

**Warning:**

Incorrect installation and improper use of this product may result in damage to the device or individuals. Therefore, observing the following points is mandatory.

During the installation and use of the electric jack, prevent children from moving around in the limited space of the door. Avoid placing any obstacles in the path of the door's movement. Keep the remote out of reach of children to prevent unintended opening and closing of the door. Installing a flashing light reduces the likelihood of the door colliding with people or vehicles. Precise adjustment of door opening and closing times and proper installation of protective sensors prevent potential damage to the jack.

Avoid repairing and adjusting the product yourself and seek assistance from qualified individuals if necessary.

It is advisable to periodically check the operation of the jack and all connections by qualified individuals and ensure their proper conditions.

This device should be installed in locations where the grounding system is available.

The main power cutoff key should be considered in the fixed wiring route.

When cleaning or performing other electrical maintenance tasks, disconnect the device.

This device is not intended for use by individuals (including children) with disabilities, physical, sensory, or mental impairments, or inexperienced and unaware individuals, unless supervised by responsible adults or provided with usage instructions by their safety supervisor.

It is recommended that children be supervised and supervised to ensure they do not play with the equipment.

**Important Pre-installation Notes:**

- operating methods outside of these guidelines will void the warranty. Perform all welding operations or modifications on the door prior to installation.
- Ensure smooth door movement without any collisions or obstructions.
- Check the condition of the rollers to ensure there are no movement issues.
- The short arm jack is suitable for doors with a maximum length of 1.8m and a maximum weight of 380kg. The medium arm jack is suitable for doors with a maximum length of 2m and a maximum weight of 400kg. The long arm jack is suitable for doors with a maximum length of 3m per leaf and a maximum weight of 450kg.
- During welding, keep the jack arms away from the heat generated to prevent damage. Passing cables and wires through unprotected paths is not allowed. Regularly inspect installations for balance, signs of cable wear or damage, springs, and mounting methods. Use as needed for repair or adjustment.
- Keep the instructions for future reference.
- Doors must be in a safe and suitable condition for jack installation so that the disconnection between the actuator and the door does not cause the door to fall, and the stability of the door does not rely on the actuator.

#### Important Post-installation Notes:

- After installation, ensure that the mechanism is properly adjusted and the safety and manual release system is functioning correctly.
- For horizontal sliding doors, make sure that there is no risk of trapping individuals between the moving part and stationary parts due to the movement of the moving part. This assurance is achieved when the relevant distance does not exceed 8mm. Although the following distances are considered to prevent specific body parts from getting trapped:
  - For fingers: a distance greater than 25mm.
  - For feet: a distance greater than 50mm.

**Dear Customer,**

The warranty conditions for this product are as follows:

- This product is warranted for 2 years from the date of production by the Tavan Tosee Power Measurement Company. After-sales services and parts supply are guaranteed for 10 years from the date of production.
- Costs incurred for transportation outside of warranty services will be calculated.
- If spare parts are needed after the warranty period, the cost will be based on the expression.
- Consumable parts such as remote controls, flashers, and eye sensors are not covered by the warranty due to their consumable nature.
- Defects resulting from the use of miscellaneous parts are not covered by the warranty.
- Presentation of the warranty card and sales invoice is mandatory for receiving after-sales services. For any after-sales services, please contact 33136-026, extension 2. Authorized representatives are not allowed to receive any fees for issuing warranties. In case of any violation, please report it to the after-sales service department at extension 2 of the above number.
- Exclusions from warranty: Any unauthorized tampering or repairs, damages caused by water, fire, breakage, or impact, electrical fluctuations, and other external factors.

**Important Notes:**

- Employment of methods outside the installation guidelines in the instruction manual will result in warranty cancellation.
- The warranty only covers the main arm, left arm, and main board.

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**Technical Specifications**

POWER SUPPLY	220V 50 HZ
ENGINE POWER	( 225W per arm) 2x225W
Consumption CURRENT	0.8A per arm) 2x0.8A

Time to fully open the door	minimum 20 second
Door opening angle,	maximum 110 degrees
engine speed	1400 rpm
Maximum length of short arm door	1.80 meter for each beam
the maximum weight of the short arm door	380 kg per beam
the maximum length of the medium arm door	2 meters for each beam
the maximum weight of the arm door (medium)	400 kg per beam
The maximum length of the long arm door	3 meter for each door
The maximum weight of the long arm door meters for each beam	450 kg
Operating temperature	20 to +55 degrees Celsius
Remote operation radius	About 50 meters in the open space

### **Input terminals**

220 AC ,50 HZ

50HZ Signal received from the eye sensor

Signal received from the door opener Motor power supply

### **Output terminals**

the 220V AC,

220V AC Flasher power supply

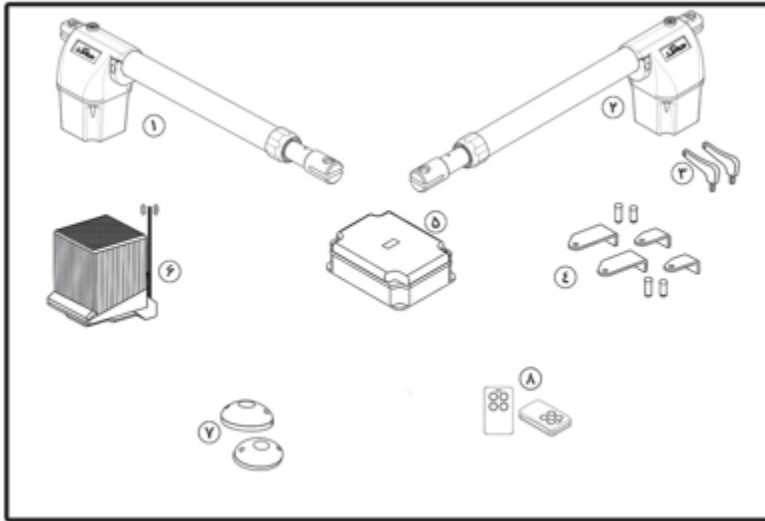
220V AC Power supply for the eye sensor

12V AC Electric lock activation signal 12V AC

### **Protection mechanism**

Turning on the flashing light (flasher) during the opening and closing of the door, the infrared sensor stops the door if there is an obstacle.

