

EvoDrive+

INSTALLATION MANUAL



Parts 1 & 2 of the Installation, User, and Maintenance Manual
This section must be given to the installation technician

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EvoDrive+ AUTOMATIC DOOR OPERATOR FOR INTERIOR SLIDING DOOR

PART 1

Prologue

The first part of the manual explains the considerations that must be taken into account before installing and commissioning the **EvoDrive+** automatic door operator.



It is very important to read this manual in full, and to observe and follow all instructions as described herein.

1. INTRODUCTION

Dear client,

We thank you for your confidence in Linear Motor Applications SL and for acquiring this innovative **EvoDrive+** automatic operator for interior sliding doors.

At Linear Motor Applications SL we offer products designed and developed following high demanding production standards, to ensure we deliver a product with the best quality, as well as a superb user-friendly experience and easy installation.

This manual includes important and necessary information for the correct and safe installation, use, and maintenance of this automatic door operator. Please, read these instructions in full before starting the installation and commissioning.

Yours sincerely,

Mr. Oriol Guilera
CEO



2. GENERAL NORMS

This manual is applicable to the Installation, User and Maintenance of the **EvoDrive+** automatic operator for sliding doors, which is designed for being used indoors. It can not be installed on evacuation routes, exteriors of buildings, or as emergency exit doors.

The section in this manual related to installation and commissioning is limited only and exclusively for use by qualified skilled technicians.

2.1. WARNINGS

Before installing, using, or performing any maintenance task on the **EvoDrive+** operator, it is compulsory to read and understand the content of this manual in full.

This manual is an integral part of the automatic door operator and will have to be kept by the client or user, for future reference or consultation by the installation or after-sales service technician.

The **EvoDrive+** automatic door operator is designed only and exclusively for professionals. It is prohibited the installation and commissioning of this operator by DIY individuals.

In order to prevent damage to people, animals, or other objects, the transportation, manipulation, assembly, commissioning and maintenance must be carried out only and exclusively by qualified technicians, who must wear the appropriate individual protection equipment (IPE) and use the suitable tools for each one of the described functions.

Once finished the installation of the **EvoDrive+** operator with its sliding leaf and related accessories, the complete assembly will form a unique piece of machinery, as described in the Directive 2006/42/EC on Machinery.

The complete risk assessment to determine the health and safety requirements, shall only be considered valid if:

- The procedures described in the installation manual have been followed and respected in full.
- The type of installation corresponds to that described in the manual.
- Any procedure of installation or measure adopted during the handling, installation, operation, maintenance, and disposal of this machine, not described or provided in this manual, will be considered as not included in the mentioned risk assessment, and therefore Linear Motor Applications S.L. declines all responsibility, being the installation or maintenance technician the full and unique responsible and liable for the compliance of the essential requirements of safety and health protection.

Due to our policy of continuous development and improvement of the products, Linear Motor Applications SL reserves the right to modify or develop the product described herein, without previous advice. Therefore, the drawings, descriptions, and data contained in this manual must not be considered as a contractual obligation, but only indicative.

All data contained in this document has been prepared and controlled rigorously, however, Linear Motor Applications SL declines all responsibility for any eventual impreciseness that may have been caused by errors or omissions during the transcription of the same.

2.2. GENERAL NORMS

The automatic **EvoDrive+** operator has been designed and developed:

- Only and exclusively for the automation of interior sliding doors, and therefore it cannot be used for purposes other than those described in this manual, in order to ensure the safety and performance of the product, under all circumstances.
- Following all points described in Directive EN16005 "Power operated pedestrian doorsets - Safety in use - Requirements and test methods" and Directive EN16361 "Power-operated pedestrian doors –Product standard, performance characteristics", paying special attention to the articles referred to automatic sliding doors for internal use.
- For a correct performance, the maximum **weight per leaf is limited to 80 Kg.**

Linear Motor Applications SL declines all civil or criminal liabilities for injuries caused to persons, animals, and/or objects as a result of:

- Not proceeding following the indications contained in the installation, user, and maintenance manuals.
- A non-authorized manipulation of the product.
- The replacement of parts and/or pieces of the operator, as well as the use of accessories that are not original, or which have not been homologated by the manufacturer.
- Removing, deleting, or altering the stickers, labels, and/or other indications placed in origin, on the automatic door operator or its accessories.
- Standing within the course of the door leaf of the automatic door, or performing tasks near possible parts in motion.

2.3. RECOMMENDATIONS

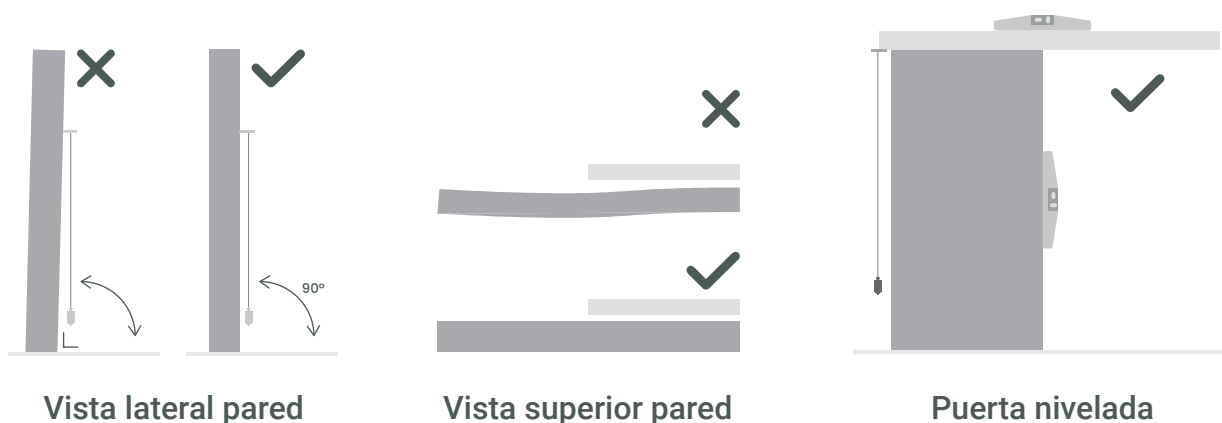
All **EvoDrive+** automatic operators are delivered with a serial number displayed on an identification sticker. For a proper identification of the product in case of claims or inquiries, the data displayed on the sticker must be communicated to the concerned person.

Before the installation starts, please check that the product described on the sticker attached to the packaging corresponds to the material ordered, and with that described in the delivery note. Verify that the product has not suffered any damage during transport. In case of damage or discrepancy, please immediately inform the manufacturer.

To prevent possible water condensation inside the packaging during the storage period, we recommend to keep the product inside its original packaging, to not expose it outdoors, to keep it away of sunlight, and to always store it in a dry environment.

2.4. INSTALLATION REQUIREMENTS

- The power cable that connects with the cable supplied must have a minimum section of 1,5 mm².
- For a good performance, the operator must be levelled in all 3 axis, and must be firmly fixed to a solid vertical surface.



2.5. LIST OF TOOLS REQUIRED FOR INSTALLATION



Level



Wrench (n°10 and 13)



Electric Drill/Screwdriver



Hex (Allen) Key (n°4)



Cross-head screwdriver



Flat-head screwdriver

2.6. WARRANTY

The manufacturer's warranty for the **EvoDrive+** automatic operator will be VOID if:

- The installation, use and/or maintenance of the product was not carried out following the norms, instructions and indications described in this manual.
- Using non-original components, accessories, parts, pieces, or electronics systems, being these new or for replacement purpose, when these parts haven't been supplied or homologated by the supplier.

2.7. DISPOSAL AND RECYCLING

When disposing the packaging materials, it is recommended to check the specific norms and regulations in force at the installation site, before proceeding to dispose them.

Packaging materials are similar to other urban solid waste materials, and therefore they can be easily disposed after doing a selective classification and recycling.

When the product needs to be disposed, as this is composed of different materials, we recommend:

- Materials such as aluminium, plastic, steel, electrical cables, etc... are solid waste materials, which need to be carefully classified for a proper recycling in authorized recycling centres.
- Other components such as the plates of electronic circuits, capacitors, batteries, magnets, etc... may contain contaminating materials, and as such, they must be carefully removed and delivered to companies specialized in their evacuation, classification and disposal.



Do not throw away the packaging or product materials anywhere.
Recycle!

PART 2

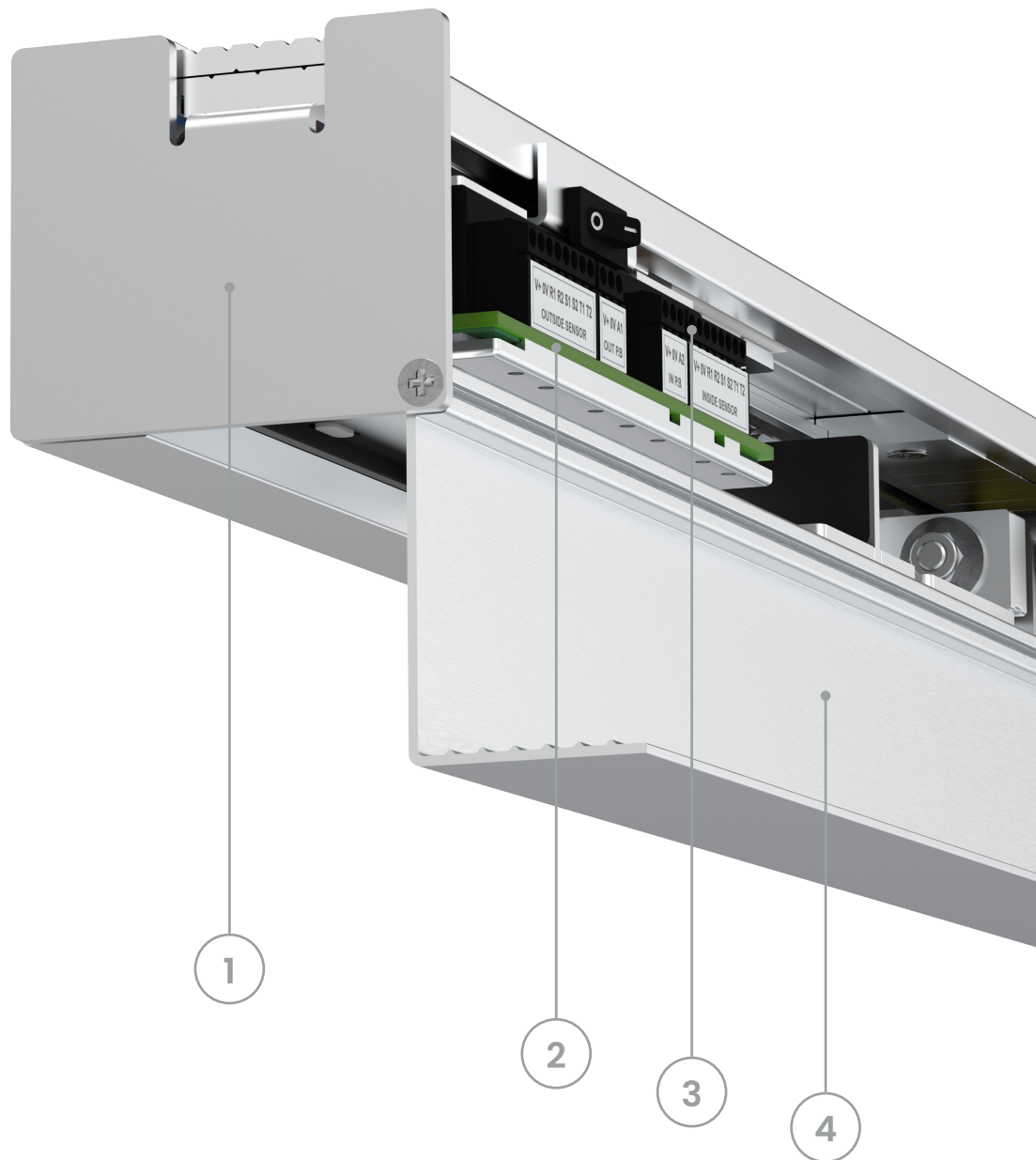
Installation

The second part of the manual explains the steps you must follow to install and commission the **EvoDrive+** automatic door operator

