EASY TO INSTALL

RELIABLE AND STURDY

ADVANCED KIT

Rino SEC ECO

GATE OPENER
contrl board manual

ECO EN • 30-07-2020

Contents

1. General safety precautions

This product has been designed and built solely for the purpose indicated herein. Uses other than those indicated herein might cause damage to the product and create a hazard.

- The units making up the machine and its installation must meet the requirements of the following European Directives, where applicable: 108/2004/EC, 95/2006/EC, 42/2006/EC, 106/89/EC, 05/99/EC and later amendments. For all countries outside the EEC, it is advisable to comply with the standards mentioned, in addition to any national standards in force, to achieve a good level of safety.
- The Manufacturer of this product (hereinafter referred to as the "Firm") disclaims all responsibility resulting from improper use or any use other than that for which the product has been designed, as indicated herein, as well as for failure to apply Good Practice in the construction of entry systems (doors, gates, etc.) and for deformation that could occur during use.
- Installation must be carried out by qualified personnel (professional installer, according to EN 12635), in compliance with Good Practice and current code.
- Before installing the product, make all structural changes required to produce safety gaps and to provide protection from or isolate all crushing, shearing and dragging hazard areas and danger zones in general in accordance with the provisions of standards EN 12604 and 12453 or any local installation standards.
Check that the existing structure meets the necessary strength and stability requirements.
- Before commencing installation, check the product for damage.
- The Firm is not responsible for failure to apply Good Practice in the construction and maintenance of the doors, gates, etc. to be motorized, or for deformation that might occur during use.
- Make sure the stated temperature range is compatible with the site in which the automated system is due to be installed.
- Do not install this product in an explosive atmosphere: the presence of flammable fumes or gas constitutes a serious safety hazard.
- Disconnect the electricity supply before performing any work on the system. Also disconnect buffer batteries, if any are connected.
- Before connecting the power supply, make sure the product's ratings match the mains ratings and that a suitable residual current circuit breaker and overcurrent protection device have been installed upline from the electrical system. Have the automated system's mains power supply fitted with a switch or omnipolar thermal-magnetic circuit breaker with a contact separation that provide full disconnection under overvoltage category III conditions (contact opening equalor greater than 3mm).
- Make sure that upline from the mains power supply there is a residual current circuit breaker that trips at no more than 0.03A as well as any other equipmentrequired by code.
- Make sure the earth system has been installed correctly: earth all the metal parts belonging to the entry system (doors, gates, etc.) and all parts of the system featuring an earth terminal.
- Installation must be carried out using safety devices and controls that meet standards EN 12978 and EN 12453.
- Impact forces can be reduced by using deformable edges.
- In the event impact forces exceed the values laid down by the relevant standards, apply electro-sensitive or pressure-sensitive devices.
- Apply all safety devices (photocells, safety edges, etc.) required to keep the area free of impact, crushing, dragging and shearing hazards. Bear in mind the standards and directives in force, Good Practice criteria, intended use, the installation environment, the operating logic of the system and forces generated by the automated system.
- Apply all signs required by current code to identify hazardous areas (residual risks). All installations must be visibly identified in compliance with the provisions of standard EN 1-13241.
- Once installation is complete, apply a nameplate featuring the door/gate's data.
- This product cannot be installed on leaves incorporating doors (unless the motor
can be activated only when the door is closed).

2. Checking the automated system and maintenance

Before the automated system is finally put into operation, and during maintenance work, perform the following checks meticulously:
- Make sure all components are fastened securely.
- Check starting and stopping operations in the case of manual control.
- Check the logic for normal or personalized operation.
- For swing gates only: make sure the leaves' axis of rotation is perfectly vertical.
- Check that all safety devices (photocells, safety edges, etc.) are working properly.
than the value laid down by standard EN 12453.
- Make sure that the emergency operation works, where this feature is provided.
- Check opening and closing operations with the control devices applied.
- Check that electrical connections and cabling are intact, making extra sure that insulating sheaths and cable glands are undamaged.
- While performing maintenance, clean the photocells' optics.
- When the automated system is out of service for any length of time, activate the emergency release (see "EMERGENCY OPERATION" section) so that the operated part is made idle, thus allowing the gate to be opened and closed manually.
- If the power cord is damaged, it must be replaced by the manufacturer or their technical assistance department or other such qualified person to avoid any risk .
- If "D" type devices are installed (as defined by EN12453), connect in unverified mode, foresee mandatory maintenance at least every six months
- The maintenance described above must be repeated at least once yearly or at shorter intervals where site or installation conditions make this necessary.