### **Jack's belongings:**



1 - Left arm - 2 Right arm - 3 2 special wrenches - 4 metal connections 5 - Electrical panel - 6 Flashing light with antenna - 7 A pair of eye sensors 8 2 remotes

**Jack components**

**Figure 2**

1-Engine cover 2 – Motor 3 - Power cable - 4 - Spring barb 5 - Motor holder 6 Pin of short lens head 7- Remover 8 - Cover remover 9 Telescopic arm 10 - Open holder and 11- spring barb 12-pin of long lens head

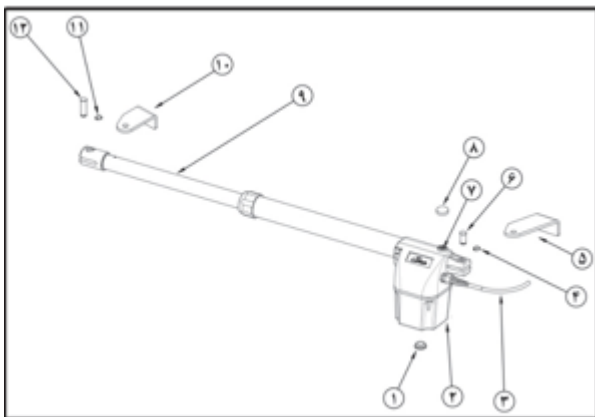
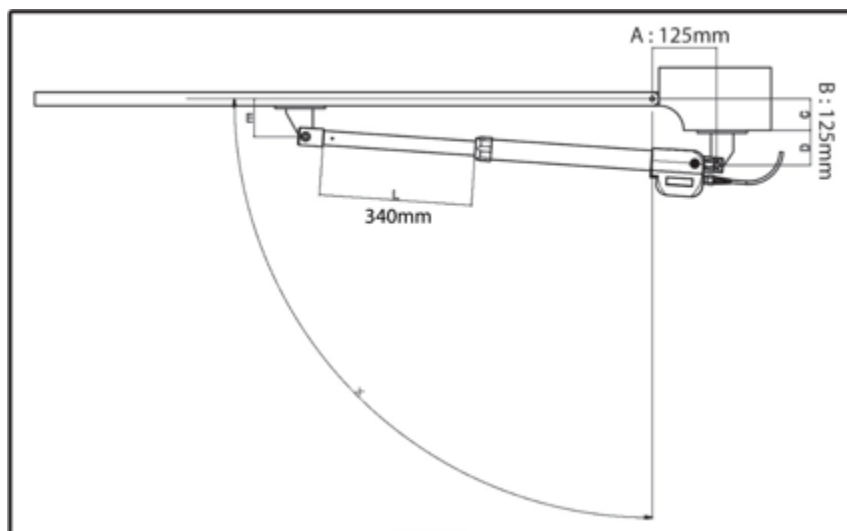


figure 2

### Jack installation guide:

The recommended dimensions for installing the jack are according to Figure 3 and Table 1

Figure3



A	B	C	D	E	L	زاویمبازشدن درب $\theta$	
125mm	125mm	$\leq 80\text{mm}$	$\leq 45\text{mm}$	66mm	340mm	$110^\circ$	بازوی کوتاه
155mm	155mm	-	-	66mm	400mm	$110^\circ$	بازوی متوسط
185mm	185mm	-	-	66mm	500mm	$110^\circ$	بازوی بلند

Table 1

If the installation location of the jack is such that the provided dimensions cannot be applied exactly and the suggested dimensions

It needs to be changed, its modification is allowed only within the scope of table 2

	Min	Max
A	100mm	130mm
B	100mm	125mm

Table 2



2-So that the jack arm has a proper distance to the column Size D should not be less than 45mm and size C should not be more than 80mm. (Figure 3)

3-In some cases, a hole must be created in the column to apply the dimensions and install the jack correctly (Figure 4)

4-According to the suggested dimensions and the items mentioned in the previous paragraphs, install the engine holder to the column. You should adjust the length of the motor support piece to the required amount ( this amount should not be less than 45 mm according to the paragraph)

5-Connecting the engine holder to the column should be done with welding operation

6-Install the jack on the motor holder using a short lens head pin (Figure 5)

7-Loosen the jack using a special wrench (How to do this is explained in the manual operation section

given)

8- Pull the telescopic arm outward until it reaches the end of its movement (Figure 6)

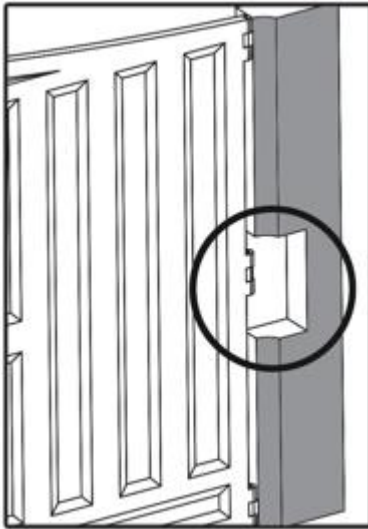


figure4

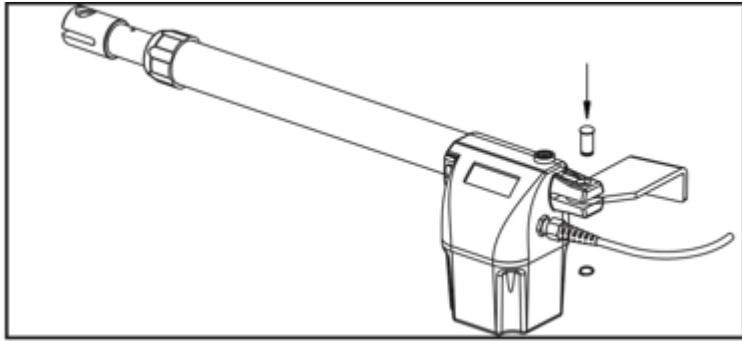


figure5

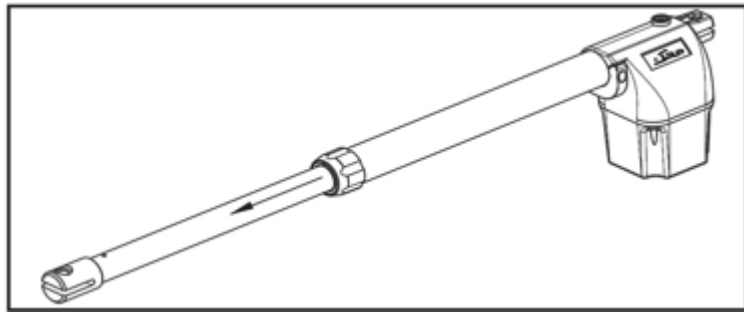


figure 6

9 -Lock the jack using a special wrench (How to do this is explained in the manual operation section given)