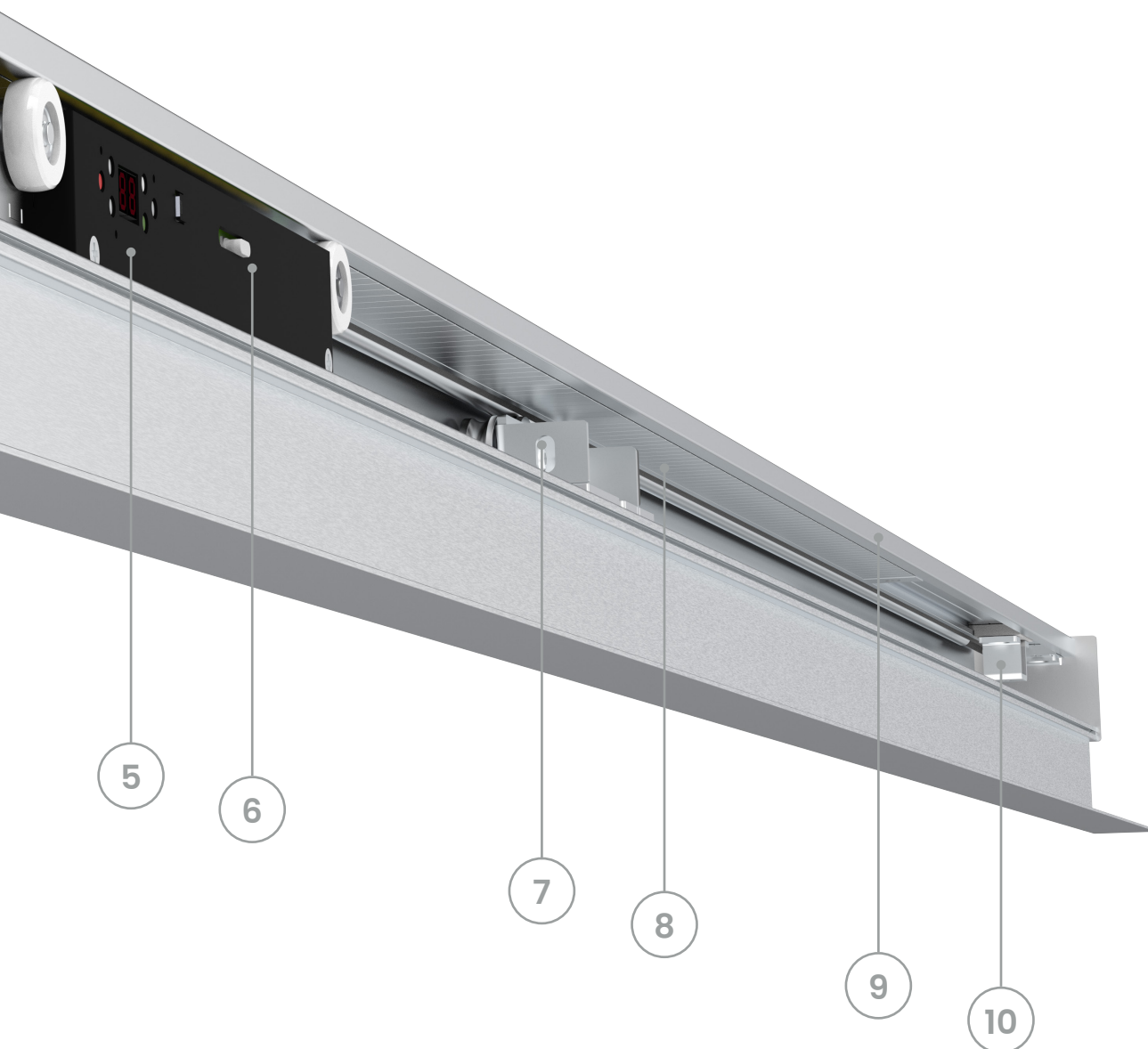


Is very important to read it carefully!

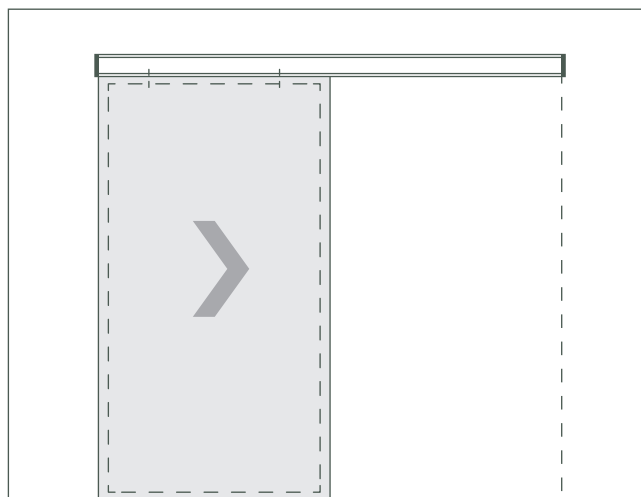
1. EVODRIVE+ COMPONENT OVERVIEW



- 01. Side Covers
- 02. Power Supply Circuit
- 03. I/O Module - Master
- 04. Aluminium Cover Profile
- 05. Linear Motor Type LSMPM
- 06. Motor Driver
- 07. Leaf Trolleys
- 08. Permanent Neodymium Magnets
- 09. Aluminium Main Profile
- 10. End Stops

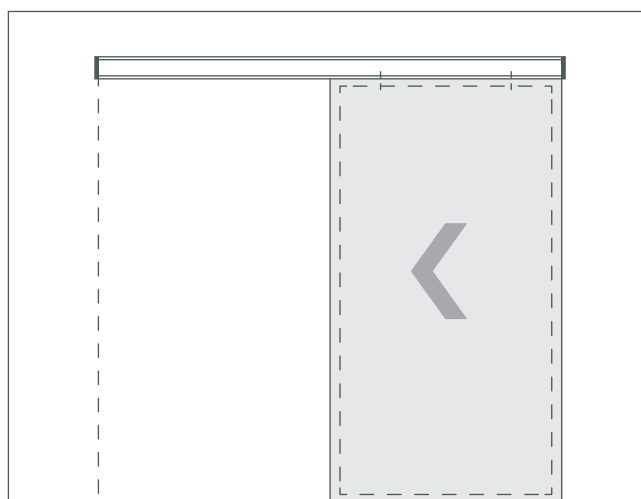


2. VERIFY THE OPENING DIRECTION AND THE OPERATOR LENGTH



RIGHT SIDE OPENING

(From the operator side)

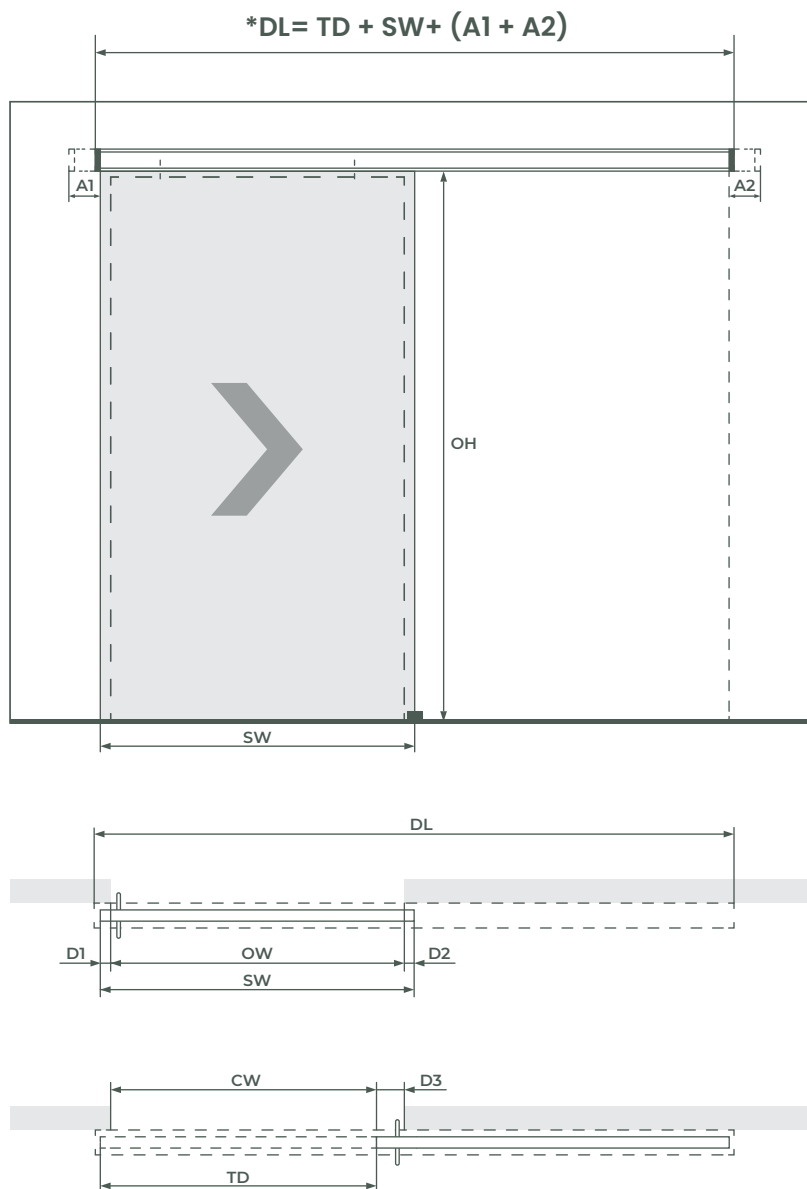


LEFT SIDE OPENING

(From the operator side)

