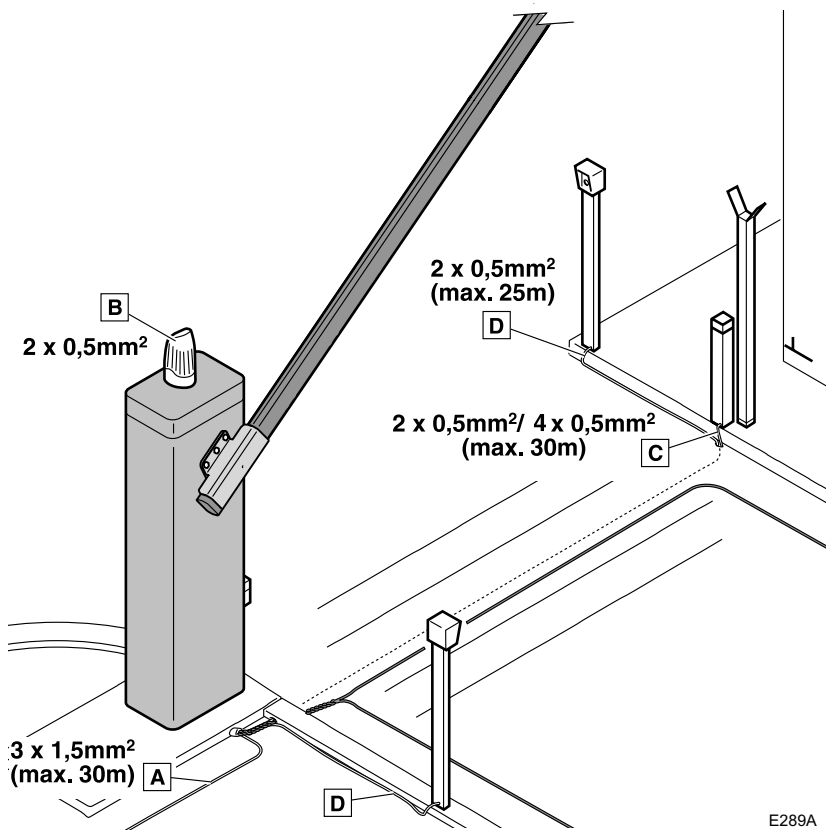


This quick guide is a summary of the complete installation manual. The manual contains safety warnings and other explanations which must be taken into account. The most recent version of this guide and the installation manual are available at the "Downloads" section on Erreka's website:
<http://www.erreka-automation.com>

WARNING

The options and functions described in this guide apply for the firmware version indicated on the circuit. The firmware, as part of a process of continuous improvement, is subject to new functionalities or upgrades being included as a result of new versions which are not necessarily compatible with previous ones. For this reason, some options or functions may differ or be unavailable if your firmware is older than shown in this guide.

Elements of the complete installation



The drawing shows a right-side barrier (ULS6ECD, ULS45ECD, ULS3ECD)

Electrical wiring

- A: Main power supply
3x1,5mm² (max. 30m)
- B: Flashing light
2x0,5mm²
- C: Photocells (Tx / Rx)
2x0,5mm² / 4x0,5mm² (max. 30m)
- D: Key switch
2x0,5mm² (max. 25m)

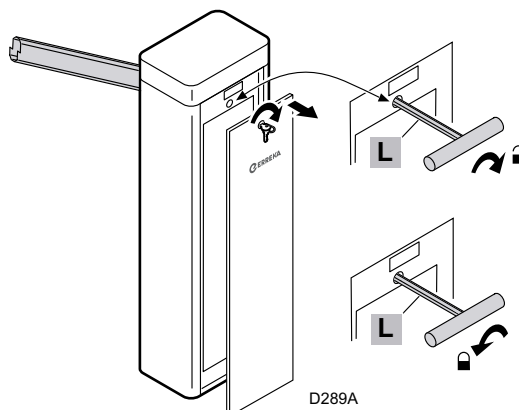
E289A

V1.18b or later

Unlocking

⚠ Unlocking should be carried out with caution. The internal spring may cause jolting if the barrier is not balanced or the arm is not mounted.

ONLY UNLOCK THE BARRIER IF THE ARM IS INSTALLED.



D289A

Unlocking (manual operation):

turn the key (L) clockwise until it stops.