10-Then rotate the telescopic arm clockwise until the distance between the two aluminum branches and the beginning of the gray sheath is 340mm (Figure 7)

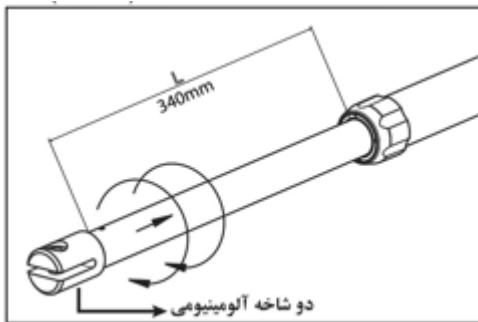


figure 7

Two aluminum branches

Attention: the maximum useful displacement of the telescopic arm is 280mm, so in order to avoid damaging the jack arms, it is necessary to observe the following points.

- 1- When the door is closed, the size of the L should not exceed 340 mm.
- 2- When the door is open, the size of L should not be less than 75mm.

11- Connect the arm holder to the two branches of the telescopic arm using a long pin lens head (Figure 8)

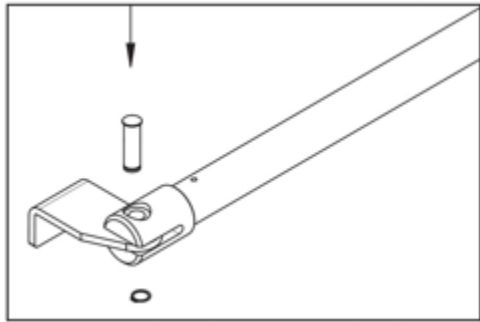


figure8

12 - Close the door completely and hold the jack arm perfectly horizontal by using a leveler and place Determine the installation of the arm holder on the door. (Figure 9)

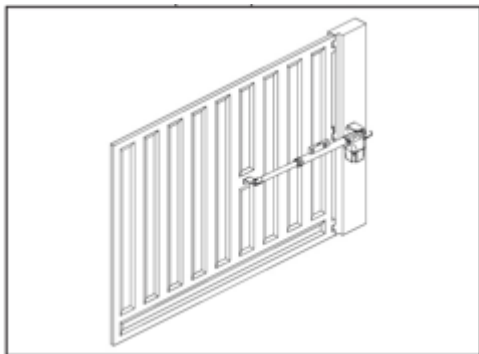


figure9

13- Temporarily attach the arm holder to the door by spot welding.

14- Remove the jack and make sure that the door moves smoothly.

15- Now remove the jack from the arm holder and complete the welding of the arm holder. This act of separating the jack from the arm holder is necessary to prevent damage to the jack arm.

### **Remarkable points in board connections**

A door consists of two hinges, the first hinge and the second hinge. In this booklet, the first hinge is the hinge on which the door lock is installed, and when opening, this hinge must be opened first. So connect the wire of the arm installed on the first lever to MOTOR1 and the wire of the arm installed on the second lever to MOTOR2

Connect the wires of each arm of the motors according to Figure 14 and Table 4.

When connecting the circuit to the city electricity, be sure to pay attention to the position of phase and null . Incorrect connection causes serious damage to the control circuit and there is a possibility of electric shock.

Before connecting the wires of each arm of the motors to the board, be sure to install an 8 microfarad 450V capacitor between the two C1 terminals and an 8 microfarad 450V capacitor between the two C2 terminals.

If you do not use protective sensors such as infrared sensors, be sure to select a mode in the device settings where the protective sensors are disabled (select zero value in the SSC and SSO menus)

in order to increase the range of the remotes in places where the electrical panel is at a distance. It is far away from the door or the electrical panel is inside a metal box. Be sure to connect the antenna on the flashing light to the electrical panel using the antenna cable.

The earthing wire of the device must be connected to the earthing system of the building.

To install the wires to the connectors, pay attention to the marks on the board under the connectors.

### **Important points in antenna installation**

1- In the electrical panel (in the antenna connector part of Figure 13 and Table 3), connect the core wire of the antenna cable to SIG and the shield end of the antenna cable to GND.

2- The core wire of the antenna should not have a connection with its shield part.

3- Make sure the correct connection of the shield and core part of the antenna cable to the antenna terminal.

3- In order to maintain, close and tighten the sealing of the antenna rod in its place until the end and do not leave it loose.

4- Do not bend or shorten the antenna rod in any way.

Note: In case of bending, the antenna range of the remote control will be less.