3. MOUNT THE OPERATOR TO THE WALL

3.1. SINGLE LEAF DOOR: MEASURE THE OPENING WIDTH AND HEIGHT



LEGEND

DL = Drive Length

OH = Opening Height

OW = Opening Width

COW = Clear Opening Width

SW = Width of Sliding Leaf

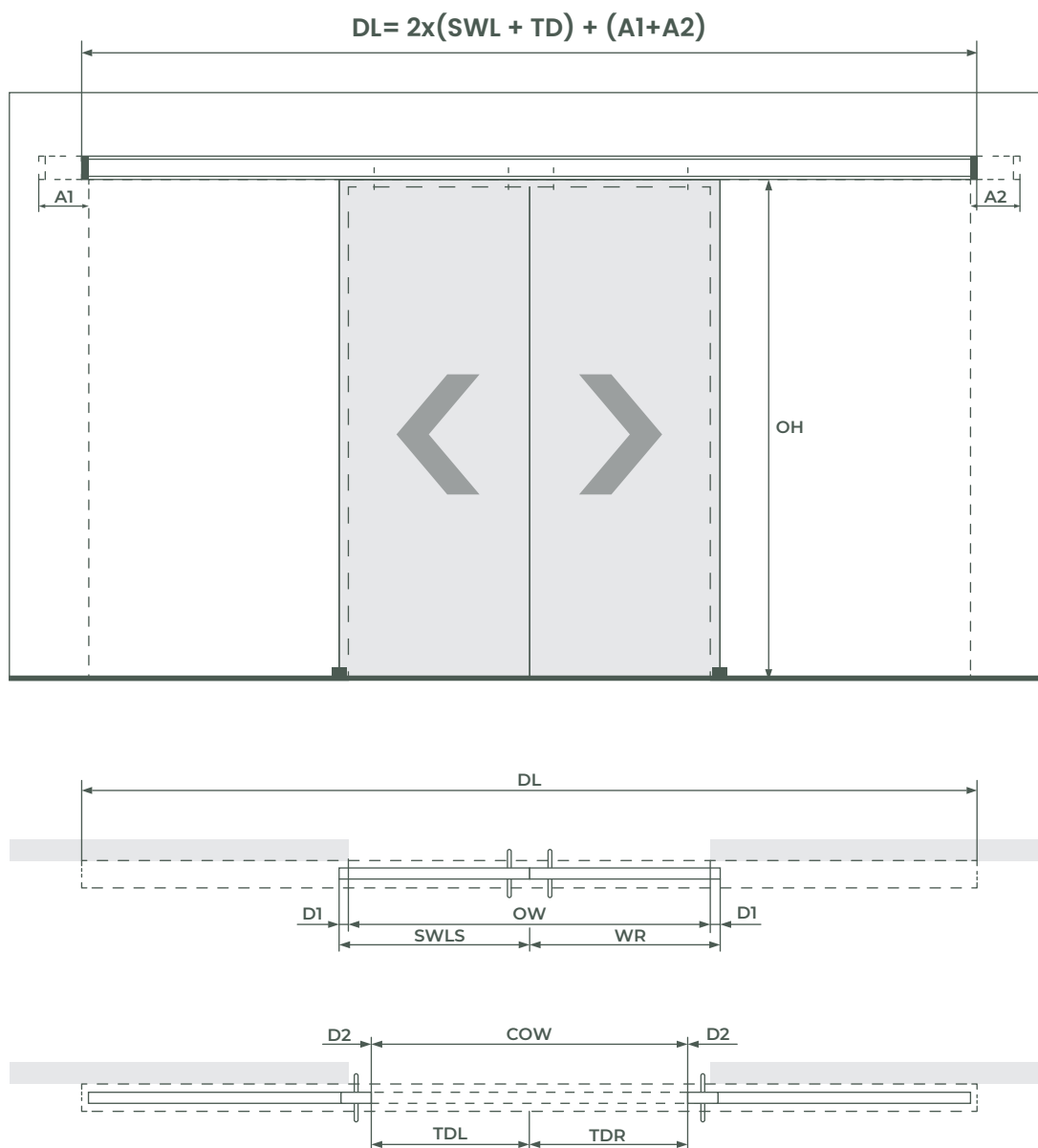
TD = Travelling Distance

D1/D2 = Overlap

D3 = Door Handle Distance

A1/A2 = Header Extension

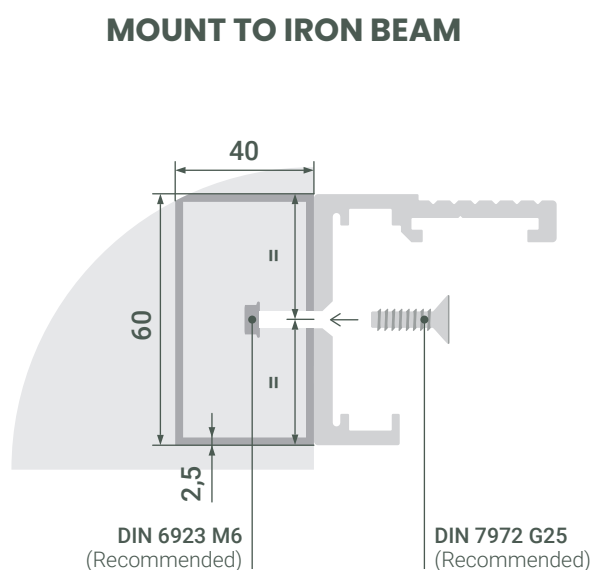
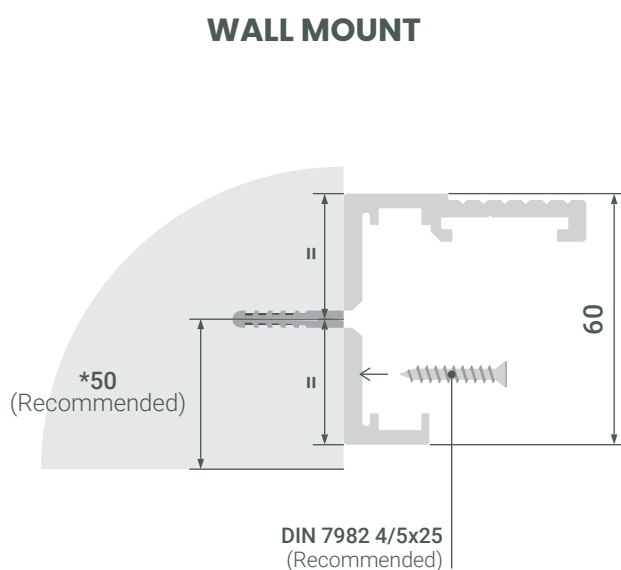
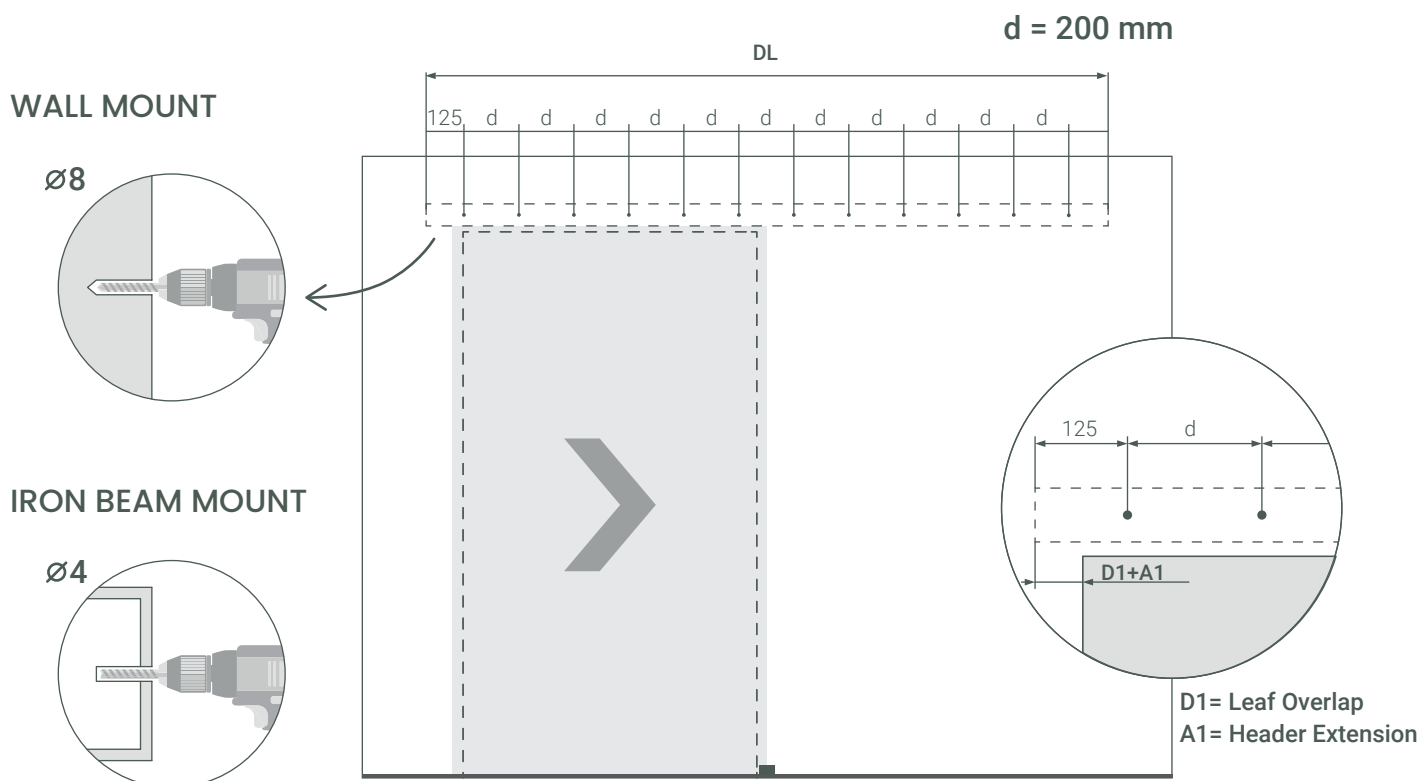
3.2. DOUBLE LEAF DOOR: MEASURE THE OPENING WIDTH AND HEIGHT



LEGEND

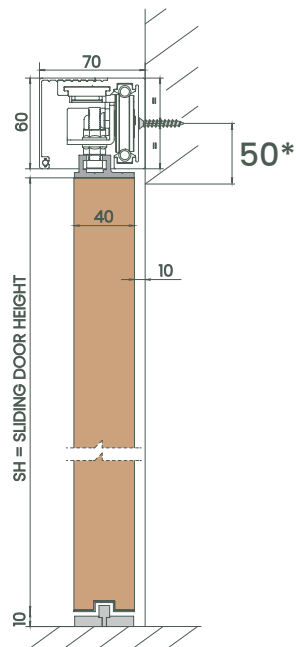
- DL** = Drive Length
- OH** = Opening Height
- OW** = Opening Width
- COW** = Clear Opening Width
- SWL / SWR** = Width of Left Sliding Leaf / Right Sliding Leaf
- TDL / TDR** = Travelling Distance Left Sliding Leaf / Right Sliding Leaf
- D1** = Overlap
- D2** = Door Handle Distance
- A1** = Header Extension

3.3. PREPARATIONS BEFORE MOUNTING

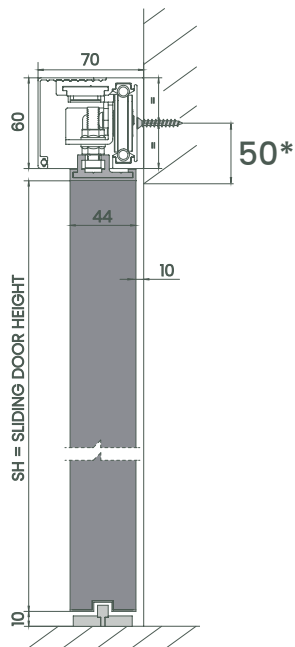


3.4. TYPES OF LEAF ADAPTERS

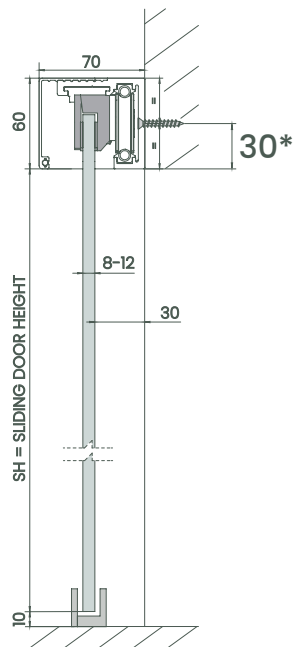
WOODEN LEAF (40 mm)



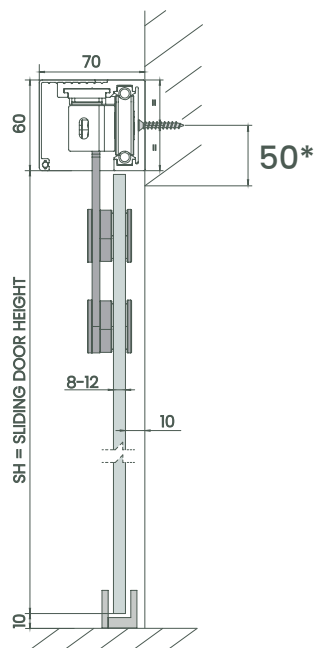
ALUMINIUM LEAF (44 mm)



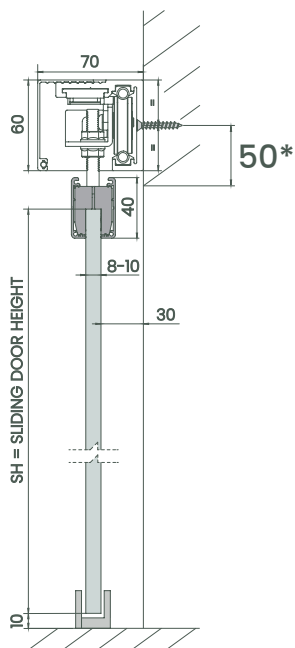
FULL GLASS (8-12 mm)



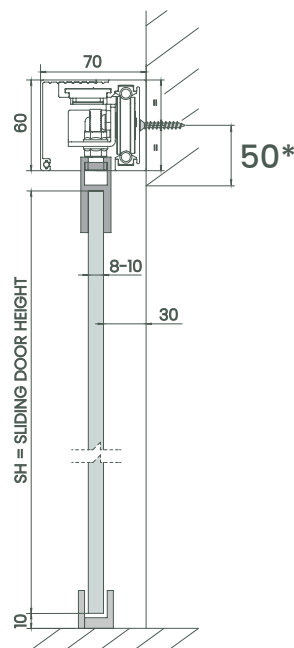
TWINS (8-12 mm)



SV-EASY (8-10 mm)



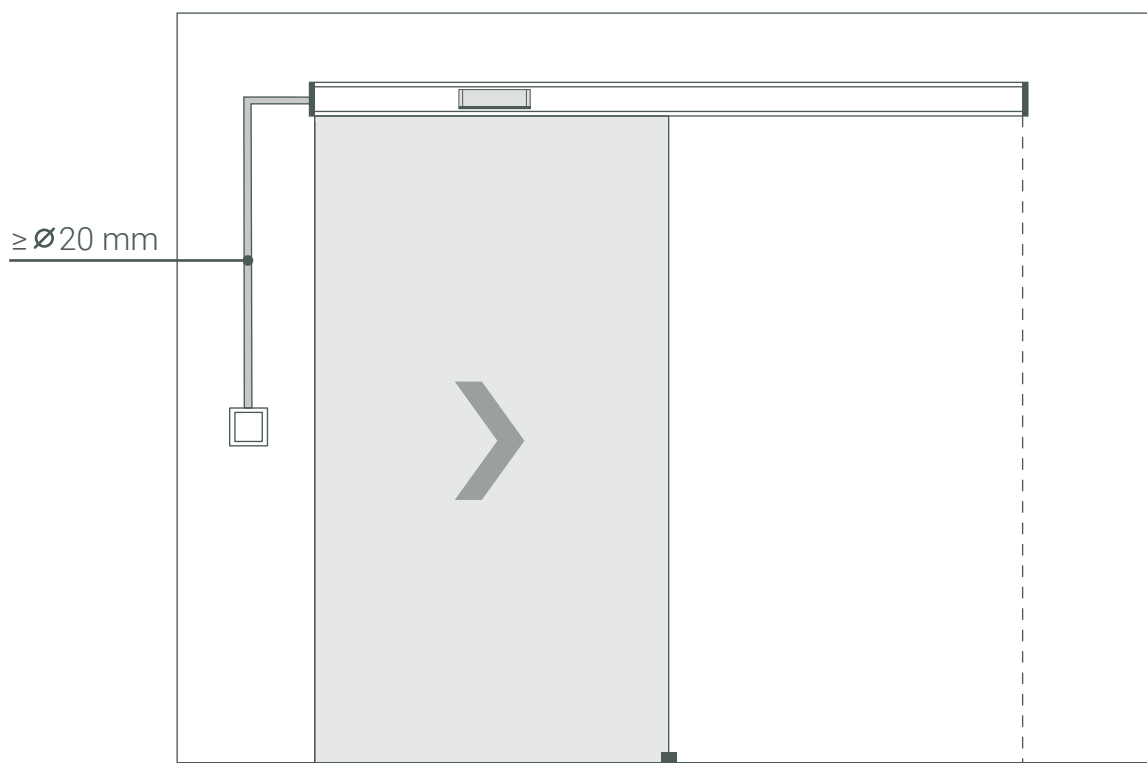
TOP RAIL (8-10 mm)



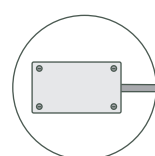
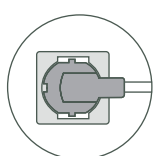
*Recommended height

