

# CSD250 USER MANUAL

**GENERAL INFORMATION :** Before starting the setup and installation, please carefully review all installation instructions and the installation video provided with our product. Mistakes made during assembly may cause damage to people and things. This product has been manufactured in accordance with recognized technical standards and safety regulations. Before installing the product, make sure that all architectural elements and structures (mounting surfaces of beams, guides of door frames, etc.) in the door entry opening are suitable and strong enough to carry the automation. For pedestrians, the automatic door must be earthed in accordance with the current regulations.

In the assembly of the processor, there must be a ground line in the structure. If the structure does not have a ground line, the connections must be secured according to national regulations. Installation should only be carried out by expert personnel. Disconnect the electrical supply before performing any work on the system.

Pay special attention to the danger symbol or notes in the manual. Relevant symbols or notes are warnings to prevent damage to the operator or special hazard warnings for the safety of other people. The manufacturer cannot be held responsible for the non-compliance with the labor, application or special regulations regarding the automation of the doors or their possible consequences.

## **WARRANTY TERMS :**

1. The warranty period starts from the date of delivery of the product and is 2 years.
2. All parts of the product are covered by our company's warranty.
3. In the event, the product defects within the warranty period, the time spent for repair will be added to the warranty period. The repair period of the product is a maximum of 30 working days. This period starts from the date of notification of the failure of the product to the service station or, in the absence of a service station, to one of the seller, dealer, agent, importer or manufacturer of the product.
4. If the product fails due to material and workmanship defects during the warranty period, it shall be repaired without any charge under the name of labor cost, changing part price or any other name.
5. Defects arising from the use of the product contrary to the issues in the installation and user manual are not covered by the warranty.
6. The manufacturer is not responsible for any damages or malfunctions caused by the use of the product with devices of other manufacturers. Damages or failures that may occur if the devices of other manufacturers are used with the product means that the product will be excluded from the warranty. Use only original equipment and spare parts so that your product does not come out of warranty.



**7. DOUBLE CARRIER ROLLER (4 PCS)**



**8. SIDE COVERS (RIGHT-LEFT)**



**9. IDLER REEL**



**10. LOCK POSITION KEY**

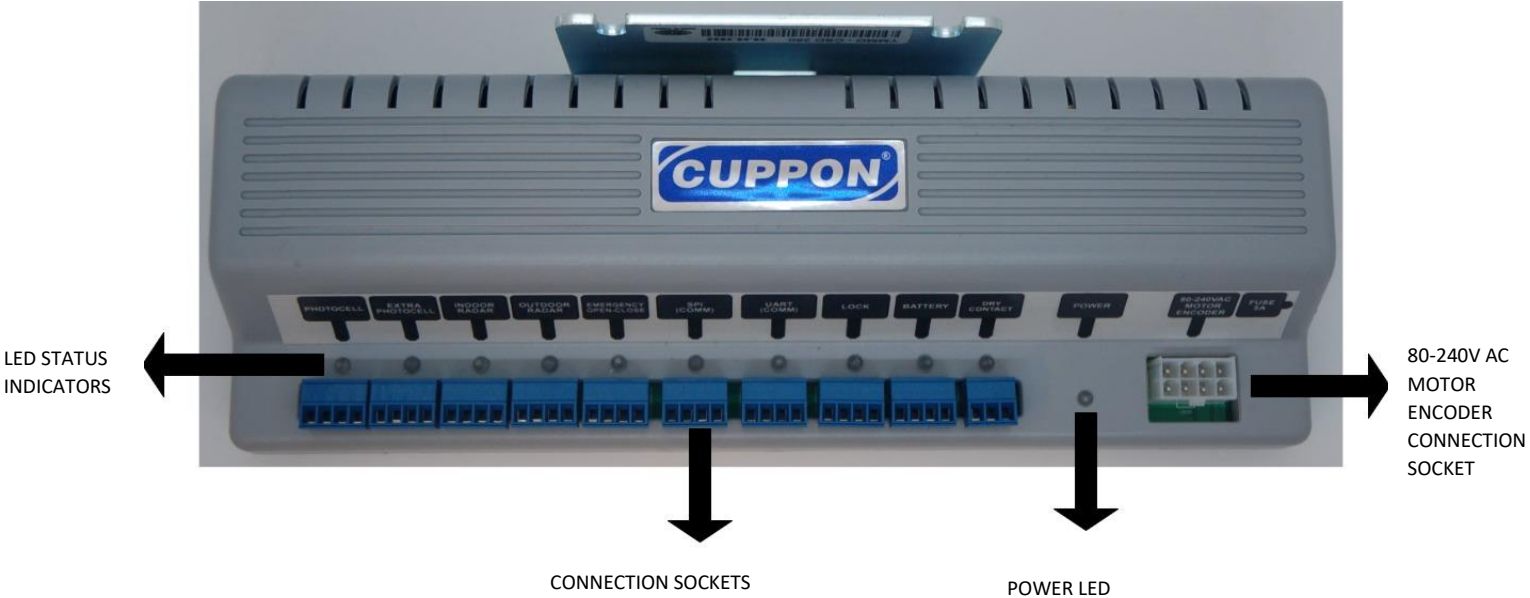


**11. CABLE ASSEMBLY**



**SOCKET CONNECTIONS**

**WARNING :** The materials used in the assembly operations must comply with the applicable standards and the connections must be made by authorized personnel.



## LED STATUS INDICATORS :

Photocell: The PHOTOCCELL shows that the eyes see each other and are active. The led goes out when an object intervenes.

EXTRA PHOTOCCELL: Extra PHOTOCCELL shows that the eyes are seeing each other and are active. The led goes out when an object intervenes.

INDOOR RADAR : Indicates that the indoor radar is active. Only when it detects motion, the led will light up.

OUTDOOR RADAR : Indicates that the outdoor radar is active. Only when it detects motion, the led will light up.

EMERGENCY Open-Close: THE led illuminates when it is active.

SPI : Indicates that the SPI output is active. The led illuminates when the card is energized.