Locking (motorised operation):

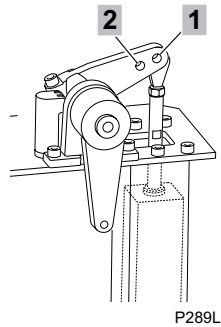
turn the key (L) anti-clockwise until locked.

Choosing the spring and anchoring orifice

The balancing spring and its anchoring orifice depend on the length (L) of the barrier arm:

ULS3EC Barriers:

- Arm $2.0\text{m} < L < 3.0\text{m}$:
spring D= 4.5mm, orifice 1
- Arm $1.5\text{m} < L < 2.0\text{m}$:
spring D= 4.5mm: orifice 2



ULS45EC Barriers:

- Arm $2.5\text{m} < L < 4.0\text{m}$:
spring D= 5.5mm, orifice 2
- Arm $4.0\text{m} < L < 4.5\text{m}$:
spring D= 6.5mm: orifice 2

ULS6EC Barriers:

- Arm $4.5\text{m} < L < 6.0\text{m}$:
2 springs D = 6.5 mm, orifice 2

☞ AUL03/AUL04/AUL08 rubber band and/or AUL05/AUL06/AUL09 LED strip can be used indistinctly.

☞ Using other accessories may influence the choice of spring and orifice.

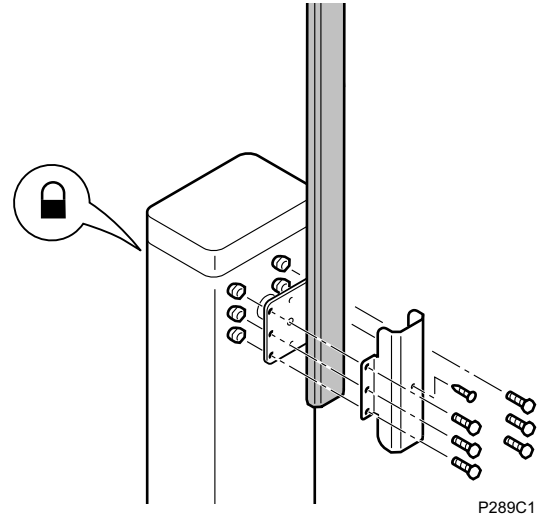
☞ **If the spring or anchoring orifice needs to be changed, do it before installing the barrier and the arm.**

Arm assembly

☞ Choose the barrier in accordance with the assembly side and length of the arm:

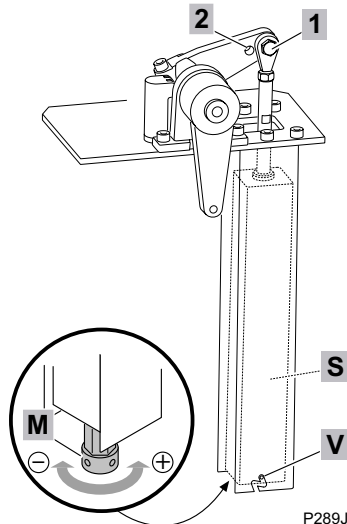
- ULS6ECD: right, 100x45mm, 6m;
- ULS45ECD: right, 100x45mm, 4.5m;
- ULS3ECD: right, 80x45mm, 3m;
- ULS6ECI: left, 100x45mm, 6m;
- ULS45ECI: left, 100x45mm, 4.5m;
- ULS3ECI: left, 80x45mm, 3m.

☞ Lock the operator and mount the arm.



Changing the anchoring orifice

- 1 Place the barrier arm in upright position.
- 2 Turn the tensioning handle (M) anti-clockwise until the spring is tensionless.
- 3 Release the anchor bolt (1) and mount it in the other orifice.
- 4 Balance the barrier as described below.



Changing the spring

- 1 Place the arm in upright position.
- 2 Turn the tensioning handle (M) anti-clockwise until the spring is tensionless.
- 3 Release the anchor bolt (1).
- 4 Take down the spring box (S), releasing the pivot (V).
- 5 Completely unscrew the tensioning handle, remove the spring and position the new spring in place. Finally, screw the tensioning handle.
- 6 Mount the spring box (S), inserting the pivot (V).
- 7 Secure the anchor bolt in the appropriate orifice, (1) or (2).
- 8 Balance the barrier as described below.

