



M42

User Manual

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Important safety instructions

Safety instructions for installation



Disconnect the power supply whenever you proceed to the installation, maintenance or repair of the equipment.

- Before installing the panel, remove all unnecessary ropes or chains and disable any equipment such as locks that is not necessary for the automatic operation.
- Before installing the panel, check that the door is in good mechanical condition, correctly balanced and that it opens and closes correctly.
- Install the manual unlocking device at a height lower than 1.8m.
- Install any permanent control next to the door away from any moving part and at a minimum height of 1.5m.
- For permanently connected equipment, an easily accessible power disconnection device must be incorporated into the wiring. It is recommended that this be of the emergency switch type.
- If the control panel is supplied without emergency stop button, this will be incorporated in the installation, connecting it to the STOP terminal.
- For correct use of the security edge, this must never be activated when the door is fully closed. It is wise to install the ends of run before activating the edge.
- This equipment can only be handled by a specialist fitter, by maintenance staff or by a suitably trained operator.
- To connect the power supply and motor wiring, 2.5 mm² section terminals must be used.
- Use protective goggles when handling the equipment.
- Fuses must only be handled when the appliance is disconnected from the mains.
- The instructions for using this equipment must remain in the possession of the user.
- European door normative EN 12453 and EN 12445 specify the following minimum protection and door safety levels:
 - for single-family dwellings, prevent the door from making contact with any object or limit the force of contact (e.g. safety band), and in the case of automatic closing, it is necessary to complement this with a presence detector (e.g. photocell).
 - for communal and public installations, prevent the door from making contact with any object or limit the force of contact (e.g. safety band), and complement this with a presence detector (e.g. Photocell).



M42 control panel switches automatically to dead man mode when safety devices are active or defective. Therefore, all controls work as “hold-to-run” controls.



WARNING: IN ACCORDANCE WITH THE EN 13241-1 AND EN 12453-1 STANDARD CONCERNING PRESSURE MAINTAINED CONTROL DEVICES:

“The person operating the door must have a direct view of the doorway, must be near the door (5 meters maximum) during movement of the door and should not find itself in a dangerous position”. Any adjustment of the radio range out of these recommendations, undertakes the installer in terms of responsibility for injury or damage.

“Releasing of the pressure maintained control device should stop the door movement before it scrolls 5cm!”.

Safety instructions for the use

- Do not allow children to play with the door controls.
- Keep the remote controls out of the reach of children.
- Watch the door movement and keep people away until the door is fully open or closed.
- Precaution when operating the manual unlocking device, as the door may suddenly fall due to the bad condition of the springs or door unbalance. Details on how to use the manual unlocking device must be provided by the manufacturer or the device installer.
- Examine the installation frequently, especially the cables, springs and supports, to detect signs of wear, damage or unbalance. Do not use the door if repair work or adjustments are required, as this may cause damage.

Use of the equipment

Designed for automation of garage doors, in accordance with the general description. Not guaranteed for other uses. The manufacturer reserves the right to alter equipment specifications without prior notification.

Introduction

General description

Single-phase control panel with 2 motors with soft stop for residential and community use. Control by JCM, Elektromaten or Kostal digital absolute encoder (motor 1 only) or by limit switches.

Detailed description

1- RECEIVER

Motion STICK receiver connector

2- MOTOR POWER

3- EXPANSION CARD

TL-CARD-V / RSEC3 Connector

4- DOOR POSITION BUTTONS

Position open and close door for each motor

5- ALTERNATIVE BUTTON

Start maneuver

6- PROGRAMMING BUTTON

(Maximum time: 6 min)

7- OPTION SELECTORS

(see "Connections")

8- REMOTE CONNECTOR

Connection for VERSUS-PROG programmer

9- INPUTS

Connection for inputs, limit switches or safety contacts / safety edges

10- INPUTS

Encoder input

11- INPUTS

Connection for inputs, limit switches or safety contacts / safety edges

12- 12/24VDC / TEST OUTPUT

2 outputs

12Vac/dc range: 11,4V to 12,6V

24Vac/dc range: 23,9V to 27,3V

13- ELECTROLOCK

Electrolock 12Vdc output

14- FREE VOLTAGE OUTPUTS

Voltage-free outputs (voltage-free relay contacts, supply them at 110-230Vac or 12 / 24Vac / dc as desired)

