



CDVI

Security to Access



DIGIWAY

DOOR AUTOMATION



DIGIWAY PLUS

Fully automated operator for inward or outward opening doors



EN

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IMPORTANT SAFETY INSTRUCTIONS



The present document contains important precautions for safe use and operation. Read the instructions carefully before commencing the installation. Keep this document even after installation.

This manual is intended for professional installers, who have received appropriate training.

Installation and connections must be carried out in accordance with Good Working Practice and in compliance with the current Regulations. Poor installation could cause a health & safety hazard.

Read this manual carefully before starting the installation process.

First check all of the existing door and frame structure - verify its integrity, stability and strength. If necessary modify the structure in order to make it standard, being aware of all the possible problems that could occur during normal use.

Verify that all the zones where there is a risk of crushing, dragging, shearing and other dangers are protected by electronic safety devices, safety boards, or barriers. This can be achieved if the distance does not exceed 8 mm. However, to avoid entrapment for the various parts of the body, the following distances are considered sufficient:

Fingers	> 25mm
Foot	> 50mm
Head	> 300mm
Body	> 500mm

The forces produced by the complete system must comply with the current standards and, where this is not possible, protect the zones with electronic safety devices.

Apply hazardous area notices required by the applicable regulations. Before the actuator is connected, make sure that the plate details correspond to those of the mains power and that there is a differential circuit-breaker and adequate protection against overcurrents on the supply side of the system.

Fit a Dual Pole disconnection switch with contact opening gap of at least of 3 mm. Interrupt the power supply before opening the cover of the actuator for any maintenance or repair intervention.

Handling of electronic parts must be carried out wearing grounded antistatic bracelets to avoid any static damage. Servicing the actuator is of fundamental importance if the system is to operate correctly and safely. Comply with the manufacturer's instructions described in this manual.

Only use genuine spare parts if replacements or repairs are required. The motor manufacturer declines any responsibility if component parts fitted are not compatible with safe and correct operation. The actuator must be installed inside only.

The manufacturer declines all liability for damage caused by outdoor assembly without adequate protection.
This product cannot be installed in places with an explosive atmosphere or in the presence of flammable fumes or gases.

The appliance can be used by children aged 8 or under and by persons with reduced physical, sensory or mental abilities, without experience or prior knowledge, provided they are under surveillance or after they have received instructions concerning safe use of the appliance and an understanding of the dangers inherent to it.

The sound pressure level, weighted A, of the noise emitted by the device is less than 70 dB (A).

If a passive emergency button is installed, it must be installed in view of the door but away from moving parts.
Unless this is protected by a security key, it must be installed at a minimum height of 1.5 m and not accessible to the public.

Children must not play with the appliance. Cleaning and maintenance intended for use by the user must not be carried out by children without supervision.

Machinery Directive

Automatic pedestrian doors fall into the application field of the Machinery Directive (2006/42/CE).

This states that the installer who motorizes a door becomes the manufacturer of machinery and so must:

1. Prepare the Technical Construction File (which must contain the documents indicated in Annex V of the Machinery Directive) and must be kept and placed at the disposal of competent national authorities for at least ten years from the date of manufacture of the motorised door.
2. Draft the EC Declaration of Conformity in accordance with Annex II-A of the Machinery Directive.
3. Apposer le marquage CE sur la porte motorisée en accord avec les points 1.7.3 de l'annexe I de la Directive Machine.

The installer must consign to the customer the following documents:

1. Instructions on how to operate and safely use the system;
2. Routine maintenance instructions;
3. Declaration of conformity;
4. Maintenance register.

Introduction

The DIGIWAY operator type DWPS102XX, DWPD102XX belongs to the Service Class 5 (600 cycles a day for 5 years min).

Applications: HEAVY DUTY, for pedestrian accesses to institutional complexes with very intense use.

Declaration of the Manufacturer

(According to Directive 2006/42/CE Annex II part B)

The Manufacturer

CDVI WIRELESS SPA - CDVI Group
Via Piave,23
31020 S.Pietro di Feletto (TV)
ITALY

Herewith declares that the automatic operator for swing doors

Brand : DIGIWAY
Model : DIGIWAY PLUS
Types : DWPS102XX, DWDP102XX

- constitutes a "partly completed machinery" and it is intended to be incorporated into machinery or to be assembled with other machinery to constitute a machinery covered by Directive 2006/42/CE;

- complies with the following Directives:

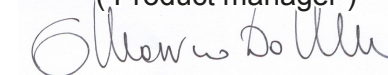
2006/95/CE (Low Voltage Directive)
2004/108/CE (Electromagnetic Compatibility Directive)
2014/53/UE (RED)

European Standard EN16005 : Power Operated doorsets - Safety in Use

- it is not allowed to put the machinery into service until the machinery into which it has to be incorporated or of which it has to be a component has been found and declared to be in compliance with the provisions of the Directive 2006/42/CE.

S.Pietro di Feletto, 01/11/2017

G. Massimo Dalle Carbonare
(Product manager)



1] IDENTIFYING THE PRODUCT AND ITS PARTS

DIGIWAY type DWPx102xx is an indoor operator for swing doors, with integrated electronic controller and radio receiver. The opening and closing motion is electromechanical with backup battery, which assures operation in cases of power failure.

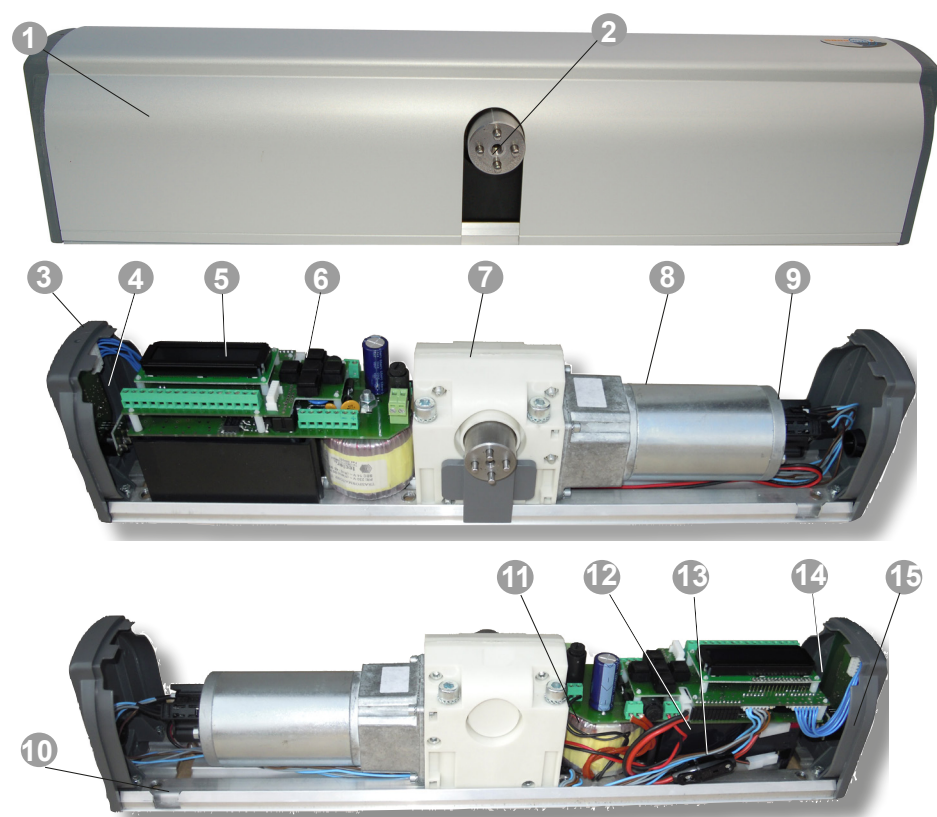
The following versions are available:

Code F	Reference	Description
F054300093	DWPS102SCD	DIGIWAY PLUS operator 230VAC for inswing doors - sliding arm
F054300094	DWPS102ACD	DIGIWAY PLUS operator 230VAC for outswing doors - articulated arm
F054300095	DWPS102UCD	DIGIWAY PLUS operator 230VAC for inswing or outswing doors - universal arm
F0543000180	DWPS102ABT	DIGIWAY PLUS operator 230VAC for inswing doors - articulated arm w/ Bluetooth module
F0543000181	DWPS102SBT	DIGIWAY PLUS operator 230VAC for outswing doors - sliding arm w/ Bluetooth module
F0543000182	DWPS102UBT	DIGIWAY PLUS operator 230VAC for inswing or outswing doors - universal arm - w/ Bluetooth module

The operator is suitable for swing doors with max width of 1.2 m or max weight of 120kg (refer to diagram on page 7). At max speed the door can open and close within 3 sec. (90°), depending on door weight and dimensions.

See the technical specifications in the following pages of this manual.

Warning: The operator is suitable only for top-jamb fixing. Door leaf fixing is not allowed.



Legend

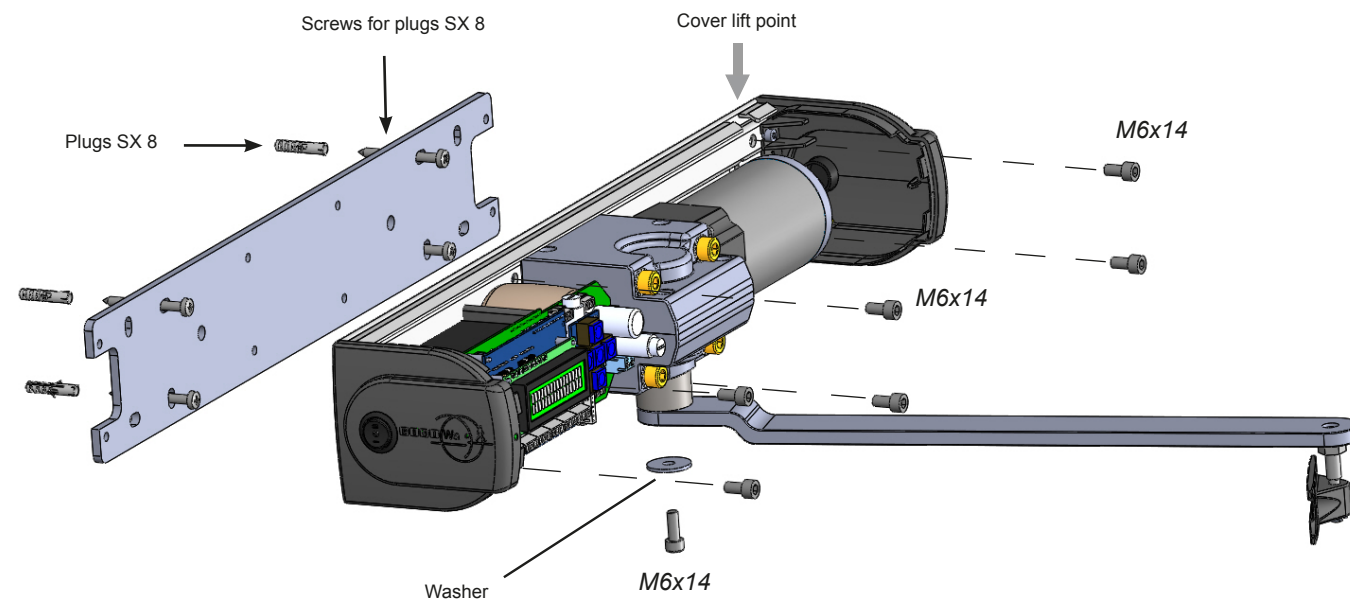
- 1 - Anodised aluminium cover
- 2 - Motor shaft
- 3 - Status led LP
- 4 - Receiver card
- 5 - Display LCD
- 6 - 5-button keyboard
- 7 - Gear box
- 8 - Motoriductor
- 9 - Encoder
- 10 - Slot for cover opening
- 11 - Toroidal transformer
- 12 - Backup battery
- 13 - Battery cable with protection fuse
- 14 - Jumper for external selector exclusion
- 15 - Operating mode selector

Accessories

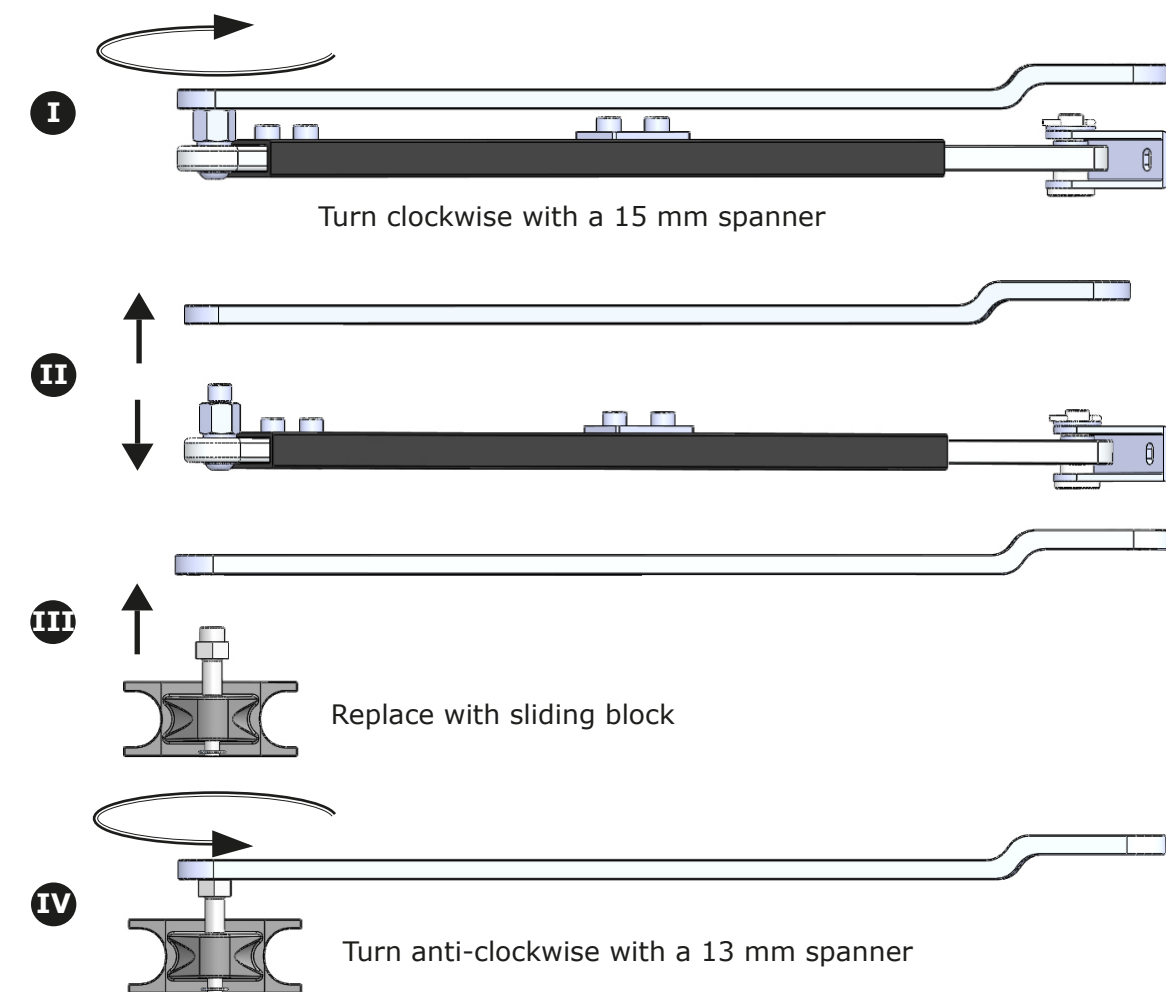
Description	P/N	F-code	
Articulated arm short tube extension	DWAA35	F0543000217	
Articulated arm long tube extension	DWAA55	F0543000218	
Tube extension only	DWAA55E	F0543000219	
Universal arm kit	DWSRKU	F0543000122	
Extension shaft 55 mm	DWSE	F0543000033	
Extension shaft 30 mm	DWSE30	F0543000123	
Extension shaft 80 mm	DWSE80	F0543000136	
Double door cable	DWPCS	F0543000124	
Mounting tools kit	DWTK	F0543000156	
Bluetooth plug-in module (*)	DWMBT	F0543000179	

(*): The models with the suffix BT (refer to table on pg 6), come with the Bluetooth module built-in. The models with the suffix CD on the part name can also be equipped with the Bluetooth module. See page 43 for details concerning after-sale installation of the module, for its configuration and use.