## **Wiring guide**

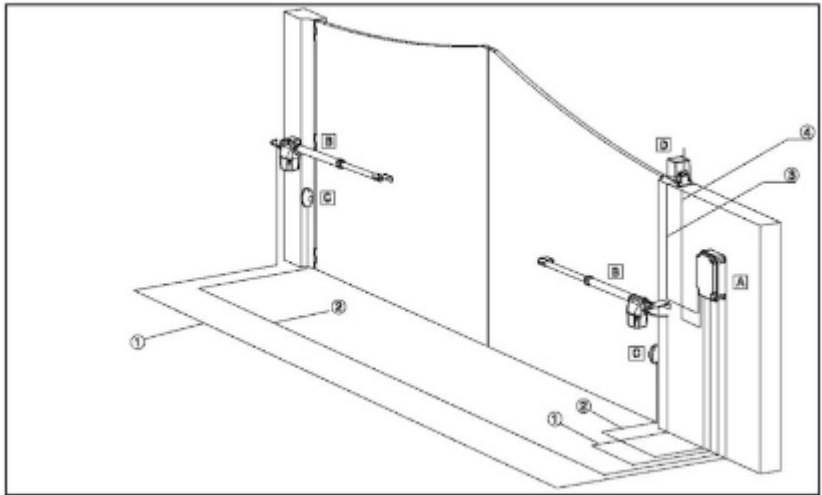


Figure 12

(1) Jack arm cable: 4x1mm2

A switchboard

(2) Optical sensor cable: x 0.5 mm 3

B Jack arms

(3) Flasher cable: 1.5x2 mm2

C optical sensor

(4) antenna cable, coaxial cable or special antenna cable

D flashing light and antenna

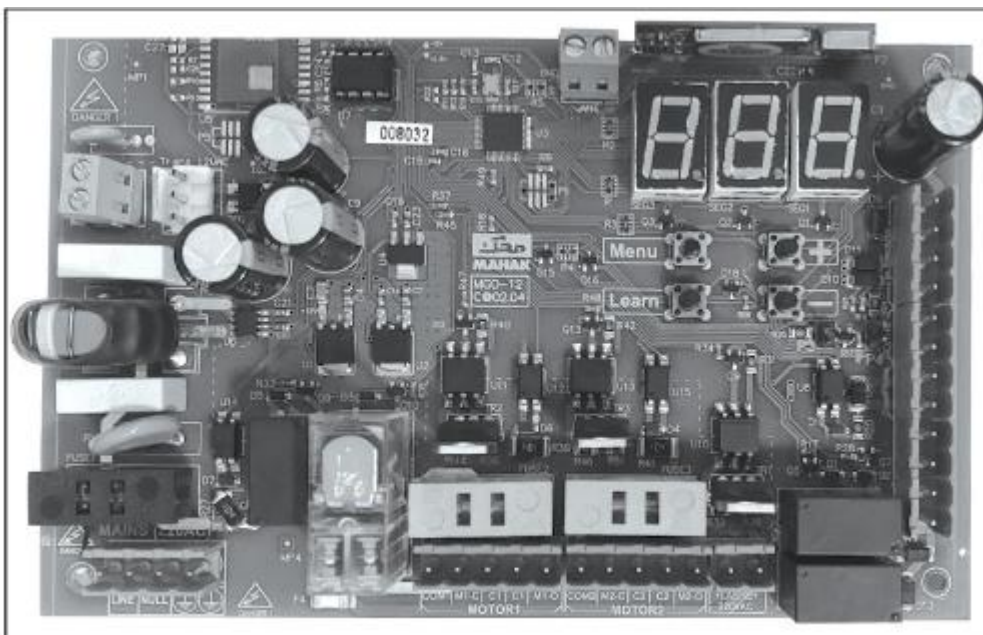


figure 13

220 V AC	LINE	Voltage of 220 v (phase)
	NULL	Voltage of 220 v (null)
	EARTH	Earth wire ( ground )

Motor1	Com1	Building common wire of the first leg
	M1-c	The close wire of the first hinge
	C1	8uf, 450 v , 1st pitch motor capasitors
	C1	
	M1- O	The open wire of the second latch
Motor 2	Com2	Common wire of the second limb
	M2-c	The close wire of the second latch
	C2	8uF, 450V, 1st pitch motor capacitor
	C2	
	M2-O	The Open wire of second hinge
flasher	220v ac	220 volt flashing light
EM- LOCK1	12v ac	Voltage for electric parking door lock excitation
EM- LOCK2	12v aC	Voltage for electric pedestrian door lock excitation
TAKNAMA	SIG	The input signal from iphone video camera
	GND	
EXT -RF	MC	The input signal to close
	MO	The input signal to open
IR - SENSOR	IR-O	input signal in opening state
	IR-C	Input signal in closing state
	+12VDC	Positive eye sensor supply voltage 12 V
	GND	Ground eye sensor supply voltage

Board connection guide (MG0200-Plus)



Figure 14

If the first hinge of the Side be right	RIGHT ARM TO MOTOR1	Right arm brown wire to M1-0
		BROWN WIRE RIGHT ARM TO M1-C
		Right arm blue wire to COM1
		Connect the yellow wire of the right arm of engine 1 to the earth terminal of the electrical panel
	LEFT ARM TO MOTOR2	Left arm black wire to M2-0
		LEFT ARM BROWN WIRE TO M2-C
		LEFT ARM BLUE WIRE TO COM2
		The yellow wire of the left arm of engine 2 should be connected to the earth terminal of the electrical panel
If the first hinge of the Side be left	right arm to MOROR2	Right arm black wire to M2-0
		LEFT ARM BROWN WIRE TO M2-C
		Blue wire right arm to COM2
		The yellow wire of the left arm of engine 2 should be connected to the earth terminal of the electrical panel
	Left arm to MOTOR1	Left arm black wire to M1-0
		Left arm brown wire to M1-C
		Left arm blue wire to COM1
		Connect the yellow wire of the left arm of engine 1 to the earth terminal of the electrical panel

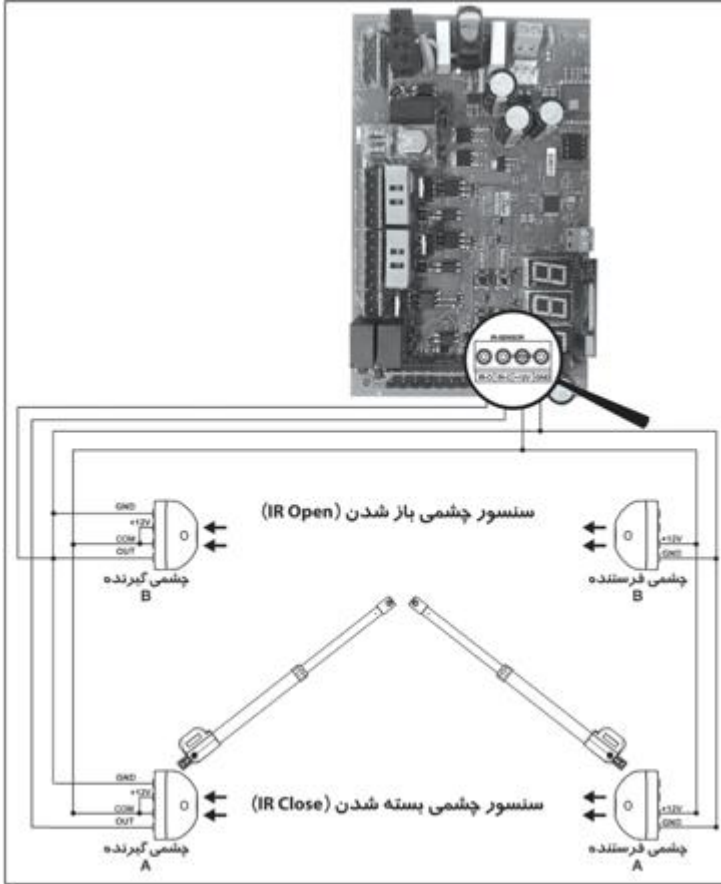
Table4

7-SEG1 , 7-SEG2 , 7-SEG3	Display settings and system status
MENU	enter settings and different sections
(+)	Selection of different sections of settings
(-)	Selection of different sections Of setting
FUSE 1	Fuse 5 A
FUSE2 , FUSE 3	FUSE 2 A

