

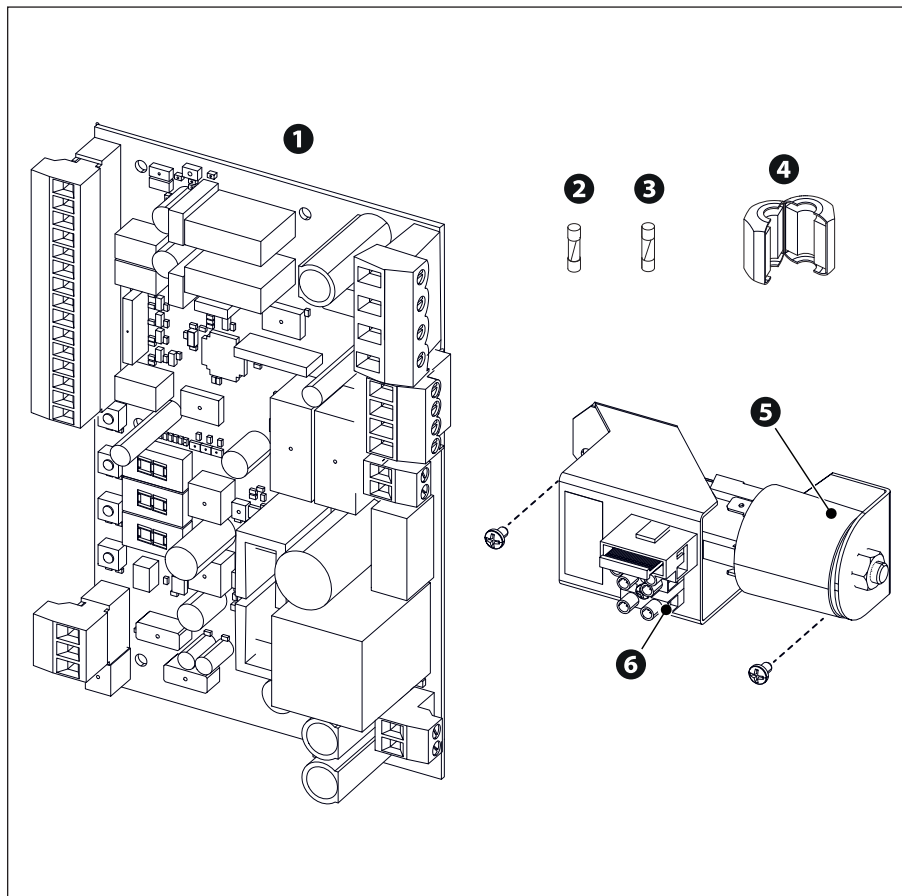
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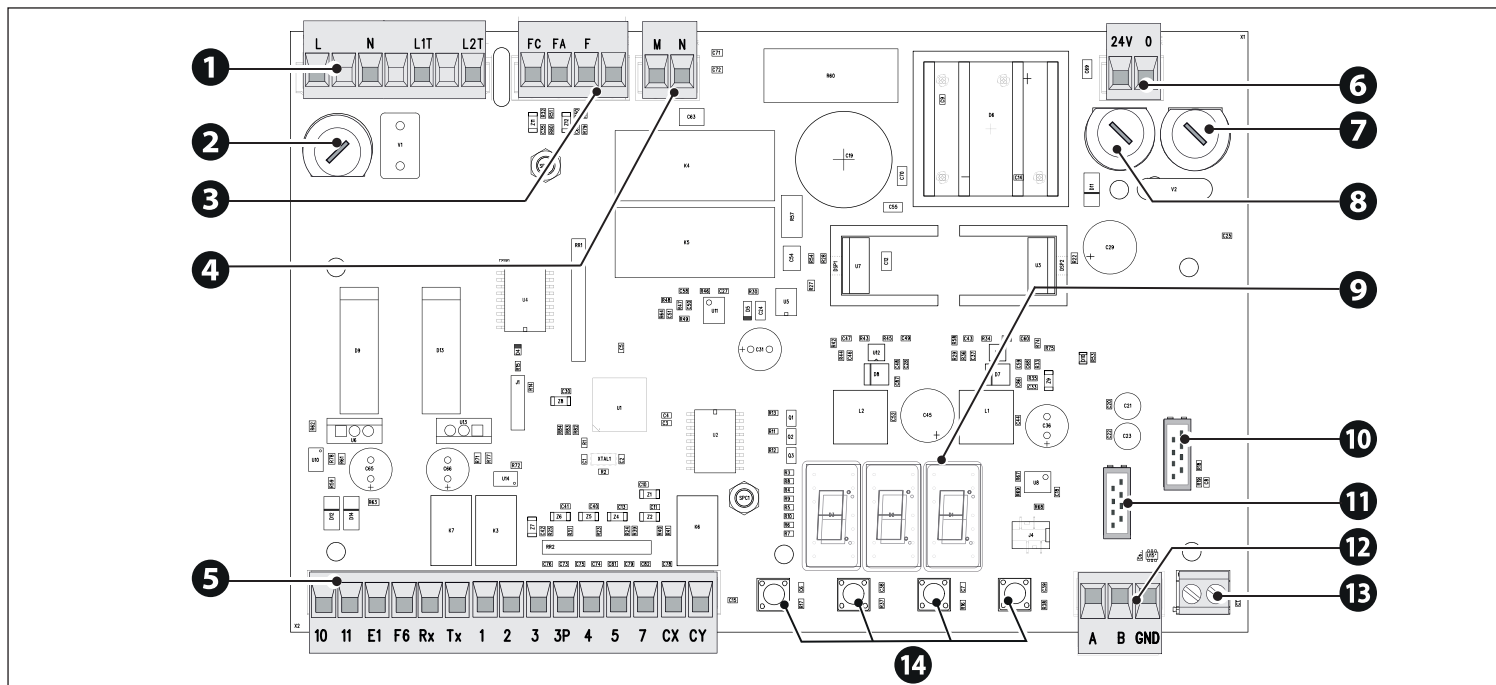
EN English