Mounting diagram



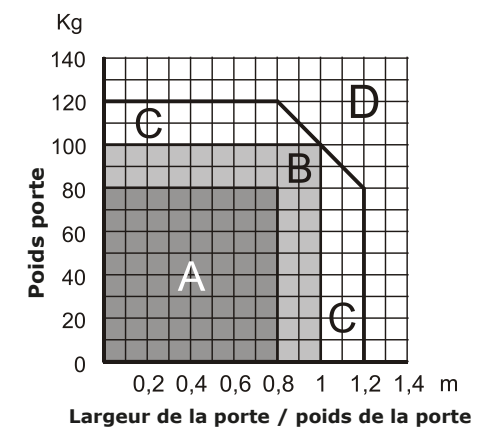
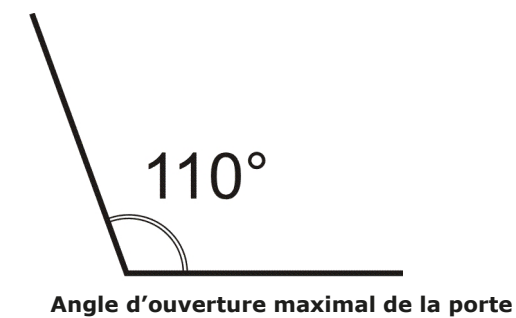
Universal arm: articulated arm into sliding arm conversion



Technical specifications

General features

Power supply	230 Vac - 50 Hz
Motor torque	15 Nm
Max power	50 W
Operating class	5 (heavy duty)
Battery	12 Vdc 1,3 Ah
Overall dimensions	511 x 90 x 110 mm
Weight	5kg
Operating temperature	-10°C ÷ +55°C
IP Grade	IP40
Opening / closing time	3 ÷ 15 sec.
Pause time	3 ÷ 90 sec.
Power for auxiliary devices	13.5 Vdc / 500 mA [max]
Power for electrolock	12 Vdc / 1A [max]
Electrolock output relay	(C-NO-NC) 10A / 12V
Open door output relay	(C-NO) - 24 VA
Electrolock hold time	Réglable [0.1 sec. ÷ 5 min]
Power failure autonomy	270 cycles / 16 hours
Transmitters security protocol	KeeLoq® Hopping Code
Receiver memory	50 transmitters
Integrated receiver main specifications	433.92 MHz ASK / -107 dBm
Fire voltage input	24 ÷ 48 Vac/dc



Use conditions

Zone A : Very intense use : 600 cycles / day
 Zone B : Intense use : 200-300 cycles / day
 Zone C : Use at reduced speed
 Zone D : Not allowed

Electronic card specifications

Operating modes: Automatic (I) - Door free (0) - Door always open (II)

Inputs: Re-open photocells (NC)
 Stop photocells (NC)
 Door always open (NO)
 Door free (NO)
 External Radar (NO)
 Internal Radar (NO)
 Day / Night selection (NO)
 Open / Close command (NO)
 Fire alarm voltage (+V, -V) [optoisolated]

Outputs: Door open contact (C-NO)
 External devices power 13.5 Vdc / 500 mA
 Electrolock output contacts (C-NO-NC)
 Electrolock power 12 Vdc / 1 A
 Test for safety devices (FTC- FTC-S)

Main features

- Operating modes: Fully automatic, Door open, Door free/operation off;
- Operating with single door, double door, with or without leaf overlapping;
- Guided procedure for quick basic setup;
- Adjustable motor torque during open and close phases;
- Remote controls management, master transmitter and user transmitter;
- Auto slow down during approach to door limits;
- Push & Go / Pull & Go function;
- Pause Time, Max Speed, Torque and Velocity adjustable;
- Opening Jolt fully adjustable;
- Two-colour status LED;
- Electrolock hold time and torque adjustable;
- Opening Jolt parameters adjustable;
- Spring mode (Door always free, spring simulation with auto closing);
- Stop and reopen photocell inputs;
- "Fire mode";
- Night / day mode;
- Door open output relay (gives open volt free contact whilst door is open).
- Secure mode protected by a password
- Parametrised inputs for optional limit switch of door closed

2] INSTALLATION

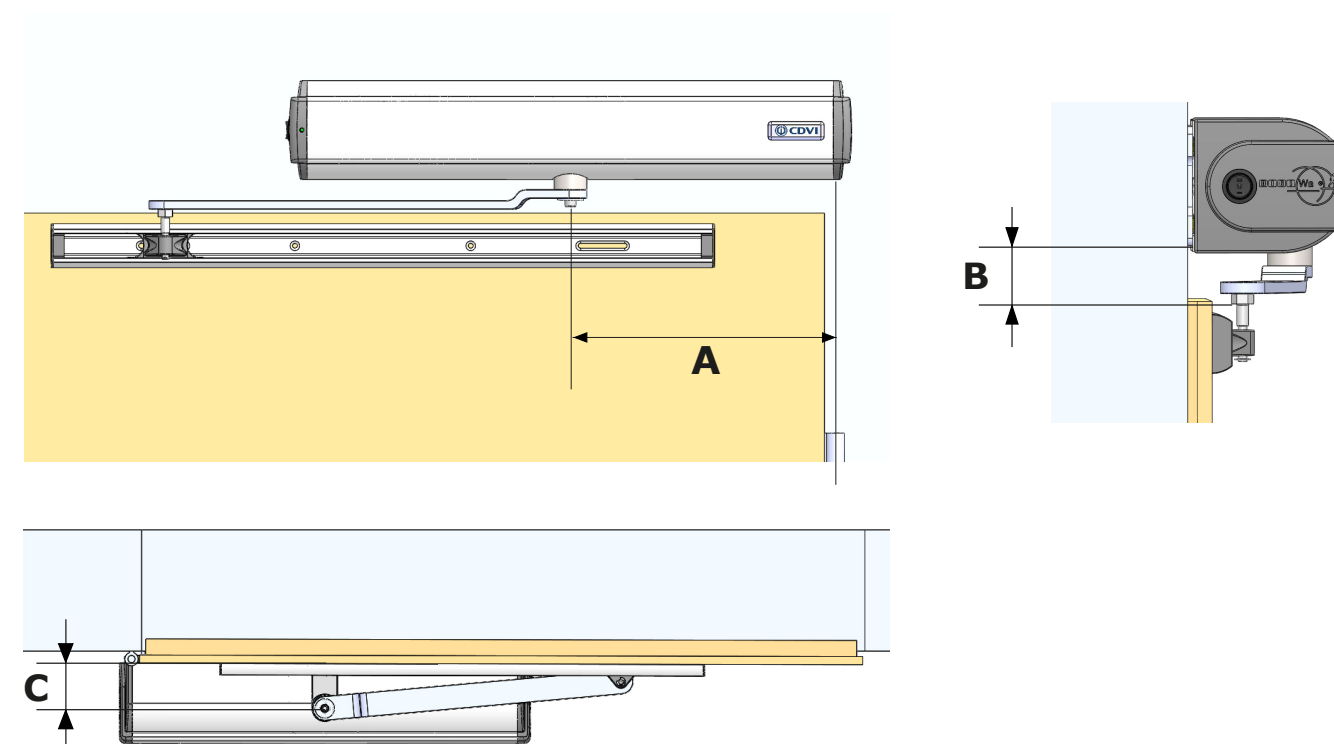
Important: Check the integrity of the door that is to be automated, verifying the operation in both directions is smooth without any friction from the closed to open position and the open to closed position. If this is not the case, make any repairs or improvements necessary to achieve smooth operation of the door. Remove any manually operated locking mechanism unless it is to be used with a strike. A door stop is not required to complete the opening cycle.

Warning: Any existing closing device should be removed to allow the door to move freely. Hydraulic devices **MUST** be replaced with dummy units as adjusting the device will not allow the DIGIWAY to operate correctly.

Mechanical installation: sliding arm version

The Sliding Arm is designed for pull applications and inward opening doors.

Thanks to the universal arm kit, the main lever of the articulated arm can also be used for a sliding arm configuration.



Parameter	Value (mm)	Description
A	280	Door hinge - motor axis distance
B	35	Backplate - guide distance
C	70.5	Motor axis - vertical plate distance

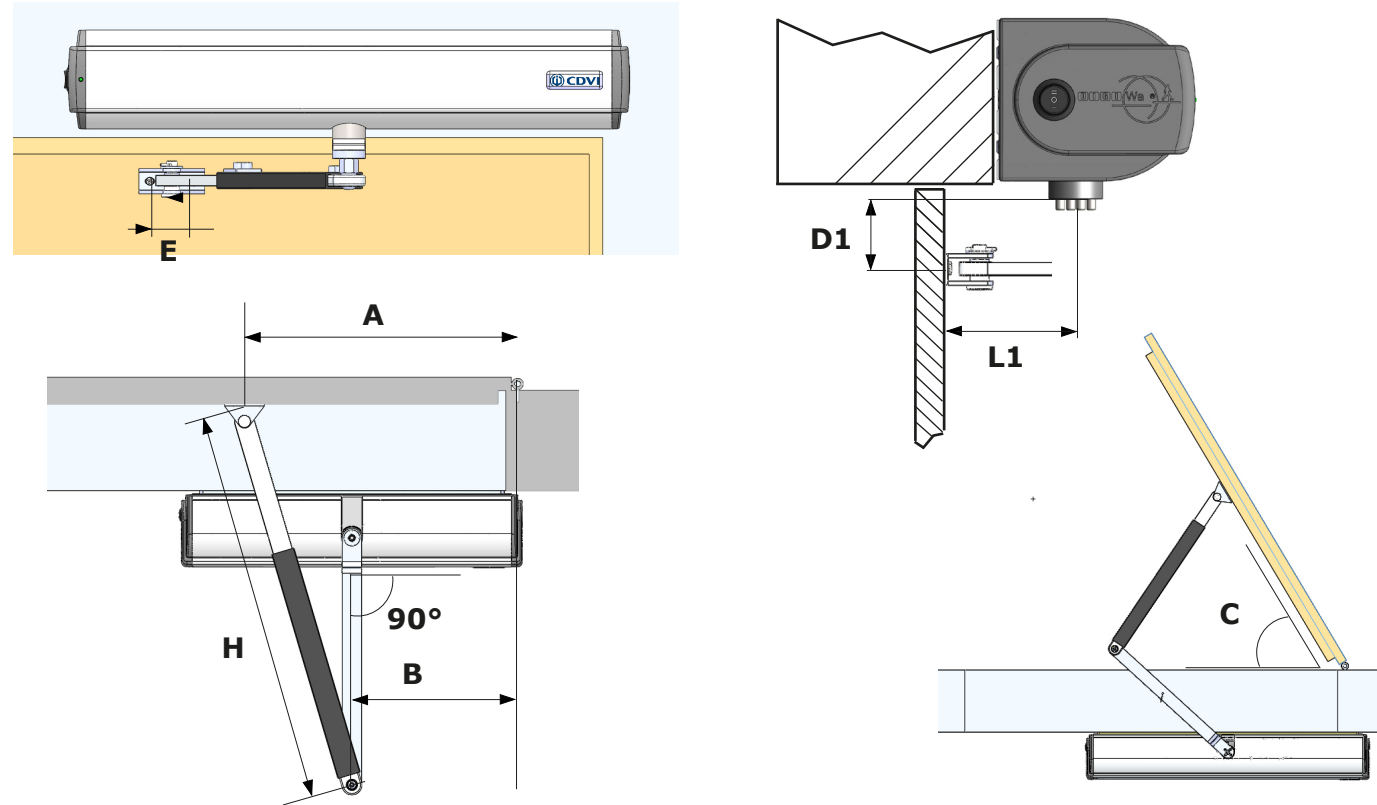
Important: The door face and DIGIWAY mounting must be in line as shown above.

Mechanical installation: articulated arm version

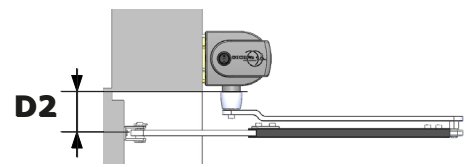
The Articulated Arm is designed for push applications and outward opening doors.

Type I Installation:

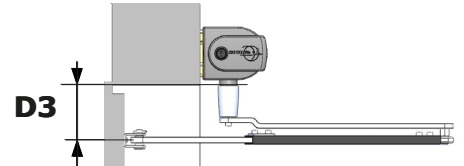
For most door types, type I installation gives the most options for mounting, taking into consideration the wall depth (reveal). Each set of dimensions allows for various wall depths with opening angles between 105 and 110 degrees.



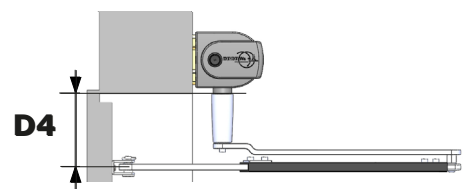
Extension DWSE30



Extension DWSE



Extension DWSE80



Description	Value
E Door bracket holes distance	40 mm
A Door hinge - door bracket distance	See tables p.13-14
L1 Distance motor axis - door (thickness of the wall)	See tables p.13-14
B Door hinge - motor axis	See tables p.13-14
H Length of the adjustable arm	See tables p.13-14
C Max opening angle of the door	See tables p.13-14
D1 Distance motor shaft - door bracket (no extension)	38.5 mm
D2 Distance motor shaft - door bracket (w/ extension DWSE30)	68.5 mm
D3 Distance motor shaft - door bracket (w/ extension DWSE)	93.5 mm
D4 Distance motor shaft - door bracket (w/ extension DWSE80)	118.5 mm

The following tables show the recommended mounting dimensions for the DIGIWAY Plus referencing to B, L1, H and C shown in the previous diagrams.

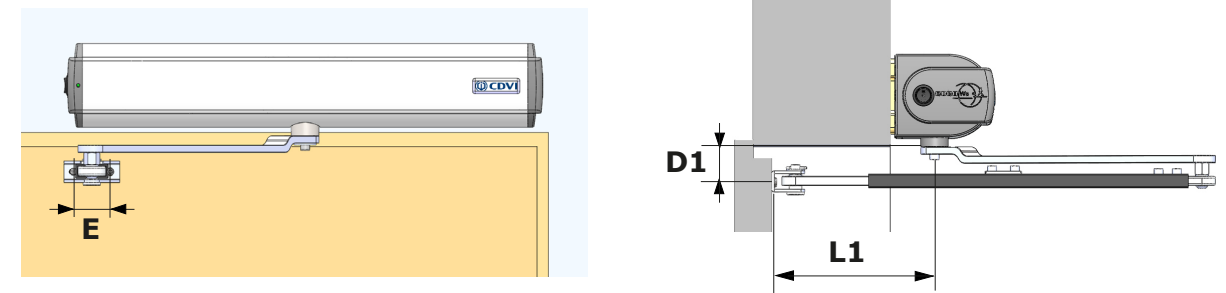
B = 270 mm			
Distance Motor Axis - Door (thickness of the wall)	Door hinge - Door bracket distance	Length of the adjustable arm	Max opening angle of the door
L1	A	H	C
60	660	550	115
90	660	570	110
120	580	550	120
150	620	590	110
180	580	595	118
210	500	580	140

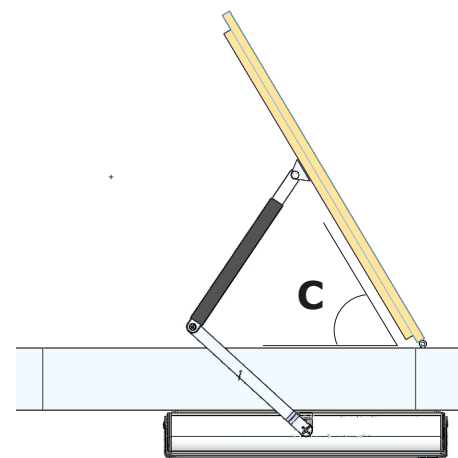
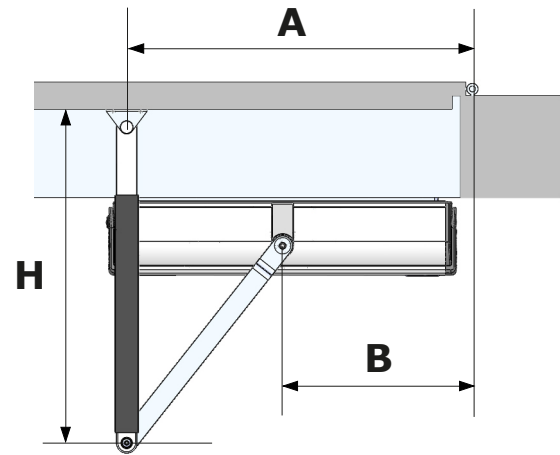
B = 300 mm			
Distance Motor Axis - Door (thickness of the wall)	Door hinge - Door bracket distance	Length of the adjustable arm	Max opening angle of the door
L1	A	H	C
60	580	490	110
90	660	550	100
120	580	530	110
150	580	555	113
180	580	580	108
210	540	590	117
240	540	600	110

B = 330 mm			
Distance Motor axis - Door (thickness of the wall)	Door hinge - Door bracket distance	Length of the adjustable arm	Max opening angle of the door
L1	A	H	C
60	500	430	110
90	500	450	110
120	500	480	113
150	500	480	113
180	540	525	107
210	540	575	107
240	500	590	115

Type II Installation:

Type II installation is for fitting to doors requiring a maximum of 300 mm wall width (reveal) or when the door requires firmer final close. For example, over a strike release or to overcome intumescent strips or door seals.