3.5. LOCATION OF THE ACTIVATORS AND CONNECTION TO MAINS

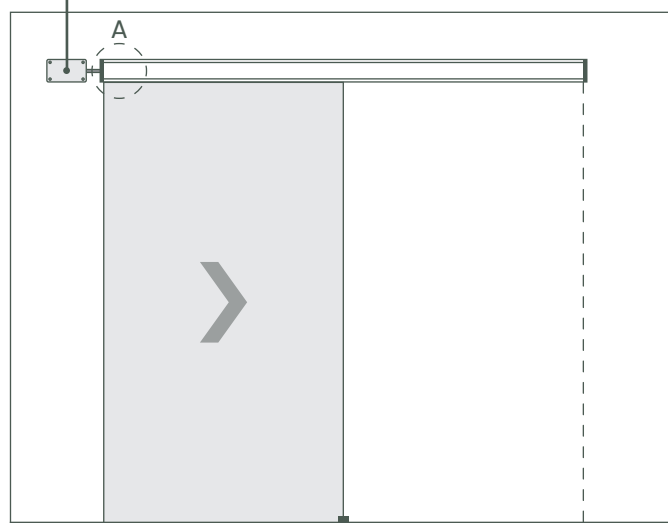
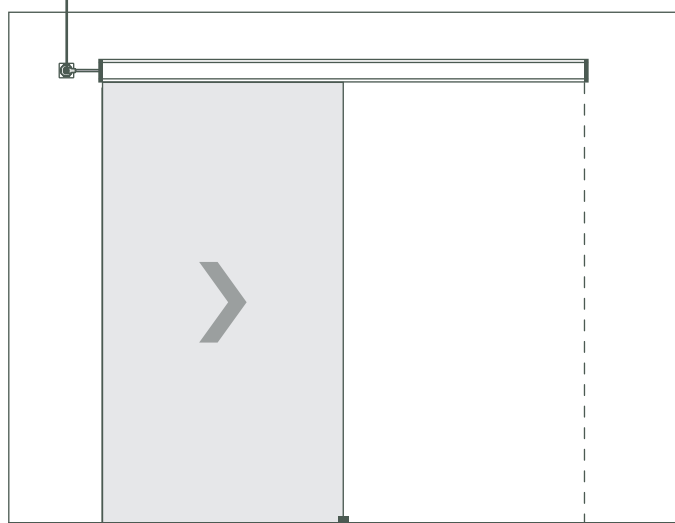
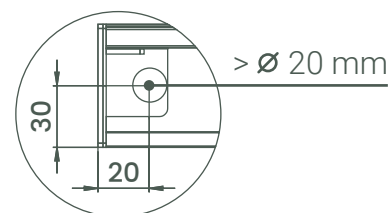
ACTIVATORS



CONNECTION TO MAINS

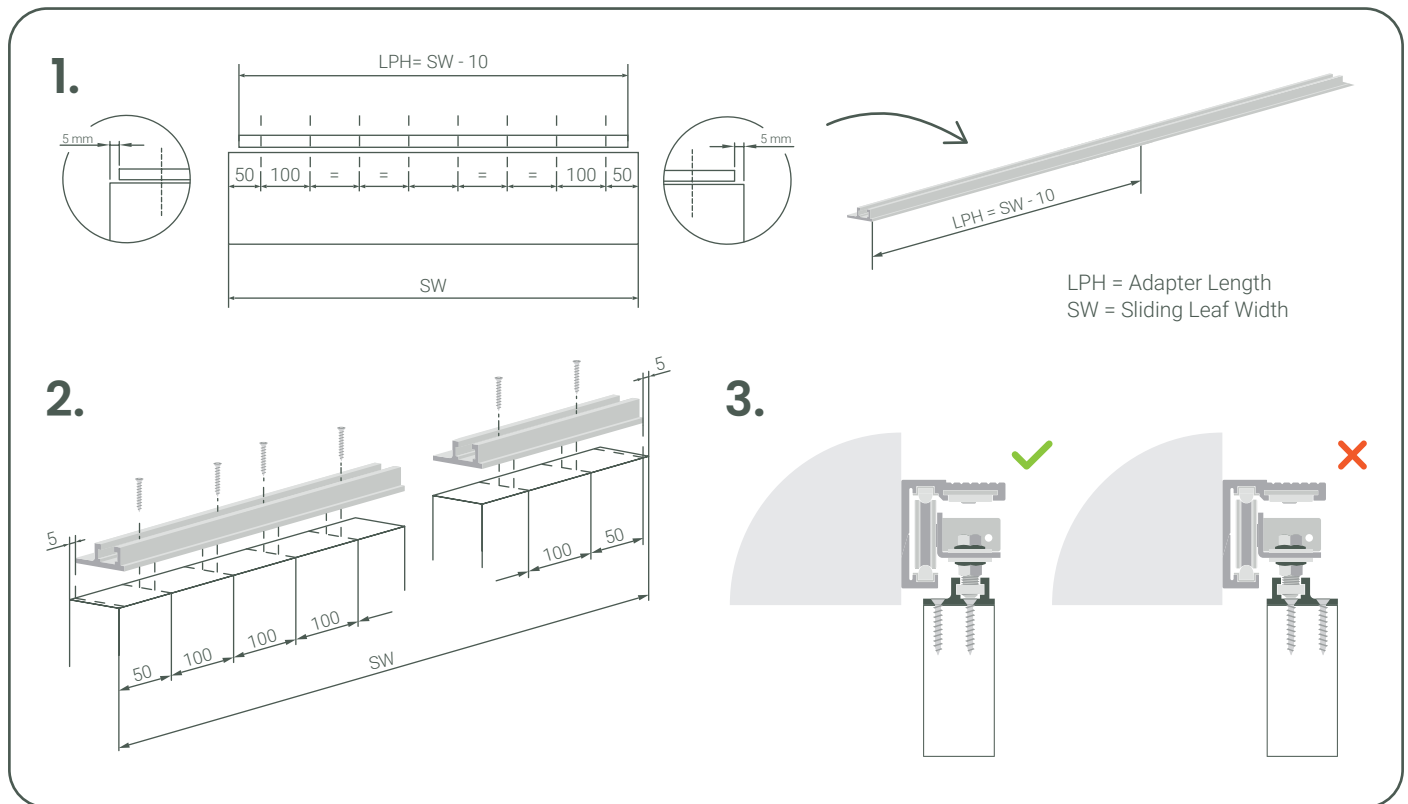


DETAIL A

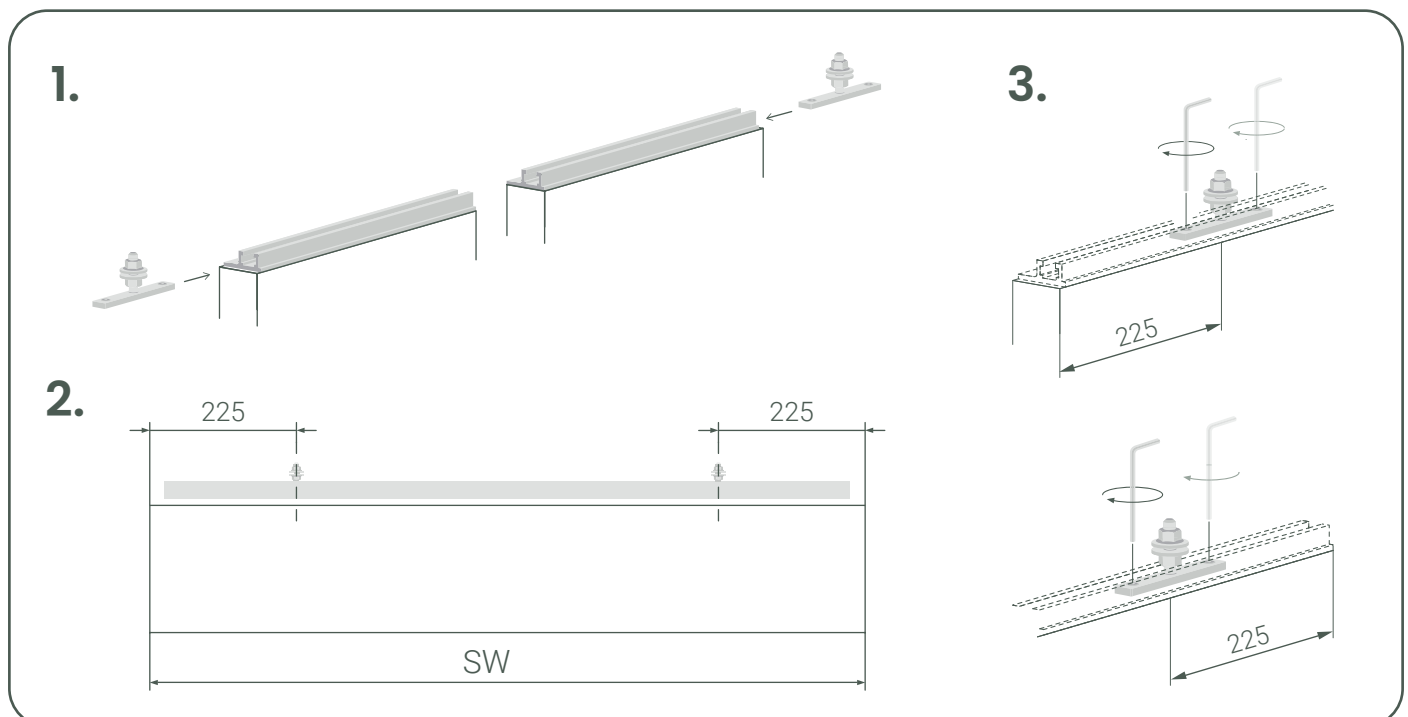


4. PUT UP THE DOOR LEAVES

4.1. TIMBER LEAF ADAPTER: MOUNT THE ALUMINIUM PROFILE ONTO THE WOOD PANEL

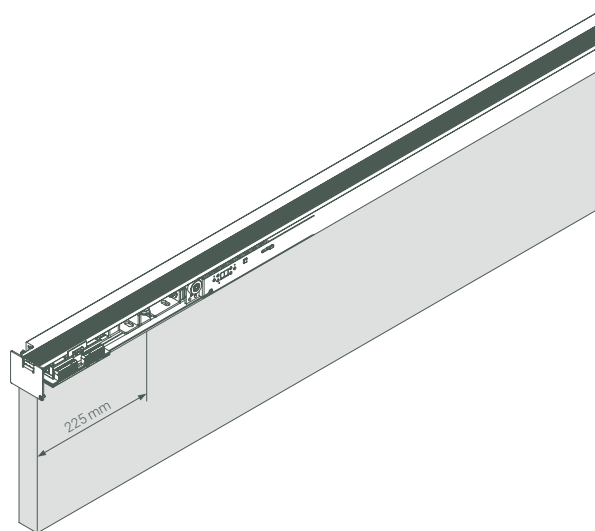
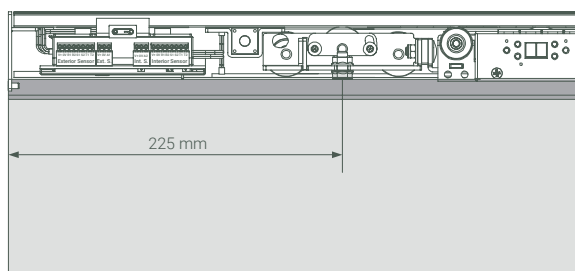


4.2. SLIDE THE LEAF CONNECTOR RODS INTO THE ADAPTER

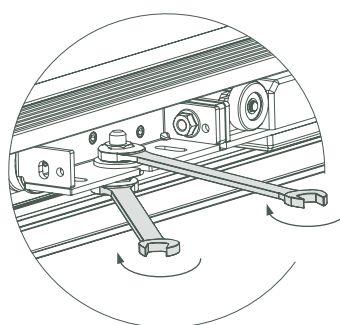
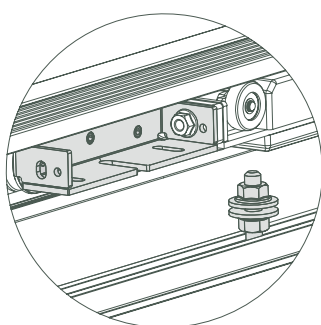


4.3. ATTACH THE LEAF CONNECTOR RODS TO THE TROLLEYS

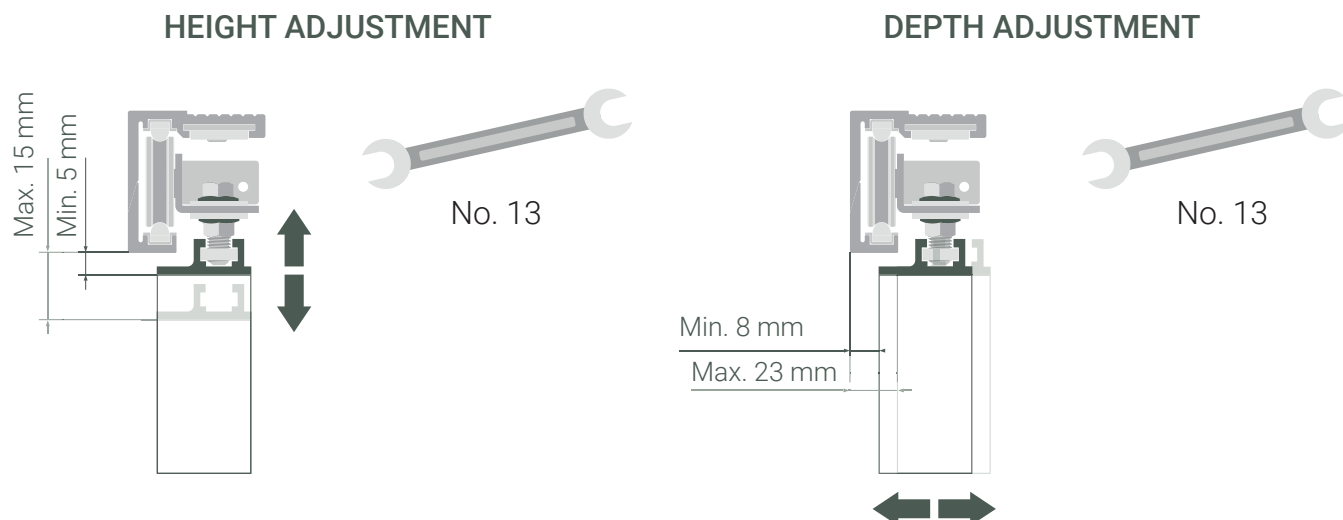
1. Identify the correct position of the leaf connectors