Table 5

**Optical sensor connection guide (IRTX: IRRX)**





Eye sensor A is activated when the door is closed. The optical out pin of the receiver is connected to the IRC terminal on the main board. Eye sensor B is activated when the door is opened. The optical Out pin of the receiver is connected to B to the IRO terminal on the main board.

## Settings

Press the Menu key to enter the settings. Move between sections with - or + keys. Press the Menu key to enter each section, in each section, if the value is a number, you can use the + or - keys to increase and decrease its value, and if it is active/inactive, use 1 for active and 0 for passive,

Press the Menu key to exit any section

Row	section	Full name	Duty	Range	Unit (Seconds)	Initial value (seconds)
-	RL	Remote learning	introducing the new remote to the device	-	-	-
-	LL	Leaves learning	introducing the door (adjusting the opening and closing time of the door)	Yes/no	-	-
1	Op1	Opening period 1	the opening time of the first hinge	0-40	0.2	16
2	Od2	Opening delay 2	Delayed opening of the second hinge	0-20	0.2	2
3	Op2	Opening period 2	The opening period of the first hinge	0-40	0.2	16
4	Cp2	Closing period 2	The closing time of the second hinge	0-40	0.2	16
5	CD1	Closing delay 1	Delay in closing the first hinge	0-20	0.2	5
6	Cp1	Closing period 1	The duration of closing the first hinge	0-40	0.2	16
7	Ot1	Opening slow period 1	The opening time of the first round is slow	0-20	0.2	4
8	Ct1	Closing low period 1	The closing time of the second round is slow	0-20	0.2	5
9	Ot2	Opening slow period 2	The opening time of the second round is slow	0-20	0.2	4
10	Ct2	Closing slow period 2	Second slow closing time	0.20	0.2	5
11	PD	Pause duration	Fast and slow round break duration	0.2-4	0.2	2
12	AS	Anti skid	The duration of the movement of the door after passing through the optical sensor	0-6	0.2	2
13	PA	Open angle for walk	The opening rate of the door in single leaf mode (passenger passage)	0=100% 1=50% 2=25%		0
14	EM1	Electro magnetic	The duration of activation of the parking door electric lock	0-2	0.2	0.4
15	EM2	Electro magnetic	The duration of activation of the electric door lock	0.02	0.2	0.4
16	L1	Leaf power 1	The power of the first stroke engine at high speed	1-15		10
17	L2	Leaf power 2		1-15		10

			the power of the second stroke engine at high speed			
18	M1	Motor 1	Enable or disable the first stroke motor	0=disable 1= enable		1
19	M2	Motor 2	Enable or disable the second flap motor	0= disable 1= enable		1
20	MT	Motor test	Motor test during start-up	0=disable 1= enable		1
21	RS	Reverse stroke	The reverse impact of the door before opening (for ease of operation of the magnetic lock)	0=disable 1=enable		0
22	EF	END FORCE	The final pressure	0-2	0.2	0.2
23	NOL	NUMBER OF LEAVES	the number of door hinges	1-2		2
24	ST	STOP WHEN REVERSED	Door stops when opening or closing	1=ENABLE 0=DISABLE		1
25	GF	GATE FUNCTION	Function of the door modes menu based on the number of door leafs menu	1-11		1
26	AD	AUTO CLOSE DELAY	Automatic door closing delay	0-250	0.2	30
27	CA	AUTO CLOSE AFTER PHOTO	Automatic closing after passing the door	0-60	0.2	0
28	PF	PRE FLASH	The light turns on 3 seconds before the door is opened	1=ENABLE 0=DISABLE		0
29	IOR	IGNOR OTHER REMOTES	Ignoring the operation of other remotes when the door is opened with the current remote command	1=ENABLE 0=DISABLE		0
30	ODS	OBSTACLE DETECTION SENSITIVITY	The sensitivity of the obstacle detection system	1=ENABLE 0=DISABLE		12
31	SSC	SAFETY SENSOR CLOSING	Optical door closing sensor	1=ENABLE 0=DISABLE		1
32	SSO	SAFETY SENSOR OPENING	Optical door opening sensor	1=ENABLE 0=DISABLE		0
33	PH	PHOTO CELL BOARD SELECT	Choosing the type of optical board	LOGIC=1 LOGIC=0		1
34	RSL	REMOTE SECURITY LEVEL	Definable remote security level	1=HIGH SECURITY		1

				0= LOW SECURITY		
35	RL	REMOTE LEARNING	Introducing the new remote to the device	-		1
36	RE	RESET RECEIVER	Deactivating the remotes	YES/NO		
37	LL	LEAVES LEARNING	introducing the door (setting the time of opening and closing the door)	YES/NO		
38	ATL	AUTO TOTAL LEARNING	Introducing the door (automatically)	YES/NO	-	-
39	WF	WIFI	setting the Wi-Fi module	YES/NO	-	-
40	FD	FACTORY DEFAULT	Reset settings to factory defaults VALUES	YES =1 NO=0	-	-
41	FW EXIT	FIRMWARE VERSION EXIT FROM SETTING	SOFTWARE VERSION	-	-	-

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## The meaning of the numbers displayed on the board display when the door is opened and closed

DISPLAY	CONCEPT
-	The door is closed
1	The door is opening
2	The door has stopped while opening
3	The door is open
4	The door is closed
5	The door is stopped while closing
E	The door is stopped during opening and closing due to an obstruction
FF	The flasher is flashing

### Introduction of remotes to the device (2L)

- When you are on the L menu, messages will be displayed to confirm the (+) button in case of cancellation Press the ( - ) button.
- In this case, the number 1 will be displayed by default, which indicates the unit number 1 . To select the units, press the (+) key until the desired number can be set up to 200 units and each unit has 5 remotes.
- Defined Confirm the number of the desired unit with the Menu key. The number of the desired unit will flash for 5 seconds

Note: During this period, you can introduce 5 remotes for that unit. For this action, it is enough to press one of the buttons of the new remote only once.