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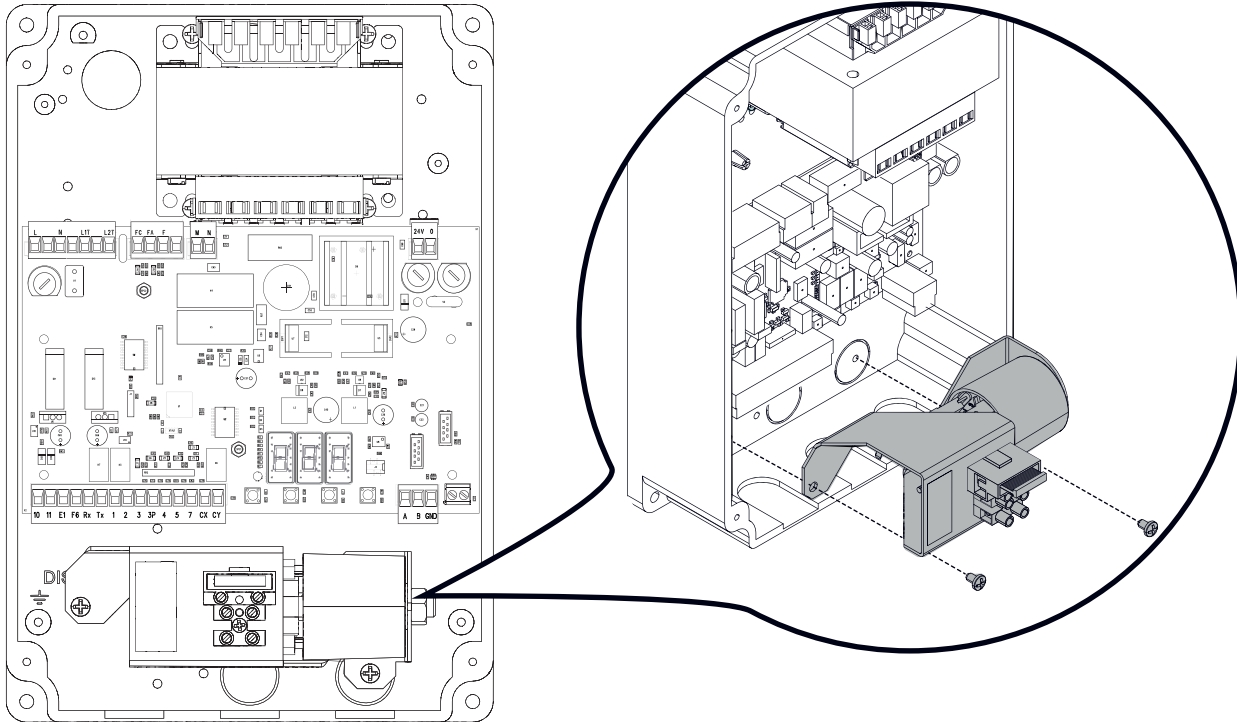


- ❶ Control board ZL371
- ❷ Fuse 1.6A (line 230 V)
- ❸ Fuse 3.15A (line 120 V)
- ❹ Ferrite
- ❺ EMC filter
- ❻ Terminal block with fuse compartment