2. Attach the leaf connectors to the trolleys, and tighten



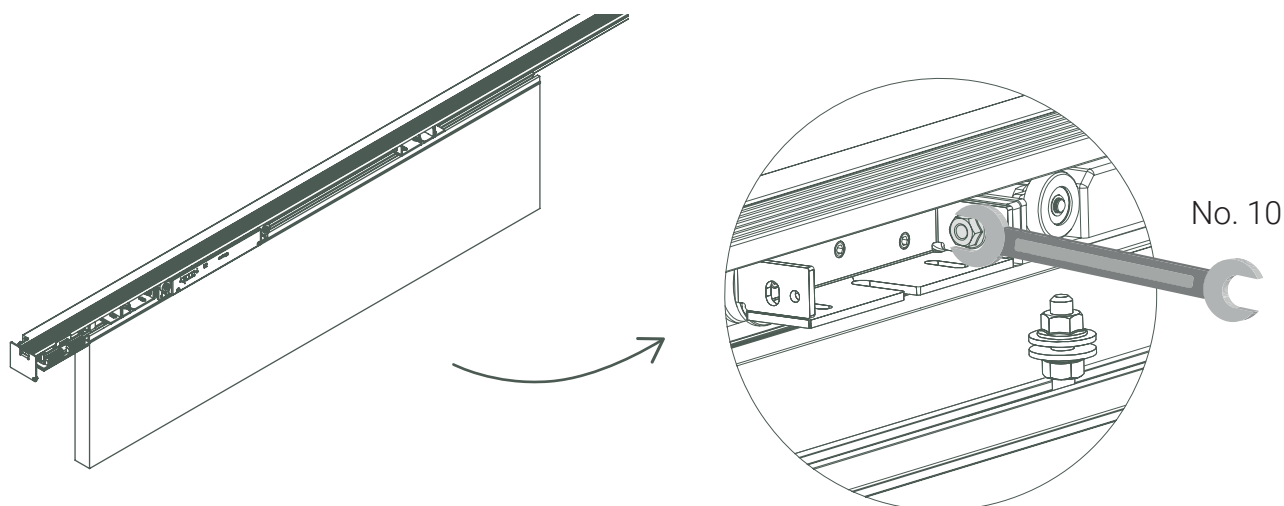
4.4. ADJUST THE DOOR LEAF



4.5. FINAL ADJUSTMENT

After the door leaf has been put in place and sliding on its floor guide, and right before running the self-adjustment, **loose the nut** that connects the front trolley with the motor, **slide the door** two times to full open and full close positions, **and tighten the nut again firmly**. Once tighten, make sure that the two front wheels of the motor slide smoothly on the top of the aluminium frame.

This simple but critical mechanical adjustment will balance the motor and ensure that the separation between the magnets and the motor is correct.

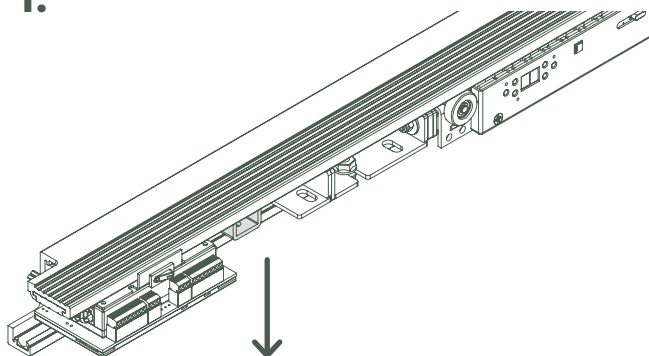


**WITHOUT THIS FINAL MECHANICAL ADJUSTMENT, THE OPERATOR
MAY NOT WORK PROPERLY**

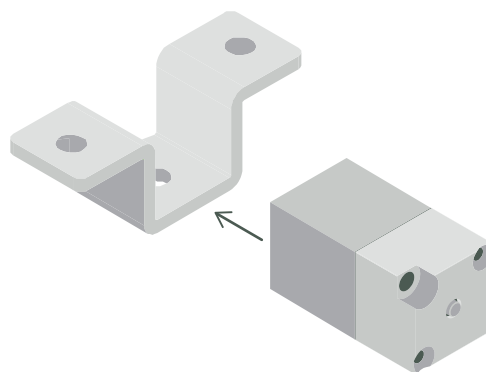
5. CONNECT THE ACCESSORIES

5.1. HOW TO INSTALL AND CONNECT THE AUTOMATIC LOCK (OPTIONAL)

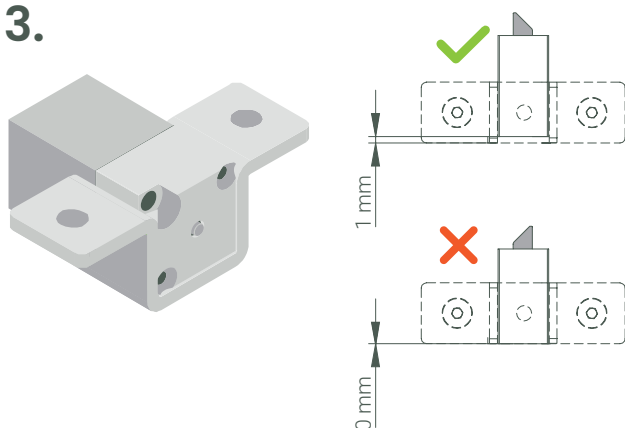
1.



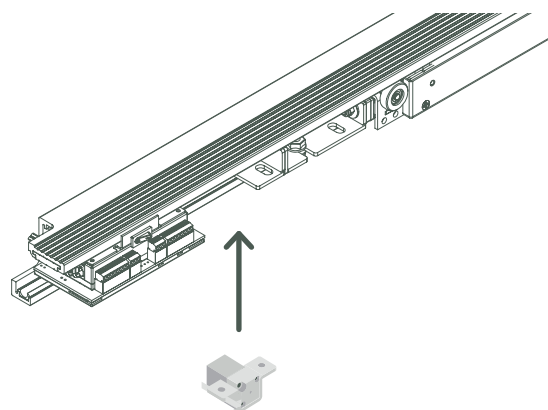
2.



3.



4.

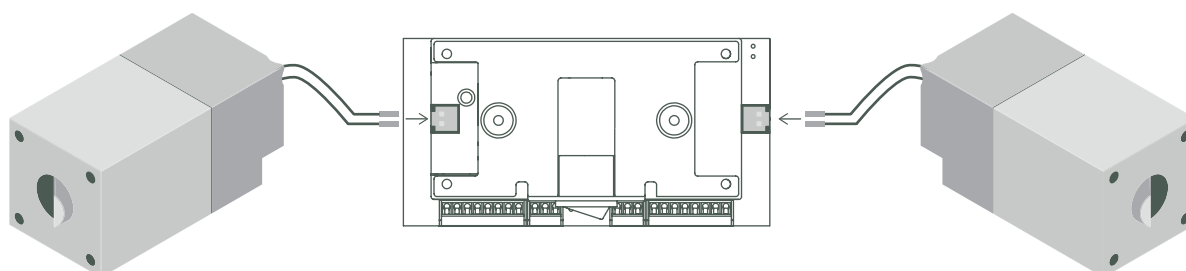


5.

Automatic lock wiring to the I/O module

LEFT OPENING DOOR

RIGHT OPENING DOOR

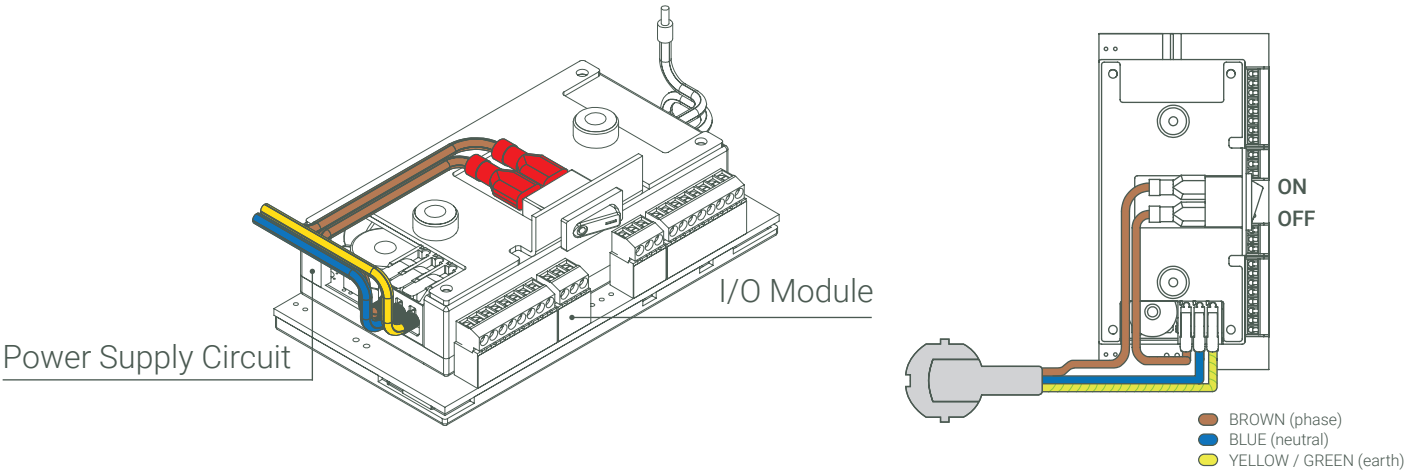


6. WIRING AND COMMISSIONING

6.1. CONNECT THE POWER CABLE

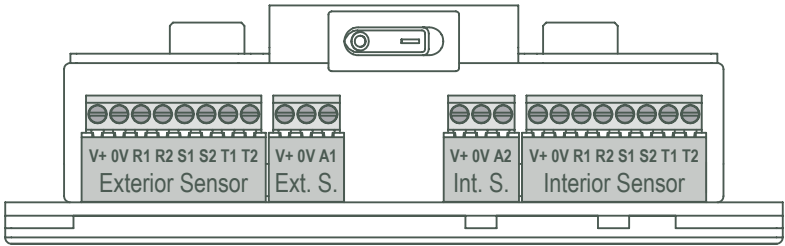


Before you connect the operator to mains, all the accessories and devices must be already wired to the I/O module. The power supply circuit in the **EvoDrive+** is compatible with 110V and 220/230V.



6.2. CONNECT THE ACCESSORIES TO THE I/O MODULE

The activation and safety devices will perform differently, depending on the operating mode selected, and to which terminals are they connected.



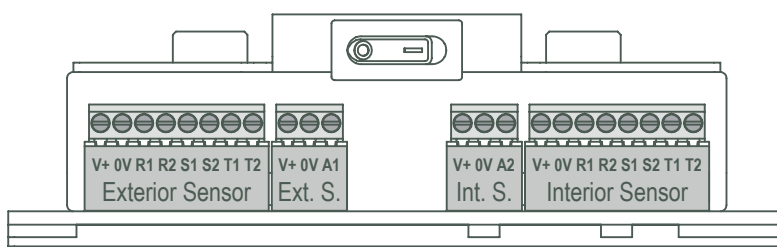
	Ext. Sensor	Ext. Switch	Int. Switch	Int. Sensor
Automatic Mode	✓	✓	✓	✓
Exit Only Mode	✗	✗	✓	✓
Open Mode	✗	✗	✗	✗
Closed Mode	✗	✗	✗	✗

✓ Enabled ✗ Disabled

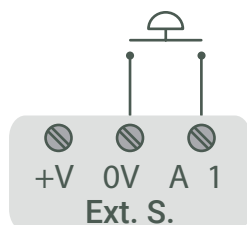
6.3. PUSH BUTTON (WIRED VERSION)



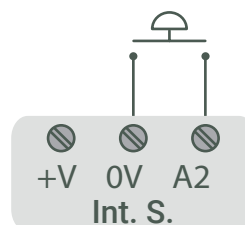
Make sure that the operator is **switched OFF** and **disconnected** from the mains, before wiring any accessory to the I/O module.



EXTERIOR PUSH BUTTON

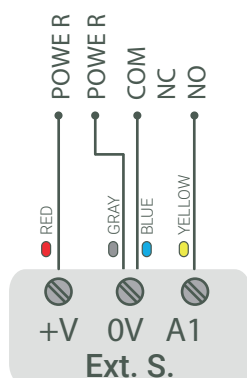


INTERIOR PUSH BUTTON

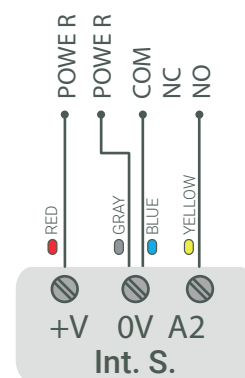


6.4. TOUCH-LESS SENSOR

EXTERIOR TOUCH-LESS SENSOR, "CLEAR WAVE" AND "MAGIC SWITCH"



INTERIOR TOUCH-LESS SENSOR, "CLEAR WAVE" AND "MAGIC SWITCH"

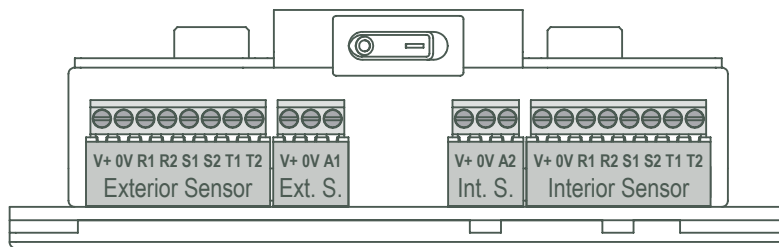


NOTE: Set **DIP switch T/P** in the sensor to **"T" - Toggle mode**: a first detection opens the door, a second will close the door; or **"P" - Pulse mode**: a detection opens and closes the door.