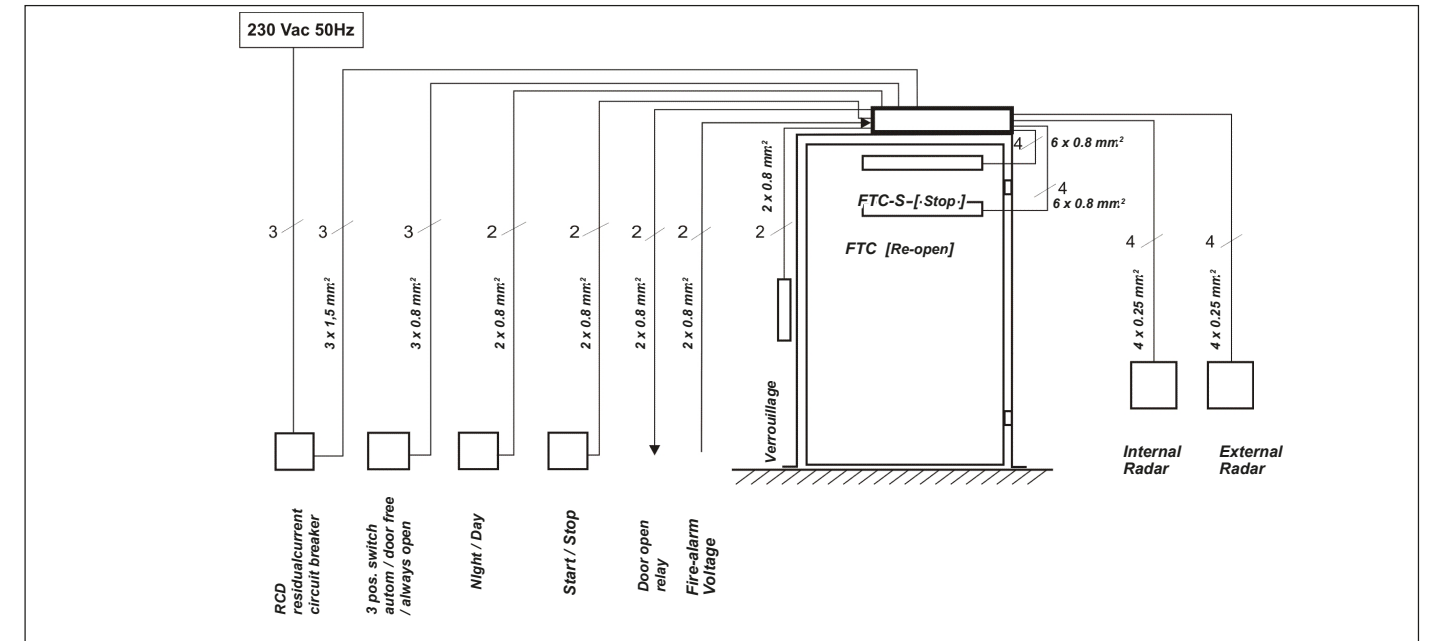
B = 270 mm			
Distance Motor axis - Door (thickness of the wall)	Door hinge - door bracket distance	Length of the adjustable arm	Max opening angle of the door
L1	A	H	C
120	420	410	140
150	460	420	115
180	460	450	110
210	460	480	110

B = 300 mm			
Distance Motor axis - Door (thickness of the wall)	Door hinge - door bracket distance	Length of the adjustable arm	Max opening angle of the door
L1	A	H	C
120	460	410	110
150	460	440	110
180	460	470	110
210	460	495	110
240	460	525	115
270	460	560	115
300	460	590	115

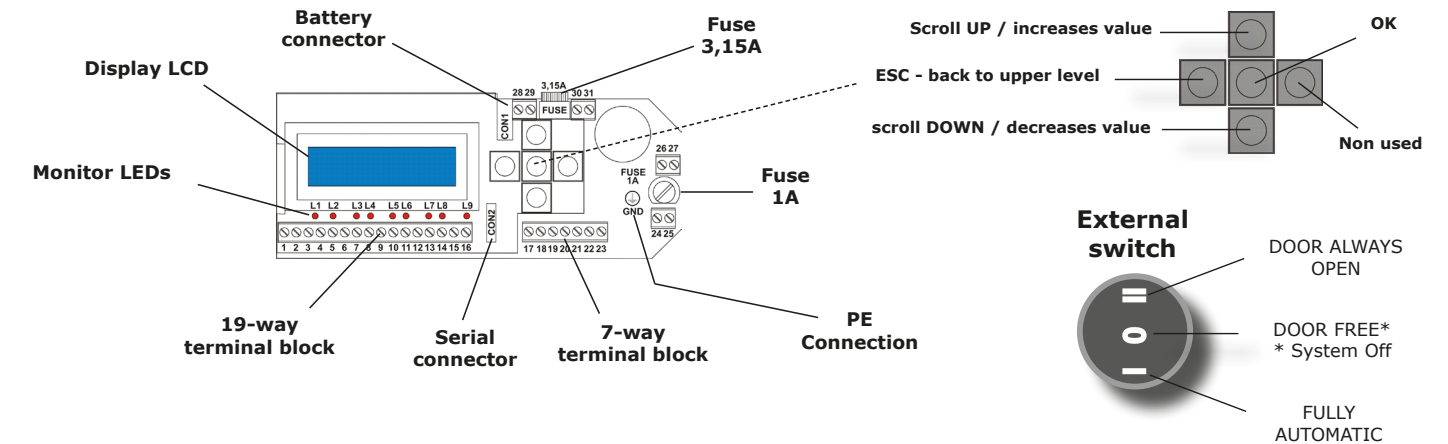
B = 330 mm			
Distance Motor axis - Door (thickness of the wall)	Door hinge - door bracket distance	Length of the adjustable arm	Max opening angle of the door
L1	A	H	C
120	460	420	105
150	460	420	105
180	500	430	95
210	500	495	95
270	500	550	95
300	500	580	95

Wiring diagram

Full diagram

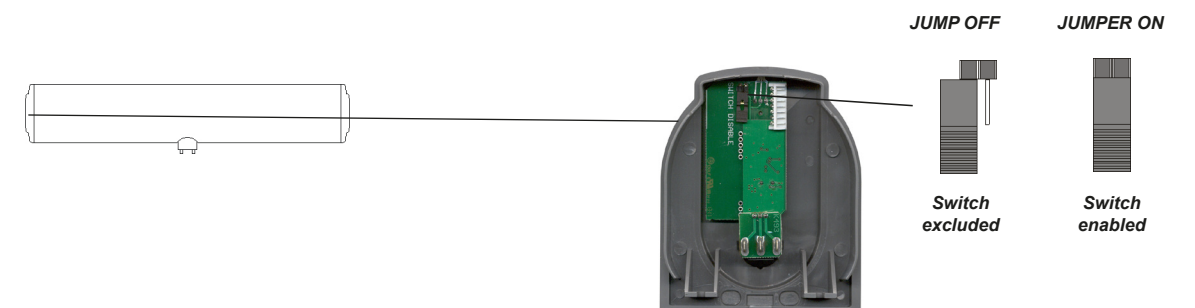


Electronic PCB Controller Layout and Push Buttons

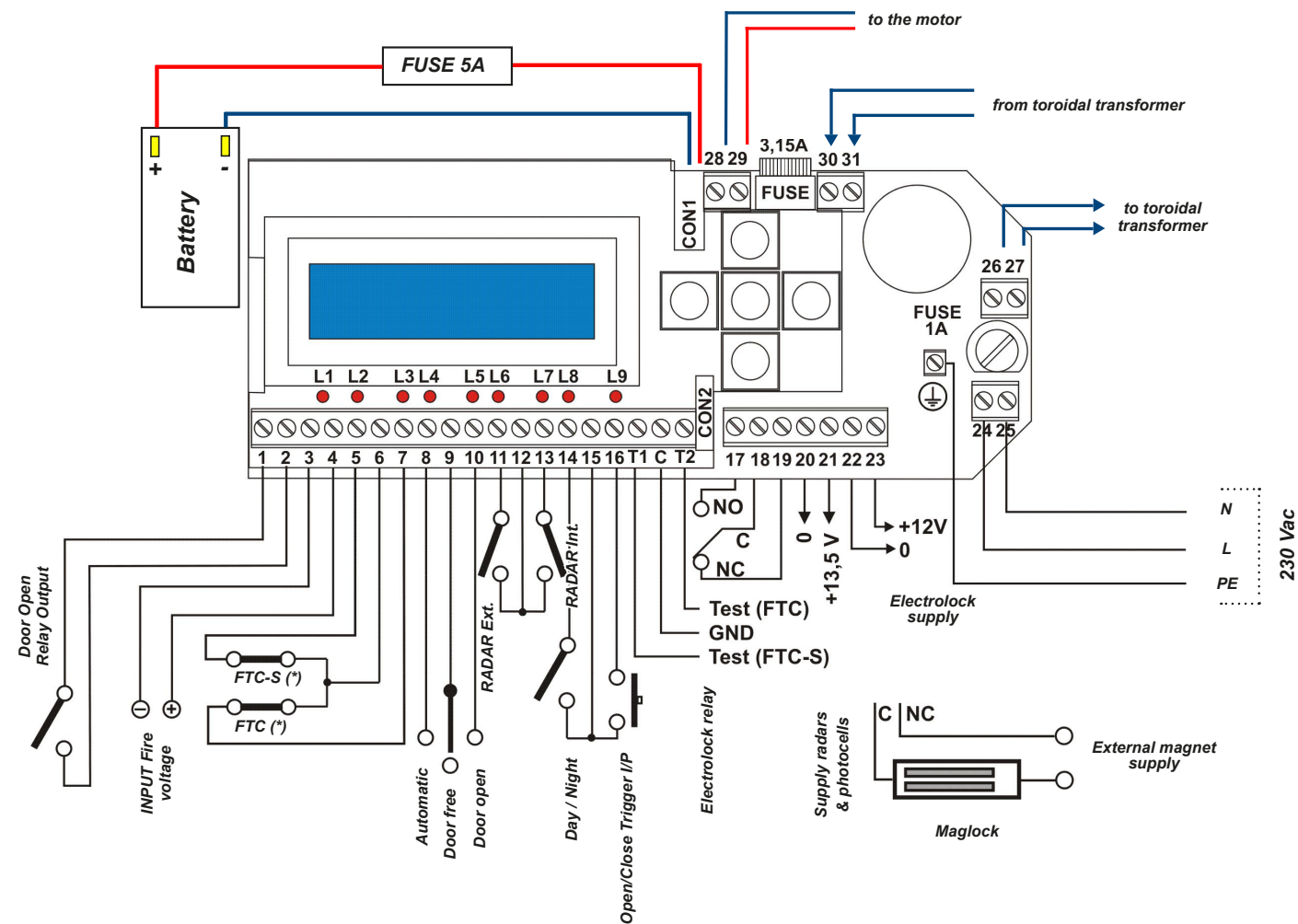


Jumper for external switch exclusion

The external mode switch on the end cap can be isolated to prevent misuse or for use with a remote switching device such as the DWSP-KS keyswitch.



Electrical connections



Terminal detail

19-way terminal block	
1	Output C Door Open Relay
2	Output NO Door Open Relay
3	Input V- Fire alarm voltage
4	Input V+ Fire alarm voltage
5	Safety Input NC Stop Photocells [FTC-S]
6	Safety Input C Photocells
7	Safety Input NC Re-open Photocells [FTC]
8	Input NO switch pos. I
9	Input C switch pos. 0
10	Input NO switch pos. II
11	Input NA Radar external
12	Input C Radar
13	Input NO Radar internal
14	Input NO Day/Night switch
15	Input common
16	Input NO push-button open/close/stop
T1	Output (+12) Test FTC-S
C	Common test photocells (GND)
T2	Output (+12) Test FTC

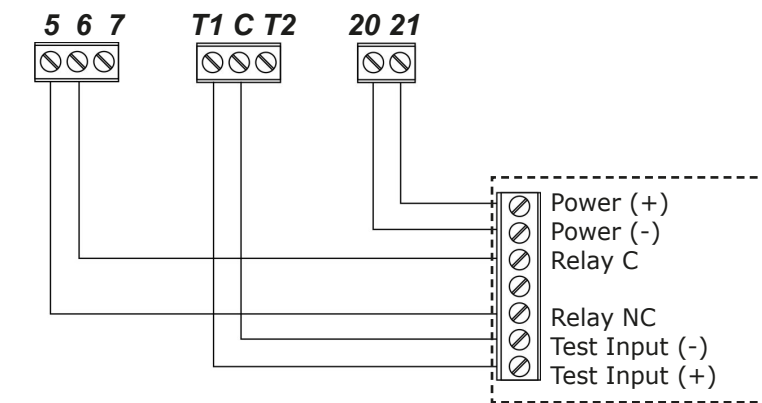
7-way terminal block	
17	Output NO relay electrolock
18	Output C relay electrolock
19	Output NC relay electrolock
20	Output 0V external devices power
21	Output 13.5 Vdc external devices power
22	Output 0V electrolock power
23	Output 12 Vdc electrolock power
2-way terminal block	
24	Input Line 230 Vac
25	Input Neutral 230 Vac
2-way terminal block	
26	Output 230 Vac to internal toroidal transformer
27	Output 230 Vac to internal toroidal transformer
2-way terminal block	
28	Input Motor BLACK cable
29	Input Motor RED cable
2-way terminal block	
30	Input 14 Vac from internal toroidal transformer
31	Input 14 Vac from internal toroidal transformer
(*) Door open relay	
Door status	Closed Opening/Open/Closing
Relay	OFF ON

Monitored photocells wiring

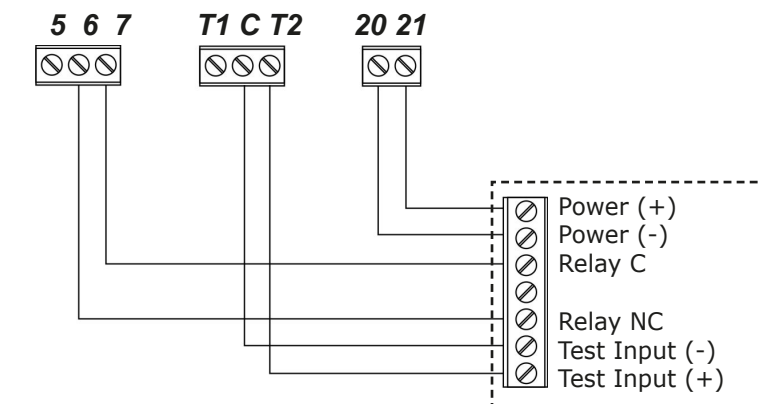
The EN16005 standard indicates that the parts of the system which have a direct effect on safety must comply with EN12978 and be designed to comply with EN ISO 13849-1 Performance Level "C". Safety related parts of the control system used for escape route functionality shall comply with EN ISO 13849-1 Performance Level "D". If devices type ESPE (photocells) are used, they must be monitored by the drive system.

The DIGIWAY Plus is equipped with output test signals (Test1, C, Test2) that check the photocells' status before any motion. **(see "Advanced Settings" under point 15)-18) to match the signal test to the sensor type)**

The system switches the photocell off and back on within a few mS to detect a change of the safety signal on terminals 5-6 and 6-7. If the signal change is regular, door motion is enabled, otherwise the motion is stopped or enabled in low energy mode (see the Advanced Settings menu).



STOP Photocells (FTC-S)



REOPEN photocells (FTC)

WARNING: at the end of the autocalibration (see pg 18) you are asked to enable or disable the test on the photocells. If no photocells are connected, terminals 5-6 and 6-7 must be shorted and the test must be disabled.