☞ **If the spring or anchoring orifice needs to be changed, do it before installing the barrier and the arm.**

☞ The illustrations and explanations refer to ULS3C, ULS45EC barriers, which have a single balancing spring. The procedure for ULS6EC barriers is similar, bearing in mind that the spring and its adjacent elements are duplicated.

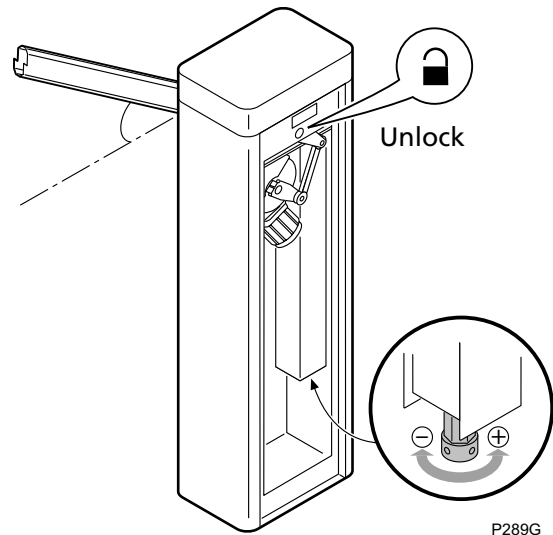
Balancing the barrier

THE BARRIER MUST BE BALANCED FOR PROPER OPERATION.

- In order to complete the balancing, connect the power supply and check operation: the barrier should move smoothly, without jolts or jerks.
- If it does not move smoothly, without any jolts or jerks, reduce the tension of the spring using the tensioning handle.
The barrier may not be balanced when moving the handle; if this is the case, change the anchoring orifice (from 1 to 2) or the balancing spring. Repeat these steps until the barrier is balanced and moves smoothly.

ULS6EC barriers have two springs and two knobs for tensioning.

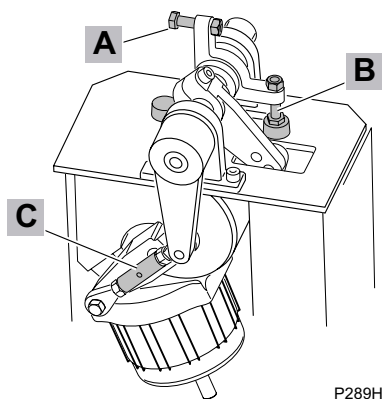
Balancing is done by acting equally on the two knobs, to ensure the tensioning of both springs is approximately the same.



P289G

- ✎ The tensioning handle is only accessible with the arm in upright position.

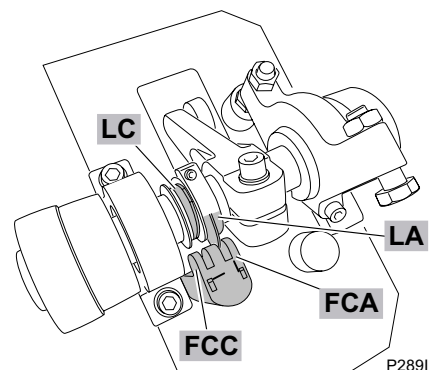
Stopper adjustment



P289H

- Unlock the operator and move the barrier by hand to check its position in the stoppers. If it is not correct, adjust the corresponding stopper, (A) or (B).
- Lock the operator and check operation. If necessary, adjust the rod (C).

Limit switch adjustment



P289I

Unlock the operator and move the barrier by hand to check the adjustment of the LA and LC cams which drive the FCA and FCC limit switches.

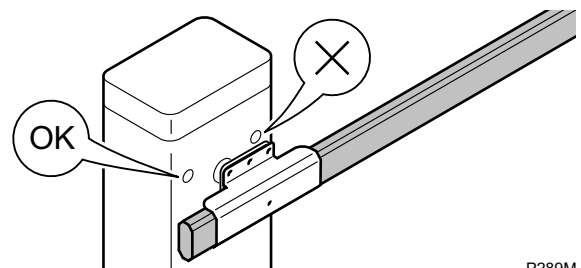
The limit switch has two LEDs which indicate whether it is enabled or not:

- The closing LED (FCC) is red
- The opening LED (FCA) is green

- ✎ **Travel will not be programmed correctly unless the cams are correctly adjusted.**

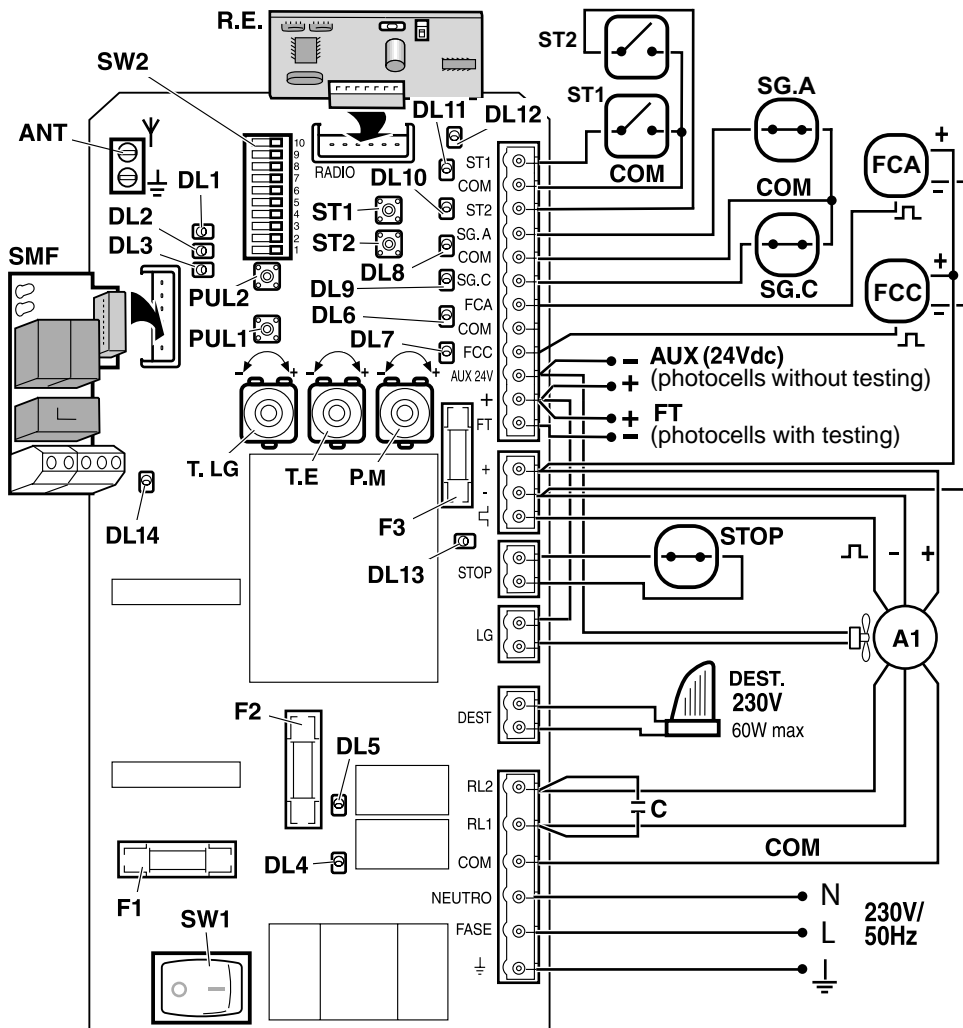
LED Strip

- ✎ If the LED strip is installed (AUL09 for 3 m Barriers; AUL05 for 4.5 m barriers; AUL06 for 6 m barriers), use the hole furthest from the arm to pass the cable inside the barrier.



P289M

General connections



- F1** Motor fuse (5x20):
230VAC: 2,5A
125VAC: 6,3A
- F2** Electronic fuse
(5x20; 230VAC: 500mA)
- F3** FT and AUX24V outputs fuse
(5x20; 315mA)

- DL1** Barrier open
- DL2** Radio code programming indicator / Receiving radio code
- DL3** Radio code or operation programming
- DL4** Opening relay enabled
- DL5** Closing relay enabled
- DL6** Opening limit switch contacts closed
- DL7** Closing limit switch contacts closed
- DL8** Opening safety device contacts closed
- DL9** Closing safety device contacts closed
- DL10** Pedestrian key command contacts closed
- DL11** Total key command contacts closed
- DL12** Radio key command
- DL13** Encoder signal

- DL13** Operator working: DL13 comes on intermittently, since the encoder sends the signal in the form of pulses.
- DL13** Operator shutdown: DL13 may be on or off, indistinctly, depending on the position of the encoder (high pulse or low pulse).