6.5. ACTIVATION AND SAFETY SENSOR

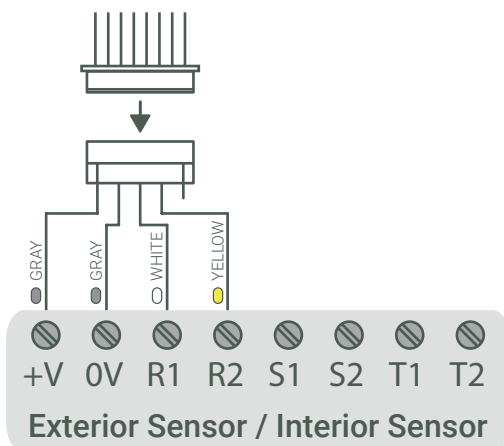


Make sure that the operator is **switched OFF** and **disconnected** from the mains, before wiring any accessory to the I/O module.

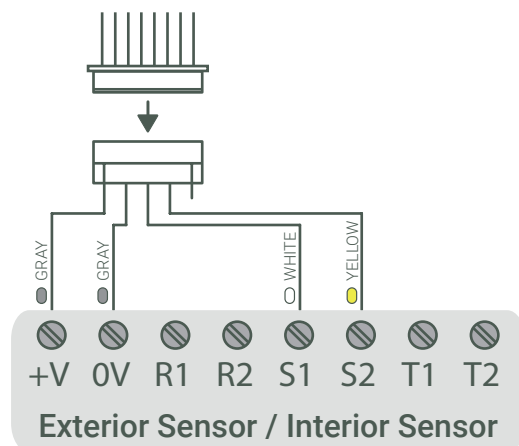


6.5.1. OPTEX OA-203C Activation and Safety Sensor (Infrared)

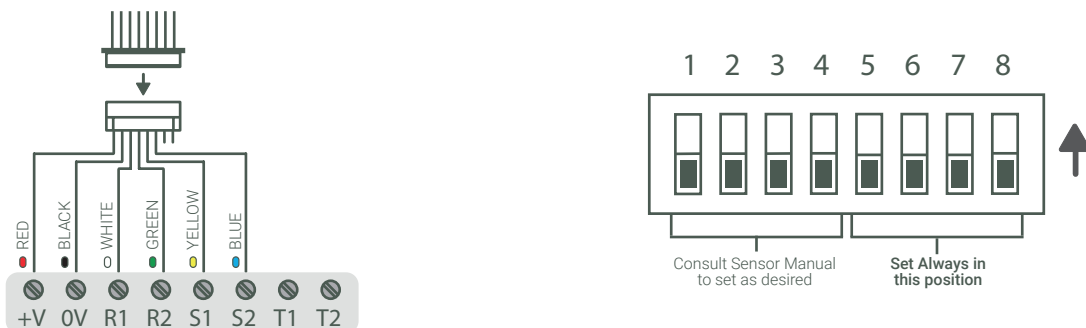
As an ACTIVATION sensor



As a SAFETY sensor



6.5.2. HOTRON 3H-IR14C Activation and Safety Sensor (Infrared)



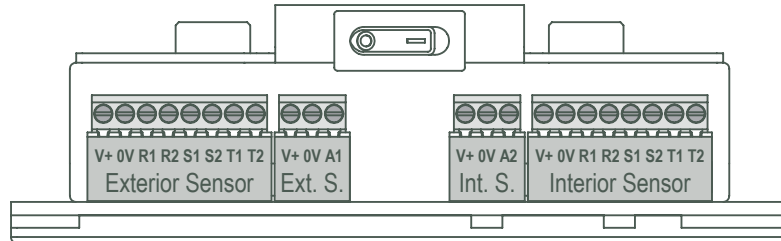
NOTE: Open the sensor cover, and set:

- **DIP switch 5** (Safety Output) to **N.O.** (Normally Open)
- **DIP switch 6** (Activation Output) to **N.O.** (Normally Open)

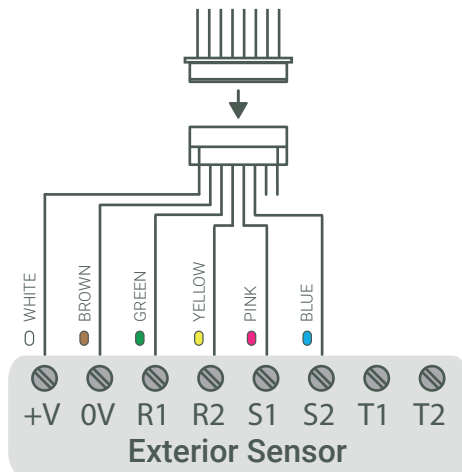
6.5.3. OPTEX OAM-DUAL T Activation and Safety Sensor (Microwave & Infrared)



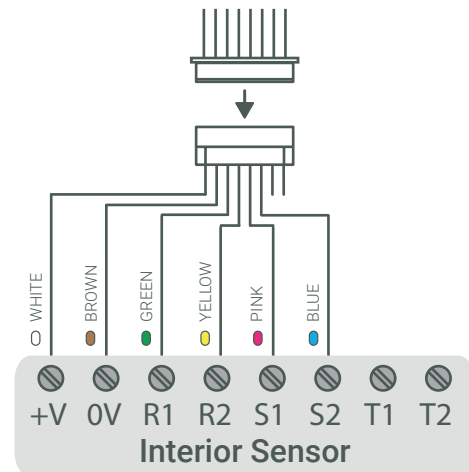
Make sure that the operator is **switched OFF** and **disconnected** from the mains, before wiring any accessory to the I/O module.



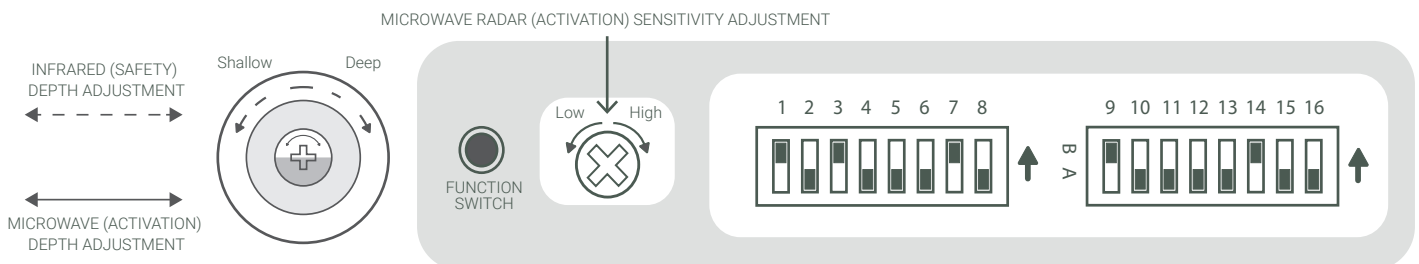
EXTERIOR



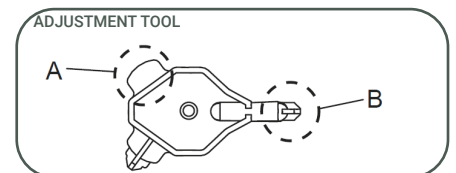
INTERIOR



PARAMETER SETTING:



1. Adjust the depth angle of the presence safety area (Infrared) introducing the flat tip of the adjustment tool (A) and turn right/left as desired.
2. Adjust the depth angle of the motion activation area (Microwave) introducing the crosshead of the adjustment tool (B) and turn right/left as desired.
3. Adjust the sensitivity of the activation area (Microwave) turning the potentiometer using a screwdriver.
4. Adjust the **DIP SWITCH** settings as shown.



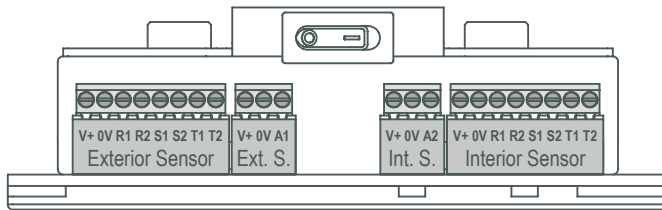
5. After doing the necessary adjustments, press and hold the FUNCTION SWITCH button for 5 seconds, to save all changes in memory

6.6. PUBLIC BATHROOM MODE

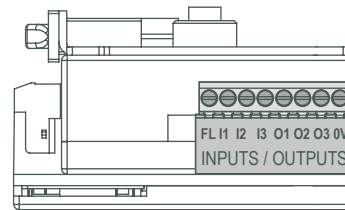


To set up the door in bathroom mode:

- An optional **I/O terminal block** must be ordered, and delivered with the main control board. It cannot be added after delivery.
- The **parameter “0 - Operating mode”**, must be set to “5 - Public Toilet Mode”. See point 8 in this manual for further details.



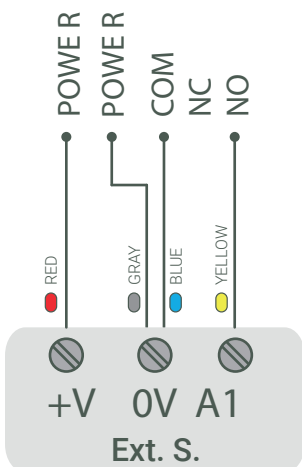
I/O and Power module - Front View



I/O and Power module - Side View

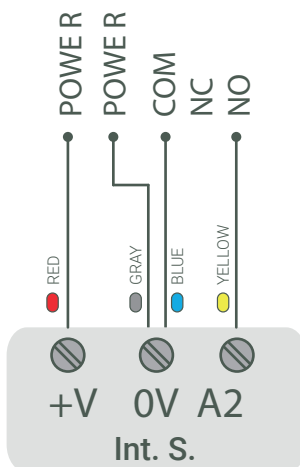
ClearWave touch-less sensor (Exterior)

Activates the door to open, if the door is unlocked



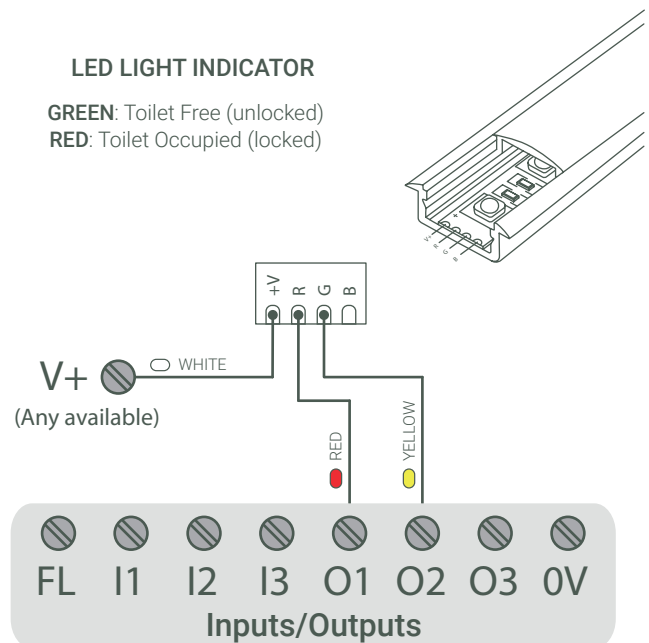
ClearWave touch-less sensor (Interior)

1. Locks the door if unlocked
2. Unlocks and opens the door to exit

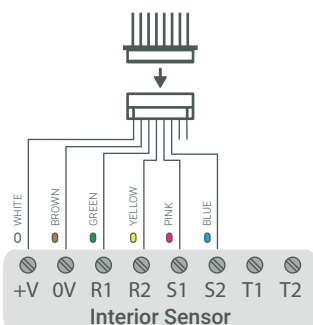


LED LIGHT INDICATOR

GREEN: Toilet Free (unlocked)
RED: Toilet Occupied (locked)



OAM DUAL-T Infrared and Microwave sensor (Interior)



In Public Bathroom mode (Parameter “0” set to 5):

- Terminals R1/R2 of the “Interior Sensor” change their functionality: it will activate the lock and block the door when the door is fully closed and the radar connected to R1/R2 detects movement inside the toilet.
- Connect the microwave radar cables to **R1/R2** for lock activation as described above
- Connect the infrared sensor cables to **S1/S2** for safety: prevents the door from closing while presence is detected within the door threshold.
(terminals R1 and R2 of the “Exterior sensor” terminals keep their functionality)

**** Please make sure the DIP switches on the OAM DUAL-T sensor are set as described in point 6.5.3 of this manual ****

OPERATING PRINCIPLES:

1. To enter the bathroom, wave hand on the exterior ClearWave sensor to open the door, then walk in and the door will automatically close.
2. The OAM DUAL-T radar will lock and block the door when the door comes to fully closed position and it detects movement inside the bathroom. If it doesn't lock automatically, wave hand on the interior ClearWave sensor to lock the door.
3. When the door locks, the led indicator will turn red (toilet occupied)
4. To exit the bathroom, wave hand on the interior ClearWave sensor, to unlock and open the door, walk out, and the door will slide back to closed position
5. The led indicator will turn green until the bathroom is back in use.