LOW ENERGY Mode

The EN 16005 standard (Annex F) indicates the parameters for Low Energy mode: the minimum open / close time from 10° to 90° is indicated in the following table:

Width of doorset leaf (m)	Mass (kg)				
	50	60	70	80	90
0.75	3.0	3.2	3.2	3.3	3.5
0.85	3.1	3.1	3.2	3.4	3.6
1.00	3.2	3.4	3.7	4.0	4.2
1.2	3.8	4.2	4.5	4.8	5.1

For other widths and/or masses the times can be calculated using the formula:

$$t = \frac{D\sqrt{m}}{2,26}$$

where:

t = time in sec.,
D = diameter doorset leaf in metres,
m = mass in kg.

See the ADVANCED SETTINGS Menu to set the door-set leaf dimensions and operating mode in case of photocell malfunction.

LED messages

Electronic card LEDs

	LED ON	LED OFF
L1	Fire voltage OK	Fire voltage ABSENT
L2	NC contact stop photocells closed	NC contact stop photocells open
L3	NC contact re-open photocells closed	NC contact re-open photocells open
L4	Automatic mode	-
L5	Door always open	-
L6	External radar active	-
L7	Internal radar active	-
L8	Night mode	Day mode
L9	Open/close command active	-

Meaning of LP LED messages

Function	GREEN LED		ORANGE LED		RED LED		
	ON	Blinking	ON	Blinking	ON	Blinking	Fast blinking
Basic mode	x						
Battery operated		x					
Fire alarm				x (fast)			
Night mode			x				
Night Mode & battery operated				x			
Door free	-	-	-	-	-	-	-
Current calculation in progress						x	
Selflearning						Red/green	
Battery test							x
Battery discharged					x		
Safety photocells malfunction							x
Service required						x (slow)	

Battery

Voltage	12V
Rated charge	1.3Ah
Autonomy in battery operating mode (*)	270 cycles / 16 hours
Average charge and discharge cycles	800
Average battery life	2-3 years (in rated operating temperature)
Cycles with battery at end-of-life	100

(*): In case of mains power failure (230 Vac) the operator functions in battery mode. The autonomy declared above depends on the number of external devices connected i.e. radar, photocells etc. The internal software periodically executes a test on the battery charge. (LED LP blinks RED QUICKLY). If, at the end of the test, the battery is discharged and the LP doesn't stop blinking RED, replace the battery with an equivalent.

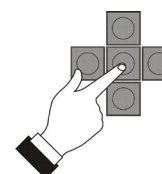
3] SYSTEM CONFIGURATION AND SETTINGS

Getting started

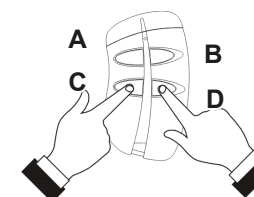
DIGIWAY Plus is equipped with a 2x16 character LCD display and a 5-key keyboard. The operating configuration can be set navigating through several menus. The menu has a tree structure with a main menu and different sub-menus.

Access to the main menu

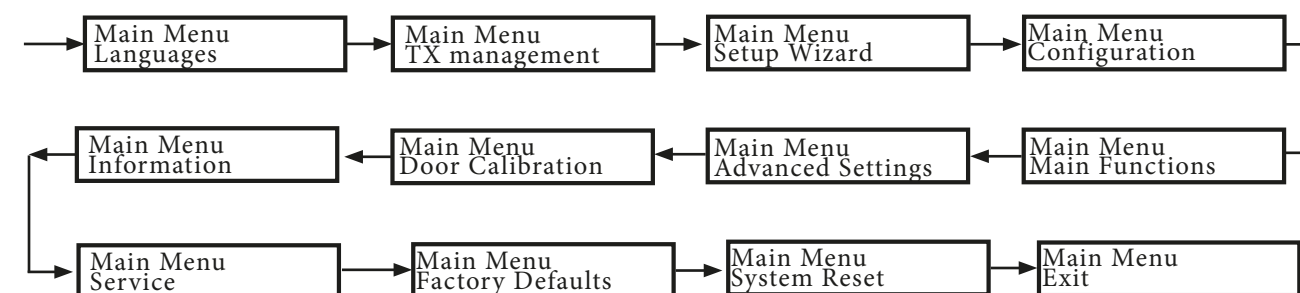
Hold the OK button for 4 seconds on the operator.



OR



Press and hold the C and D buttons on the master transmitter simultaneously.

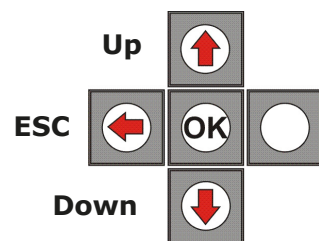


Master transmitter

The operator is supplied with a 4-button transmitter. On completion of the mechanical fixing and the electric connections, proceed with the memorisation of this transmitter as "MASTER TRANSMITTER" into the internal DIGIWAY memory. This transmitter allows you to set up all parameters, without having to access the 5-button keypad on the operator.

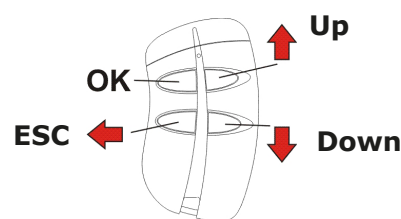
LANGUAGE SELECTION

- 1 Press and hold the OK button on the keyboard until the display enters the main menu.
- 2 Select the language by scrolling through the list using the UP and Down buttons.
- 3 Press OK to confirm: the display shows the message "OK" and then displays all messages in the new language.
- 4 Exit the menu with the ESC button.



MASTER TRANSMITTER MEMORISATION

- 5 Scroll through the main menu, select TX MANAGEMENT submenu and press OK.
- 6 Select the option ADD TX MASTER and press OK
- 7 Press the OK key on the transmitter (top-left button): the display will show the serial number, confirming the memorisation.
- 8 Exit the menu with the ESC button.
- 9 Exit the main menu selecting EXIT MENU.



NOTES:

The system accepts only ONE Master Transmitter. Any other transmitters must be memorised as "regular" and will only serve to trigger the door operation.

In case of loss of the Master Transmitter it is possible to replace it with an identical 4-button Transmitter.

A Master transmitter cannot be memorised as a Regular transmitter.
A Regular transmitter cannot be memorised as a Master transmitter.

Important: do not issue this transmitter to the end user as programming or factory defaults could be applied unintentionally.

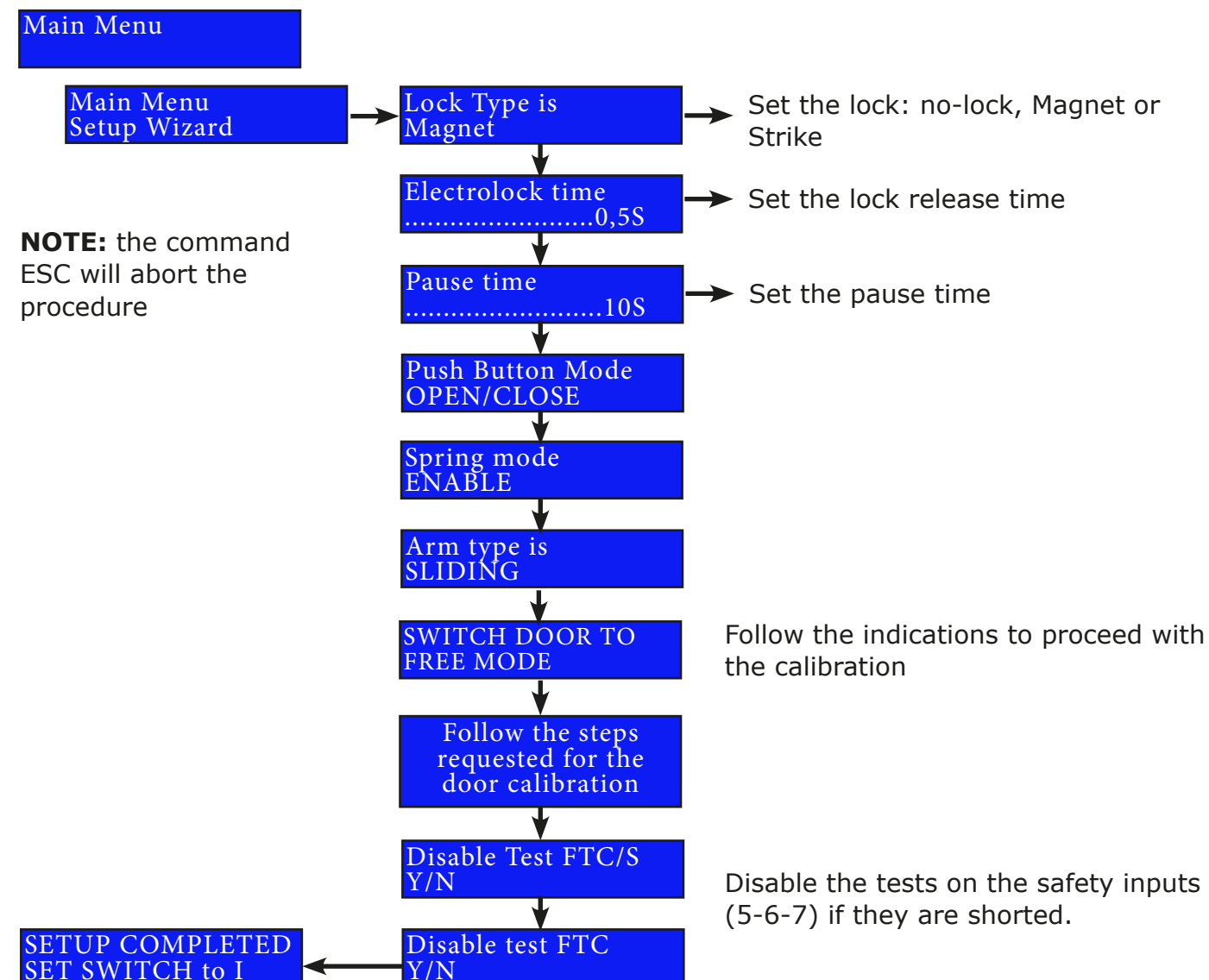
The setup of the operator can be divided into **4 steps**:

- PART I : CONFIGURATION (setup of the basic operating mode)
- PART II : DOOR CALIBRATION (automatic detection of the door characteristics)
- PART III : ADJUSTMENTS (further adjustments and personalisation)
- PART IV : SPECIAL PARAMETERS (setup of the advanced parameters)

WIZARD SETUP

In the Main menu select the Wizard setup to initiate a basic setup of the operator. The guided menu will ask you to specify the main parameters for basic operation of the unit and will complete the adjustment with the calibration of the door.

At the end of the procedure the door will operate in a basic manner. To complete the setup and tailor the settings to the installation site of the automated door, go to the remaining parameters in the Configuration, Main, and Advanced Settings submenus.



PART I: CONFIGURATION

The CONFIGURATION submenu allows you to set up of all the basic parameters of the operator depending on the door type that is being automated. It consists of 18 parameters. Each parameter can have 2 or more values. For each parameter there is a preset factory value. If the FACTORY DEFAULT function of the main menu is activated, all the parameters are reset to those values.

All parameters are described in the table below:

Parameter	Description	Option	Default
Number of Doors	Sets the number of doors	1 DOOR / 2 DOORS	1 DOOR
Electrolock	Enables the electrolock and specifies the type	NO LOCK / STRIKE/ MAGLOCK	NO LOCK
Opening Jolt	Enables the Opening Jolt: SHORT CLOSING PULSE BEFORE OPENING, useful when using an electric strike to stop binding.	ENABLE / DISABLE	DISABLE
Push & Open	Opens the door automatically with a short push.	ENABLE / DISABLE	ENABLE
Push & Close	Closes the door with a short push even in pause status.	ENABLE / DISABLE	ENABLE
Wind Stop	Keeps the door closed in presence of wind which pushes the door. See ADVANCED SETTINGS to set the level of the closing force used.	ENABLE / DISABLE	DISABLE
Autoreclosing	Enables the automatic reclosing of the door.	ENABLE / DISABLE	ENABLE
Radar 'I' Mode	INTERNAL radar operating mode. If the CLOSING option is selected, the radar is excluded during the closing cycle. This prevents the door reopening if the arm or door is detected. (*)	NEVER / CLOSING / ALWAYS	NEVER
Radar 'E' Mode	EXTERNAL radar operating mode. If the CLOSING option is selected, the radar is excluded during the closing cycle. This prevents the door reopening if the arm or door is detected. (*)	NEVER / CLOSING / ALWAYS	NEVER
Day / Night	Disable the radar in night mode (contact closed on terminals 14-15) - In NIGHT MODE the External radar or both radars are disabled.	E Radar OFF / I+E radar OFF	E Radar OFF
Disabled Mode	Disabled access mode (see paragraph: Disabled Access settings)	ENABLE / DISABLE	DISABLE
Open Command	Optional functions for the open command; Open, Close or Stop. Once selected the function will operate from the open button (terminals 15 - 16) and the radio transmitter.	OPEN - OPEN / CLOSE - OPEN-CLOSE / STOP	OPEN / CLOSE
Sprin Mode	If the door is closed it will remain free and can be pushed/pulled manually; if opened fully it will close after the preset pause time. Note: If the door is partially opened up to 75% the pause time will be 1 sec and will close after.	ENABLE / DISABLE	DISABLE
2 Doors Overlap	Overlap of the leaves (in case of double doors). The MASTER leaf starts opening first, the SLAVE starts closing first. If disabled the doors open simultaneously	ENABLE / DISABLE	DISABLE
Door Type	MASTER leaf or SLAVE leaf (in case of double doors)	MASTER / SLAVE	MASTER
Arm Type	Articulated or sliding arm. This parameter sets the VELOCITY of the door according to the arm type selected. (see Adjustments) 50% ARTICULATED ARM, 70% SLIDING ARM	SLIDING / ARTICULATED	SLIDING
Fire Signal	Fire signal management. When this option is enabled the door operates normally if the fire voltage is present V+/V-. If the fire power is removed (fire alarm triggered) the door reacts to the option set in the advanced settings.	ENABLE / DISABLE	DISABLE

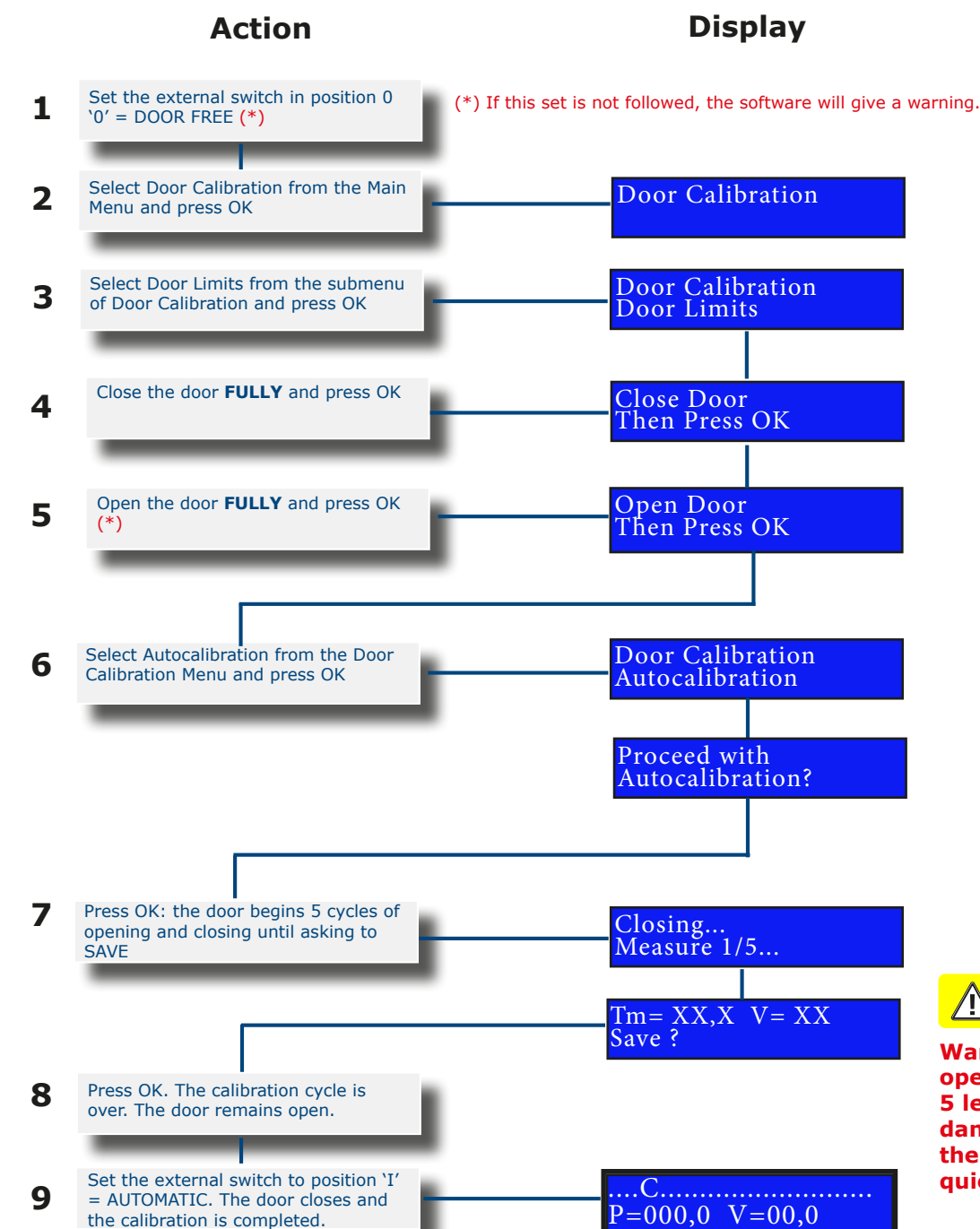
ATTENTION: Any change carried out requires a complete cycle (open, pause, close) or a system reset to be implemented.