Warning!

Remember that the drive is designed to make the gate/door easier to use and will not solve problems as a result of defective or poorly performed installation or lack of maintenance.

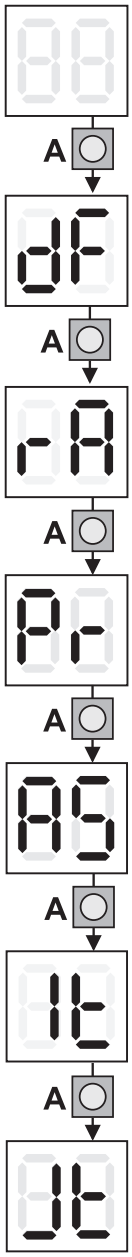
SCRAPPING

Materials must be disposed of in accordance with the regulations inforce. Do not throw away your discarded equipment or used batteries with household waste. You are responsible for taking all your waste electrical and electronic equipment to a suitable recycling centre.

3. General Information

The Rinosec ECO control panel comes with standard factory settings. Any change must be made using the programmer with built-in display or universal handheld programmer. The Control unit completely supports the EELINK protocol.
Its main features are:
- Control of one or two 220 V motors
Note: 2 motors of the same type must be used.
- Electronic torque control
- Two 7 segment display
- Limit switch control inputs based on motor selected
- Separate inputs for safety devices
- Built-in radio receiver rolling or learning code with.
The board has a terminal strip of the removable kind to make maintenance or replacement easier. It comes with a series of prewired jumpers to make the installer's job on site easier.
The ECO panel controls (checks) the start relays and safety devices (photocells) before performing each opening and closing cycle. If there is a malfunction, make sure that the connected devices are working properly and check the wiring.

	Terminal		Description
22	L	LINE	Single-phase power supply 230-220V 60/50 Hz*
21	⏚	EARTH	
20	N	NEUTRAL	
19	CL M2	CLOSE M2	Connection motor 2.
18		COM M2	
17	OP M2	OPEN M2	
16	CL M1	CLOSE M1	Connection motor 1. This motor starts first and electrical lock will be installed on this leaf
15		COM M1	
14	OP M1	OPEN M1	
13	FLASHER	220 V Flashing light. (mode blinker/fix in FL)	
12			
11	PARK	Auxiliary free contact.(light/flasher/lock)	
10			
9	20 VAC	20V Accessories power supply output.	
8			
7	Elock	Electrical lock output.	
6			
5	PHOTO	Input configured as Phot (photocell)	
4	COM	Inputs common	
3	PD	Input configured as open to the pedestrian	
2	ST	Input configured as start	
1	COM	Inputs common	



Restores the controller's DEFAULT factory settings. Controller's Default for two leaves and one leaf.

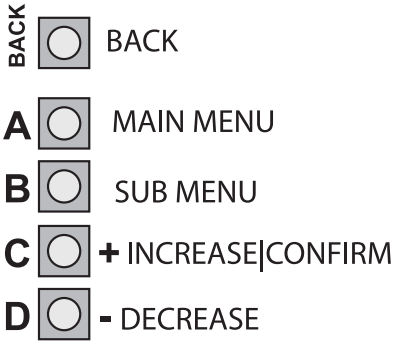
Radio Menu to memorize transmitters.