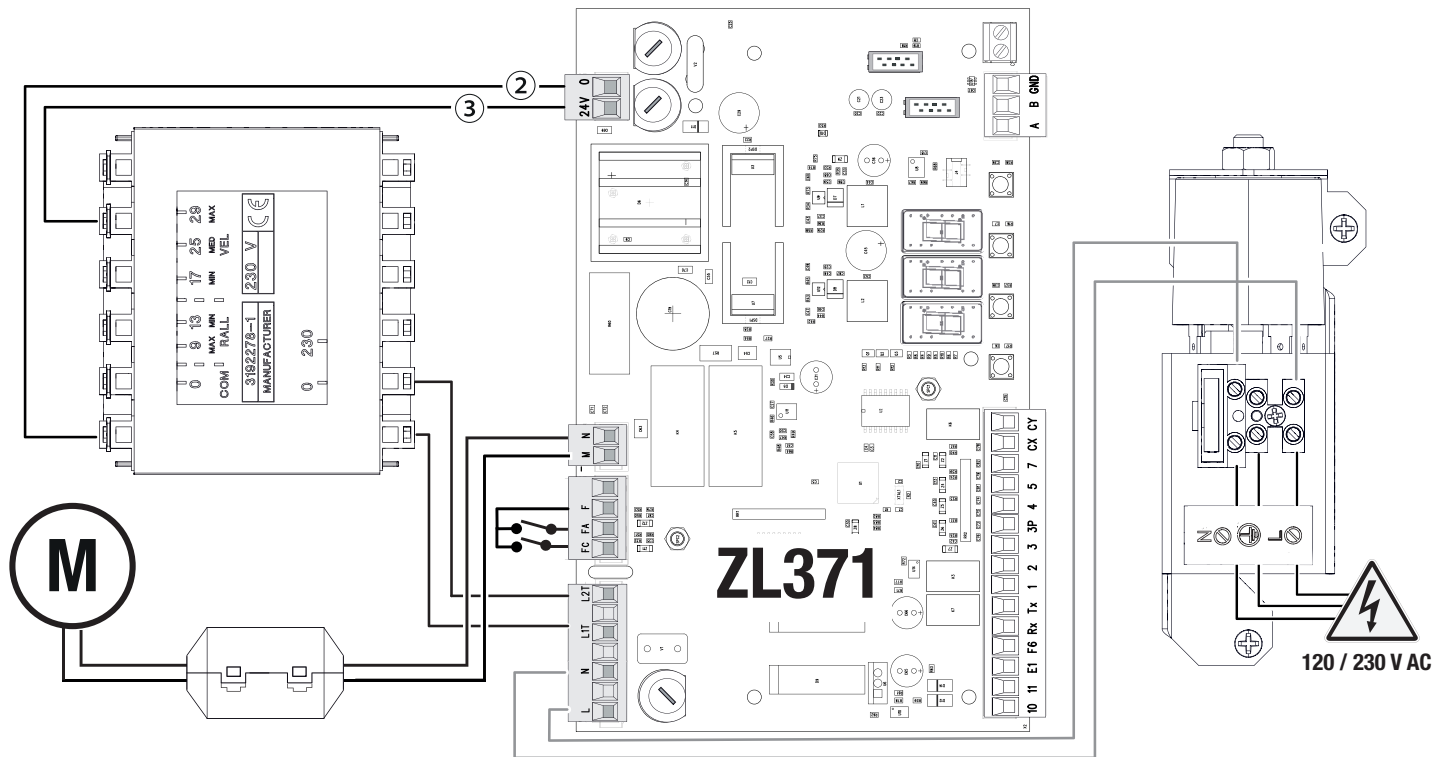


- 1 Terminal board for connecting the transformer
- 2 Line fuse
- 3 Terminal board for limit-switch micro-switches
- 4 Terminal board for motor power supply
- 5 Terminal block for connecting the accessories
- 6 Terminal board for power supply to the control board
- 7 Accessories fuse

- 8 Control board fuse
- 9 Display
- 10 Connector for plug-in radio frequency card (AF)
- 11 RSE card connector
- 12 Terminal board associated with the RSE connector for paired, alternate or CRP connection
- 13 Terminal board for connecting the antenna
- 14 Programming buttons



⚠ Always insert the line fuse in the terminal block.



Maximum capacity of contacts


 The total power of the outputs listed below must not exceed the maximum output power [Accessories]

Device	Output	Power supply (V)	Power (W)
Accessories	10 - 11	24 AC	40
Additional light	10 - E1	24 AC	25
Flashing beacon	10 - E1	24 AC	25
Operator status warning light	10 - 5	24 AC	3

Command and control devices

1 STOP button (NC contact)

This stops the boom and excludes automatic closing. Use a control device to resume movement.

 If the contact is not used, it must be deactivated during programming.

2 Control device (NO contact)

OPEN ONLY function

 When the [HOLD-TO-RUN] function is active, the control device must be connected during OPENING.


3 Control device (NO contact)

PARTIAL OPENING function

 The contact must only be used for operators working in paired mode.

4 Control device (NO contact)

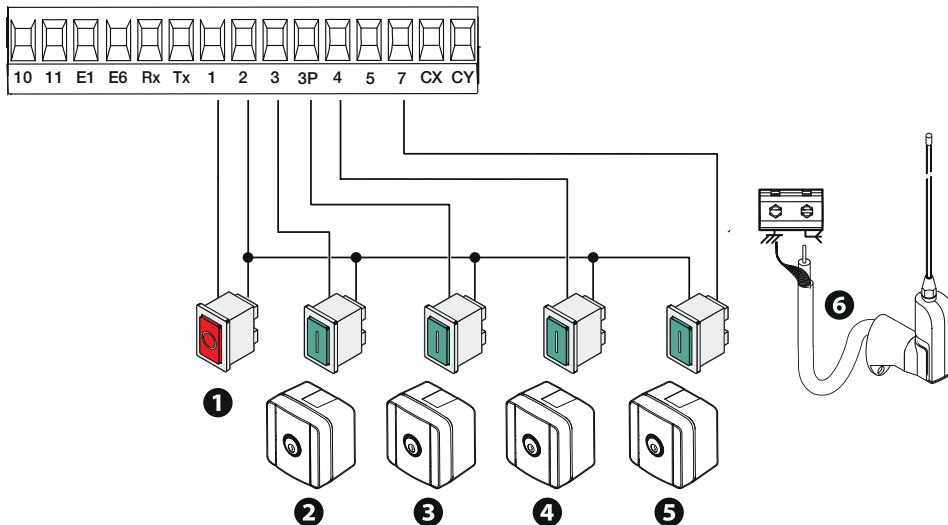
CLOSE ONLY function

 When the [HOLD-TO-RUN] function is active, the control device must be connected during CLOSING.

5 Control device (NO contact)

OPEN-CLOSE function

6 Antenna with RG58 cable



Signalling devices

1 Additional light

It increases the light in the manoeuvring area.

2 Additional flashing beacon

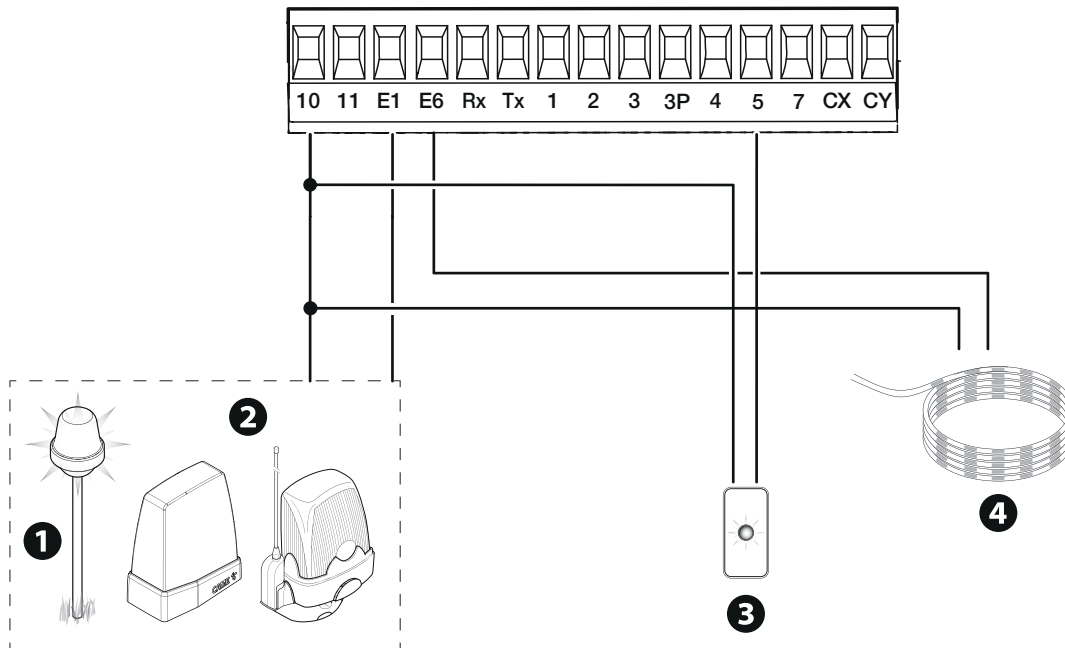
It flashes when the operator opens and closes.