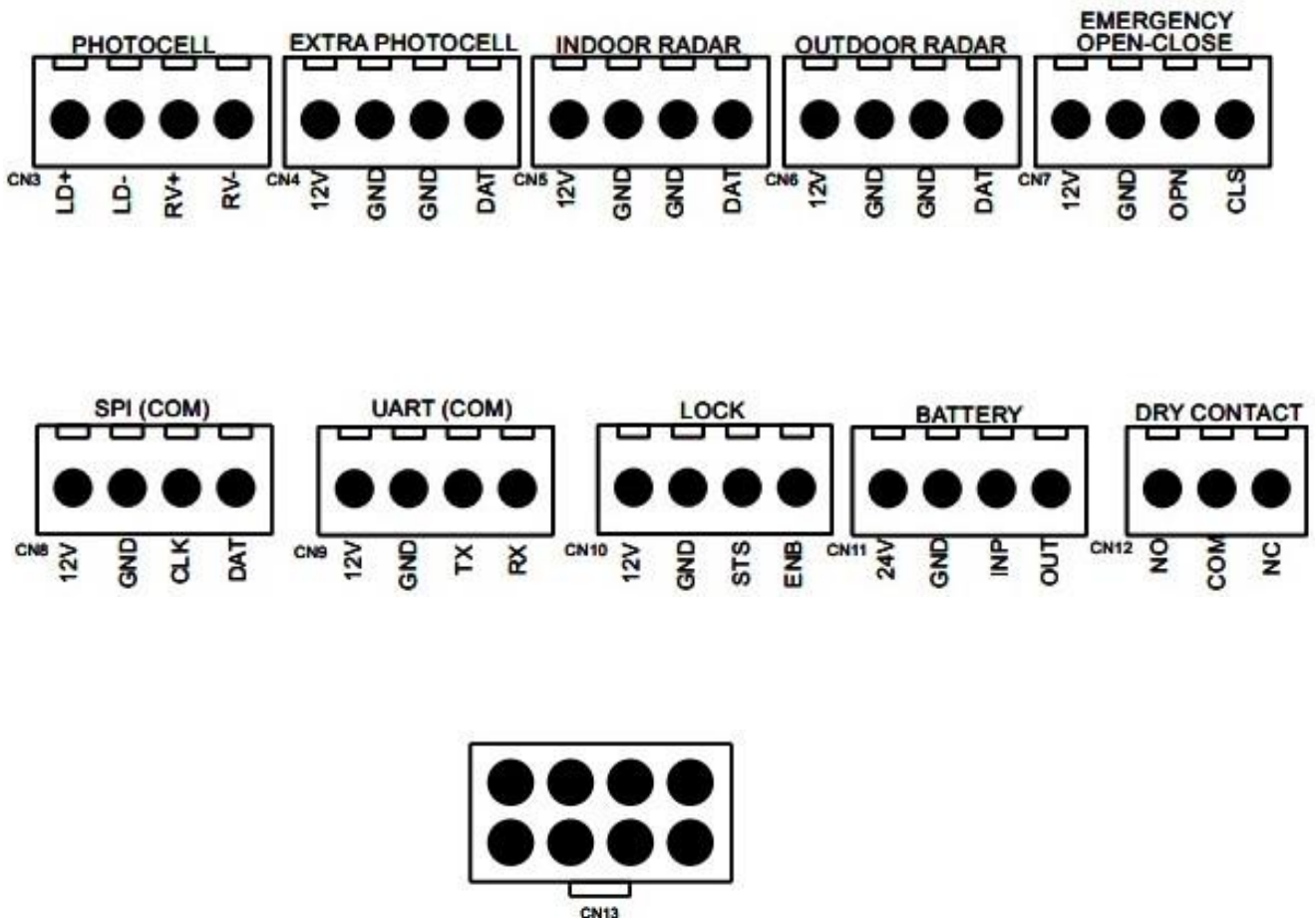
UART : Indicates that the UART output is active. The led illuminates when activated.

LOCK: The led illuminates when the electronic lock is activated.

BATTERY: If the battery is plugged in, the led will light up.

DRY CONTACT: If the dry contact output is active, the led illuminates.

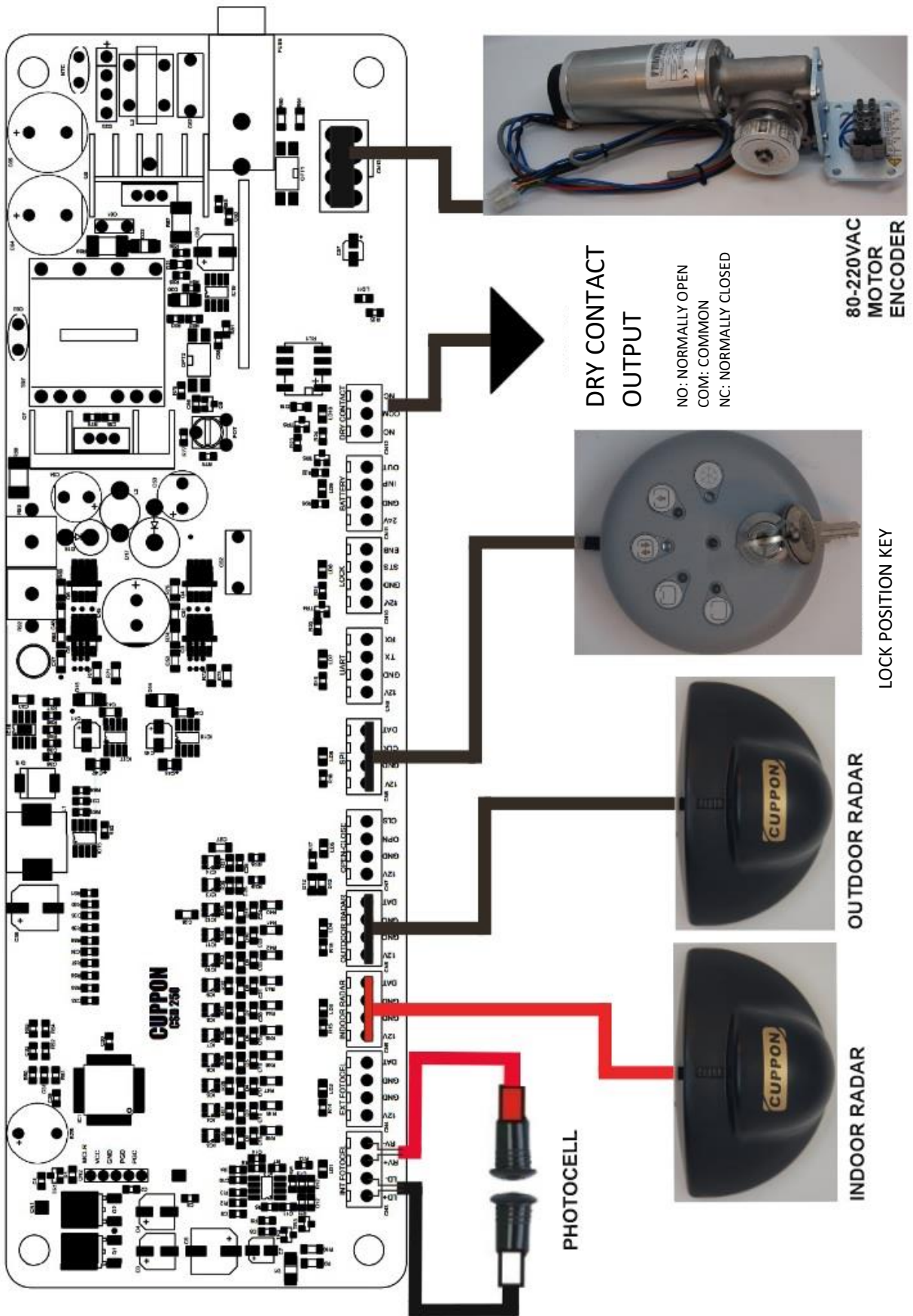
## LINKS :