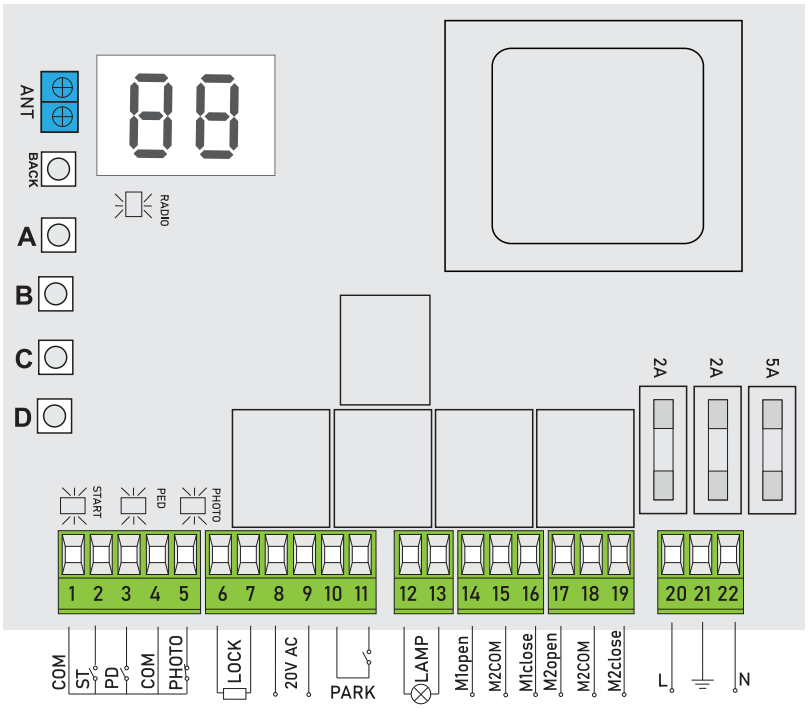
Parameters of controller.

Launch an autoset operation to catch time of motors.

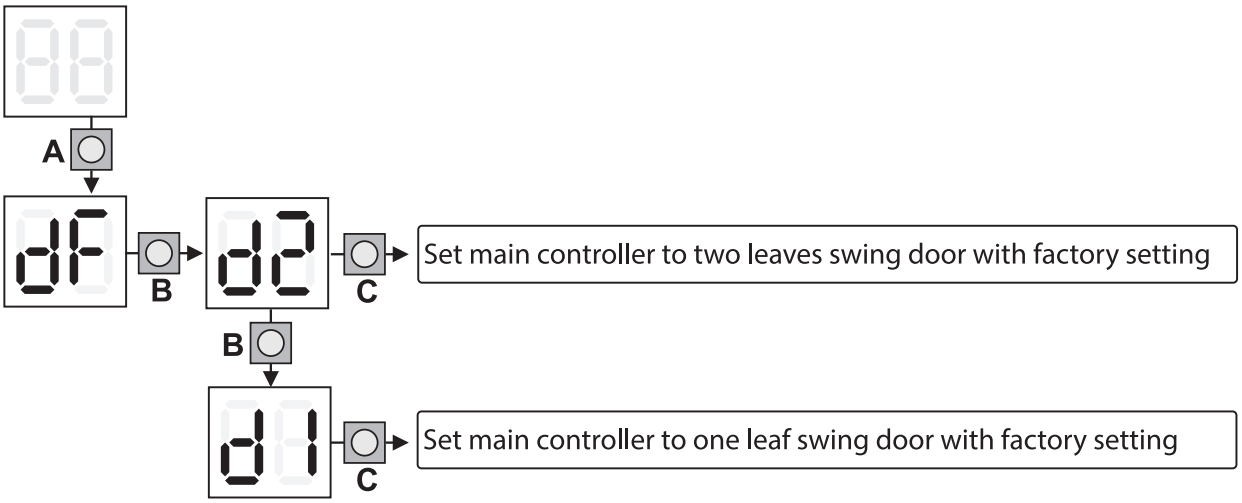
Launch test operation on inputs.

Launch test operation on motor outputs.