PART II: DOOR CALIBRATION

DIGIWAY Plus has an innovative software which adapts the internal parameters to the characteristics of the door. The calibration sets the door travel limits and launches a 5-cycle routine for the automatic detection of door characteristics.

Follow the steps below for the door calibration procedure:

NOTE: Before proceeding with the calibration check the connection of the battery's red/black cable to the main board and temporarily disconnect any lock if connected. Make sure any door latch is retracted to allow clear operation of the door movement.



Warning: whilst the door operator is going through its 5 learning cycles, it can be dangerous to pass through the door as it opens very quickly.

Calibration Completion

At the end of auto-calibration, the door is operational. However, for the door to be fully functional a couple of full complete cycles must be carried out. During these two cycles the current profile is calculated for the opening and closing. This is necessary for functional obstacle detection. At the end of these cycles the external LED changes to GREEN and the letters "i" and "I" appear on the display indicating the acquisition of the current levels.

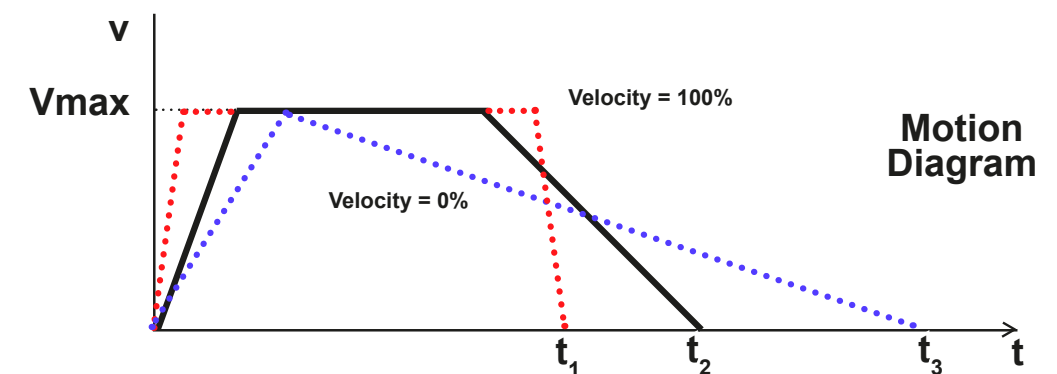


It is highly recommended to ensure the door completes these 2 cycles without any interruption. When completed, the external LED will illuminate Green, and the door calibration is completed.

PART III: MAIN FUNCTIONS

The maximum speed, the torque, and the pause time are automatically calculated by the system during door calibration. If you need to change any of these settings, enter the submenu 'Main Functions'. See the following table for the explanation of the parameters. Each parameter can be adjusted using the keyboard buttons or transmitter keys.

Functions	Description	Values	Notes
Open Speed	Sets the maximum speed reached by the door during opening.	0-100%	At the end of the door calibration the system automatically sets the max open speed at a particular value. By increasing this value, the total open time can reduce - be aware that in order to meet the end opening point, the door may slow down before reaching the max speed.
Close Speed	Sets the maximum speed reached by the door during closing.	0-100%	At the end of the door calibration the system automatically sets the max close speed at a particular value. By increasing this value, the total close time can reduce - be aware that in order to meet the end closing point, the door may slow down before reaching the max speed.
Pause Time	This is the time the door remains open before automatically closing again.	1-99 sec	The preset factory value is 10 sec.
Pause Time ext	Extended pause time	1-99 sec	When Disabled Mode is enabled, if the door is opened through a command at inputs 15-16, it will re-close after the Ext Pause time. The Pause Time for the remaining commands (radar, push&go, remote controls) the pause time remains the regular one.
Open Torque	Max torque of the door during opening.	0-100%	Le couple maximum en ouverture est défini automatiquement par le système à la fin de l'auto apprentissage à la valeur maximum de 100%. Dans le cas d'une porte très légère ou sensible, il est nécessaire de diminuer cette valeur.
Close Torque	Max torque of the door during closing.	0-100%	Le couple maximum en fermeture est défini automatiquement par le système lors de l'auto apprentissage à la valeur maximum de 100%. Diminuez cette valeur en cas de porte sensible ou très légère, ou pour respecter la réglementation des personnes à mobilité réduites.
Velocity	Velocity of the door: rapidity of the door to reach the max speed set, and to maintain this value along all its travel.	0-100%	The default value for this parameter is 70%. The higher this value, the lower the total travel time, because the door maintains a high value of speed for a longer time. If this value is too high, it can cause "door bounce", especially for heavy doors (see motion diagram).



Gestion des obstacles

Main Functions	Description	Value	NOTES
O.D. Type	Sets the obstacles detection criteria	B1 & B2	B1 and B2 are basic criteria that are always active.
		B3 B4 B5 B3+B4 B3+B4+B5	B3 = intervenes after the speed decreases under 2/3 of the max speed, calculated during the calibration. B4 = intervenes if the current consumed exceeds 175% of the current consumed during the preset. B5 = intervenes if the door is manually pushed during the closing
		Bf	Bf = obstacle detected by the slave leaf in double door configuration
O.D Reactivity	Sets the reaction time against an obstacle	0.1 - 5 sec.	Use the UP or DOWN keys to adjust this time: the higher the value, the longer will be the contact of the door against the obstacle (less sensitive). Default value = 0.1 Sec.

Once the door operator is installed, check that the friction or the disbalance of the door doesn't cause an automatic recognition of an obstacle criteria. Select the obstacle criteria that is most suited for the door usage and installation.

The opening or closing cycle is performed at lower speed when an obstacle criteria is detected.

ATTENTION: Reactivity values above 0.1 sec allow to avoid potential friction but reduce the time of reactivity and can cause a big impact of the door on the obstacle.

PART IV: DOOR CALIBRATION (ADDITIONAL FUNCTIONS)

Door open position fine adjustment

If, at the end of the autocalibration, the door does not open to the exact point set during calibration, it is possible to change the open angle without having to complete the autocalibration operation again.

To do this, enter the calibration menu and select the option: **CHANGE OPEN POS.**



The number displayed (eg 155) is the door open angle in degrees and is stored by the system. It corresponds to the door open position. Using the keys of the PCB or the buttons of the Master transmitter, decrease the value to decrease the opening angle or increase the value to increase the opening angle.

NOTE: The new opening angle is reached after one full cycle.

Zero Mode

It is possible to set the mode used by the system to calculate the "door closed" position: There are 2 modes: The encoder or the limit switch.

Encoder

When the "door-closed-position" is given by the built-in encoder, every time the door closes, the system updates the zero position with the value of the encoder. This is a dynamic zero, that could change with the operation of the door.

Limit Switch

In this case it is necessary to install a limit switch with dry contact **C-NO**, activated by the door when it reaches the closed position.

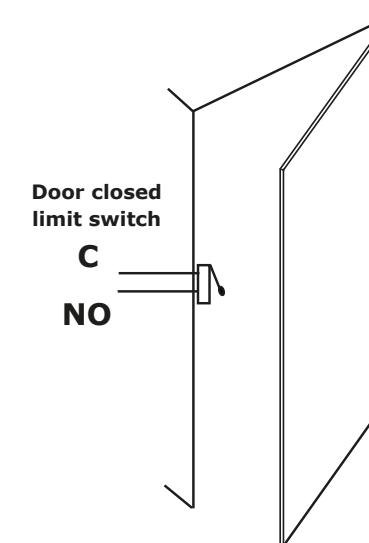
The terminals used by the limit switch selected must be free: They lose the main function assigned and they acquire the function of ZERO POSITION.

Here are the inputs that can be used provided that the terminal is free and has not been used with the system yet:

- Day-Night contact (terminals 14-15)
- Request-to-exit (REX) contact (terminals 15-16)
- Radar ext (terminals 11-12)
- Radar int (terminals 12-13)

The zero position set through this contact remains identical regardless of any operational change of the door due to environmental conditions.

For this reason, it is highly recommended to install the limit switch in a very stable way, fixed on a solid support, fitted to be activated when the door has reached the closed position.



PART V: ADVANCED SETTINGS

DIGIWAY Plus is equipped with many additional parameters (all adjustable) to better suit any type of installation. From the main menu select **ADVANCED SET** to enter this submenu, which allows more adjustments.

- 1) **Advanced Setting Electrolock Time** — **Electrolock Time**
|||||||.....0,5 SEC.

It is possible to set the electrolock release time from 0.1 to 40 sec. depending on the lock/door type. Press the UP or DOWN buttons to increase or decrease the pause time and confirm with OK.

Default value = 0.5 sec

- 2) **Advanced Setting Opening Jolt Time** — **Opening Jolt Time**
|||||||.....0,5 SEC.

The opening jolt, when enabled, is a short closing motion before the operator begins opening - this relieves the pressure of "side-load" for some locking devices. You can adjust this time from 0.1 to 40 sec. depending on the type of electrolock and door. Press the UP or DOWN buttons to increase or decrease the time and confirm with OK.

Default value = 0.5 sec.

- 3) **Advanced Setting Open Jolt Torque** — **Open Jolt Torque**
|||||||.....20%

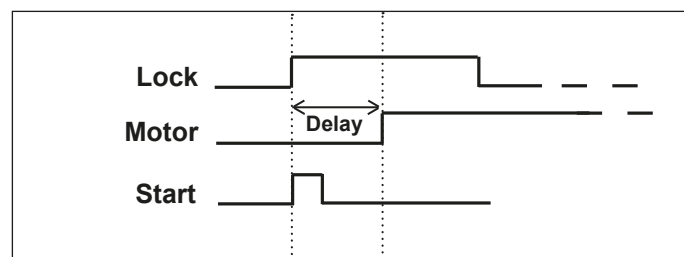
It is possible to adjust the torque of the motor during the opening jolt pulse. This is adjusted depending on the mechanical resistance of the door. Press the UP or DOWN buttons to increase or decrease the value and confirm with OK.

Default value = 20%.

- 4) **Advanced Setting Open Delay** — **Open Delay Time**
|||||||.....0,5 SEC.

It is possible to add a short delay to the door motion to allow the electrolock bolt to fully exit from its keeper, ensuring the door is fully unlocked. This can be useful when using motorised locks. The open delay is set by pressing UP or DOWN buttons to increase or decrease from 0.1 to 40 sec and confirm with OK.

Default value = 0.5 sec.



- 5) **Advanced Setting Wind Stop Torque** — **Wind Stop Torque**
|||||||.....10%

It is possible to adjust the torque of the motor when the wind stop function is enabled. This allows you to change the value of the force applied by the door relative to the wind pressure. Press the UP or DOWN buttons to increase or decrease the torque and confirm with OK.

Default value = 50%.

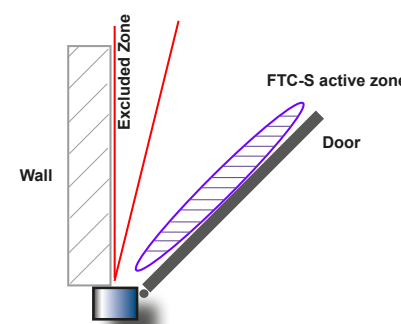
- 6) **Advanced Setting Dynamic Pause** — **Enable / Disable**

Dynamic pause is a function which automatically adjusts the programmed pause time, preventing too many close attempts of the door in high traffic situations. When enabled, this function increases the programmed pause time by 1 sec. each time it detects a passage through the door during the closing phase, and restarts the time when passage is detected when the door is open. Once the door completes its cycle up to the closed status, the pause time is reset to the programmed value.

Press UP or DOWN buttons to enable or disable the function and confirm with OK.

Default value = DISABLE.

- 7) **Advanced Setting FTC-S Exclusion** — **FTC-S Exclusion**
|||||||.....000



If the door is next to a wall and is using a curtain protection device, it may be necessary to prevent the device being activated by the wall to allow a complete opening of the leaf.

Set the zone width as a percentage of the full door motion using the UP or DOWN buttons to increase or decrease the value.

000 = Door OPEN

100 = Door CLOSED

Example: if you want to disable the curtain device when the leaf is open at 80% of the complete travel, set the value to 20.



WARNING: the excluded zone may become a health & safety hazard because it not protected!

- 8) **Advanced Setting Ex Power Open** — **Enable / Disable**

When enabled, this adds one more OPENING pulse at the end of the opening cycle to compensate for possible friction or door imbalance. Enable or disable this function with the UP or DOWN buttons and confirm with OK.

Default value = DISABLE.

- 9) **Advanced Setting Ex Open Torque** — **Ex Open Torque**
|||||||.....50 %

This function allows you to set the TORQUE of the OPENING extra pulse. Change the value by pressing the UP or DOWN buttons and confirm with OK.

Default value = 50%.

- 10) **Advanced Setting Extra Open Time** — **Extra Open Time**
|||||||.....0 SEC.

This function allows to set the duration TIME of the OPENING extra pulse. Change the value by pressing the UP or DOWN buttons and confirm with OK.

Default value = 0 sec.

- 11) **Advanced Setting Ex Power Close** — **Enable / Disable**

When enabled, this adds one more CLOSING pulse after the regular CLOSING cycle to compensate for possible friction or door imbalance. Enable or disable this function with the UP or DOWN buttons and confirm with OK.

Default value = DISABLE.

12) **Advanced Setting** — **Ex Close Torque**
Ex Close Torque |50 %

This function allows to set the TORQUE of the CLOSING extra pulse. Change the value by pressing the UP or DOWN buttons and confirm with OK.

Default value = 50%.

13) **Advanced Setting** — **Extra Close Time**
Extra Close Time |0 SEC.

This function allows you to set the duration TIME of the CLOSING extra pulse. Change the value by pressing the UP or DOWN buttons and confirm with OK.

Default value = 0 sec.

14) **Fonctions Avanc** — **Relache incendie**
Relache incendie | Ouvert/Libre/Fermé

When the Fire Release function is enabled, it's possible to set the reaction of the door depending on the failure of the Fire Power (V+, V-):

- DOOR FREE = In case of Fire Power failure the door becomes FREE (System Off)
- DOOR OPEN = In case of Fire Power failure the door opens and stays OPEN until the Fire Power is reset or the function of the Menu Configuration is disabled.
- DOOR CLOSED LOCKED = Door CLOSED and lock active
- DOOR CLOSED UNLOCKED = Door CLOSED and lock disactive

15) **Advanced Setting** — **Max Cycles Obst**
Max Obst Cycles |000

When the door meets an obstacle during closing, it re-opens immediately. At the end of the pause time, it re-closes. If the obstacle is still present the cycle restarts. This parameter sets the max number of re-closing attempts before the door stops and waits for an external command.

Range : from 1 to 256 . Value 0 of the parameter means no limit.

Default value = 100 tentatives.

NOTE: At the end of the attempts the door remains stopped, until a different mode i set as described in the parameters Restart Time-out and Restart O/C Retry.