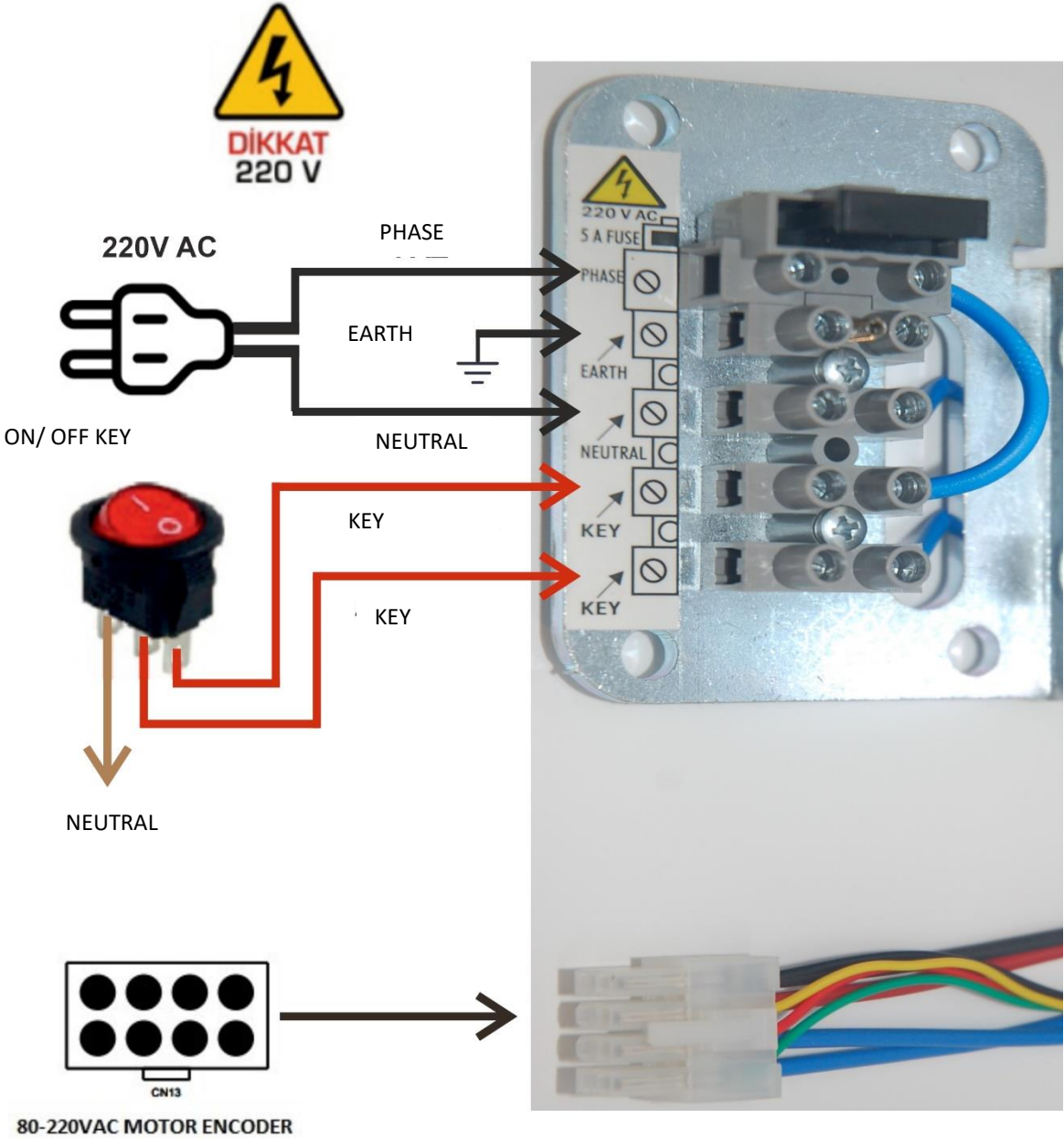
80-220VAC MOTOR ENCODER

NO	TERMINAL BLOCK	DESCRIPTION
CN3	PHOTOCELL	1 = LD+ 2 = LD- 3 = RV+ 4 = RV-
CN4	EXTRA PHOTOCELL	5 = 12V (+) 6 = GND (-) 6 = GND (-) 7 = DATA
CN5	INDOOR RADAR	5 = 12V (+) 6 = GND (-) 6 = GND (-) 7 = DATA
CN6	OUTDOOR RADAR	5 = 12V (+) 6 = GND (-) 6 = GND (-) 7 = DATA
CN7	EMERGENCY OPEN - CLOSE	5 = 12V (+) 6 = GND (-) 8 = OPN 9 = CLS
CN8	SPI (COMM)	5 = 12V (+) 6 = GND (-) 10 = CLK 7 = DATA
CN9	UART (COMM)	5 = 12V (+) 6 = GND (-) 11 = TX 12 = RX
CN10	LOCK	5 = 12V (+) 6 = GND (-) 13 = STS 14 = ENB
CN11	BATTERY	15 = 24V (+) 6 = GND (-) 16 = INPUT 17 = OUT
CN12	DRY CONTACT	18 = NO (NORMALLY OPEN) 19 = COM (COMMON) 20 = NC (NORMALLY CLOSED)

# GENERAL WIRING DIAGRAM



# MOTOR ENCODER WIRING DIAGRAM



Make connections carefully according to the diagram.

PHASE : PHASE

EARTH : EARTH

NEUTRAL : NEUTRAL

KEY : KEY



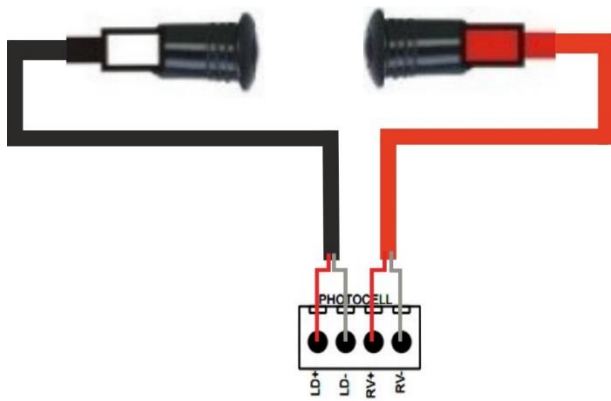
## OPERATION FUNCTIONS

### PHOTOCELL RECEIVER / PHOTOCELL TRANSMITTER

The safety photocell is a system that detects the obstacle between the doors with infrared signals for safety and control purposes.

The connection is made from the connector named "PHOTOCELL" on the processor unit. The receiver and transmitter must be in line to ensure optimum operating efficiency. The distance between the Photocell Transmitter (white) and the Photocell Receiver (red) can be up to 10 meters. The eyes should be in a vertical position and on the same line. When the photocell transmitter and receiver eyes see each other, the photocell led on the microprocessor unit lights up, and when it does not, the photocell led goes out. In cases where the photocell led does not give light, check the positions of the eyes and ensure that the eyes see each other.

Photocell Transmitter (TX) and Photocell Receiver (RX) cables are 5 meters. The Transceiver (RX) socket is given in red and the Transmitter (TX) socket in white to distinguish between the Transceiver/Transmitter cable and its eyes.



# OPERATION FUNCTIONS

## EXTERNAL (EXTRA) PHOTOCELL (FTS25)

The processor is connected from the connector named "EXTRA PHOTOCELL" on the unit. When the external photocell module is energized, the POWER LED will light continuously. The distance between the Photocell Transmitter (White) and the Photocell Receiver (Red) can be up to 10 meters. The eyes should be in a vertical position and on the same line. When the external photocell receiver and transmitter eyes see each other, the "STATUS" led gives constant light, and when it does not see, the "STATUS" led does not give light. In cases where there is no light, check the position of the eyes and ensure that the eyes see each other.

In addition, when the external (extra) photocell receiver and transmitter eyes see each other, the external (extra) photocell led on the processor unit will light up, and the led light will turn off when it does not.

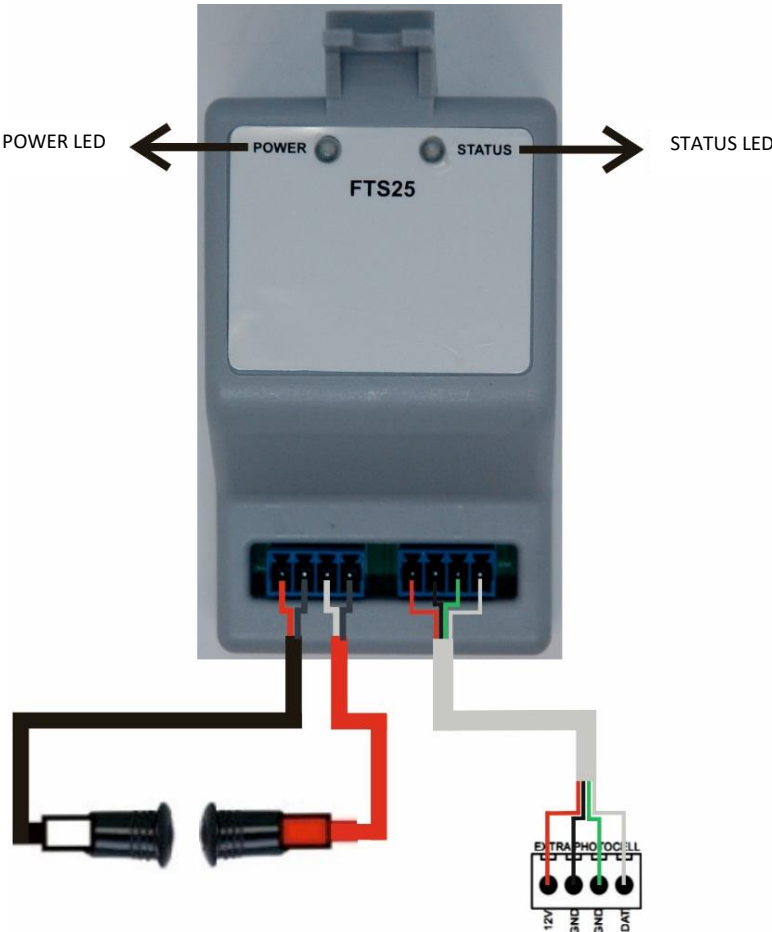
Photocell Transmitter (TX) and Photocell Receiver (RX) cables are 5 meters. The Transceiver (RX) socket is given in red and the Transmitter (TX) socket in white to distinguish between the Transceiver/Transmitter cable and its eyes.