6.7. REMOTE CONTROL (OPERATING MODE SELECTOR)



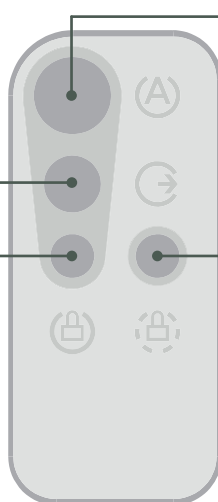
Every **EvoDrive+** automatic door operator is delivered with a Remote Control that has been paired before delivery. Use this instructions **ONLY** for **new or additional** remote controls.

OPEN mode

The door will open and remain in free/manual mode. It can be easily moved sideways pushing the door manually. Recommended for cleaning.

CLOSED mode

The door will close and remain in that position. If equipped with an automatic lock (optional), the door will remain blocked in the closed position. In the event of a power failure, the automatic lock will be released to allow manual opening



AUTOMATIC mode

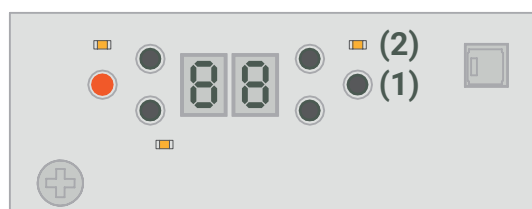
Every time an activation device (push button, touchless sensor or radar) is triggered, or when the door is pushed manually 5 cm, the door will open during an adjustable hold-open time and close again.

EXIT ONLY / ACCESS control mode

The activation devices on the interior side of the door will remain enabled, while the devices on the exterior side will remain disabled. For a full functionality, we recommend to equip the door with an automatic lock.

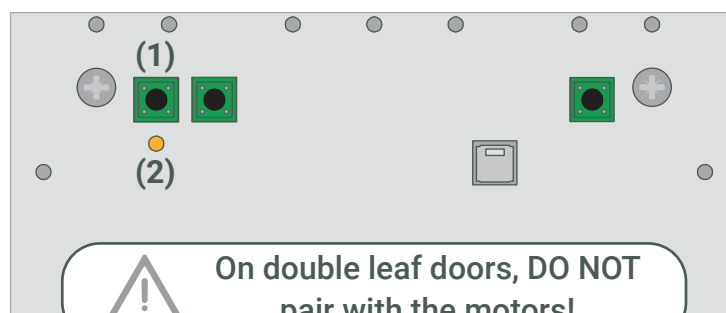
SINGLE SLIDING DOOR

Pair the remote control with the motor



DOUBLE LEAF SLIDING DOOR

Pair the remote control with the common I/O Module



To PAIR the remote control with the operator:

1. Switch power ON
2. Press and hold button (1) until the orange LED (2) starts to blink (after approx. 10 s).
3. Press any button on the remote control.

To ADD more remote controls:

1. Repeat steps 2 and 3 to pair more devices.
2. One remote control can control multiple operators.
3. One operator can be controlled from up to 10 remote controls.

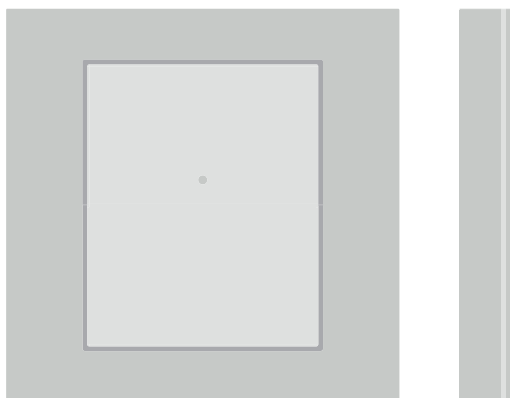
To DELETE all remote controls:

1. Press and hold button (1) until the orange LED (2) stops blinking (after approx. 20 s).

6.8. WIRELESS PUSH BUTTON

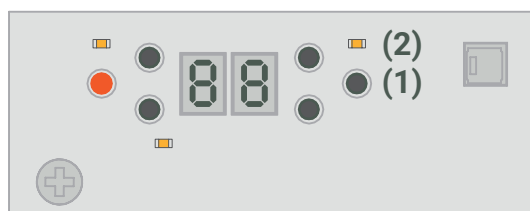


If the **EvoDrive+** automatic door operator is delivered with a Wireless Push Button, this has been paired before delivery. Use this instructions **ONLY** for **new or additional** push buttons.



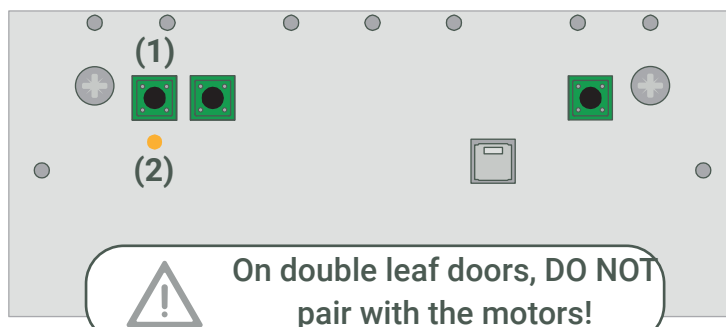
SINGLE SLIDING DOOR

Pair the wireless push button with the motor



DOUBLE LEAF SLIDING DOOR

Pair the wireless push button with the common I/O Module (Master)



To PAIR the push button with the operator:

1. Switch power ON
2. Press and hold button (1) until the orange LED (2) starts to blink (after approx. 10 s).
3. Press any button on the push button

To ADD more push buttons:

1. Repeat steps 2 and 3 to pair more devices.
2. One push button can control multiple operators.
3. One operator can be controlled from up to 10 push buttons

To DELETE all push buttons:

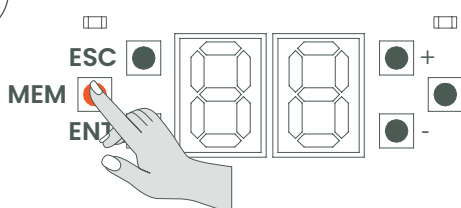
1. Press and hold button (1) until the orange LED (2) stops blinking (after approx. 20 s).

7. SELF-ADJUSTMENT AFTER INSTALLATION



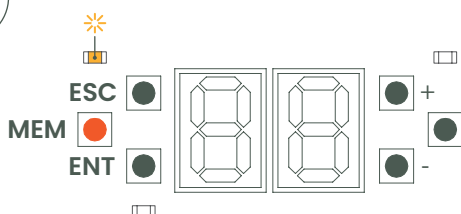
This process must be carried out **after the door has been installed**, and every time the door leaf has been **re-adjusted**, or the position of the end stops has **changed**. The self-adjustment computes the weight of the leaf and the opening width and does not override the parameters programmed by the service technician.

1



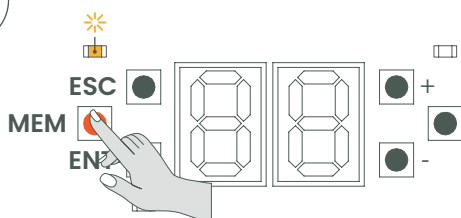
Press and hold MEM button, until MEM LED turns ON. Then release the button.

2



Wait until MEM LED starts to blink.

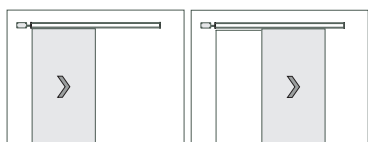
3



When the MEM LED starts blinking, press the MEM button again to start the self-adjustment process. This consists of 2 opening and closing cycles at slow speed.

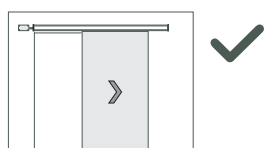
DO NOT TOUCH THE DOOR OR INTERFERE THE MOVEMENT OF THE LEAF DURING THE PROCESS!

4



The self-adjustment is completed, when the door stops after two complete cycles.

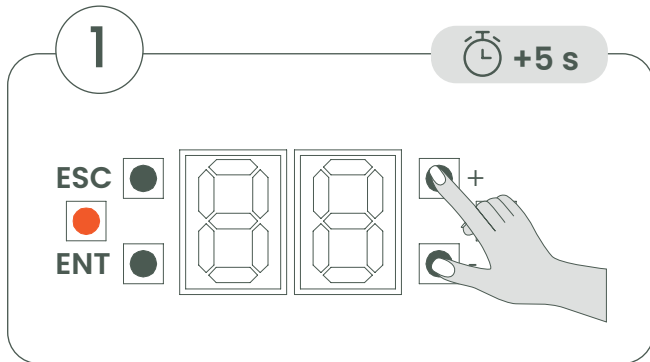
5



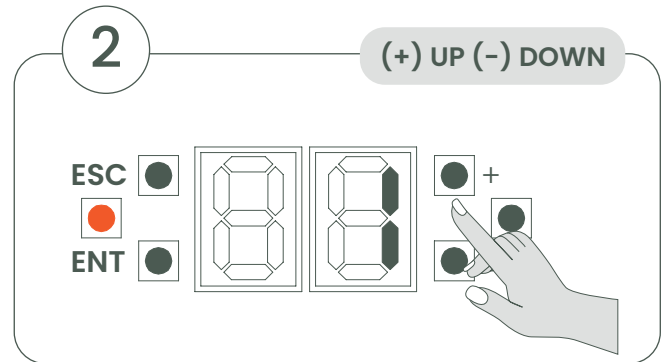
At this point, the door can be operated normally.

8. CONFIGURATION OF THE BASIC PARAMETERS

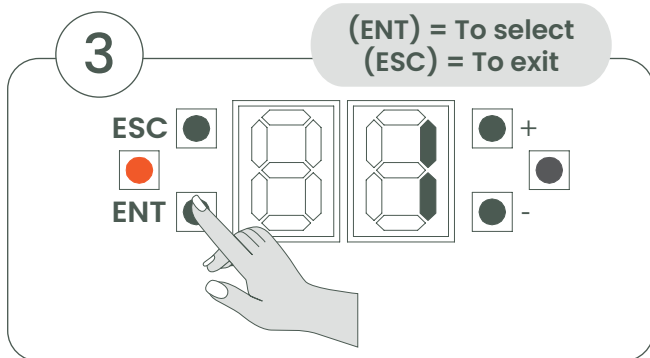
To set any of the parameters in the list below:



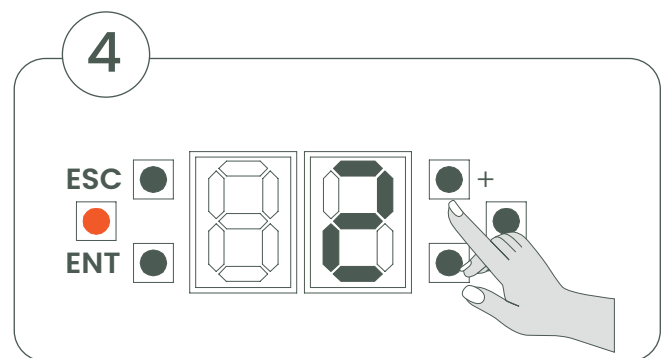
Enter the configuration mode: press and hold buttons (+) and (-) simultaneously during 5 sec., then release.



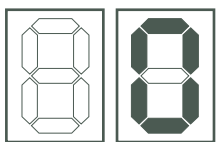
Press (+) or (-) to navigate through the different parameters, until you reach the desired parameter you wish to set.



Press (ENT) when you find the parameter you wish to set.

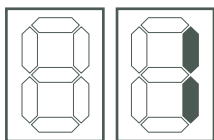


Press (+) or (-) to navigate through the different values in that parameter, then press (ENT) to set the desired value.



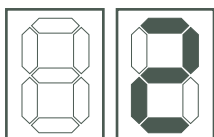
Operating Mode. If you lost the remote control, or if you don't have one, you may select the door operating mode from here. Set to:

- '0': Automatic - Default Value
- '1': Open
- '2': Exit Only
- '3': Closed
- '4': Loop/Test
- '5': Public Bathroom



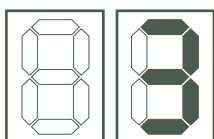
Hold Open Time. Sets the amount of time the door remains open before closing again after being activated, in Automatic or Exit Only Modes (Note: parameters 05 and 06 must be set to "0"). Set to:

- '0': ca. 0 sec - **Default Value**
- '1': ca. 2.5 sec
- '2': ca. 5 sec
- '3': ca. 10 sec



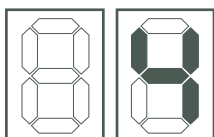
Opening Speed. It's a relative value that depends on the opening width and the weight of the leaf (Note: parameter 04 must be set to "High Energy mode"). Set to:

- '0': Minimum
- '1': Low
- '2': High - **Default Value**
- '3': Maximum



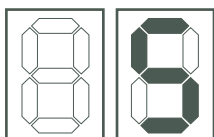
Closing Speed. It's a relative value that depends on the opening width and the weight of the leaf (Note: parameter 04 must be set to "High Energy mode"). Set to:

- '0': Minimum - **Default Value**
- '1': Low
- '2': High
- '3': Maximum



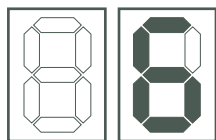
Low Energy (LE) mode. As described in the European Norm EN16005, in LE mode, the minimum travelling time of the door leaf is determined by its mass, to limit the force required to prevent a stopped doorset from opening or closing any further, which has implications in the type of safety sensors to be installed. Speed is determined by the operator, and overrides parameters 02 and 03. Set to:

- '0': Disabled (LE Off) - **Default Value**
- '1': Enabled (LE On)



Device Activation mode. Sets how the door reacts after being triggered by an activation device, in Automatic and Exit Only modes. Set to:

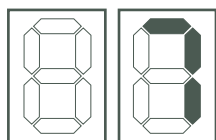
- '0': Normal. The door opens and closes automatically after every activation - **Default Value**
- '1': Bi-stable. The door opens and stays open after being activated once; and will close and stay closed after a second activation.