16) **Advanced Setting** — **OD on Closing**
OD on Closing | Reopen

After the detection of an obstacle during closing the door will react in a different way, according to the following settings:

- **Reopen:** The door reopens and, after the pause time, recloses
- **Stop & Wait:** The door stops and, after the pause time, recloses
- **STOP:** The door stops and waits for a command to reopen and for a further command to reclose.

17) **Advanced Setting** — **Approach speed**
Approach speed |5

It is possible to change the approach speed as the door approaches the final close point. This is useful if the door senses an obstacle or finishes short of a strike. The door will accelerate a small amount when increased.

Default value = 5.

18) **Advanced Setting** — **Obst. detection %**
Obst. detection % |2%

It is possible to change the percentage at which the door does not detect an obstacle during the full door cycle allowing the door to close.

100% = fully open, 0% = fully close

19) **Advanced Setting** — **Min Open Speed**
Min Open Speed |5

It is possible to change the approach speed during the OPENING. This can be useful if the door meets some friction in the approaching motion where it is searching for the open position.

Default value = 5.

20) **Advanced Setting** — **% Min Open Speed**
% Min Open Speed |2%

It is possible to change the percentage of the complete open trip after which the speed remains at the value set with the parameter "Min Open Speed".

Default value = 2%

22) **Advanced Setting** — **ENABLED /**
Test FTC | DISABLED

It is possible to disable the test on the re-open photocell FTC:

ATTENTION!! If the test is DISABLED the operator must work in Low Energy Mode otherwise it doesn't operate in compliance with the EN16005 Standard.

24) **Advanced Setting** — **STOP /**
Test FTC Fail | LOW ENERGY

In case the FTC safety photocells malfunction, you can set the operating mode to either:

STOP / LOW ENERGY

26) **Advanced Setting** — **Diameter (m)**
Low Energy |1,2

The software calculates the minimum opening/closing time when the malfunction mode is set to Low Energy, according to the doorset diameter (in metres) and weight (in kilograms).

28) **Advanced Setting** — **Latch ctrl pos**
Latch ctrl pos |3%

Sets the point in % that follows the Latch control torque setting. Useful for releasing over strikes.

0% door closed - 100% door open

21) **Advanced Setting** — **O.D. Cycle**
O.D. Cycle | Fast

It is possible to set the type of cycle after an obstacle detection:

FAST: the door keeps normal speed after the detection of an obstacle.

SLOW: the speed of the door after an obstacle is reduced.

23) **Advanced Setting** — **ENABLED /**
Test FTC-S | DISABLED

It is possible to disable the test on the stop photocell FTC-S:

ATTENTION!!: If the test is DISABLED the operator must work in Low Energy Mode otherwise it doesn't operate in compliance with the EN16005 Standard.

25) **Advanced Setting** — **STOP /**
Test FTC-S Fail | LOW ENERGY

In case the FTC-S safety photocells malfunction, you can set the operating mode to either:

STOP / LOW ENERGY

27) **Advanced Setting** — **Weight (Kg)**
Low Energy |120

Sets the doorset weight in kilograms.

29) **Advanced Setting** — **Latch ctrl torque**
Latch ctrl torque |5

Boost the starting torque of the OPENING: setting of the torque value.

Default value = 0

30) **Advanced Setting** — **FTC Test Mode**
FTC Test Mode — **Active HIGH/Active LOW**

The test signal for the safety photocells (FTC/ FTC-S) can be set to operate as "Active HIGH" or "Active LOW". This can help to match the operating mode of several types of photocells from a range of manufacturers.

Check the operating mode of the test signal of the safety device used and set the parameter accordingly.

NOTE: If the operating mode doesn't match the door will not move.

Default value = Active HIGH

31) **Advanced Setting** — **FTC-S Mode**
FTC-S Mode — **Stop / Reclosing**

Set the reaction of the door if an obstacle is detected by the FTC-S sensor during OPENING.

If the safety FTC-S meets an obstacle, the door can react in 2 different ways:

- **STOP:** the door remains stopped in that position as long as the sensor is activated
- **RECLOSING:** the door recloses anyway after 4 sec. even if the sensor is triggered

Disabled persons access settings

If the operator is used for disabled persons, adjust the opening and closing speed of the leaf for Low Energy setting.

Door Length	Door weight				
	50 Kg	60 Kg	70 Kg	80 Kg	90 Kg
750 mm	3.0 s	3.1 s	3.2 s	3.3 s	3.5 s
850 mm	3.1 s	3.1 s	3.2 s	3.4 s	3.6 s
1000 mm	3.2 s	3.4 s	3.7 s	4.0 s	4.2 s
1200 mm	3.8 s	4.2 s	4.5 s	4.8 s	5.1 s

NOTE 1:

According to regulations, when the DISABLED PERSONS ACCESS is activated (See Configuration Menu):

- The min. Pause Time must be set at 5 Sec.
- The motor torque measured at the main closing edge must be lower than 67 N.
- The min slow time in closing must be 1.5 sec.

These values can be set in the Main Functions menu.

NOTE 2:

When the Disabled Persons Mode is enabled, if the door is open through a C-NO command on inputs 15-16, it will reclose after the Pause Time Extended. If the command comes from inputs (radar, push&go, remote control), the Pause time remains the regular one. The Pause Time extended is always executed if the open command comes from button D of a remote control.

 **Warning: disabled person access doors must be identified with proper signage.**

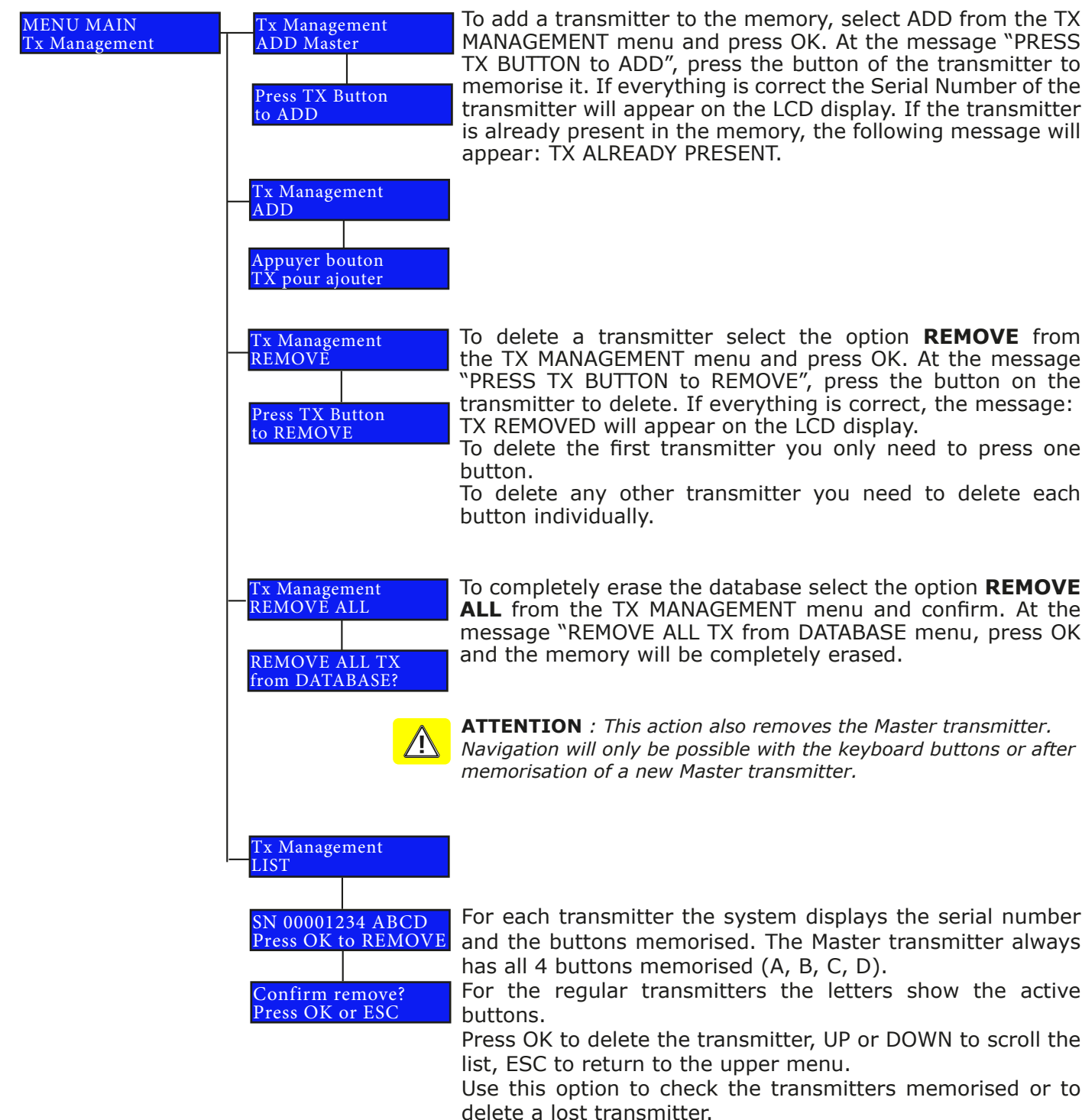


Remote controls management

The unit is equipped with a superheterodyne AM receiver with KeeLoq® hopping code security protocol. In the TX Management menu you can manage the memory of the receiver, which can store up to 50 transmitters.

The system manages 2 types of transmitters : Master and regular.

- The transmitter Master allows you to enter the menu and change the settings. Only ONE Master transmitter can be memorised. There is a special option for memorising a Master transmitter. A new Master transmitter will overwrite the old one.
- The regular transmitters can only trigger the system by giving the opening command.

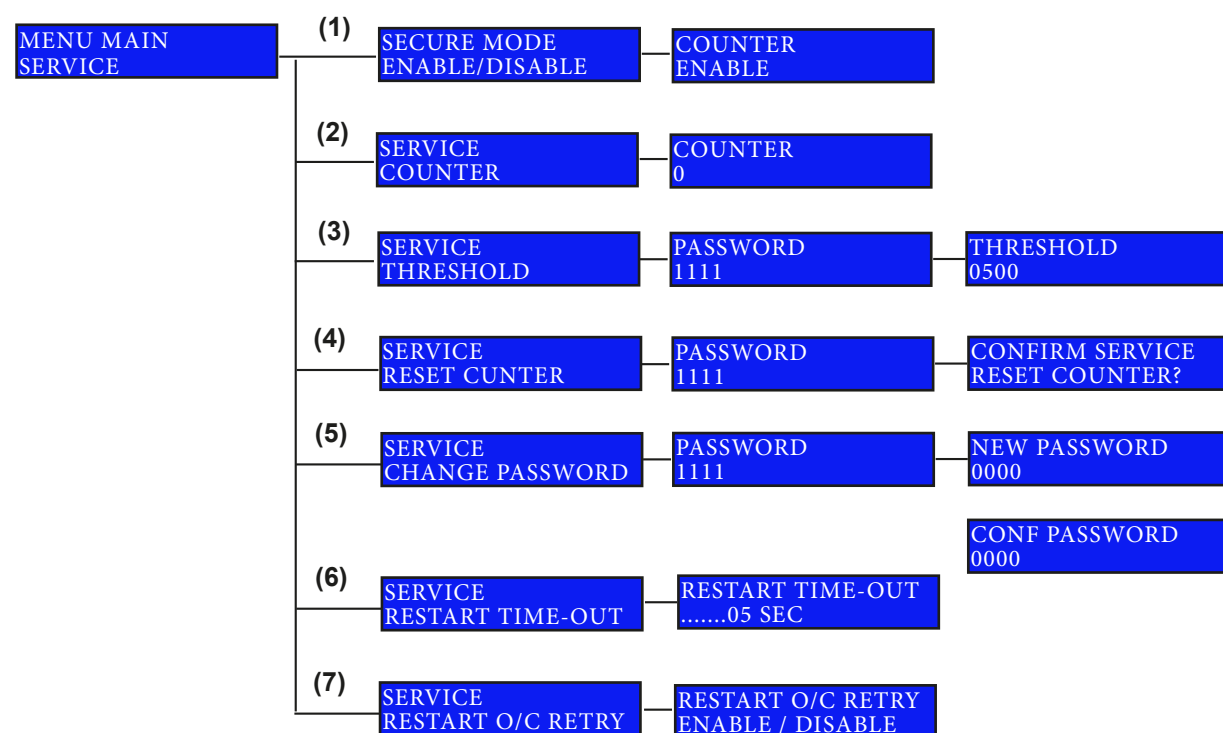


Menu Service

The unit is equipped with 2 cycle counters: **Absolute Counter** and **Partial Counter**

- The **Absolute Counter** registers the cycles of the motor throughout its life: It cannot be reset except by the factory. The counter increments by 1 if the door completes a clean cycle of opening+pause+closing without any obstacle or re-opening action caused by a sensor (radar, photocells, etc). The current value of the absolute counter can be seen on the INFORMATION menu (see next page).
- The **Partial Counter** can be used to set a maintenance period. It can be reset after a service intervention.

Note: The manual usage, meaning the opening of the door by pulling or pushing, is not taken into account.



NOTES

(1) Secure mode: Allows you to protect the system from unauthorized access. If the parameter is set to ENABLE, the system asks the password to access the menu (Factory password = 1111). A Factory default command resets the password to 1111 and sets the 'Secure mode' parameter to DISABLE.

(2) Partial counter value.

(3) Threshold: The number of cycles after which the unit starts to give the Service Request message: the main LED flashes RED SLOWLY. Setting this requires entering the correct 4-digit System Password. If Threshold=0 (factory setting) the main LED never changes colour.

(4) Resets the partial counter value: It has to be reset after the maintenance intervention and resets the main LED to solid GREEN. This requires the 4-digit system password to be entered.

(5) Changing the system password: Factory Value = 1111
Changing the password requires the default or current password to be entered. When changing the password, the new password must re-entered to confirm.

(6) Restart Time-out
It is possible to set a time-out value (from 1 sec to 1 hour) that generates a restart command to the system after the door has has run out of closing attempts set by the Max Obst Cycles parameter.

(7) Restart O/C Retry
If, at the end of the closing attempts set with the Max Obst Cycles parameter, the door has not waited for a manual intervention, it is possible to generate an automatic restart. Set the value of the Restart O/C Retry parameter to ENABLE. this way, after the last closing attempt, the door will wait for the time-out set on the parameter Restart Time-out paramater and then a general reset is initiated.

Information

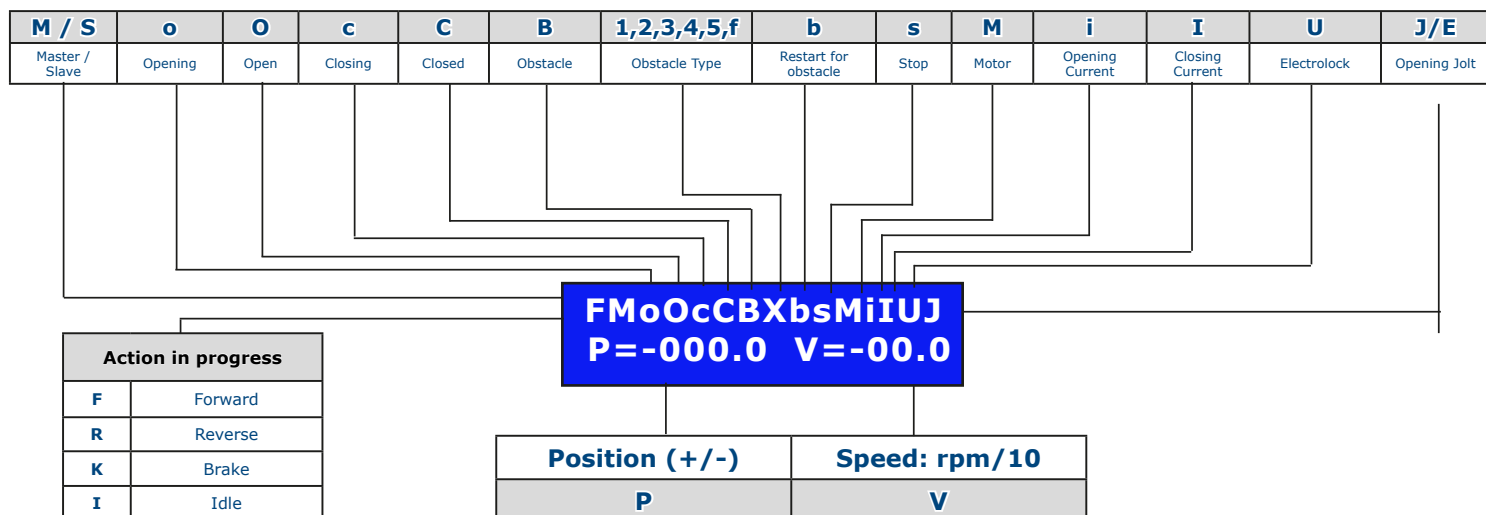


Displays the software release number and date.