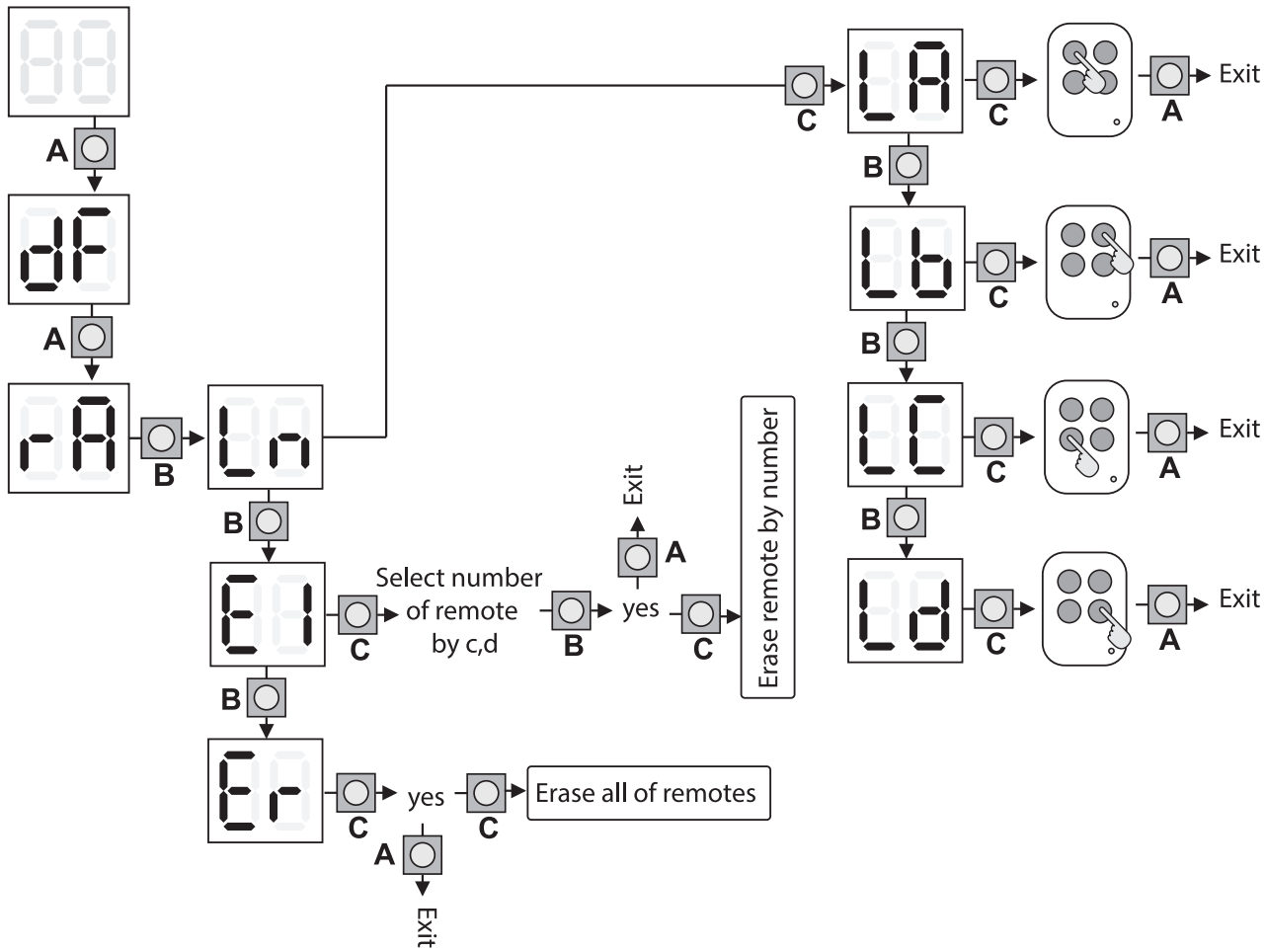




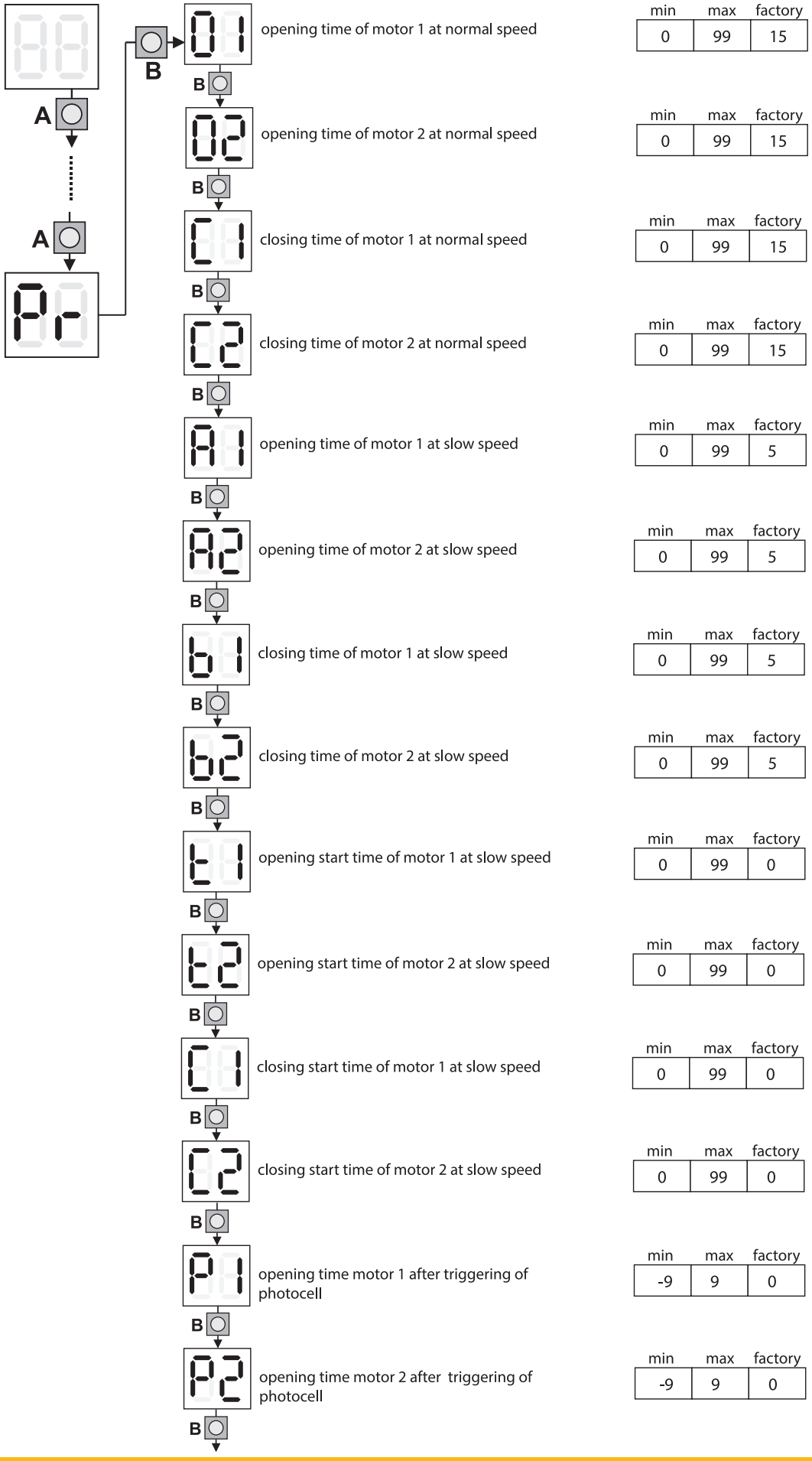
4 . Default



5 . Radio



6 . Parameters



	min	max	factory
opening time of motor 1 at normal speed	0	99	15
opening time of motor 2 at normal speed	0	99	15
closing time of motor 1 at normal speed	0	99	15
closing time of motor 2 at normal speed	0	99	15
opening time of motor 1 at slow speed	0	99	5
opening time of motor 2 at slow speed	0	99	5
closing time of motor 1 at slow speed	0	99	5
closing time of motor 2 at slow speed	0	99	5
opening start time of motor 1 at slow speed	0	99	0
opening start time of motor 2 at slow speed	0	99	0
closing start time of motor 1 at slow speed	0	99	0
closing start time of motor 2 at slow speed	0	99	0
opening time motor 1 after triggering of photocell	-9	9	0
opening time motor 2 after triggering of photocell	-9	9	0