RED : +12V

BLACK : - (GND)

GREEN : - (GND)

WHITE : DATA



## OPERATION FUNCTIONS

### INDOOR RADAR

The processor is connected from the connector named "INDOOR RADAR" on the unit. It is the radar that detects the movement that will occur in the inner region of the door mechanism. When the internal radar sees the object and is active, the "INDOOR RADAR" Led light on the processor unit lights up and the door is activated, moving in the direction of opening.

RED : +12V

BLACK : - (GND)

GREEN : - (GND)

WHITE : DATA



## OPERATION FUNCTIONS

### OUTDOOR RADAR

The processor is connected from the connector named "OUTDOOR RADAR" on the unit. It is the radar that detects the movement that will occur in the outer region of the door mechanism. When the external radar sees the object and is active, the "OUTDOOR" led on the processor unit lights up and the door is activated, moving in the direction of opening.

RED : +12V

BLACK : - (GND)

GREEN : - (GND)

WHITE : DATA



# OPERATION FUNCTIONS

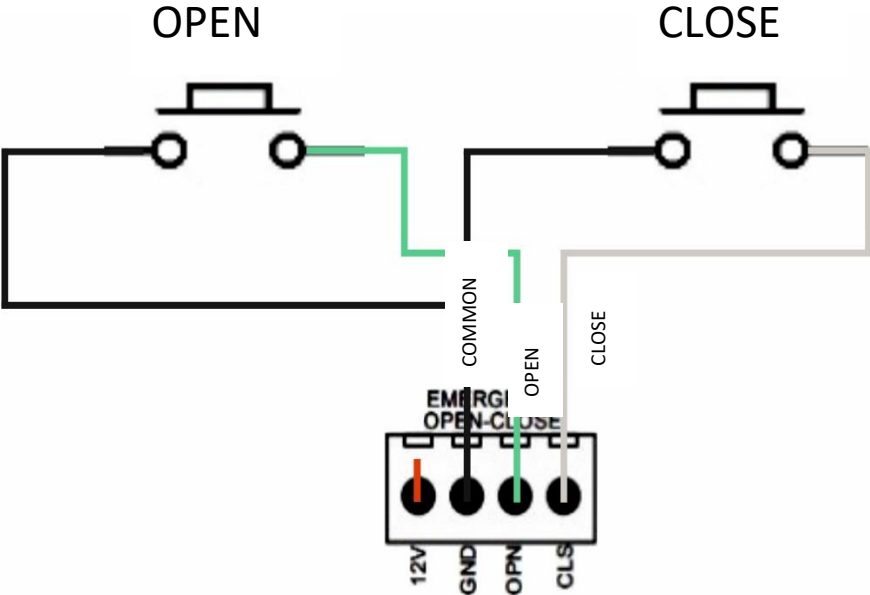
## EMERGENCY OPEN CLOSE

The processor is connected via the connector called EMERGENCY Open-Close on the unit.

Open/Close entries are opened or closed with the normally open button (no contact) connection.

When the "open" input is triggered, the door opens and the door closes after the waiting time has expired.

When the "Close" input is triggered, if the door is open, it closes without waiting for the waiting period.



RED : +12V

BLACK : COM (COMMON)

GREEN : OPEN

WHITE : CLOSE

## OPERATION FUNCTIONS

### MANUAL ADJUSTMENT MODULE (MAM25)

The processor is connected via the connector called SPI on the unit. If no installation has been made, the status led flashes. When installing, the door is turned off and the set button is pressed for 3 seconds. After installing the door, the status led turns off.

#### OPENING SPEED

The opening speed of the door is adjusted manually. When you turn to the left, the speed decreases. When you turn to the right, the speed increases.

#### CLOSING SPEED

The closing speed of the door is set manually. When you turn to the left, the speed decreases. When you turn to the right, the speed increases.

#### SWITCH MODES

##### NUMBER 1 SWITCH

This switch is used to activate or deactivate the photocell. The photocell is activated when in the " ON" position. The photocell becomes inactive when in the " off" position.

##### NUMBER 2 SWITCH

This switch is used for the dwell time option. Defines a 6-second standby time when in the " ON" position. Defines a standby time of 3 seconds when in the " off" position.

##### NUMBER 3 SWITCH

This switch is used to perform jamming test. The jam test is activated when in the " ON" position. When the jamming test is active, the door tries to close 5 times if it encounters an obstacle while moving in the closing direction. If there is still an obstacle, the door remains open. When the obstacle is removed, it is necessary to de-energize the device and turn it on again.

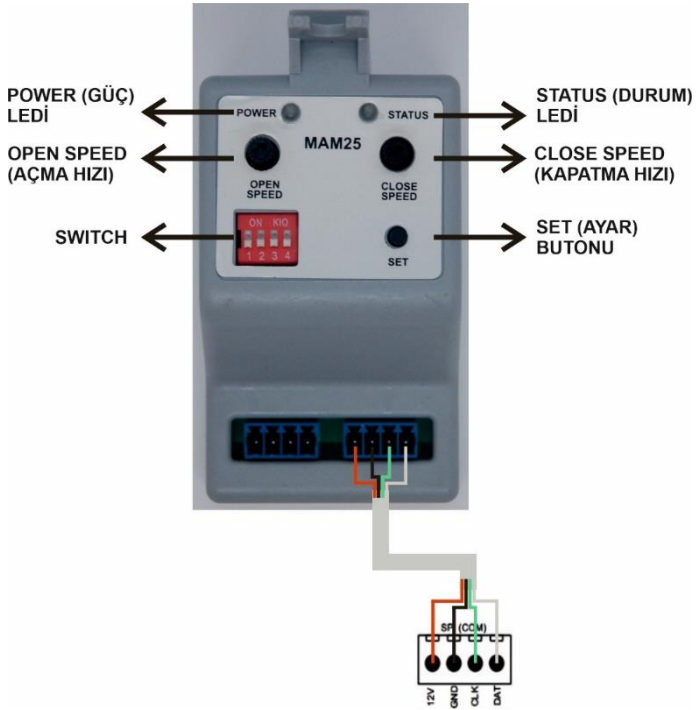
The jam test is disabled when in the " off" position.

##### NUMBER 4 SWITCH

This switch is used to activate or deactivate the motor lock. In the " ON" position, the engine lock is activated and the door will not be forced open as long as there is electricity when the door is closed.

In the "OFF" position, the engine lock is inactive.

NOTE : After all adjustments have been made, the module can be removed if desired.