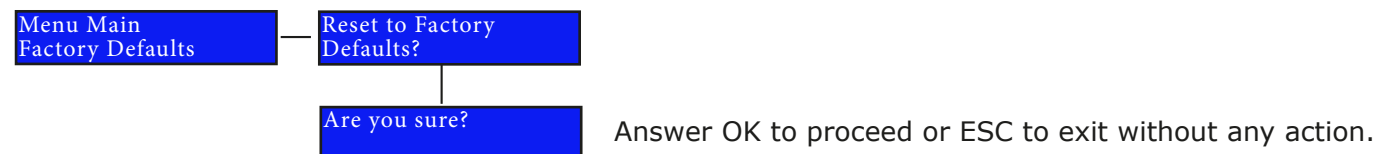
The absolute counter logs each cycle of the door (OPENING + CLOSING). Its value can only be reset by the factory.

Legend Display in Expert Mode



Reset to Factory Defaults

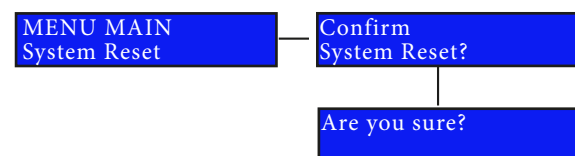
If the setup of the parameters hasn't been successful, you can recover the factory settings using the sub-menu FACTORY DEFAULTS from the Main Menu. After the completion of this function, all the parameters will be reset to factory values. See each function to find the corresponding value.



Having reset the system to the factory settings, the engineer can operate the door but without using the acceleration and deceleration values calculated during the Step III of Door Calibration. In order to revert to the previous operating mode you need to repeat Step III again. The door limits (DOOR CLOSE and DOOR OPEN) remain the same. The transmitter memory is completely erased, Master transmitter included, and the System password for the partial counter is reset to 1111.

System Reset

It is possible to reset the system, equivalent to a "power-off + power-on", using the option "System Reset" from the Main Menu. After the system reset the LCD displays the software release, the condition of the parameters and the free memory space for transmitters. This function doesn't change the value of any parameter except for the currents (I and i) which will be re-calculated during the next 2 cycles.



4] DOUBLE DOOR CONFIGURATION

The double door configuration applies to both types DWPD102X (not available in the UK) and DWPS102X.

For types DWPD, for which a central profile is provided, it is necessary to install a back plate which ensures perfect alignment between the profiles and 2 lateral backplates in place of the regular single door backplate. Follow the instructions below for the mechanical fixing of the structure (Part I: mechanical fixing).

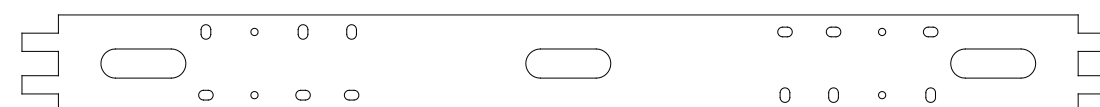
In case of 2 single standard operators (type DWPS102X) to drive a double door, make the mechanical fixing by following the regular procedure for each single door.

- **PART I : Mechanical fixing**
- **PART II : Electrical connections**
- **PART III : Final Setup**

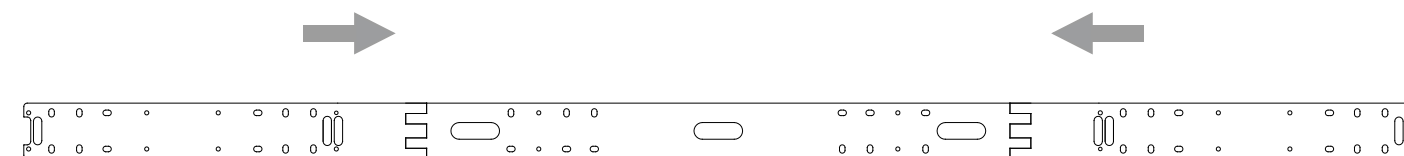
Part I: Mechanical fixing

1. Backplate fixing

- Locate the best position for the central backplate, matching the centre of the plate with the centre of the double door;
- Mark the position of the holes for the plugs provided;
- Make the holes and insert the plugs provided;
- Pass the power supply cable through the central hole of the backplate;
- Fix the central backplate by using the screws and the plugs provided, ensuring it is perfectly levelled.



- Align the side backplates on each side and locate the position of the oval holes.
- Make the holes and insert the plugs.
- Fix the side backplates with the screws provided.



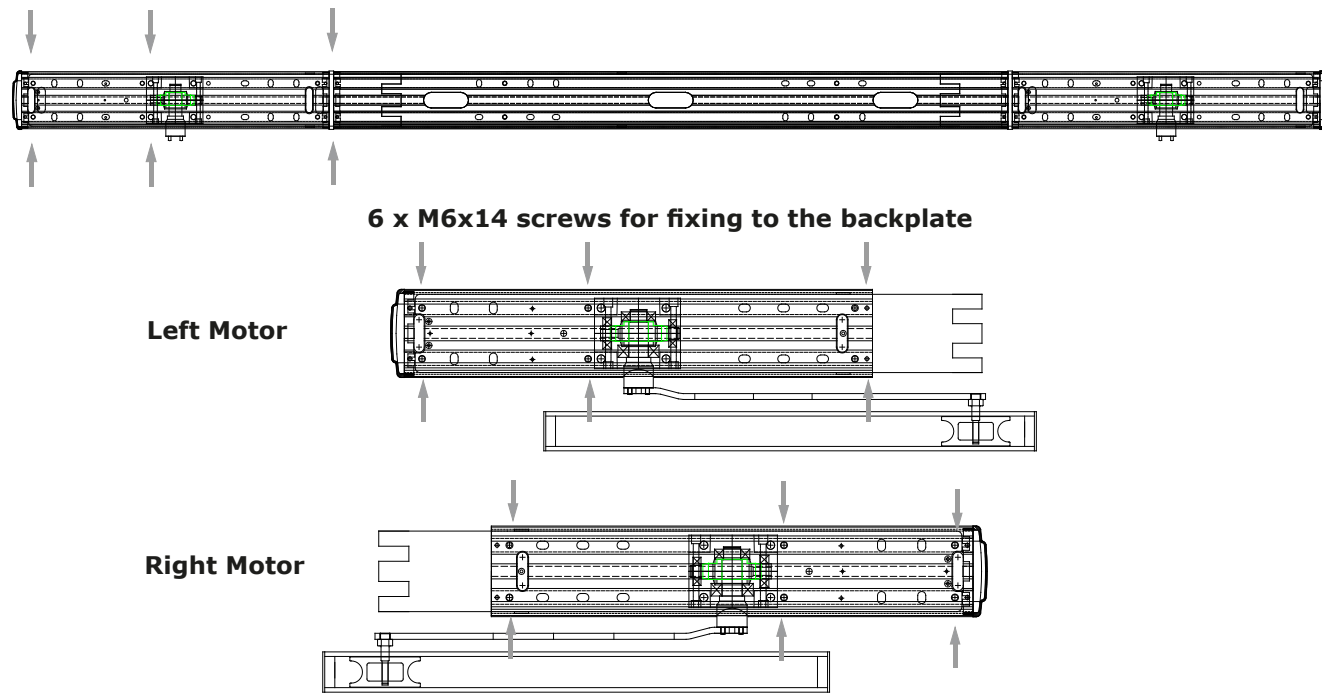
2. Central profile fixing

Fix the back central profile with the side caps with the 4 M6x14 screws provided on the central backplate.



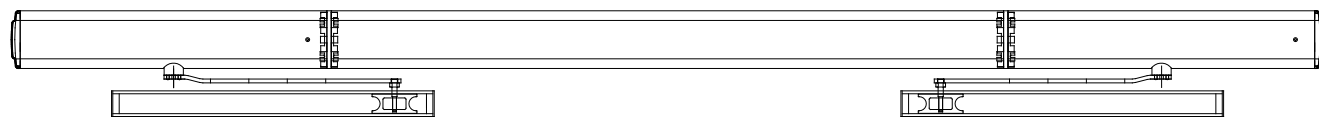
3. Motor fixing

Fix each motor with the 6 M6x14 screws provided.



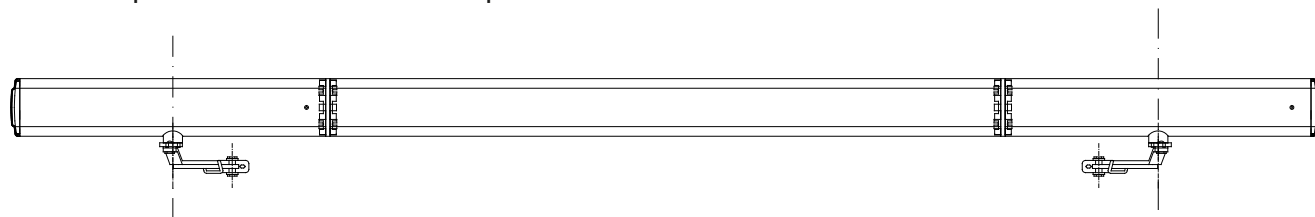
4. Door guides fixing (inward opening)

- Fix the 2 arms on the motor shafts with the M6x12 screws provided;
- Insert the guide on the sliding blocks;
- Set the external switch to position 0 and move the door to find the best position for the door guide;
- Fix the guides on the doors with the 4 screws provided.



5. Articulated arm fixing (outward opening)

- Fix the 2 articulated arms to the motor shafts with the M6x12 screws provided;
- Hold the door plate to the door;
- Fix the plate with the 2 screws provided.



6. Mechanical check

Move the side switches to position 0 and check the fluency of the motion both in opening and in closing.

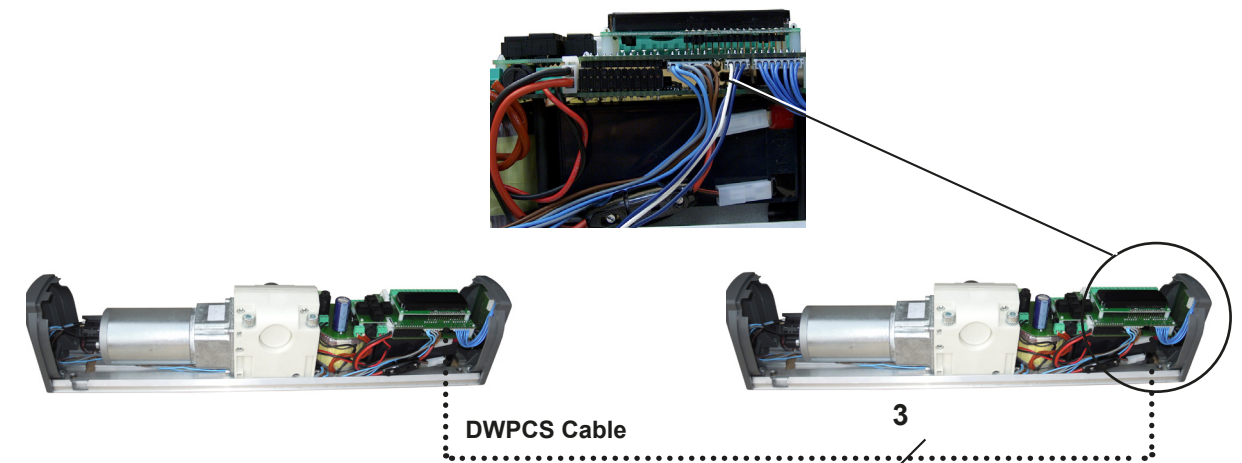
Part II : Electrical Connections

The range of motors for the double door is described in the following table:

Double door total width	Leaves width	p/n Articulated Arm	p/n Sliding Arm	p/n Universal Arm
1600 mm	70 - 80 mm	DWPD10216ACD	DWPD10216SCD	DWPD10216UCD
1700 mm	81 - 85 mm	DWPD10217ACD	DWPD10217SCD	DWPD10217UCD
1800 mm	86 - 90 mm	DWPD10218ACD	DWPD10218SCD	DWPD10218UCD
1900 mm	91 - 95 mm	DWPD10219ACD	DWPD10219SCD	DWPD10219UCD
2000 mm	96 - 100 mm	DWPD10220ACD	DWPD10220SCD	DWPD10220UCD

With the DWPD operators, with central profile, the product comes already equipped with a synchronisation cable.

It is also possible to use 2 single door units (DWP102x) to automate a double leaf door by the synchronisation of each leaf using the DWPCS serial cable (optional). The cable is terminated with 2 special 3-way connectors and must be inserted in the corresponding slot located under the PCB controller of the DIGIWAY (see below).



1) Connect the motors according to the electrical diagram of the single door.

WARNING: In double door mode, with leaves overlapping (rebated), it is very important to identify the type of unit:

The **MASTER** unit drives the leaf which opens first and closes first.
The **SLAVE** unit drives the leaf which opens last and closes first.



2) Connect the radars and the Day/Night switch to the unit identified as MASTER (if required)

3) The contacts NC of the safety devices (photocells) can be connected in 2 ways:

- Connect the photocells, contacts to terminals 5,6,7 of the corresponding unit's electronic card (recommended).
- Put in serial the contacts of all the photocells, connect them to terminals 5,6,7 of the MASTER unit, and make a bridge to contacts 5,6,7 of the SLAVE unit.

4) Connect the electrolock to the MASTER unit.

5) On the SLAVE unit memorise only the 4-channel remote control needed to navigate in the SLAVE unit menu. On the Master unit memorise the navigation transmitter and any other transmitter used to open the door.

⚠ ATTENTION: Do not configure the same 4-channel Master transmitter on both units!

Part III : Final Set Up

Follow the setup procedure here for projects involving both 2 x single motors (DWPSxx) and for a double door unit (DWPDxx). This can be completed only if the mechanical and electrical installations have been completed.

- 1) Move the external switches of both units to position "0".
Open the MASTER leaf completely and leave it open.
Close the SLAVE leaf.
- 2) Verify that the safety inputs (terminals 5-6-7) of the SLAVE unit are shorted or connected to the corresponding safety photocells (FTC and FTC-S) and that the L3 and L4 LEDs are stable ON.
- 3) Using the keyboard or using the 4-channel transmitter memorised on the SLAVE unit, temporarily set the unit of the SLAVE door to ONE DOOR configuration (default value).
- 4) Follow the DOOR CALIBRATION procedure, corresponding to the STEP III, described on page 22 of this manual, up to the end, and leave the door CLOSED.
Close the MASTER leaf.
- 5) Verify that the safety inputs (terminals 5-6-7) of the MASTER unit are shorted or connected to the corresponding safety photocells (FTC and FTC-S) and that the L3 and L4 LEDs are stable ON.
- 6) Using the keyboard or using the 4-channel transmitter memorised on the MASTER unit, temporarily set the unit of the MASTER door in ONE DOOR configuration (default value).
NOTE: The MASTER functions as the reference for the double door: the radars and the other devices must be connected to this unit only.
- 7) Follow the DOOR CALIBRATION procedure, corresponding to STEP III, described on page 22 of this manual, up to the end. The door remains OPEN.

8) Set the ENGAGE POSITION: This is the point (in case of overlapping doors) where the 2 leaves are free to open and close without any interference.



9) Set the value at 25 (factory setting) for both the leaves. In case you need increase to the value, note that greater values delay the closing of the Master leaf which starts and stops waiting for the Slave.