Slow speed of motor 1
1=remove slow speed

min	max	factory
1	6	2

B

Slow speed of motor 2
1=remove slow speed

min	max	factory
1	6	2

B

Slow start speed of motor 1

min	max	factory
1	6	2

B

Slow start speed of motor 2

min	max	factory
1	6	2

B

stop before slow down time

min	max	factory
-	-	disable

B

automatic closing(minute)

min	max	factory
0	99	2.2

B

automatic closing after triggering photocell(second)

min	max	factory
0	99	1.0

B

delay of photocell in pedestrian(second/10)

min	max	factory
0	4.0	6.0

B

delay time of motor 2 in opening

min	max	factory
0	60	2

B

delay time of motor 1 in closing

min	max	factory
0	99	3

B

disable/enable Pd

min	max	factory
-	-	disable

B

***

Push « C » buttom on the controller to save changes.

B

« C » buttom on the controller = Start

min	max	factory
-	-	enable

B

Flasher mode in time of automatic closing
0=off 1=on

min	max	factory
0	1	0

B

enable photocell in opening

min	max	factory
-	-	disable

B

enable serial port

min	max	factory
-	-	disable

B

transmitter protcol
0=disable transmitter 1=learning 2= hopping
3= both of them(1,2)

min	max	factory
0	3	3

B

enable external pd

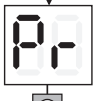
min	max	factory
-	-	enable

B

enable external start

min	max	factory
-	-	enable

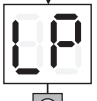
B



time of parking output relay(second)

min	max	factory
0	99	0

B



set parking outout for electrical lock(second)

min	max	factory
0	99	0

B

time of activating parking output(minute)

min	max	factory
0	10	0

B

time of electrical lock output(second/10)

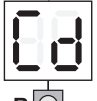
min	max	factory
0.1	2.0	0.3

B

disable of photocell in slow speed

min	max	factory
-	-	disbale

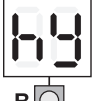
B



delay time of motor 1 in closing

min	max	factory
0	99	3

B



time of warming Hydraulic actuators(hour)

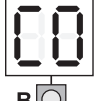
min	max	factory
0	18	0

B

Opening lock by < C > buttom of remote

min	max	factory
-	-	disable

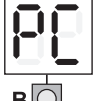
B



closing mode
0= autmatic closing time + photocell
1= autmatic closing time + photocell+remote

min	max	factory
0	1	0

B



enable test of photocell

min	max	factory
-	-	enable

B

enable two keys of remote
opening < A > buttom of remote
closing < B > buttom of remote

min	max	factory
-	-	disable

B

Flasher mode
0=lamp 1=blinker 2= lamp on parking output
3= blinker on parking output

min	max	factory
0	3	1

B

stop
1=disable stop in opening 2=totally stop in closing
3= enable stop in opening/closing 0=disable stop