3 Operator status warning light

It notifies the user of the operator status.

4 Rope light

It flashes when the operator opens and closes.



Safety devices

Connect the safety devices to the CX and/or CY inputs.

During programming, configure the type of action that must be performed by the device connected to the input.

 If contacts CX and CY are not used, they must be deactivated during programming.

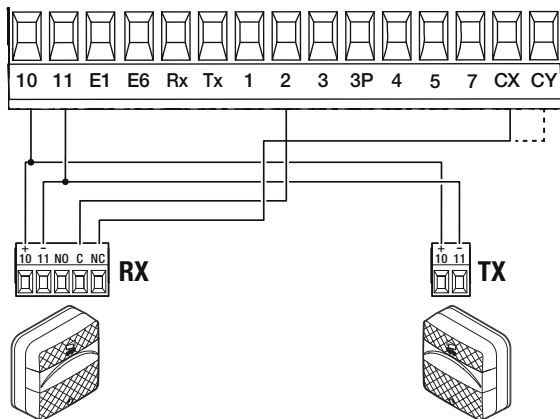
 Multiple photocell pairs can be connected.

 For Safety Devices Test mode, please see the [F5] function.

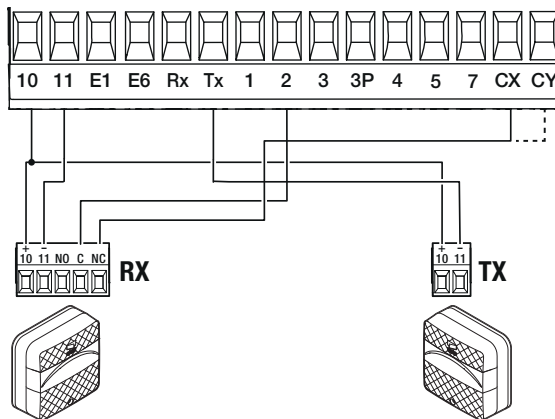
 For Sleep mode, please see the [F60] function.