RED : +12V

BLACK : - (GND)

GREEN : CLK

WHITE : DATA

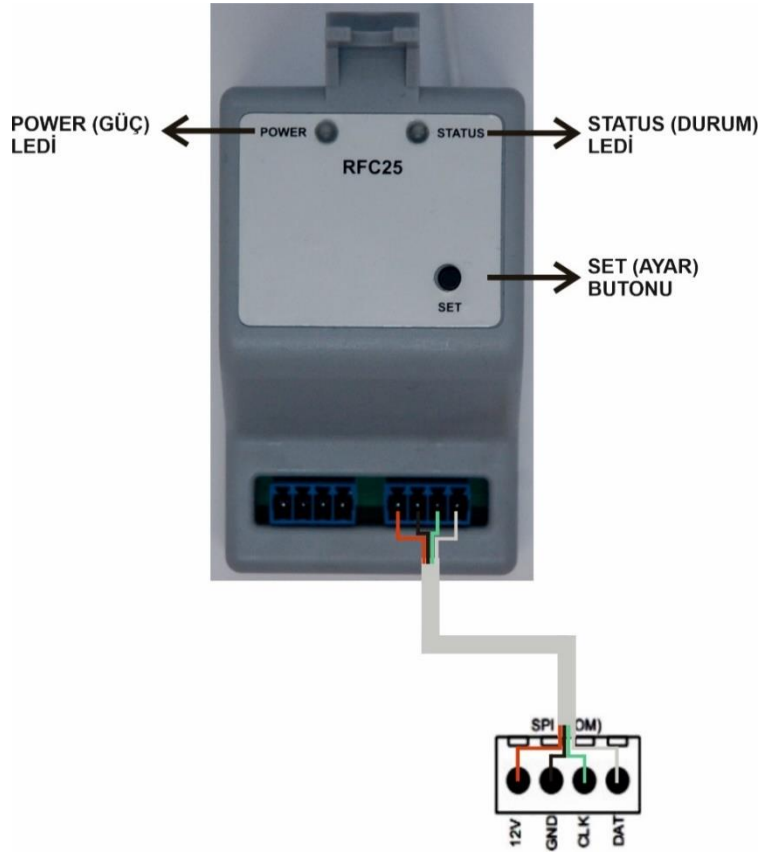
## OPERATION FUNCTIONS

### RF CONTROL MODULE (RFC25)

The processor is connected via the connector called SPI on the unit. Used for door control with controller. If there is no defined control (status), the light flashes. For the remote control identification process, the number 1 key of the remote control is pressed and at the same time, the set button is pressed on the RF receiver. The status led flashes 5 times during the controller identification process.

Key number 1 of the controller activates the "automatic mode".

Key number 2 of the controller activates the "continuous off mode".



RED : +12V



BLACK : - (GND)

GREEN : CLK

WHITE : DATA

## OPERATION FUNCTIONS

### TFT RF CONTROL MODULE (TFT25)

The processor is connected via the connector called SPI on the unit. It is the module used to control the door through the TFT screen. To install;

1. Enter the settings menu from the TFT screen.



2. Press the TFT pairing button. At the same time, the device is paired by pressing the set button on the TFT RF control module.



3. Enter the installation settings menu.



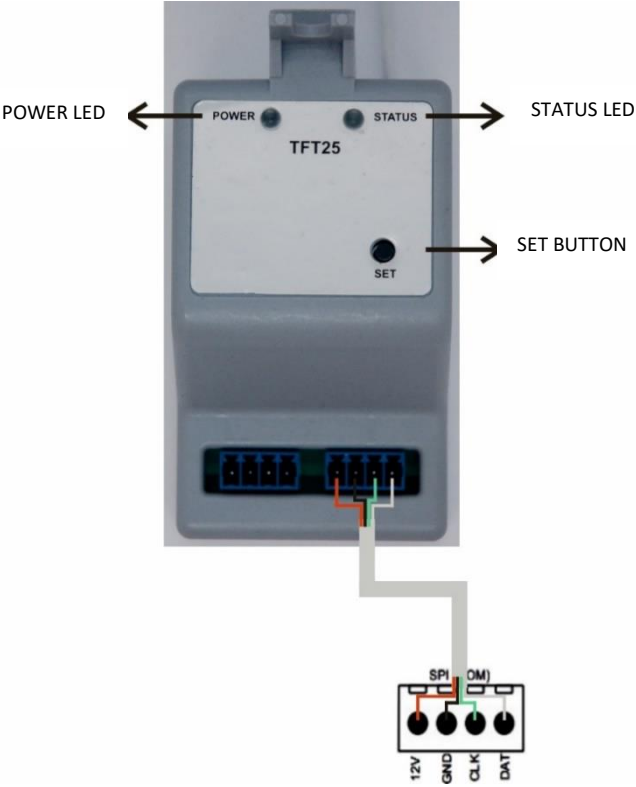
4. Press the start installation button. The door is turned to the closed position and the forward button is pressed.



5. The installation is started by pressing the Start button.



After the installation is completed, you can check the door on the TFT screen. As long as the TFT screen is on, the status led is on. The led turns off when the TFT display is turned off.



RED : +12V

BLACK : - (GND)

GREEN : CLK

WHITE : DATA

## TFT DISPLAY FUNCTIONS

### TFT SCREEN 1. PAGE



**AUTOMATIC DOOR** : When this mode is activated, the door switches to standard automatic door mode.



**ENTRY** : When this mode is activated, the door opens only at the entrances. Cannot be exited.



**EXIT**: When this mode is activated, the door only opens at the exits. Cannot be entered.



**WINTER MODE** : Enables or disables winter mode. When this mode is activated, the door opens half the normal opening distance to prevent cold air from entering the environment. If the user requests a different opening distance, this distance can be set in the settings menu.



**NIGHT MODE** : Enables or disables night mode. When this mode is activated, the door opens 10cm. If the user requests a different opening distance, this distance can be set in the settings menu.

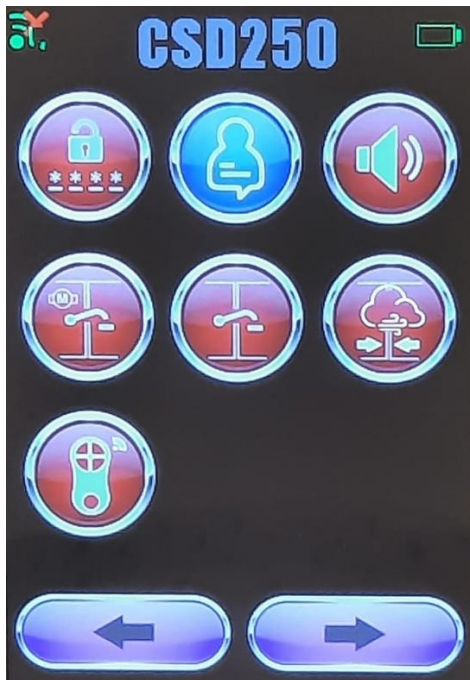


**ON** : When this mode is activated, the door remains open continuously.



**OFF** : When this mode is activated, if the door is open and moving towards the closing direction, it detects the intervening obstacle, opens again and does not close as long as there is an obstacle in between. If there is no obstacle in between, it closes and does not open again. Radars are off-line.

## TFT SCREEN 2. PAGE



**PASSWORD :** You can enable or disable the password from this menu to the first opening screen. You can define a password by entering and confirming the password you want to use.

You can deactivate the password screen by entering and confirming the password "0000".

If you want to activate the password screen again, you can activate the password screen by entering and confirming the password you want to use.



**LANGUAGE :** There is a language option in this menu.

Turkish, English, Spanish, French, Russian, Arabic language options are available



**SOUND** : This mode activates or deactivates the sound module. If you have an audio module, when this mode is activated, a buzzer will sound when the door is opened.



**ENGINE LOCK** : Activates or deactivates the motor lock. If this mode is activated, the engine will apply pressure when the door is closed and the door will not be opened manually.



**MECHANICAL LOCK** : Activates or deactivates the mechanical lock. When this mode is activated, the tongue in the mechanical lock interrupts when the door is closed and the door cannot be opened manually.



**WIND LOCK** : Activates or deactivates the wind lock mode. In windy weather, this mode puts more pressure on and compresses the door so that the door is not affected by the wind.