Enter the CONFIGURATION menu of the **SLAVE** unit and set the following parameters:

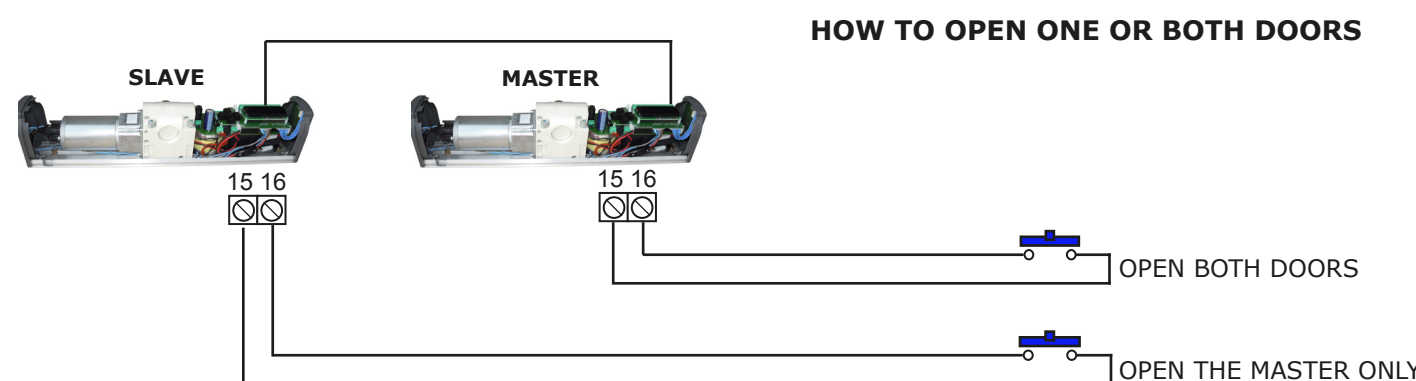
- 10) **Number of doors** = TWO DOORS
2 doors overlap = ENABLE (only if there is door leaf overlap)
Door type = SLAVE

Enter the CONFIGURATION menu of the **MASTER** unit and set the following parameters:

- 11) **Number of doors** = TWO DOORS
2 doors overlap = ENABLE (only if there is door leaf overlap)
Door type = MASTER

12) Move both the external switches to position "I": the 2 doors close very slowly. Test the function by pressing either the OK button of the transmitter configured to the MASTER, or the down key of the keypad, or the exit button connected to terminal 15 and 16 of the MASTER.

The procedure is complete.



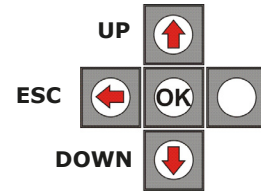
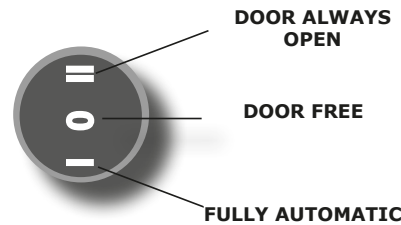
5] INSTRUCTIONS FOR USE

If the door is working properly the LP LED is stable green.

How to open the door

Depending on the peripherals installed, the door driven by this operator can be opened by the following devices:

- An exit device
- A remote control transmitter
- A radar (internal/ external)
- By pressing the 'DOWN' Button on the keyboard.



How to set door positions

Door Position	Parameter
Automatic Mode	Move the external switch to position "I" The LP LED will turn GREEN
Always Open	Move the external switch to position "II" The LP LED will turn ORANGE
Free (DIGIWAY functionality off)	Move the external switch to position "0" The LP LED will switch OFF
Night Mode (when connected)	Move the external switch to NIGHT The LP LED will turn ORANGE BLINKING
Battery operated	The LP LED blinks GREEN

6] MAINTENANCE

An automatic door, installed with the DIGIWAY Plus operator, needs periodic checks (at least every 12 months) as listed in the following points:

- 1) Check the door balancing and the functionality of the hinge.
- 2) **Installation with a sliding arm:**
 - 2A) Check the fixing solidity of the sliding guide to the door and its horizontal alignment;
 - 2B) Check the fluency of the sliding block;
 - 2C) Check the drive shaft bolt is tight;
 - 2D) Check the correct coupling of the arm-motor shaft (solidity of the driving pins)
 - 2E) Clean the sliding guide. **DO NOT LUBRICATE AS THIS MAY CAUSE DEBRIS TO STICK AND RESULT IN FRICTION OF THE SLIDING BLOCK.**
- 3) **Installation with an articulated arm:**
 - 3A) Check the fixing of the bracket to the door;
 - 3B) Check the solidity of the articulated arm pivot;
 - 3C) Check the drive shaft bolt is tight;
 - 3D) Check the solidity of the adjustable forearm where it fixes to the door (2 screws M5x12);
- 4) Check the fixing of the motor to the backplate and the backplate to the wall;
- 5) Check the absence of friction through the run of the door;
- 6) Check of the functionality of the peripherals (radar, electrolock or magnet);
- 7) In the case of double doors with overlapping, check the synchronisation of the 2 leaves is correct;
- 8) You may need to replace the battery is the LP LED indicates this.

7] BLUETOOTH CONNECTION & MANAGEMENT


The appliance can be provided from the factory with a plug-in Bluetooth module that allows you to manage the settings using a smartphone.

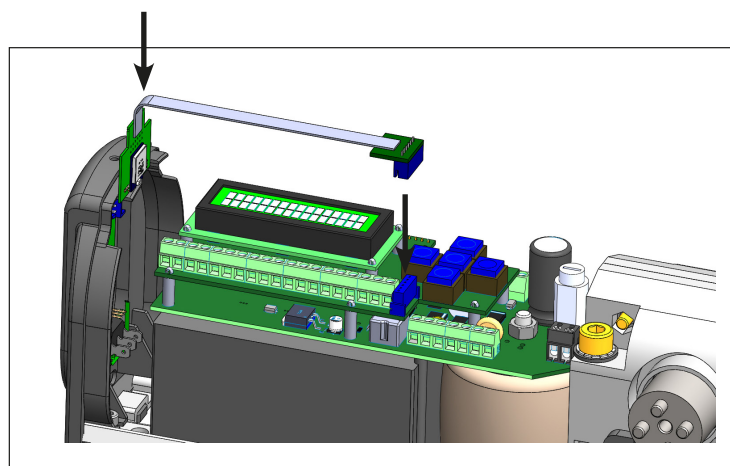
The models with the Bluetooth module are identified with the suffix BT on the part code. The Bluetooth module can be plugged in retroactively on regular units (which have the suffix CD on the part code).

The Bluetooth module allows the unit to communicate with a smartphone with iOS (Apple) or Android operating systems. The Bluetooth communication makes the display of the DIGIWAY LCD screen visible on the screen of your smartphone, even when the aluminium cover is installed. This makes any configuration and service intervention easier.

Type	F-Code	Description
DWMBT	F0543000179	BLUETOOTH PLUG-IN MODULE FOR DIGIWAY PLUS

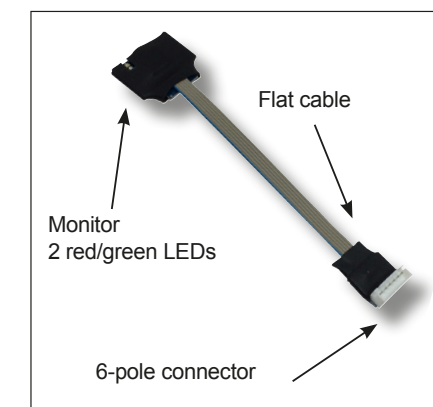
Installing the Bluetooth module on a DIGIWAY Plus

- 1) Remove the cover
-  **2) Power off the unit!**
- 3) Disconnect the battery cable!**
- 4) Plug in the polarised module connector onto the white 6-poles connector of the DIGIWAY board
- 5) Fold the flat cable of the module inward
- 6) Reconnect the battery cable
- 7) Power the unit
- 8) Replace the cover



Technical Specifications

Communication w/mobile phone:Bluetooth
 Standard:BLE 4.2
 Power supply:3 Vdc
 OS Compatibility:Android, iOS
 Release Android:5.1 and later
 Release iOS:10 and later
 Compatibility with DIGIWAY SR software:2.8a and later



Monitor Red/Green LED messages

9 dots give the status of the corresponding LEDs of the mother board (*).

Red LED	Green LED	Status
OFF	Blinking	Module operating in stand by
Blinking	Blinking	Bluetooth connection in progress. App not logged
Blinking	Fixed ON	Blinking Fixed Connected and logged in

(*) The correct functionality of the first dot on the left of the App that monitors the "FIRE" LED is guaranteed if the firmware revision installed on the door operator is DIGIWAY Plus : > 2.8a. For all previous firmware revisions, the management of the "Fire" LED is not implemented. The dot of the App does not indicate the correct status of the fire function. All other features are guaranteed.

Installing the App on a smartphone

For communication with the Bluetooth module it is necessary to install the correct app on your smartphone, from either the App Store (Apple) or Google Play (Android). The App allows you to program and control the operator.

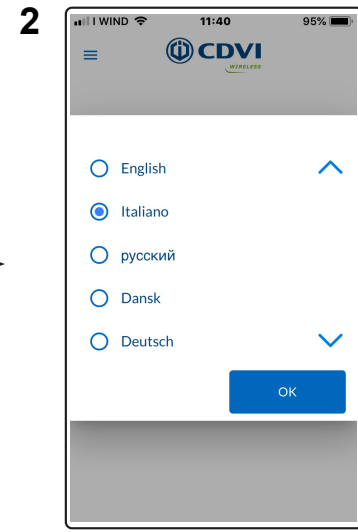


Search CDVI or DIGIWAY BLE on the App Store and proceed with the download.

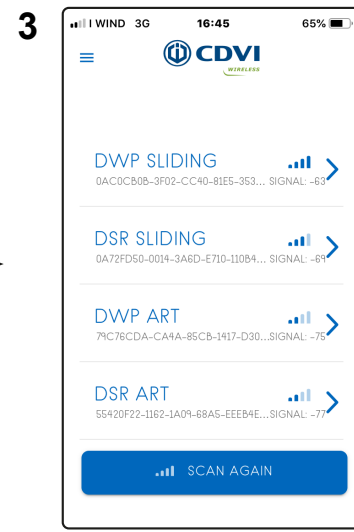


Search CDVI or DIGIWAY BLE on the App Store and proceed with the download.

Once the download is completed, start the app and follow the steps on the next page.



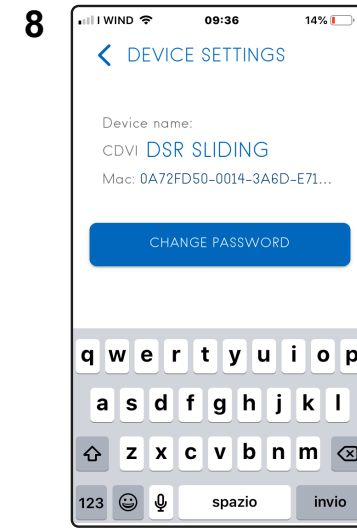
You will be asked to specify the language of the app: select the language and press OK.



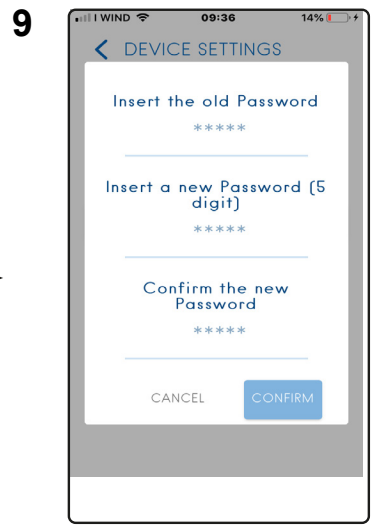
The app will start searching the Bluetooth modules present in the area, displaying all the modules found and their field strength.



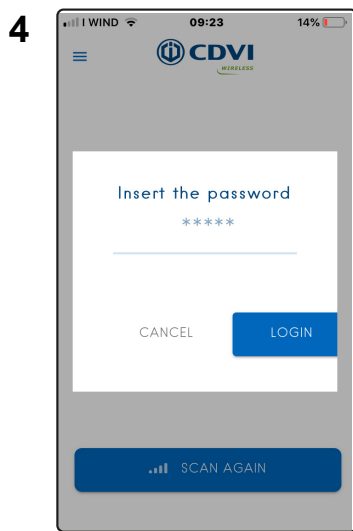
Press OK for 4 sec. to enter the menu or push open/close to give a command to the door



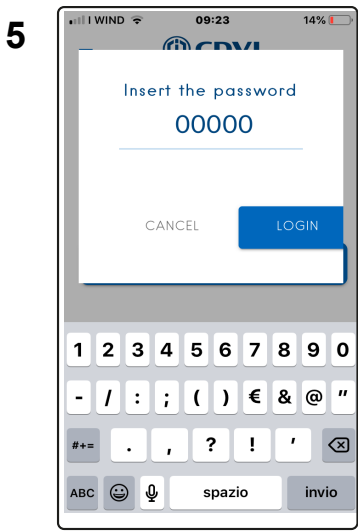
Click on the symbol to access the "Change password function"



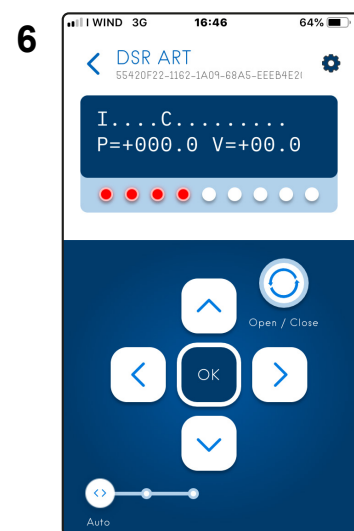
Input the old password, then the new password. Retype it to confirm.



Select the target unit. The first time you will be asked to enter the password. The password will be remembered for subsequent access attempts.



Input the password: All modules come preset with password "00000". We recommend that you change the password (see points 7 - 8).



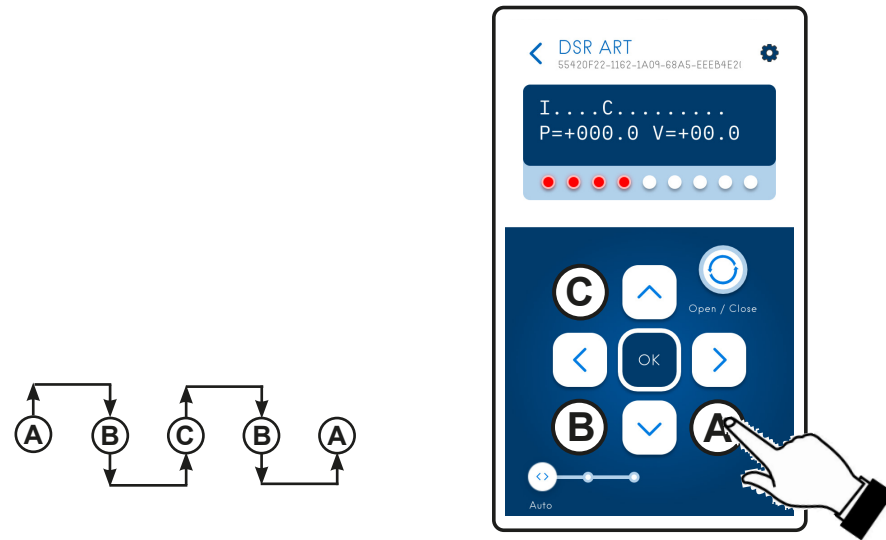
Select the target DIGIWAY. The app will show the corresponding LCD display. The LED of the module (if cover is removed) changes to flashing RED showing the communication is in progress.

NOTES

- 1) On Android phones, occasionally the screen doesn't display the full graphics or has some overlapping words. --> Reset the dimension of the characters to factory default on your smartphone: **Settings-->Display-->Text size.**
- 2) If the DIGIWAY doesn't appear on the list of devices initially, try scanning again by pressing the button "**Scan Again**".

Access to hidden menu

Access to the inner menu (only in specific circumstances, and with direct help from the manufacturer) is granted by pressing the smartphone screen in 3 places, according to this specific sequence:



NOTES

- 1) On Android phones, occasionally the screen doesn't display the full graphics or has some overlapping words. --> Reset the dimension of the characters to factory default on your smartphone: **Settings-->Display-->Text size.**
- 2) If the DIGIWAY doesn't appear on the list of devices initially, try scanning again by pressing the button "**Scan Again**".

Installing Manufacturer: (Name of the company who installed the Automatic Door Operator)

Identification: (Identity of the door that has been automated such as door location or serial number)

--

Site: (Details of the building where the door operator has been installed)

Address	
References of the owner	

Installer Details: (Information of the installer and company)

Company	
Address	
Installer name	
Installer signature	

Date of completion of the installation: _____

Identification of the power operated drive units:

Brand	CDVI
Series	DIGIWAY PLUS
Type	
Part Code	
Serial number	
Manufacturing date	

Identification of any protective devices: (Includes photocells/safety mats/operation modes etc.)

Installation Manual: _____

NOTE: The installation of the power operated pedestrian door must be completed with the risk assessment and risk reduction. Find hereunder the list of the main mechanical hazards. More hazards can be found in Annex L of the EN16005 Standard.





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