DELTA photocells

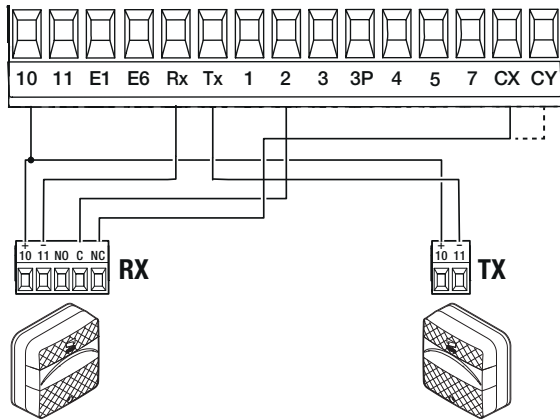
Standard connection



Connection with safety test

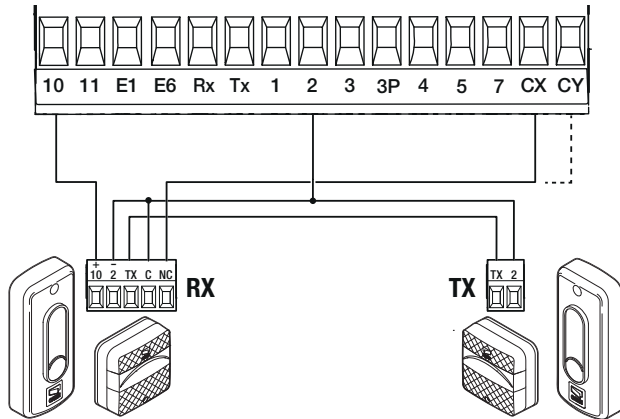


Connection with Sleep Mode

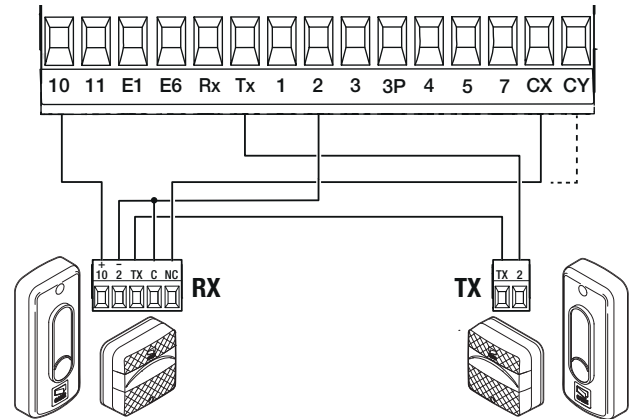


DIR / DELTA-S photocells

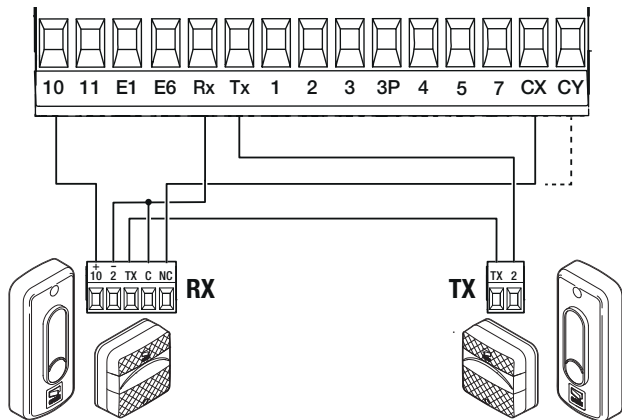
Standard connection



Connection with safety test

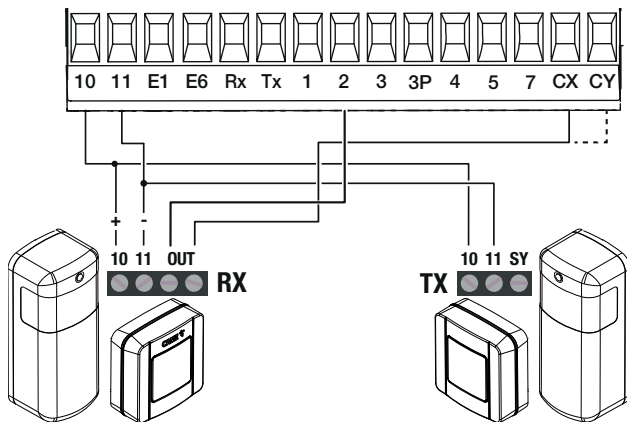


Connection with Sleep Mode

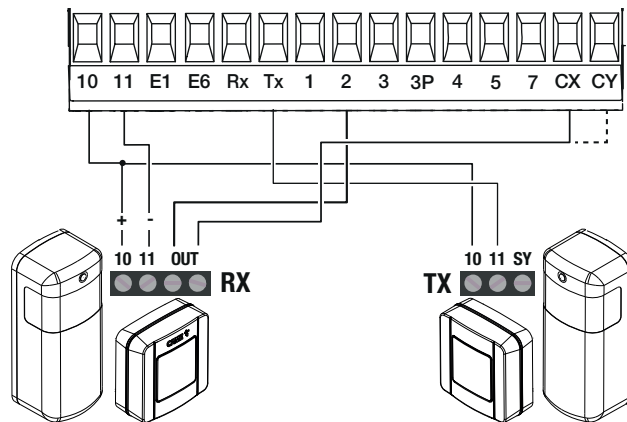


DXR/DLX photocells

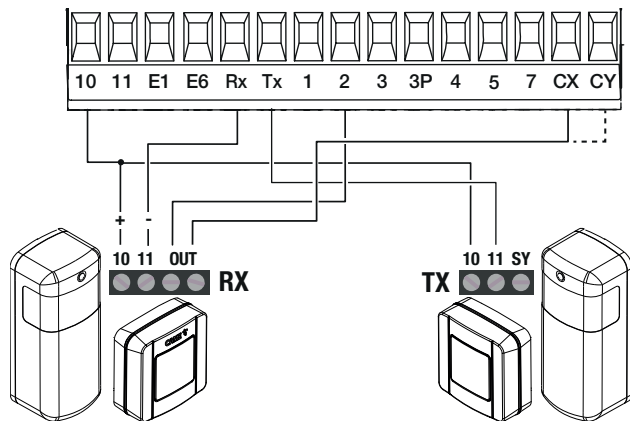
Standard connection



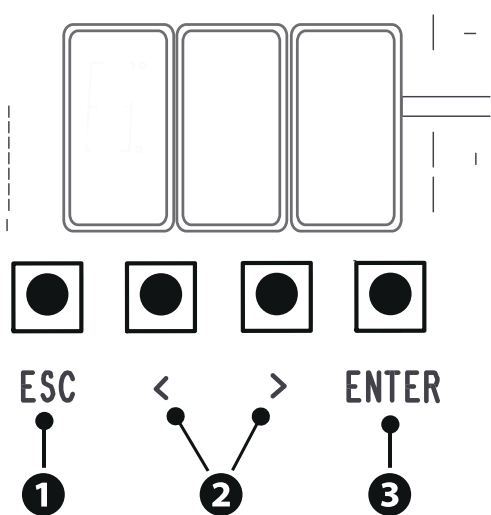
Connection with safety test



Connection with Sleep Mode



Programming button functions



1 ESC button

The ESC button is used to perform the operations described below.

- Exit the menu
- Delete the changes
- Go back to the previous screen

2 < > buttons

The < > buttons are used to perform the operations described below.

- Navigate the menu
- Increase or decrease values

3 ENTER button

The ENTER button is used to perform the operations described below.

- Access menus
- Confirm choice

Getting started

Once the electrical connections have been made, proceed with commissioning. Only skilled and qualified staff may perform this operation.

Check the warning and safety devices are working properly.

Make sure that there are no obstacles in the way.

Power up and proceed with the operations indicated below.

F1 Total stop

After powering up the system, the first manoeuvre is always to open the gate. Wait for the manoeuvre to be completed.

Press the STOP button immediately in the event of any faults, malfunctions, strange noises or vibrations, or unexpected behaviour in the system.

At the end of commissioning, check the correct operation of the device using the buttons near the display. Check that the accessories also work correctly.

Functions menu

Total stop

F1 This stops the operator and excludes automatic closing. Use a control device to resume movement.

0 =Deactivated (Default)
1 = Activated

CX input and CY input

F2 Associate a function with the input CX (F2) CY (F3).
F3


0 =Deactivated (Default)
C1 = Reopen while closing (photocells)
C4 = Obstacle standby (photocells)
C5 = Immediate closure at the travel end during opening
C9 = Immediate closure at the travel end during opening with obstacle standby during closure

Safety devices test

F5 Check that the photocells connected to the inputs are operating correctly, after each opening and closing command.

0 =Deactivated (Default)
1 = CX
2 = CY
3 = CX+CY

Hold-to-run

F6 With the function active, the operator stops moving (opening or closing) when the control device is released.
 **When the function is active, it excludes all other control devices.**

0 =Deactivated (Default)
1 = Activated

Obstacle with motor stopped

F9 With the function active and the operator stopped, an open or close command is not performed if the safety devices detect an obstacle.

0 =Deactivated (Default)
1 = Activated

Passage-open warning light

F10

Barrier status warning.