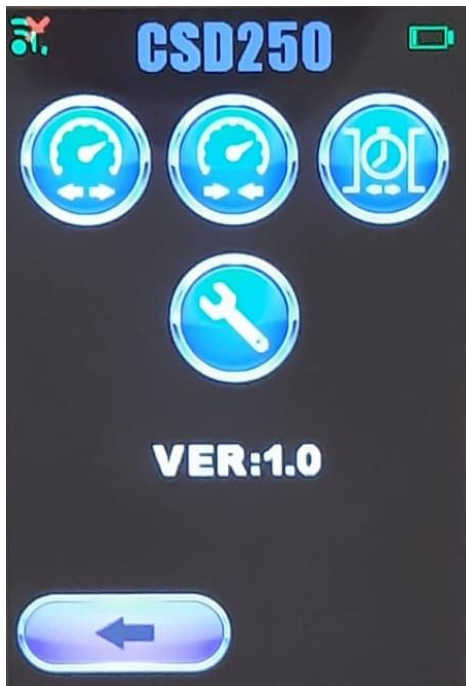


RF BUTTON : Activates or deactivates the control. When this mode is activated, the door can be controlled remotely with the controller.

When button 1 is pressed, the door switches to automatic mode.

When button 2 is pressed, the door goes into the closed mode.

## TFT SCREEN 3. PAGE



OPENING SPEED : Opening speed is adjusted. It can be adjusted between 20% and 100%.



CLOSING SPEED : Closing speed is adjusted. It can be adjusted between 20% and 100%.





**STAYING OPEN PERIOD:** Staying open period of the door is set. It can be set between 1 second and 100 seconds.



**SETTINGS :** Enter the Settings menu.



When entering the Settings menu, the password screen appears.

**PASSWORD:** 1903

# SETTINGS MENU CONTENT



SERVICE PASSWORD : You can change the password (1903) when entering the Settings section from this menu.



## INSTALLATION SETTINGS:

From this menu, you can install your device, delete the installed one, and reset your device to factory settings.



ACTIVATION : Activation settings of the device are made.



WINTER MODE DISTANCE :

The winter mode distance of the door is adjusted. You can change between 0 cm and 99 cm.



NIGHT MODE DISTANCE :

The night mode distance of the door is adjusted. You can change between 0 cm and 99 cm.



DEVICE PAIRING :

You can introduce the TFT-25 module from this menu. You can perform the identification process by entering the menu and pressing the button of the TFT-25 device.



TEST BUTTON :

From this menu, device tests are performed.

# INSTALLATION SETTINGS MENU CONTENT



START INSTALLATION:

This button starts the device installation.



DELETE INSTALLATION:

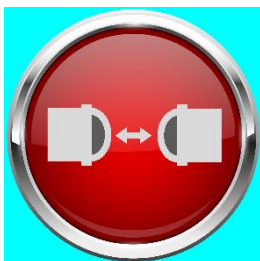
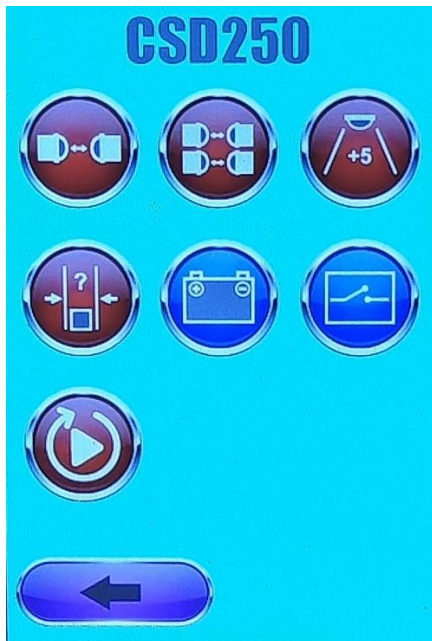
This button deletes device installations.



RESET TO FACTORY SETTINGS:

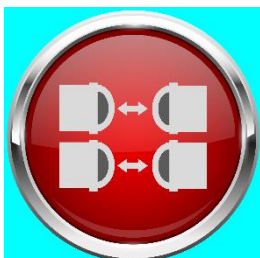
This button returns the device to factory settings.

## ACTIVATION MENU CONTENT



PHOTOCELL ACTIVATION :

Activates or deactivates the photocell.



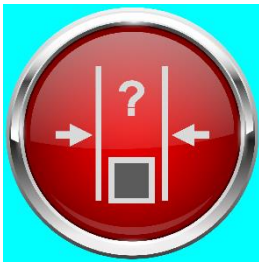
EXTRA PHOTOCELL ACTIVATION :

Activates or deactivates the Extra photocell module.



#### ACTIVE RADAR:

Activates or deactivates the radar. If this mode is activated, the radar will add 5 seconds to the door open time if it detects 5 consecutive movements while the door is moving.



#### COMPRESSION TEST:

Enables or disables the number of jam tests. The number of obstacle trial tests can be set from 1 to 99. If this mode is active, if there is an obstacle while going to the door closing direction, the door will try to close as much as the number of tests you have set, if there is still an obstacle, the door will remain open. When the obstacle is removed, it is necessary to cut off the energy and turn it on again.



**BATTERY :** If you have a battery module, it determines which direction the door will go when the power is cut.

There are 3 modes.

**CONTINUE :** When the power goes out, the door resumes its normal operation.

**OPEN THE DOOR:** When the power goes out, it opens the door and the door remains open until the power comes on.

**CLOSE THE DOOR:** When the power goes out, it closes the door and the door remains closed until the power goes out.





RELAY : This is the menu with dry contact modes.

MODE 0 : The relay remains pulled while the door is open.

MODE 1 : When the door is opened, the relay remains on, in the closing direction the relay is released.

MODE 2 : When the door is opened, the relay gives only 1 trigger.

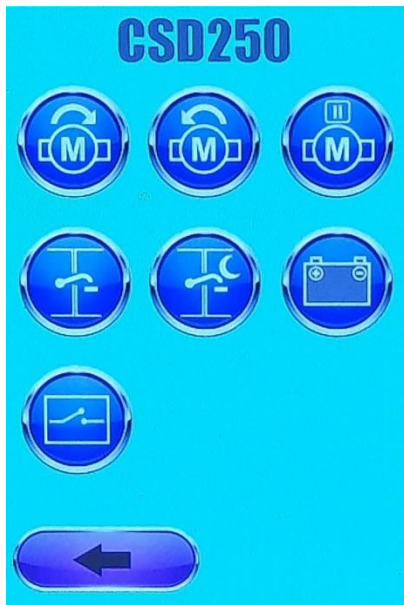
MODE 3 : If one of the input - output directions is blocked, the relay remains on.



AUTO START:

If this mode is activated, the door will auto-position when the electricity comes and goes.

## TEST MENU CONTENT



ENGINE MANUAL MOVEMENT BUTTON :

Tests the right movement by manually turning the motor to the right.



ENGINE MANUAL MOVEMENT BUTTON :

Tests its left motion by manually turning the motor to the left.



ENGINE STOP BUTTON :

Tests the stop motion of the engine.



KEY TEST :

Tests the electronic lock module.



NIGHT LOCK TEST :

Tests the night lock module.



BATTERY:

Tests the battery module.



RELAY:

Tests the relays.

## IF TFT SCREEN PASSWORD IS FORGOTTEN



If the TFT display password and the login password are forgotten in the settings section, a hollow micro sd card is inserted into the device.

When the card is inserted into the device, the password displayed on the first screen is automatically removed. The password in the settings section is "1903" again.

After the password removal process, a file named CSD250 is created in the sd card, this file must be deleted in order to use the card again.

 CSD250

NOTE : When the setting is changed on the TFT screen, the buzzer beeps twice.

## OPERATION FUNCTIONS

### LOCK POSITION KEY:

Connection is made from the connector called SPI.