- If the remote button is pressed twice. The system exits the introduction mode.
- Also, if no remote is introduced for 5 seconds, the system will exit the introduction mode
- After finishing the introduction of the system, it exits the settings menu.

### Introducing a new remote using the previously introduced remote

To introduce a new remote to the system, in addition to the method mentioned in section (2L) , the following method is also used You can act

1-When both door hinges are closed and the system is in normal mode and the display shows ---, press both the open and close keys of the old remote that was previously introduced to the system together.

2-Press one of the new remote keys only once

**Attention:**

1- If the old remote is related to any unit, the new remote will be related to the same unit.

2- If you have several new remotes, be sure to press one of their keys only once. Attention, if you press the remote key twice, the system will exit the remote introduction mode, and you must wait 15 seconds and do the operation again from the beginning.

3- After introducing the last remote, wait 15 seconds until the system returns to normal and the introduced remotes are activated.

**Door Introduction (LL)**

double lever mode	Single lever mode
<p><b>1-The opening of the first latch with a quick turn</b> : by pressing the A or B button, the first latch with a quick turn starts The opening of the first latch with a quick turn, by pressing the A or B button, the first latch starts to open with a quick turn. The A or B button will open up to that point where we need it, by pressing the A or B button again where we need it to that point, the first lever will open with a fast round, the movement of the first lever racket will be stopped and it will enter the phase of opening with the lever. First, it should be opened with fast speed, the movement of the first lever will stop and it will enter the stage of opening with slow speed.</p>	<p><b>1-The opening of the first latch with a quick turn</b> : by pressing the A or B button, the first latch with a quick turn starts The opening of the first latch with a quick turn, by pressing the A or B button, the first latch starts to open with a quick turn. The A or B button will open up to that point where we need it, by pressing the A or B button again where we need it to that point, the first lever will open with a fast round, the movement of the first lever racket will be stopped and it will enter the phase of opening with the lever. First, it should be opened with fast speed, the movement of the first lever will stop and it will enter the stage of opening with slow speed.</p>
<p><b>2-opening of the first flap with slow speed</b> : wait until the first flap opens to the desired amount with slow speed, and then by pressing the A or B button at the end of the course , stop the first ramp,</p>	<p><b>2-opening of the first flap with slow speed</b> : wait until the first flap opens to the desired amount with slow speed, and then by pressing the A or B button at the end of the course , stop the first ramp,</p>
<p><b>3-The opening of the second flap with a quick round</b> : second flap after the time set in menu (the opening delay of the second flap compared to the first flap) It starts to open by pressing the A or B button again, the movement of the second lever is stopped and it enters the stage of slowing</p>	<p><b>3- Closing of the first flap with a fast round:</b> by pressing the button A or B of the first lever with a fast round starts to Close with a sharp turn, by pressing the A or B button again the movement of the first lever is stopped and it enters the stage of closing by slow round</p>
<p><b>4- opening the first flap with a slow speed:</b> wait until the first flap opens slowly to the desired value, and then press the A or B button in At the end of the course, stop the second lever</p>	<p><b>4- Closing the first flap with a slow speed:</b> wait until the first flap opens slowly to the desired value, and then press the A or B button in At the end of the course, stop the second lever, the circle is closed, and then by pressing the A or B button at the end of the course, we will show the first lever. we stop</p>
<p><b>5- Closing the second flap with a fast turn:</b> by pressing the A or B button, the second flap starts to close with a fast turn, by pressing the A or B button again where we need it, the second flap closes with a fast turn, the movement of the second flap It stops and enters the closing phase with slow speed</p>	
<p><b>6- Closing the second lever slowly:</b> We wait until the second lever is closed slowly to the desired value, and then by pressing the A or B button at the end of the course, stop the second lever</p>	
<p><b>7- closing of the first flap with a rapid round of the first flap:</b> after the time set in the menu (the delay of the closing of the first flap compared to the second flap) starts to close with a fast round, by pressing the A or B button where needed Until that point of the first latch is closed with a fast turn, the movement of the first latch is stopped and it enters the closing phase with a slow turn. 8- Closing the first latch with a slow turn Then, by pressing the A or B button at the end of the course, we stop the first step, and at the end, we save the new values in the memory</p>	
<p><b>at the end, we save the new values in the memory</b></p>	

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**Attention:**

The settings are according to the table and are specified according to the rows and only the settings that need explanation It is described below

**1-The duration of the opening of the first flap and the second flap (op2-Op1) (rows 1 and 3 of table (6))**

if necessary, the opening duration of the first and second flap can be adjusted from 0 to 40 seconds. Note: the number shown has The unit is 0.2 seconds

**2-The opening delay of the second flap (Od2) (row 2, table (6))**

if necessary, the opening delay of the second flap can be adjusted from 0 to 20 seconds.

Note: that the number shown has a unit of 0.2 second.

**3-The closing time of the first and second flaps (Cp1-Cp2) (rows 3 and 6, table 6),**

if necessary, the closing time of the first and second flaps can be adjusted from 0 to 40 seconds.

Note: the number shown has a unit of 0.2 seconds

**4-Delay in closing the first flap (Cd1)**

If necessary, the closing time of the first flap can be adjusted from 0 to 20 seconds.

Note: that the number shown has a unit of 0.2 seconds

**5-Slow cycle time in the opening mode (op1-op2)( rows 7 and 9, table 6)**

If necessary, the slow cycle time in the opening mode can be adjusted from 0 to 20 seconds.

Note: that the number shown has a unit of 0.2 seconds.

**6-Slow cycle time in closing mode (ct1-ct2)( rows 8 and 10, table 6)**

If necessary, slow cycle time in closing mode can be adjusted from 0 to 20 seconds.