- DL14** Power supply

P289Z

Photocell testing

Opening photocells (SG.A): place DIP6 in ON to enable testing.

Closing photocells (SG.C): place DIP9 in ON to enable testing.

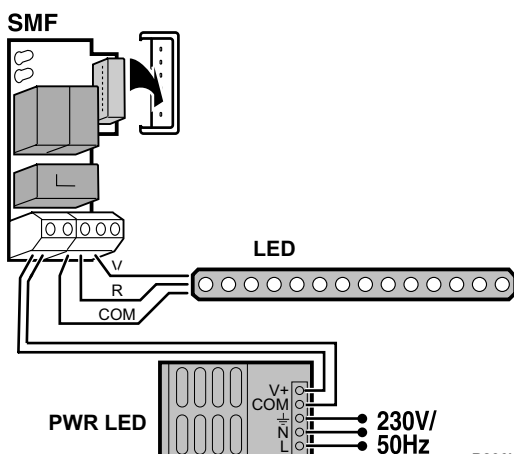
STOP pushbutton enabled (emergency stop): DL1 and DL3 flash simultaneously every 0.5 seconds.

Opening or closing photocell testing error: DL1 and DL3 flash simultaneously every 2 seconds.

Encoder

For the correct operation of the encoder, ensure DIP7 is in ON.

LED strip connections



The LED strip is an optional accessory which can be bought separately. It includes: a traffic light card (SMF), a power source (PWR LED), an LED strip (LED) and the cables and glands necessary.

There are two references:

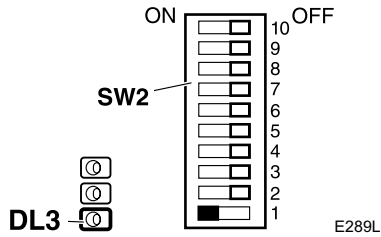
- AUL09: for 3m barriers
- AUL05: for 4.5m barriers.
- AUL06: for 6m barriers.

The "Transparent rubber" accessory MUST be installed in order to install the LED strip.

This rubber is supplied separately, in lengths of 6m (AUL03), 4.5m (AUL04) and 3m (AUL08).

P289Y

SW2 functions during programming (DIP1 = ON)

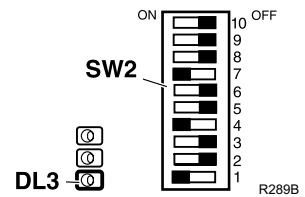
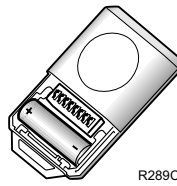
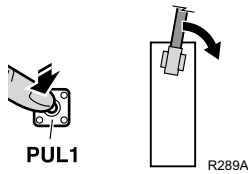


- DIP1=ON: programming enabled (DL3 lights up)
- DIP1=ON and DIP2=ON: open/close programming
- DIP1=ON and DIP4=ON: radio code programming

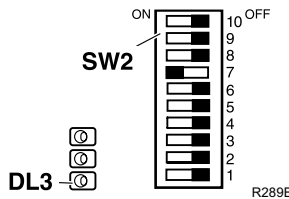
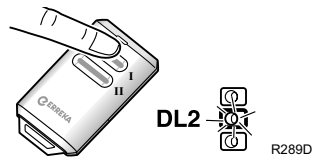
Radio code programming (only with RSD receiver)

☞ If a receiver other than RSD is used, see the corresponding instructions.

- 1 Connect the electrical power supply and close the barrier by keeping PUL1 pressed down.
- 2 Select the code in the transmitter.
- 3 Place the DIPs as shown in the figure (DIP1=ON, DIP4=ON). DL3 lights up to show programming mode enabled.