1. ON : When this button is pressed, the door remains in the open mode.
2. OFF : When this button is pressed, the door remains in the closed mode. Radars are off-line.
3. AUTOMATIC : When this button is pressed, the door operates in normal automatic mode. Radars are active.
4. EXIT : When this button is pressed, only the exits from the inside are active. No entry from outside.
5. WINTER: When this button is pressed, the door switches to winter mode. In winter mode, the door opens at half the normal opening distance.

KEY : When you lock it with the key, all settings on the position key remain locked and cannot be changed.

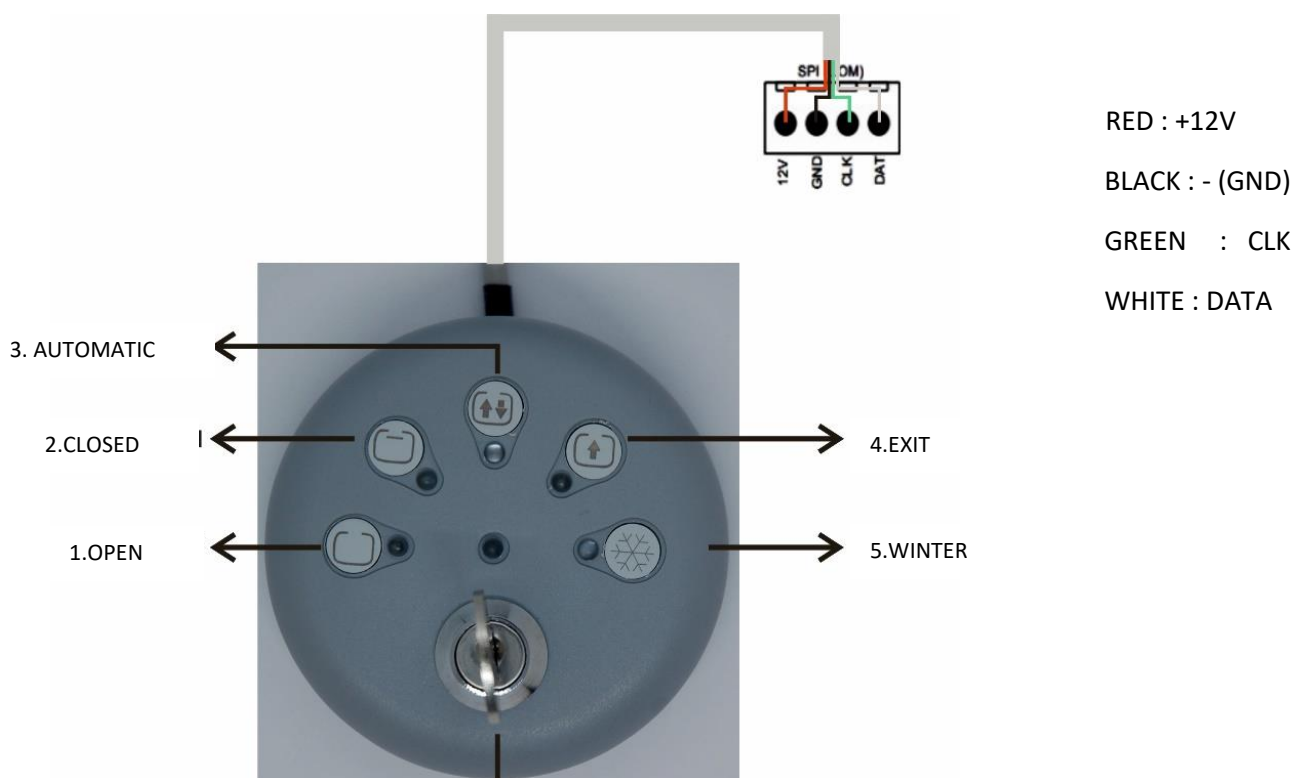
The position key can be locked and the key removed. If it is necessary to make changes again, the key must be inserted and the lock must be unlocked.

NOTE : whichever mode is activated, the indicator light of that mode will illuminate red.

The indicator led goes out when the position key is locked.

The indicator led illuminates green when the position key is unlocked.

NOTE : When the electricity comes and goes, the door will only position when it is in automatic mode.



# OPERATION FUNCTIONS

## NIGHT LOCK:

Connection is made from the connector called SPI. TFT can be activated or deactivated via the display. It is a module that allows the door to be opened by the set distance when activated and ensures that the door is not opened by force after opening.

On initial installation, this distance is automatically set to 10 cm. If it is desired to change the distance, this distance can be changed in the settings section on the TFT screen.

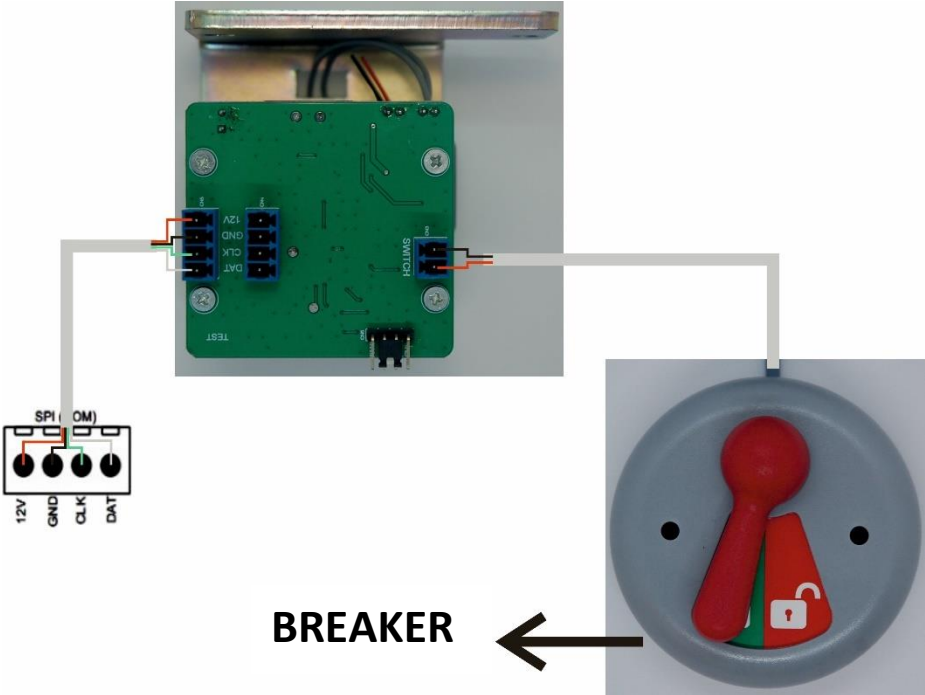
When the breaker is turned on, the lock becomes passive at night and the door can be opened more forcibly after opening the set distance. If the breaker is in the closed position, the door is not opened by force, it is only opened by the set distance.



OFF



ON



- RED : +12V
- BLACK : - (GND)
- GREEN : CLK
- WHITE : DATA

# OPERATION FUNCTIONS

## ELECTRONIC LOCK :

Connection is made from the connector named LOCK. The electronic lock system is a module that prevents the door from being opened by force without receiving a command. The electronic lock is active when it is first installed.

If the power goes out when the lock is active, you can turn the breaker to the open position and open the door manually to open the door.

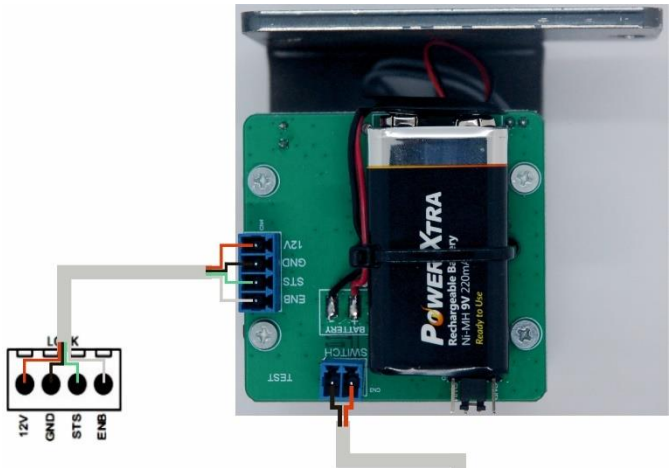
NOTE : If the breaker is in the open position, the electronic lock will not be activated in any way.