Note: The number shown is in seconds

**7-Adjusting the duration of the pause between fast and slow laps (Pd) (row 11 of table (6))**

Duration of the pause between fast and slow laps can be adjusted between 0.2 and 4.0

**8-Adjusting the duration of the sliding of the door (AS) (row 12 of table (6)**

in some cases when the door stops while opening or closing, the door does not stop immediately and due to the inertial force of the hinges, they continue to move in the AS section with Adding the appropriate number can compensate for the extra movement of the door so that the door movement does not face any problem and the door is Fully open or close. To adjust the sliding time of the door, proceed as follow

**9-The amount of door opening in single leaf mode (PA) (row 13, table (6)**

The amount of door opening in single leaf mode based on the settings of full opening of the door in 3 opening modes of 25%, 50% and 100% It is adjusted to the full opening of the door

**10-Adjusting the duration of activation of the electric lock of the passenger door and parking lot (EM1-EM2) ( rows 14 and 15, Table 6 )**

The duration of the activation can be adjusted.The larger the number you choose, the longer the electric lock will be activated,

The smaller the number you choose, the shorter the electric lock will be activated



### **11-The power of the first and second stroke engine ( L1 - L2 ) ( rows 16 and 17, table 6)**

if necessary, you can increase or decrease the power of the first and second stroke engine according to the conditions

### **12-Activating or deactivating the motor of the first and second hinges (M1-M2) (rows 18 and 19, table 6)**

In some cases when the door has only one hinge or we want one of the door hinges to be active, we can deactivate one of the motors. .

Warning: If the first lever is physically placed on the second lever and the opening of the second lever depends on the opening of the first lever, deactivating the motor of the first lever will cause mechanical damage

### **13-enabling or disabling the motor test (MT) (row 20, table 6)**

This menu is used to enable or disable the engine test and the absence of problems in the engines.

### **14- Reverse blow of the door before opening for ease of operation of the magnetic lock (RS) (row 21, table (6))**

it is possible to make a small movement for 1 second in the opposite direction of the reverse blow on the door before opening The door should be made so that the magnetic lock can be opened easily and without friction.

To enable or disable the reverse impact of the door before opening, proceed as follows.

### **15- Adjusting the final pressure for door locking (EF) (row 22, table (6))**

to ensure the door is locked after the door is closed, the motor of the first latch is activated again and pushes the two door latches together, this action causes It is possible that the door is completely locked and cannot be opened easily with pressure from the outside.

### **16- The number of door hinges, selecting one hinge or two hinges (NOL) (row 23, table (6))**

This menu is used to open the door with one hinge or two hinges, the number 1 opens the single hinge and the number Number 2 opens two levers, factory default is on two levers.

### **17- Stopping the door during opening or closing (ST) (line 24, table 6)**

This menu determines the stop of the door during opening or closing after the first command, when the user has not yet executed the first command, he issues the second command when the door is opening and has not yet been fully opened. The user issues the second command and it is set with the numbers 1 = active) and (e = inactive). If it is active, when the door is being opened or closed (the second command) is issued, the door stops and It executes the second command in) in any situation, the second command is executed

If it is inactive, when the door is opening or closing, the command (first) and if the reverse command (second) is issued with the remote, the first command will stop and wait for the third command to be executed (actually In this case, 3 orders must be issued and the third order will be executed).

Door modes (GF) ( row 25, table (6) )

Function of the door modes menu based on the number of door leaves menu.

Two levers (2 = null)					
D button (open)	Button C (lock)	B button (open)	A (lock) button		
Electric passerby lock	single-leaf door	The opening order of the pair of levers	The order to close the pair of levers		gf=1
-	-	the opening of the reverse order of single lever	The reverse order of the pair of levers		gf=2
The command to open the single lever (passer)	The command to close the single lever (passer)	The opening order of the pair of levers	The order to close the pair of levers		gf=3
-	-	the reverse order of single hinges	The reverse order of the pair of levers	First parking	gf=4
Reverse command of single lever	The reverse order of the pair of levers	-	-	Second parking	gf=5
-	-	The command to open the pair of hinges	The command to close the pair of hinges	first parking	gf=6
The command to open the pair of hinges	The command to close the pair of hinges	-	-	Second parking	Gf=7
-	-	-	The reverse order of the pair of hinges	First parking	Gf=8
-	-	The reverse order of the pair of hinges	-	Second parking	Gf=9
-	The reverse order of the pair of hinges	-	-	Third parking	Gf=10
The reverse order of the pair of hinges	-	-	-	Forth parking	Gf=11

Two levers (2 = null)					
D button (open)	Button C (lock)	B button (open)	A (lock) button		
Electric passerby lock	single-leaf door	The opening order of the pair of levers			gf=1
-	-	the opening of the reverse order of single lever	The reverse order of the pair of levers		gf=2
The command to open the single lever (passer)	The command to close the single lever (passer)	The command to open the single levers	The order to close single levers		gf=3
-	-	the reverse order of single hinges	The reverse order of single levers	First parking	gf=4
Reverse command of single lever	The reverse order of the single levers	-	-	Second parking	gf =5
-	-	The command to open the single levers	The command to close the single levers	first parking	gf =6
The command to open the single of levers	The command to close the single of levers	-	-	Second parking	Gf=7
-	-	-	The reverse order of the single levers	First parking	Gf=8
-	-	The reverse order of the single of levers	-	Second parking	Gf=9
-	The reverse order of the single levers	-	-	Third parking	Gf=10
The reverse order of the single levers	-	-	-	Forth parking	Gf=11

**tips on different door modes and related recommendations**

Door mode	explanation
gf=2	<p>It is recommended that the ST option become inactive (because if this option is activated, it adds a stop during door reversal, which seems not to be useful)</p>
Gf=3	<p><b>1- In the case that the NOL option is in the state of one latch</b></p> <p>a-B buttons And A is used to open and close a single lever as a full movement</p> <p>b-Buttons D and C are used as a pass to open and close a single lever.</p>
Gf=4	<p>1-In the case that the NOL option is in the status of a latch, the A button corresponds to the B button</p> <p>2-It is recommended that the ST option be disabled ( because if this option is activated during the door reversal, an extra stop will be added, It seems that it is not practical )</p>
Gf=5	<p>1-In the case that the NOL option is in the status of a latch, the C button corresponds to the D button</p> <p>2-It is recommended that the ST option be disabled( because if this option is activated during the door reversal, an extra stop will be added , It seems that it is not practical)</p>

Attention for opening and closing for the first time (**DC menu**) after turning on the board, regardless of the setting value for **gf**, button A has the task of closing the door and button B has the task of exiting the device from **DC** mode.

