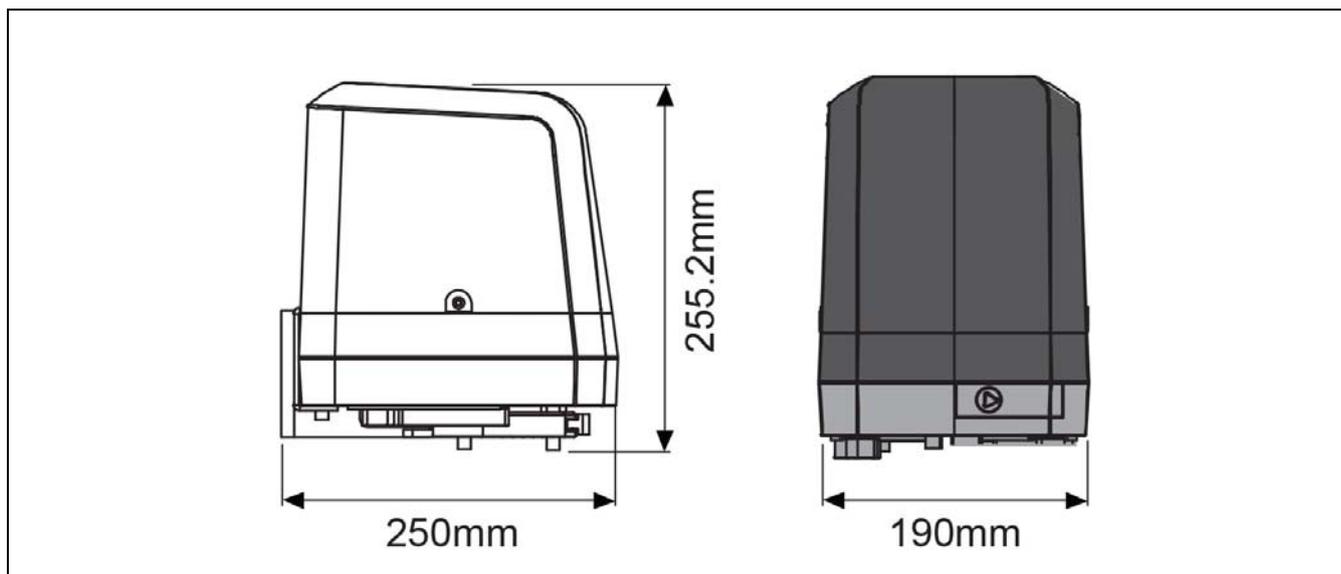
After successful motor installation, refer to the user manual of the control card for automatic operation setup.

1.3 TECHNICAL FEATURES:

A. Technical Features:

Motor Voltage	24Volts DC motor
Gear Type	Electromechanical Worm gear
Nominal Thrust	1200N
Power Supply	240 Volts AC
Nominal Input Current	2 Amps
Maximum Gate Weight	250 kg per leaf
Maximum Gate Length	2.5 metres
Duty Cycle	60%
Operating Temperature	-20°c ~ +50°c
Dimension	256mm x 267mm x 187mm
Weight	6 kg

B Dimension:



1.4 MAINTENANCE:

Maintenance should be performed at least every six months. If it is used in high traffic area, a more regular maintenance should be performed.

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) Check and make sure that the wire connections are in good condition.

Connect the power supply:

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

- **Solar kits**
- **Solar panels**
- **Backup batteries**
- **Photo electric beams**
- **Magnetic locks**
- **Wireless keypads**
- **Pre formed loop**



Visit www.elsema.com to see our full range of Gate and Door Automation products