OFF



ON



- RED : +12V
- BLACK : - (GND)
- GREEN : STS
- WHITE : ENB

BREAKER





## OPERATION FUNCTIONS

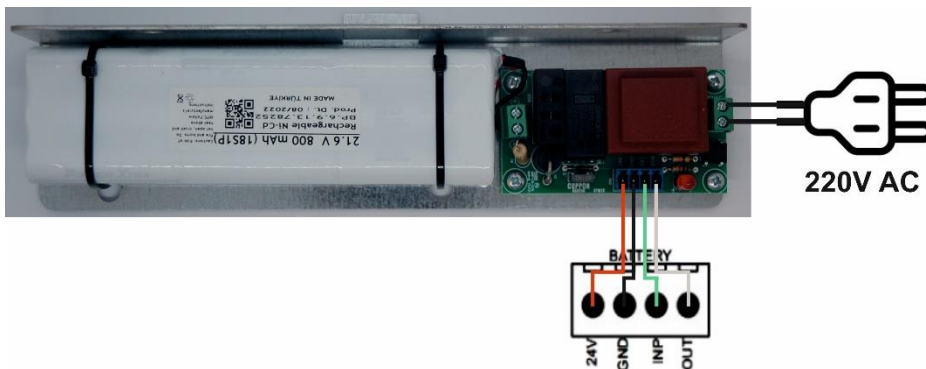
### BATTERY MODULE :

Connection is made from the connector named BATTERY. When active after the connections are made, the red LED light turns on.

This module allows the door to operate when the electricity goes out. There are 3 modes, these modes can be changed via TFT display.

1. CONTINUE : When the power goes out, the door resumes its normal operation.
2. OPEN THE DOOR: When the power goes out, it opens the door and the door remains open until the power comes on.
3. CLOSE THE DOOR: When the power goes out, it closes the door and the door remains closed until the power goes out.

NOTE : When the door operates on the battery, it works with 50% performance.



RED : +12V

BLACK : - (GND)

GREEN : INPUT = DATA

WHITE : OUTPUT = ENB

# OPERATION FUNCTIONS

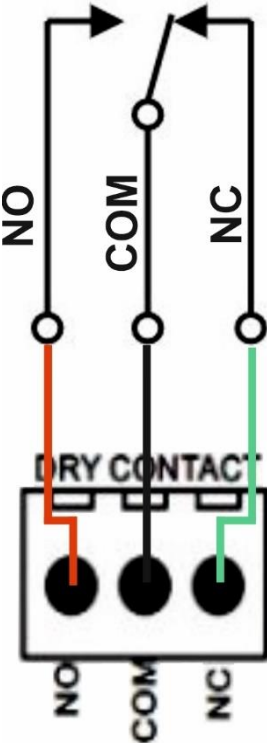
DRY CONTACT:

Connection is made from the connector called DRY CONTACT. The dry contact is the output connector.

RED : NO = NORMALLY OPEN

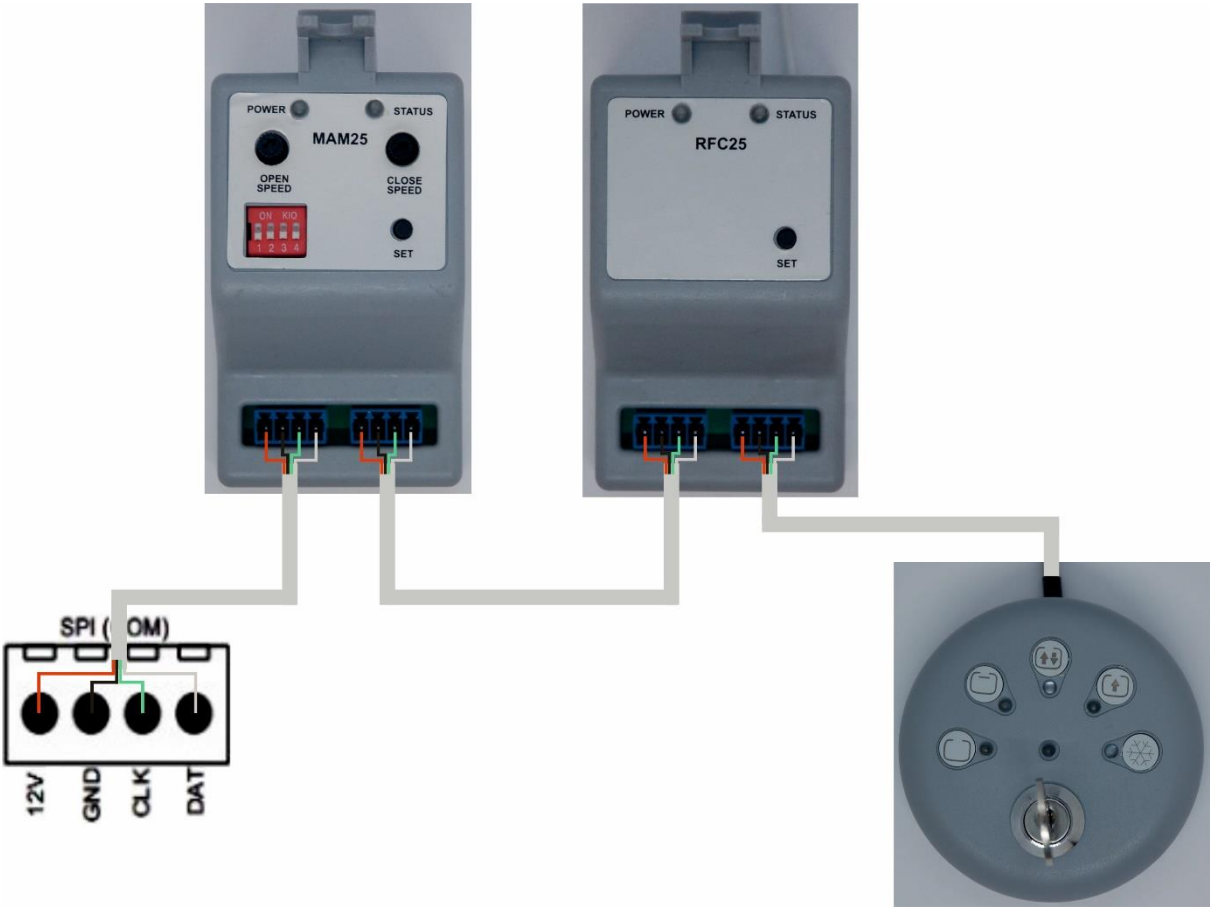
BLACK : COM = COMMON

GREEN : NC = NORMALLY CLOSED



If it is desired to connect more than one module at the same time to the connector named SPI, the connection is made as in the example connection diagram.

### EXAMPLE WIRING DIAGRAM



## **TECHNICAL SPECIFICATIONS:**

**OPERATING VOLTAGE** : 230V AV  $\pm$  10% 50Hz

**WITHDRAWN CURRENT** : 0.6A

**MOTOR VOLTAGE** : 24V DC

**MOTOR POWER** : 95W

**OPENING SPEED** : Adjustable 0.9m/s

**CLOSING SPEED** : Adjustable 0.7 m/s

**MAXIMUM WING WEIGHT** : 100kg (1 wing) 100 +100kg (2 wings)

**OPERATING TEMPERATURES** : -15° to +50° for dry environments only

**PROTECTION LEVEL** : IP20