15- MOTOR 2 CONNECTION

Connection for motor 2

16- MOTOR 1 CONNECTION

Connection for motor 1

17- POWER SUPPLY

110V - 230Vac

50Hz - 60Hz

18- EMERGENCY

Emergency button connection

19- FUSE

6A/250V delayed

20- GARAGE LIGHT

Garage light output

21- EMERGENCY STOP

Emergency stop input

22- 12/24Vdc SELECTOR

12Vdc or 24Vdc selector

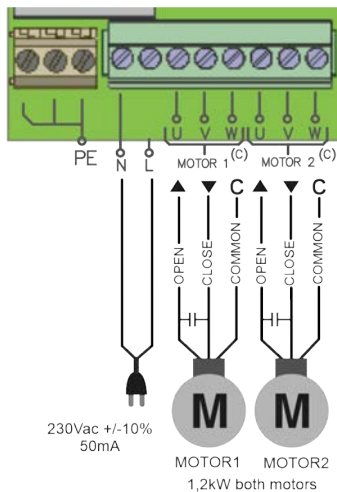
jcmtechnologies

Installation

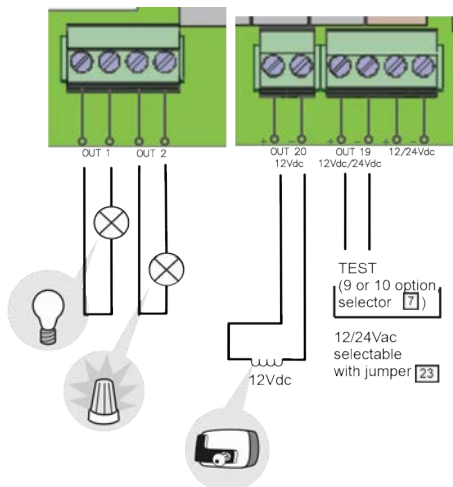
Install the control panel vertically on the wall at a height of 1.5m and following the assembly instructions.