Manual activation mode. Sets how the door reacts after pushing the door manually, in Automatic and Exit Only modes. Set to:

'0': Push & Go. The door opens and closes automatically after pushing the leaf or door handle manually 5 cm in the opening direction - **Default Value**

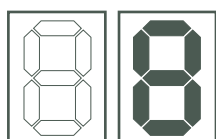
'1': Push-to-open / Push-to-close. The door opens and stays open after pushing the leaf or door handle manually 5 cm in the opening direction; and will close and stay closed after pushing it manually 5 cm in the closing direction.



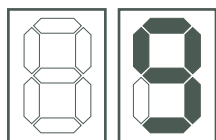
Reduced Opening (50%). Sets the clear opening width or travelling distance of the sliding leaf, when activated in Automatic or Exit Only modes. Set to:

'0': Disabled. Door opens fully - **Default Value**

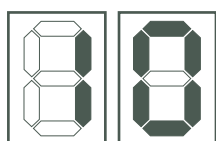
'1': Enabled. Door opens 50% of its travelling distance



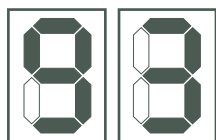
Opening Movement. Adjusts the smoothness near the end of the opening cycle. Set between 0 and 8. Reduce the value if the door vibrates when approaching to the end stop when opening. Or increase the value if the door hits the end stop. Default value is '4'.



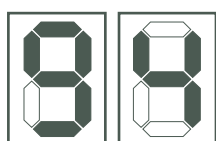
Closing Movement. Adjusts the smoothness near the end of the closing cycle. Set between 0 and 8. Reduce the value if the door vibrates when approaching to the end stop when closing. Or increase the value if the door hits the end stop. Default value is '4'.



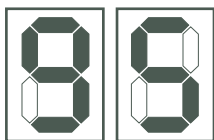
Closing Force. Adjusts the force to overcome any frictions near the end of the closing cycle. The parameter can be set to a value between 0 (lower force) and 3 (higher force). Default value is '0'.



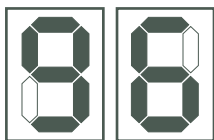
RESERVED. DO NOT CHANGE



RESERVED. DO NOT CHANGE

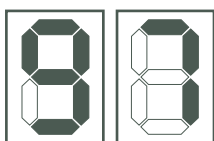


RESERVED. DO NOT CHANGE



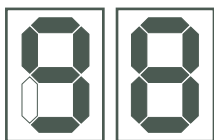
Opening Direction. Before running the self-adjustment, set the opening direction to:

- '0': Left. The door opens from right to left
- '1': Right. The door opens from left to right

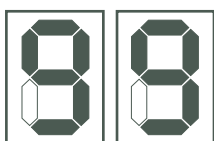


Bluetooth Pairing. Use this parameter only when you change the motor (Driver) and/or the I/O module (Master) with a new one, and you need to pair them. Set it to:

- '0': Normal (paired) mode
- '1': Pairing/Discovery Mode



Reset Parameters. Navigate to code '98' and press ENT to reset all the parameters to factory/default values. Proceed with caution.

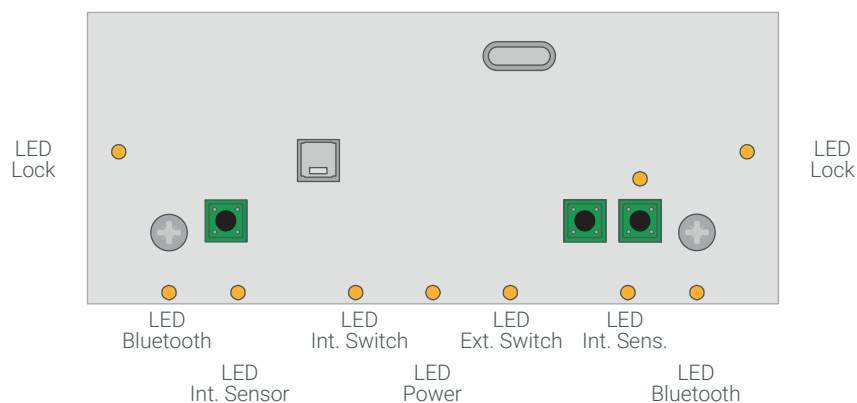


Parameter reading. Navigate through the different values between 0 to 5, then press ENT to read the desired parameter:

- '0': Number of Opening/Closing Cycles (x1000)
- '1': Motor PCB Temperature (°C)
- '2': Leaf Weight (kg.)
- '3': Firmware Version
- '4': Internal Use Only
- '5': Door Leaf Travelling Distance (cm)

9. DESCRIPTION OF THE LED INDICATORS ON THE I/O MODULE (MASTER)

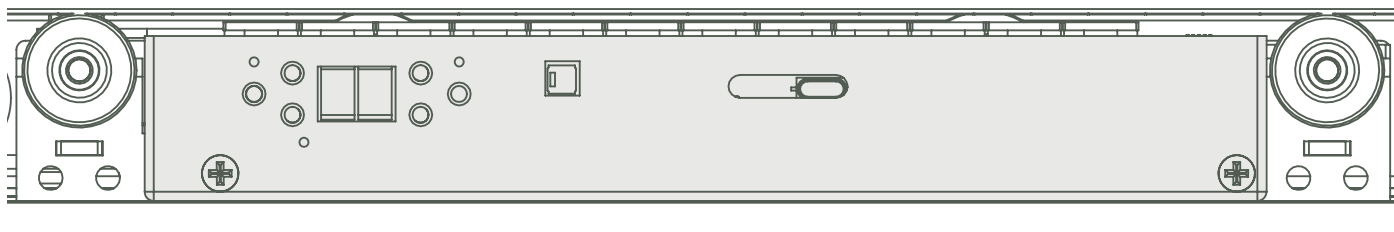
I/O MODULE



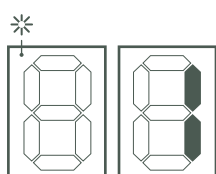
LED INDICATORS

LEDs	DESCRIPTION
POWER	ON when the operator is energized
BLUETOOTH	ON after switching the power on OFF in normal working mode Fast BLINK in discovery mode Slow BLINK pairing connection process
INTERIOR SENSOR	ON when activated, otherwise OFF
EXTERIOR SENSOR	ON when activated, otherwise OFF
INTERIOR SWITCH	ON when activated, otherwise OFF
EXTERIOR SWITCH	ON when activated, otherwise OFF
LOCK	ON when the lock is in blocked position, in Close or Exit Only Mode

10. MALFUNCTION CODES

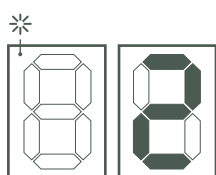


In case of malfunction, a numeric code will BLINK on the motor two-digit display.



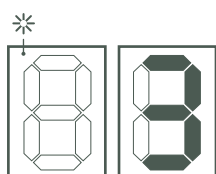
Description: Motor Overcurrent

Action: Switch the operator off and on again. If the error persists, call an official service technician.



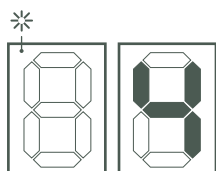
Description: Encoder Malfunction

Action: Verify the presence of magnets above the full length of the motor, along the entire travelling movement; that the stoppers on both sides of the array of magnets are firmly fixed and not moving; and there is no gap between magnets (the array of magnets is composed of several modules of 16 magnets, measuring 20 cm each module).



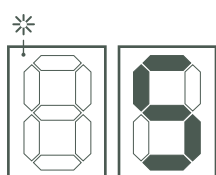
Description: Leaf Weight is above limits

Action: Check that the door leaf weights under 80 Kg; check that the friction of the floor guide is not excessive; check that the door leaf is totally vertical (not tilted) and well balanced; check that the leaf slides smoothly along the entire travelling distance.



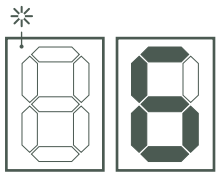
Description: Motor Temperature is above limits

Action: Verify that the environment temperature is under 40°C.



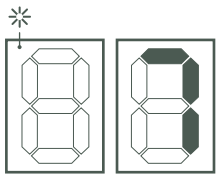
Description: Overvoltage

Action: Call an official service technician.



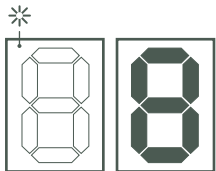
Description: Bluetooth communication is missing between the motor and I/O module

Action: Pair the motor and I/O module back together.



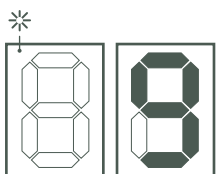
Description: Problem on the electronic board clock

Action: Switch the operator off and on again. If the error persists, call an official service technician.



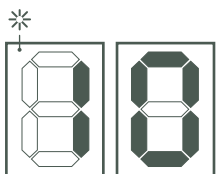
Description: Problem on the internal non-volatile memory in the electronic board

Action: Switch the operator off and on again. If the error persists, call an official service technician.



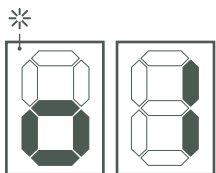
Description: Problem on the internal program memory in the electronic board

Action: Switch the operator off and on again. If the error persists, call an official service technician.



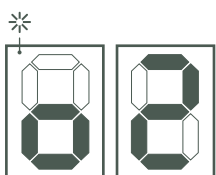
Description: Hardware Overcurrent

Action: Switch the operator off and on again. If the error persists, call an official service technician.



Description: Obstruction found during the opening cycle

Action: Remove the obstruction; check that the floor guide is not causing too much friction; check that the door leaf is totally vertical (not tilted) and well balanced; check that the leaf slides smoothly along the entire travelling distance.



Description: Obstruction found during the closing cycle

Action: Remove the obstruction; check that the floor guide is not causing too much friction; check that the door leaf is totally vertical (not tilted) and well balanced; check that the leaf slides smoothly along the entire travelling distance.

11. EVODRIVE+ INSTALLATION CHECKLIST

End user: _____
 Address: _____
 Zip code: _____
 City: _____
 Country: _____

Operator serial number: _____

Basic operation	Complies	Doesn't comply	Not applicable	Comments
Self-adjustment				
Push & Go				
Push button				
Remote control				
Operating modes	Complies	Doesn't comply	Not applicable	Comments
Automatic				
Open				
Closed				
Exit Only / Access control				
Mechanical / Electrical elements	Complies	Doesn't comply	Not applicable	Comments
Door leaf fixing and trolleys				
Sliding leaf travelling area				
Interference with wall or frames				
Leaf is evenly levelled				
Distance between floor and leaf is 6 - 10 mm				
Frictions				
End stops				
Door leaf status				
Locking device				
Adjustments	Complies	Doesn't comply	Not applicable	Comments
Opening speed				
Hold-open time				
On power failure	Complies	Doesn't comply	Not applicable	Comments
The automatic lock unlocks				
Door slides smoothly in manual mode				
Internal sensor	Complies	Doesn't comply	Not applicable	Comments
Movement area adjustment				
Presence area adjustment				
Presence timing				
External sensor	Complies	Doesn't comply	Not applicable	Comments
Movement area adjustment				
Presence area adjustment				
Presence timing				
Other activation and safety devices	Complies	Doesn't comply	Not applicable	Comments
Activation (push buttons, touch-less sensors, access control systems, etc.)				
Safety / Protective guards				
Hand-over	Complies	Doesn't comply	Not applicable	Comments
Cleaning				
User manual has been handed over to the end user				
The end user has been informed about the EvoDrive+ functions				
Maintenance manual has been handed over to the owner				

INSTALLED BY:

Company: _____
 Address: _____
 Zip code: _____
 City: _____

Country: _____
 Contact: _____
 Installation technician: _____
 Date of installation: _____

12. CE DECLARATION OF CONFORMITY OF THE INSTALLATION

(Directive 2006/42/EC - Machinery Directive)

The installer:

Address:

Declares that:

Door description:

(Model, type)

Serial number:

Installed in (location):

(Serial number of EvoDrive+)

(Client, address)

- The installation conforms to the requirements of the Machinery Directive 2006/42/EC
- The installation conforms to the specifications of the following EC directives:
 Directive 2014/30/EU on "Electromagnetic Compatibility (EMC)" and amendments.
 Directive 2014/35/EU on "Low Voltage Directive".
- The installation conforms to the technical specifications of the harmonized standard EN 16005:2013/AC:2015: "Power operated pedestrian doorsets".
- I declare that the installation has passed the final operational and safety check of the automatic drive unit as well as all associated elements.
- I declare that I have duly informed the end user about all the instructions for the correct and safe use of the product.
- I declare that the following local and national norms and specifications have been observed:

Date:

Installer readable signature:

INSTALLERS STAMP OR SIGNATURE

OPERATOR ID STICKER - CE MARK

TO BE FILLED OUT BY THE INSTALLER

**ADDRESS**

Linear Motor Applications, S.L.
Pol. Ind. Santiga
Pasaje Arrahona 4, Nave 1
08210 Barberà del Vallès
Barcelona, Spain

CONTACT

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