0 = Warning light on (default) - The light stays on when the boom is moving or open.
1 = Warning light flashing - The warning light flashes every half a second when the boom is opening and remains on when the boom is open. The light flashes every second when the boom is closing, and remains off when the boom is closed.

Flashing rope light

F15


Choose how you would like the barrier status to be signalled using the rope light flash settings.

1 = The rope light flashes when the boom is moving and when closed.
0 = The rope light flashes when the boom is moving (Default).

Light E1

F18


Choose the operating mode for the lighting device connected to output E1.

0 =Flashing beacon (Default)
1 = Cycle light - The lamp stays on during the manoeuvre.
 **This parameter does not appear if the [F19 - Automatic Close] function is deactivated.**
2 = Courtesy lamp - The light switches on when a manoeuvre starts and remains on once the manoeuvre has finished, for the time set under the function [F25 Courtesy time].

Automatic closure

F19

Set the time before automatic closure, once the opening travel end point has been reached.

 **The function does not work if any of the safety devices are triggered when an obstacle is detected, after a complete stop, during a power outage or if there is an error.**

0 =Deactivated (Default)
From 1 to 180 seconds

Pre-flashing time

F21

Adjust the time for which the beacon is activated before each manoeuvre.

0 =Deactivated (Default)
1 to 10 seconds

Operating time

F22

Set the gearmotor working time during opening and closing.

5 to 120 seconds (Default 120 seconds)

Courtesy time

F25


Set the lighting device operation time.

60 to 180 seconds (Default 180 seconds)

Opening and closing speed

F28

Set the opening and closing speed.

 **For booms complete with accessories (swing rest and/or skirt), reduce the speed.**

MIN = minimum speed

MED = average speed

MAX = maximum speed

XMA = maximum speed for boom <3m

Slowdown speed

F30

Set the slowdown speed.

MIN = minimum speed

MED = average speed

MAX = maximum speed

Calibration speed

F33

Set the travel self-learning speed (percentage of maximum speed).

20% to 40%

Travel sensitivity

F34

It adjusts the obstacle detection sensitivity during the gate travel.

10% to 100% (Default 100%)

10% = minimum thrust and high obstruction sensitivity

100 % =maximum thrust and low obstruction sensitivity

Slowdown sensitivity

F35

Adjust the obstruction detection sensitivity during slowdown in percentage terms.

10% to 100% (Default 100%)

10% = minimum thrust and high obstruction sensitivity


100 % =maximum thrust and low obstruction sensitivity

RSE communication

F49 Configure the function performed by the board connected to the RSE1 connector.

0 =Deactivated (Default)
1 = Paired
2 = Compass
3 = CRP/CAME KEY (Default)

Transferring MASTER-SLAVE parameters

F52 Share parameters programmed on the Master barrier with the Slave barrier.
 **This only appears if the F49 function is set to [Paired] or [Alternate].**

0 =Deactivated (Default)
1 = Activated

CRP address

F56 Assign a unique identification code (CRP address) to the control board.


from 1 to 255

Sleep mode

F60 This reduces the consumption of the photocells when they are in standby.

0 =Deactivated (Default)
1 = Activated

Pre-flashing

F61 Choose the type of manoeuvre that activates the flashing beacon in advance.
 **Set how much earlier the flashing beacon is activated under the function [F21 - Pre-flashing time].**

0 = when opening and closing (Default)
1 = only when closing
2 = only when opening

RSE speed

F63


Set the remote connection system communication speed on the RSE port.

0 = 1200 bps
1 = 2400 bps
2 = 4800 bps
3 = 9600 bps
4 = 14400 bps
5 = 19200 bps
6 = 38400 bps (default)
7 = 57600 bps
8 = 115200 bps

New user

U1

Register a maximum of 25 users and assign a function to each one.

 **The operation can be carried out by using a transmitter. The board that manages the transmitters (AF) must be inserted into the connector.**

1 = Step-by-step - The first command is to open and the second to close.
3 = Open
4 = Partial opening
When the barrier is in [Paired] mode, the [Partial Opening] command opens the Master barrier.

Remove user

U2

Remove one of the registered users.

Use the arrows to choose the number associated with the user you want to remove.
No.: 1 > 25
Alternatively, the control device associated with the user you want to remove can be activated.
Press ENTER to confirm.


Remove all

U3

Remove all registered users.

0 = Deactivated (Default)
1 = Activated

Radio decoding

U4 Choose the type of radio coding for the transmitters enabled to control the operator.
 **If you choose the type of radio coding for the transmitters [Rolling code] or [TW key block], any transmitters with a different type of radio coding saved previously will be deleted.**

1 = All decoding (default)
2 = Rolling code
3 = TW key block

Parameter reset

A4 Restore operator factory settings.

0 =Deactivated (Default)
1 = Activated

Manoeuvre counter

A5 View the number of operator manoeuvres.

1 = 1000 maneuvers

FW version

H1 Display the firmware version.

PAIRED OPERATION

 Paired operation can only be activated on operators with the same control board model.

Two connected operators are controlled with one command.


Electrical connections

Connect the two electronic boards with a UTP CAT 5 cable.