Connections

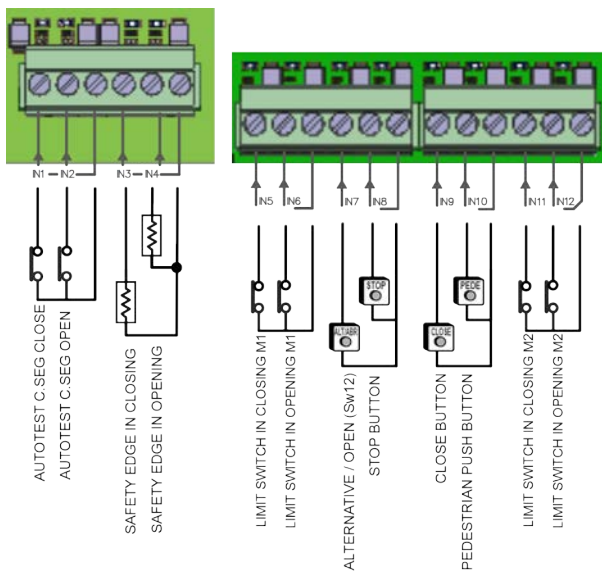
POWER SUPPLY AND MOTOR CONNECTIONS



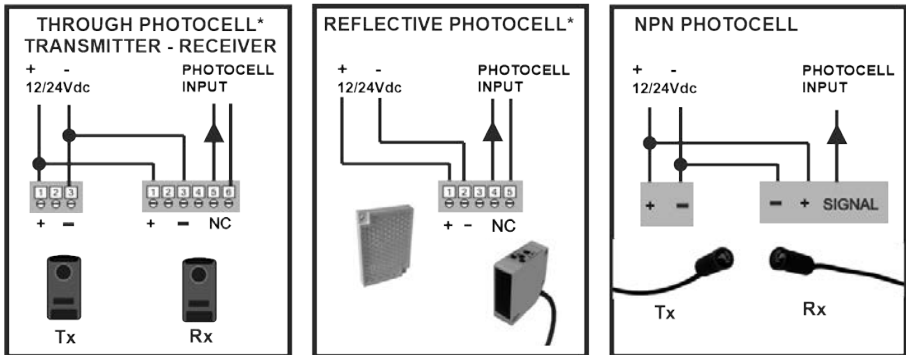
OUTPUTS



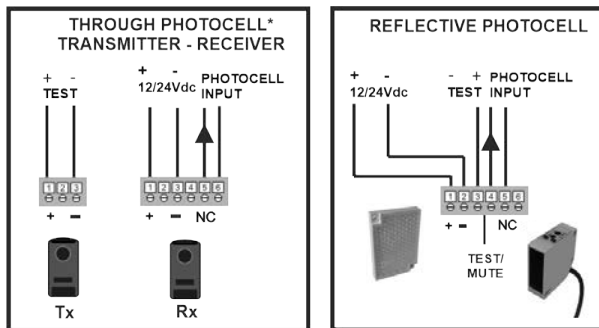
INPUTS



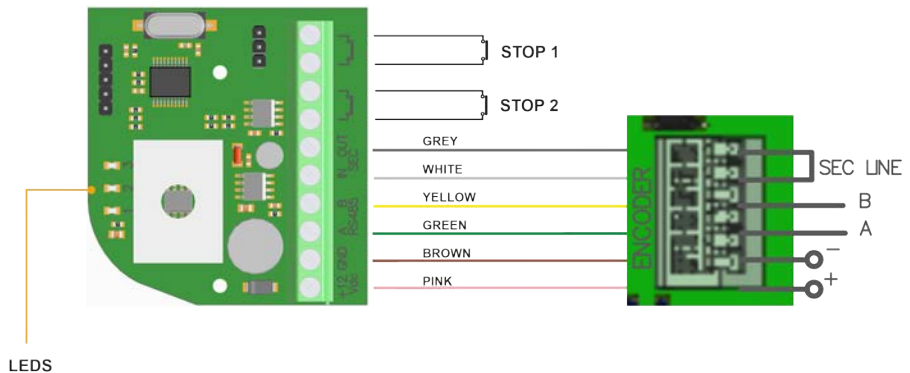
PHOTOCELL CONNECTION WITH AUTOTEST



* If autotest not connected, perform a maintenance of the photocells every 6 months.



ABSOLUTE ENCODER CONNECTION

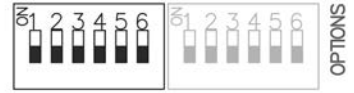
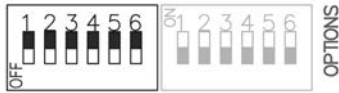


1	Normally ON to indicate a correct power supply
2	Normally OFF. In ON indicates communication ERROR
3	Normally FLASHING each time that the Encoder transmits an answer (ERROR / POSITION) to the control panel

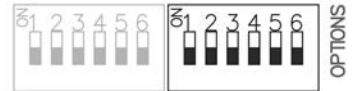
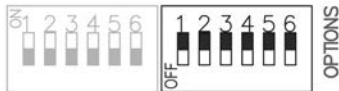
Configuration

Options selector

By default all selectors leave the factory set to OFF.



OFF	OPTIONS SELECTOR	ON
Do not closes automatically	1- AUTOCLOSE	Closes automatically
Normal speed in all the manoeuvre	2- SLOW SPEED	Slow speed available at the end of the manoeuvre
Enables the operation by end limit switches	3- ABSENCODER/LIMITSW	Enables the operation by ABS encoder
Normal opening	4- REVERSE STRIKE	Performs a reverse strike 2s before opening the door
The safety contact performs its formal function	5- CLOSE BY CSEG	The safety contact operates as a close button once the vehicle has passed
One motor (M1) operating	6- TWO MOTORS MODE	Both motors operating (M1 and M2)



OFF	OPTIONS SELECTOR	ON
Start button performs an stop at opening	7- NO REVERSE AT OPEN	Start button opens until total opening
The electrolock is activated 2s before opening the door + 1s during the opening	8- ELECTROLOCK	The elctrolock is disabled
Test safety contact in opening disabled	9- TEST CSEG OPEN	Test safety contact in opening enabled
Test safety contact in closing disabled	10- TEST CSEG CLOSE	Test safety contact in closing enabled
Adds 3s after inversion in closing	11- ELECTROMECH/HYDR	Do not adds time after inversion in closing
Pushbutton in IN7 performs a start button	12- OPEN/START	Pushbutton in IN7 performs an open button

Starting up

Door Positioning

1 PRESS PROG BUTTON



2 PRESS MOTOR2 CLOSE TO CLOSE IN DM



3 DOOR 2 CLOSES



4 PRESS MOTOR1 CLOSE TO CLOSE IN DM



5 DOOR 1 CLOSES



6 PRESS PROG BUTTON



7 LED TURNS OFF



8 END DOOR POSITIONING



Considerations:

In step 2, if MOTOR2 CLOSE is pressed and the door opens, reverse the motor 2 wires, and return to step 1.