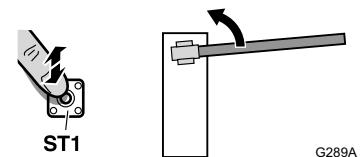
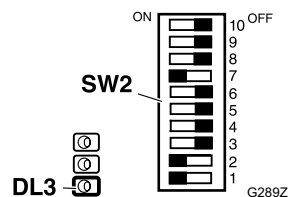
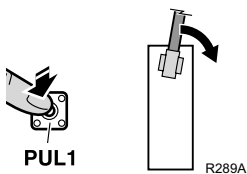


- 4 Press the button for the required channel. DL2 flashes to show programming is complete.
- 5 Place DIP1 and DIP4 in OFF. DL3 remains off.
- 6 Disconnect and reconnect the electrical power supply.

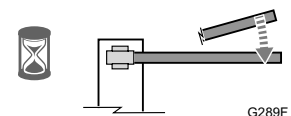
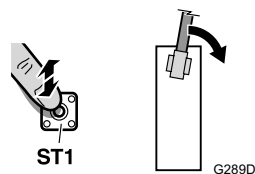
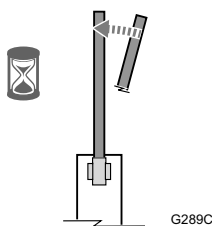


Open/close programming

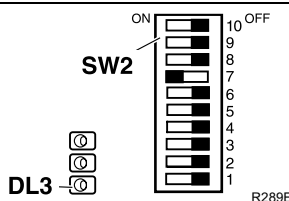
- 1 Connect the electrical power supply and close the barrier by keeping PUL1 pressed down.
- 2 Place the DIPs as shown in the figure (DIP2=ON, DIP1=ON). DL3 lights up to show programming mode enabled.
- 3 Press ST1 to start opening.



- 4 Wait for it to come to a stop at the end of its travel.
- 5 Press ST1 to start closing.
- 6 Wait for it to come to a stop at the end of its travel.



- 7 Place DIP1 and DIP2 in OFF. DL3 remains off.

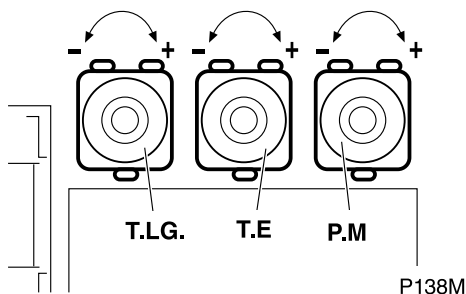


The barrier is supplied with open/close settings programmed at factory.

Function and mode selection using SW2 (DIP1 = OFF)

DIP	Modes and functions	Option	Effect
DIP1		OFF	
DIP2	Advance warning	ON	the flashing light comes on and the operation begins after a 3 second warning
		OFF	the flashing light comes on and the operation begins immediately
DIP3	Key commands using ST1 and ST2	ON	ST1: opening command; ST2: closing command
		OFF	ST1: opening and closing commands; ST2: no function
DIP4	Automatic or step-by-step mode	ON	automatic mode (the barrier closes automatically once standby time has passed, adjusted using T.E.)
		OFF	step-by-step mode (the barrier only closes when receiving the key command)
DIP5	Automatic mode optional (only if DIP4 = ON)	ON	during standby, the barrier obeys the key commands (can be closed before standby time finishes)
		OFF	the barrier cannot be closed until standby time finishes; key commands will cause standby time to restart
DIP6	Opening photocell testing	ON	testing enabled
		OFF	testing disabled
DIP7	Encoder	ON	encoder enabled
		OFF	encoder disabled
DIP8	Interlocking mode (with FT1)	ON	interlocking mode enabled: the barrier closes if SG.C is enabled during standby time (in automatic mode)
		OFF	interlocking mode disabled
DIP9	Closing photocell testing	ON	testing enabled
		OFF	testing disabled
DIP10	No function		always place in OFF

Potentiometer adjustment



T.L.G: fan operation time

Regulate the time the operator cooling fan is working.

- Minimum value: 3 seconds; maximum value: 90 seconds

T.E: barrier open standby time

If automatic or optional automatic operation mode has been programmed, adjust T.E. to set standby time with the barrier open (before starting to close automatically).

- Minimum value: 0 seconds; maximum value: 90 seconds

P.M: motor torque

Use P.M. to adjust the maximum motor power value.

- ▲ **Torque adjustment, respecting the maximum closing forces set out in Standard EN12453:2000. Make the measurements as described in Standard EN 12445:2000.**