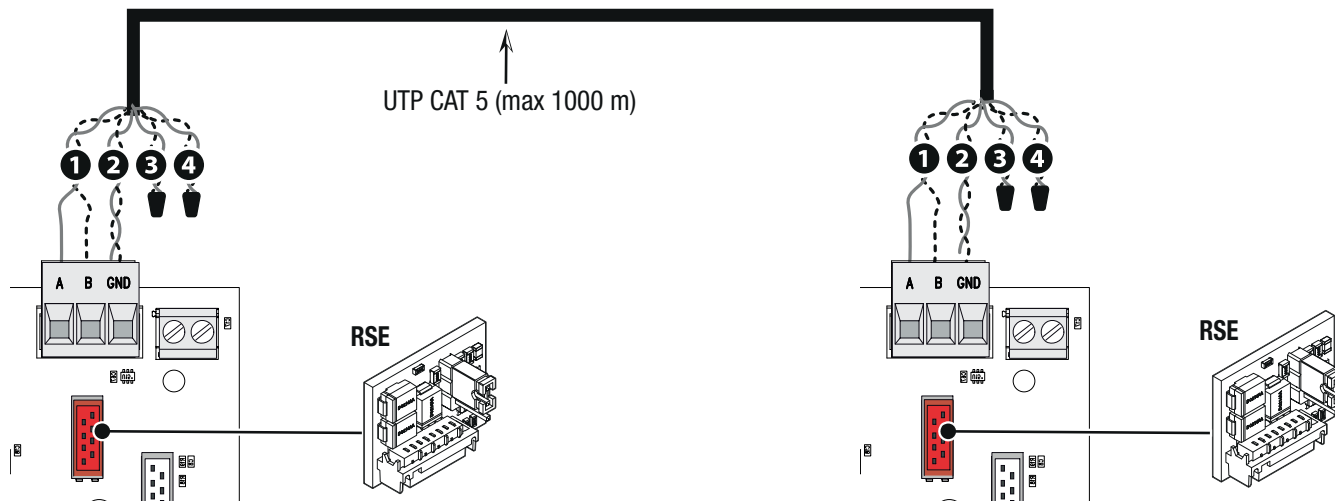
Fit an RSE card on both control boards using the RSE connector.

Connect up the electrics for the devices and accessories.


 For information on connecting the electrics for the devices and accessories, please see the “ELECTRICAL CONNECTIONS” section.

 The devices and accessories must be connected to the control board which will be set as the MASTER.

 Deactivate function F19 on the SLAVE operator control panel.



Programming

 All programming operations described below must be performed only on the control board set as the **MASTER**.

Select function F49.
Press ENTER to confirm.
Select 1.
Press ENTER to confirm.

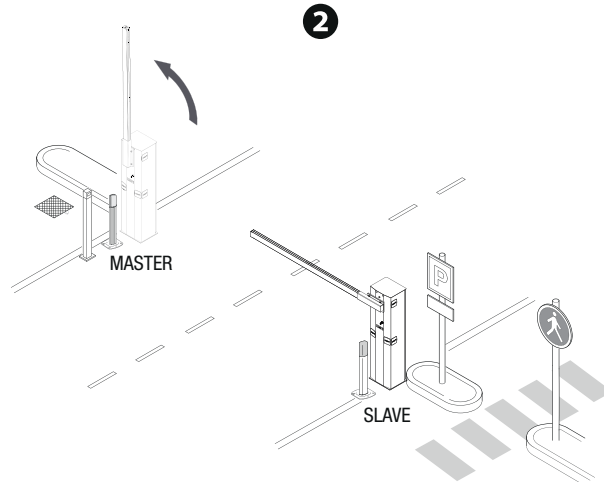
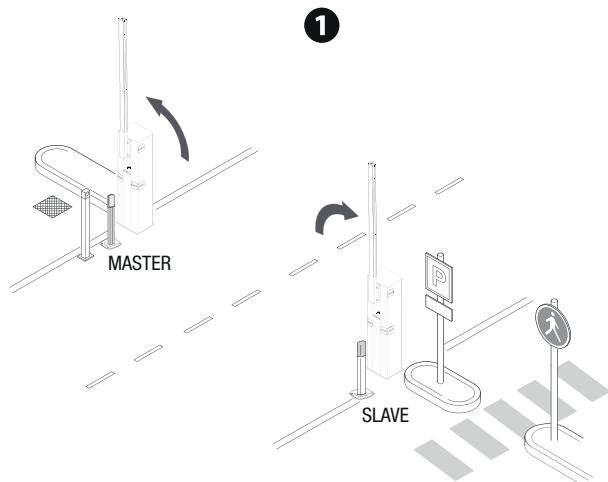
Select function F52.
Press ENTER to confirm.
Select 1.
Press ENTER to confirm.

 For user storage operations, see function U1.

Operating modes

1 STEP-BY-STEP or OPEN ONLY command

2 PARTIAL OPENING command (2-3P)



ALTERNATE OPERATION


The first barrier opens, the vehicle passes, the first barrier closes, the second barrier opens, the vehicle passes and the second barrier closes.

Electrical connections

Connect the two electronic boards with a UTP CAT 5 cable.

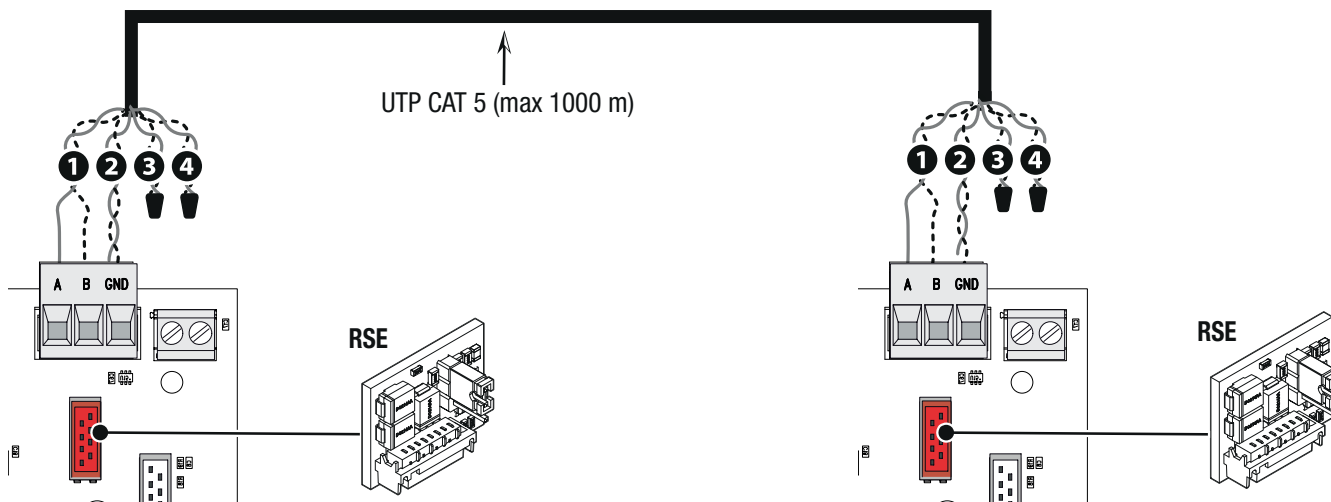
Fit an RSE card on both control boards using the RSE connector.