**19-Automatic door closing delay (AD) (line 26, table 6)**

if the door is not closed by the user after opening, the door will close automatically after a while. This delay period, the default time of which is 30 seconds, can be changed.

**20- Automatic closing of the door after passing through the door (CA) (line 27, table (6))**

It is possible to close the door automatically after passing through the parking lot door. Note: The CA menu works after the door is fully opened and the flashing light turns off. Provided that the change range is set to the desired time.

**21- Turning on the flashing light of the flasher 3 seconds before the movement of the door (PF) (line 28, table 6)**

. You can turn on the flashing light

## **22-Ignoring the operation of other remotes when the door is opened with the current remote command (IOR)**

( row 29, table 6)

This menu is used to define other remotes to the arm and benchmark range, which affects the security of the jack and to No title is recommended

## **23-The sensitivity of the obstacle detection system (ODS) (row 30, table (6))**

This menu is used when the door hits an obstacle while opening or closing, and it adjusts the sensitivity and the type of collision until it stops, which is the number Low, low sensitivity and high number, increase the sensitivity.

( By default, the sensitivity number is 12)

## **24- Door closing eye sensor (SSC) (line 31, table (6))**

if the eye sensor is installed in the door closing range,

enable the SSC function and otherwise disable the SSC function

When the door is closed, if this optical sensor is triggered, the movement of the door will stop and after a few moments it will start to open. The SSC function is active by default. Press the remote control button 6 times with a pause to close the door.

Note: To keep the garage door open for a long time, for example, when moving, press the open key on the remote .control twice while the door is open, until the closing command is issued

The remote door stays open. To close the door, just press the close or A key on the remote

## **25- Door opening eye sensor (SSO) (row 32, table (6))**

if the eye sensor is installed in the door opening area, enable the SSO function and otherwise disable the SSO function. When opening The door, if this eye sensor is triggered, the movement of the door will stop, and after removing the obstacle, you can determine the direction of the door movement through the remote control, and use the (+) or (-) buttons to select a number or ( 0 = inactive / 1 = active)

## **26-Choosing the type of optical board (PH) (line 33, table- 6))**

This menu gives you the right to choose 2 options that set the type of eye board. The eye of the benchmark company, which by default is option 1, and option 0 It is for various glasses.

## **27-security level of definable remotes (RSL) (row 34, table (6))**

This menu is for setting the security level of remotes and it is recommended not to change it in any way .and contact the benchmark experts for more explanations

## **28-The introduction of the new remote to the device (RL) (line 35 of table (6))**

is explained at the beginning of the guide

### **29- Disabling remotes (RE) (line 36, table 6)**

This menu is used to delete all remotes or remotes of a specific unit

Press the Menu button again \-Select the section (RE) using the button (+)

RE message will be displayed, press (+) button to confirm and (-) button to cancel push.

In this case, the number 1 will be displayed by default, which indicates the number of the unit 1. To select the number of units, press the (+) key until the desired unit number

Confirm the number of the desired unit with the Menu key, (the number of the desired unit) will flash - for 5 seconds, and if you press the + key, all the remotes of the desired unit will be deleted

### **30- Introducing the door, adjusting the opening and closing time of the door automatically (ATL) (line 38, table 6)**

This menu determines the step of introducing

### **31- This menu determines the step of introducing**

Select the -. Attention, for this operation, the doors must be opened at an angle of 30 degrees. to be ATL menu and then confirm

The opening rate of the doors in this menu is 110 degrees, and if it does not match the door settings, - you can change them according to the table on page 14 after the introduction.

### **32-Connection to WiFi module (WF) (row 39, table 6)**

is for connection of WiFi module and special for respected installer

### **33- Restoring the settings to the initial factory settings (FD) (row 40, table 6)**

Restoring the settings to the initial factory settings (FD) (row 40, table 6)

Warning: doing this operation will destroy the current settings of the device and restore them to the initial setting

### **34- Display the software version (FW) (line 41, table (6))**

to view the software version of the device, use the Fu menu

### **35- Leaving the settings (E) (line 42, table (6))**

This menu means you are out of the menus.

## **Repair and mechanical troubleshooting guide for engines**

1- The engine does not work because one of the wires connected to the stator is disconnected from the inside.

2- Motors become extremely hot if they are connected to direct electricity several times. It is normal

and if it gets hot when the motors start working for the first time, there is a problem with the motor stator.

3-The engine is working loudly

- The internal bearings are dry or out of shape. Motor body and stator have friction.

4 engines work in place

- Unlocker is out.

- The unlocking pin is broken.

-The bead of four threads is broken.

### **How to make sure that the motors are healthy with a multimeter**

Put the multimeter in the circuit and measure the motor wires in relation to the common wire in the following order. The cable of each motor has 4 wires of grade 1, whose colors are blue, black, brown, yellow and green. The first three colors are related to connecting the motors to the steering circuit and the yellow and green wires are related to ground connection. The ohm of blue and problem wires and blue and brown wires should be between 40 and 50 ohms. If it is below or above the permissible limit, the coil is defective and must be returned to the factory for repair.

### **Guidance and troubleshooting of the steering circuit board**

1- The power of the device is cut off, the problem is with the input power or the main circuit fuse, or the steering circuit transformer is burnt.

2. The engines do not work. The problem is with the engine fuses or the software is set to off mode is.

3- There is a problem with the eyepieces, the photocell menu is off, or there is a problem with the eyepiece wiring connections.

4- The parameters are illegible in the input, the phase and zero are wrong, which may have arisen due to power fluctuations. To fix it, you have to go back to the factory settings.

### **Why should we use Mahek's smart remote control?**

All the remotes in the market have common disadvantages such as: illegal duplication, missing or stolen, weak battery and constant lack of access. For this purpose, by using Mahek's smart remote control, you can turn your car's high beams into a permanent and reliable remote control



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- 6-the ability to install easily by all car electrical technicians,
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