min	max	factory
0	3	0

B

reverse motor to open lock better

min	max	factory
-	-	disable

B

time of activating —motors after closing

min	max	factory
0	2.0	0

B

time of pushing leaves for closing perfectly

min	max	factory
1	5.0	1.5

B

pushing
0=disable, 1=push motor1 ,2=push both of motors

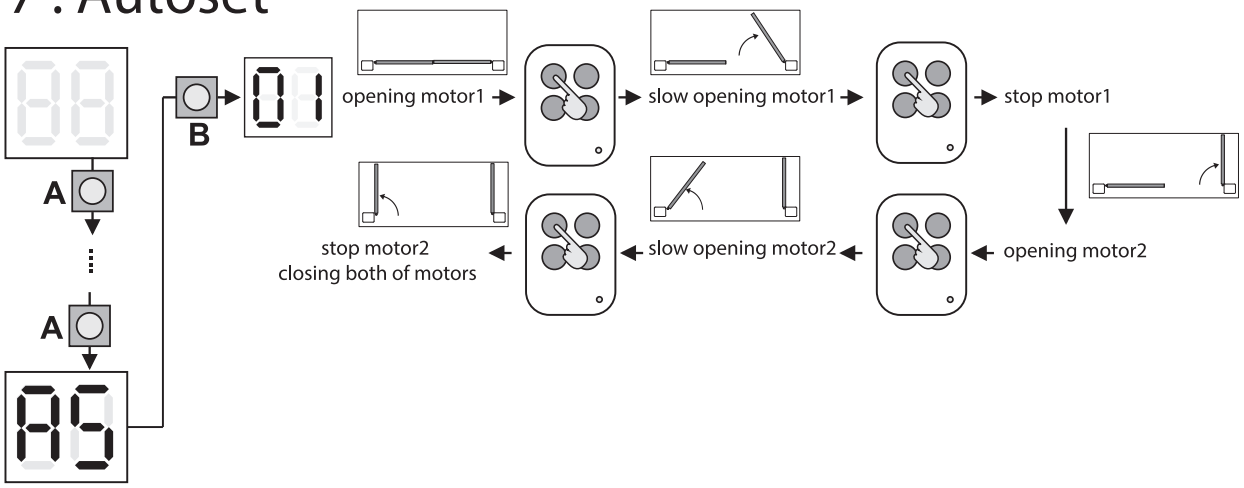
min	max	factory
0	2	0

B

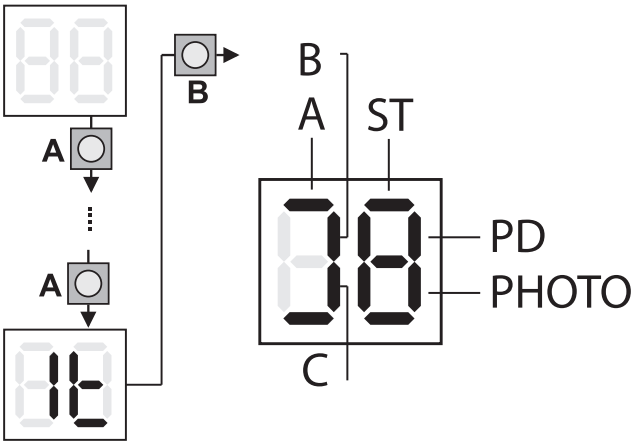
lack time of pd

min	max	factory
0	99	0

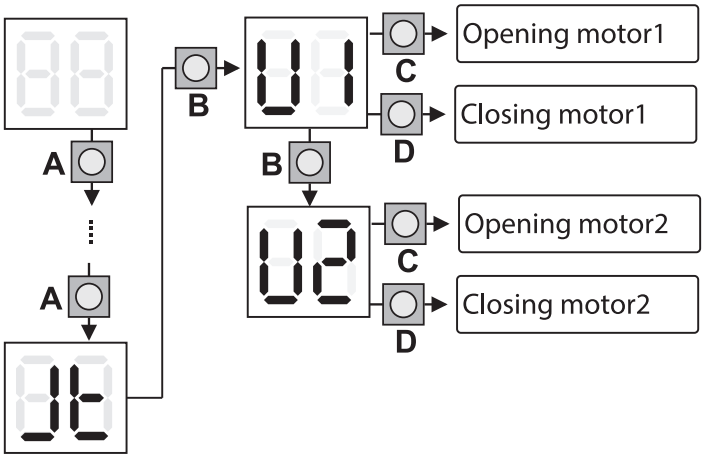
7 . Autoset



8 . Test of inputs



9 . Test of motors



10 . Diagnostic codes

St START	rd <B> REMOTE IS PUSHED	YS ARE YOU SURE?
Pd PEDESTRIAN	rb <C> REMOTE IS PUSHED	En ENABLE
tb <B> BUTTON IS PUSHED	rL <D> REMOTE IS PUSHED	dI DISBALE
tC <C> BUTTON IS PUSHED	Ph PHOTO IS TRIGGERED	OA OK. IT,S DONE
td <D> BUTTON IS PUSHED	OP OPENING	EP ERROR OF MEMORY
tE <BACK> BUTTON IS PUSHED	CL CLOSING	E1 ERROR READING OF MEMORY
rt <A> REMOTE IS PUSHED	Er ERROR	E. 2~9 SYSTEM ERROR