Connect up the electrics for the devices and accessories.


 For information on connecting the electrics for the devices and accessories, please see the “ELECTRICAL CONNECTIONS” section.

 The control and safety devices must be connected on both electronic boards.

 Deactivate function F19 on the SLAVE operator control panel.



Programming

 **All programming operations described below must be performed only on the control board set as the MASTER.**

Select function F49.

Press ENTER to confirm.

Select 2.

Press ENTER to confirm.

Select function F52.

Press ENTER to confirm.

Select 1.

Press ENTER to confirm.

 **For user storage operations, see function U1.**

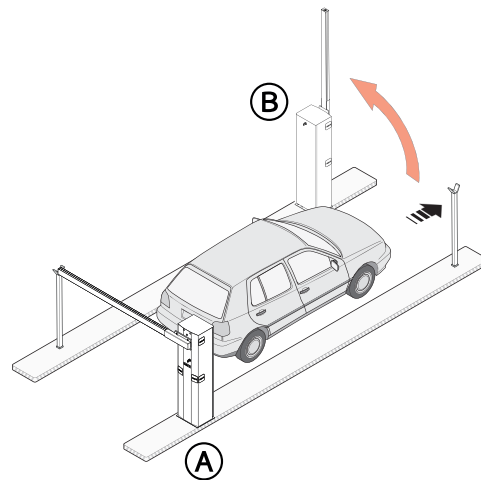
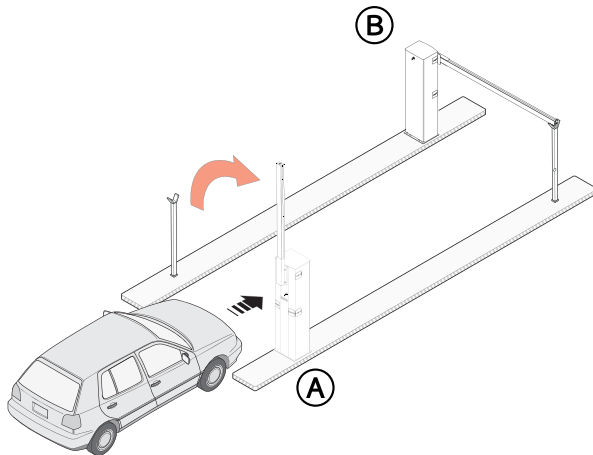
Operating modes

 The MASTER barrier is marked A; the SLAVE barrier is marked B.

1 ONLY OPEN command (2-3) on barrier A

 Barrier B opens automatically when barrier A closes.

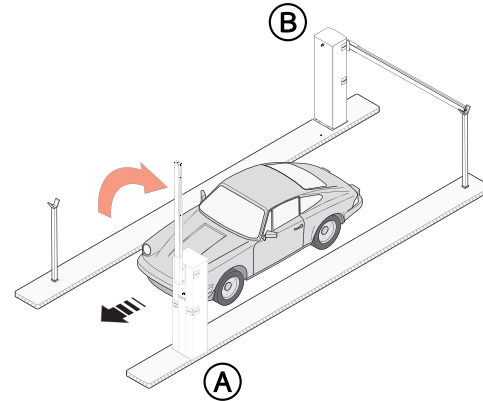
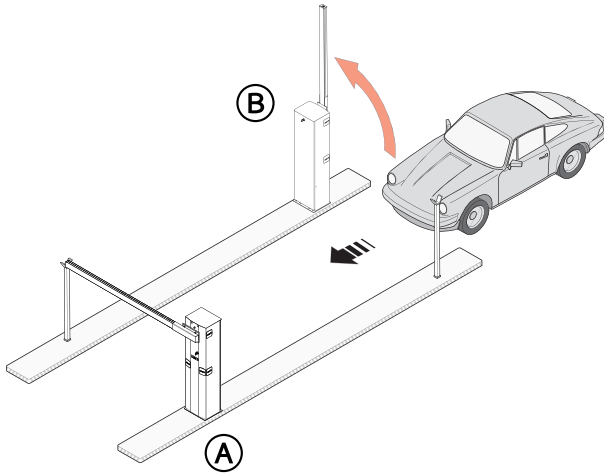
1



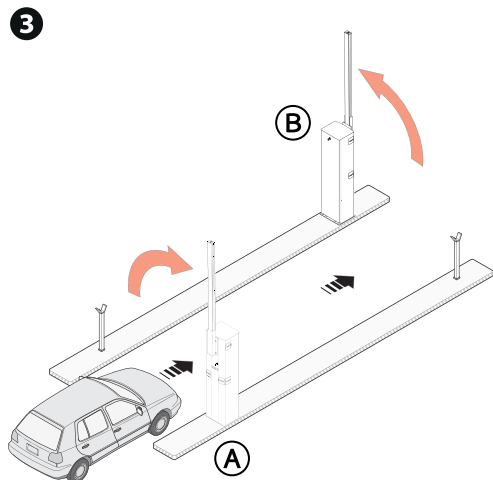
2 PARTIAL/PEDESTRIAN OPENING command (2-3P) on barrier B

 Barrier A opens automatically when barrier B closes.

2




3 STEP-BY-STEP command (2-7) on barrier A or B for emergency opening



DISPLAY WARNINGS KEY

C<n>

Wired safety device active

 The <n> value is associated with the selected parameter for the functions [F2 - CX input] [F3 - CY input].

ERROR MESSAGES

E4

Service test failure error

E6

Maximum number of detected obstructions

E8

Both limit switches are open

E15

Incompatible transmitter error



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