In step 4, if MOTOR1 CLOSE is pressed and the door opens, reverse the motor 1 wires, and return to step 1.

Maneuver programming with two motors with slow speed

To program the door maneuver is necessary to use the PROG button to start programming and the START button to perform each step in the sequence.

1 DOORS CLOSED



2 SET OPTIONS 2&6 AT ON



3 PRESS WHITE PROG UNTIL LED ON



4 PRESS BLACK START BUTTON



5 DOOR 1 OPENS



6 PRESS START BUTTON



7 DOOR 2 OPENS



8 PRESS START BUTTON



* 9 DOOR 1 OPENS SLOW SPEED



* 10 PRESS START BUTTON



* 11 DOOR 2 OPENS SLOW SPEED



* 12 PRESS START BUTTON



13 DOOR 1 STOPS (OPENED)



14 PRESS START BUTTON



15 DOOR 2 STOPS (OPENED)



16 AUTOCLOSE TIME



17 PRESS START BUTTON



18 DOOR 2 CLOSES



19 PRESS START BUTTON



20 DOOR 1 CLOSES



*21 PRESS START BUTTON



*22 DOOR 2 CLOSES SLOW SPEED



*23 PRESS START BUTTON



*24 DOOR 1 CLOSES SLOW SPEED



25 PRESS START BUTTON



26 DOOR 2 STOPS (CLOSED)



27 PRESS START BUTTON



28 DOOR 1 STOPS (CLOSED)



29 LED TURNS OFF



30 END PROGRAMMING



Maneuver programming with two motors without slow speed

In step 2, set only the 6 option at ON.

Follow the above sequence without performing the steps marked with '*'.

Maneuver programming with one motor with slow speed

In step 2, set only the 2 option at ON.

Follow the above sequence without performing the steps marked with '*'.

Maneuver programming with one motor without slow speed

In step 2, set options 2 and 6 at OFF.

Follow the above sequence without performing the steps marked with '* and/or 2'.

Maneuver programming with absolute encoder (just motor 1)

In options selector, set option 3 at ON.

Follow the sequence of steps explained in previous points to program the door maneuver for a leaf.

The control panel will save the encoder position instead of storing time.

Troubleshooting

Indicator light for possible faults, LED ERROR

	ERROR	LED ERROR	INDICATION	SOLUTION
Er 02	INTERNAL ERROR	10 slow flashes 2 quick flashes	Internal error	Consult the technical service
Er 09	PROG TIME MAX	10 slow flashes 9 quick flashes	Programming time maximum	Program a maneuver below the maximum allowed time
Er 12	S.EDGE.CL ERROR	1 slow flashes 2 quick flashes	Closing safety edge error	Verify the security edge band connections when closing
Er 13	S.EDGE.OP ERROR	1 slow flashes 3 quick flashes	Opening safety edge error	Verify the security edge band connections when opening
Er 19	TEST.CL ERROR	1 slow flashes 9 quick flashes	Closing auto test error	Verify that the security device connected to the security connection when closing is in good conditions and correctly installed
Er 20	TEST.OP ERROR	2 slow flashes 10 quick flashes	Opening auto test error	Verify that the security device connected to the security connection when opening is in good conditions and correctly installed
Er 21	RSSENS NC WHEN PROG	2 slow flashes 1 quick flashes	Control panel programmed without RSSENS connected	Connect the RSEC card and program the control panel again
Er 22	RSSENS NOT FOUND	2 slow flashes 2 quick flashes	Control panel programmed with RSSENS connected and now it is not connected	Program the control panel again without RSEC or connect the RSEC again that was programmed to the control panel previously
Er 23	RSSENS PROG ERROR	2 slow flashes 3 quick flashes	RSSENS programming error, are R and T paired?	Program the transmitter RSSENS to the RSEC receiver card
Er 26	STOP	2 slow flashes 6 quick flashes	Control panel stopped by an STOP	Verify that the STOP input has been activated
Er 29	DOOR LOCKED RSSENS	2 slow flashes 9 quick flashes	Closed door latch	Open the door's latch before the opening man oeuvre

Er 30	RBAND NOT FOUND	3 slow flashes 10 quick flashes	Control panel programmed with RBAND connected and now it is not connected	Program the control panel again without using RBAND or connect the RBAND that was connected to the control panel previously
Er 31	RBAND NC WHEN PROG	3 slow flashes 1 quick flashes	Control panel not programmed with RBAND connected	Connect the RBAND card and program the control panel again
Er 32	FC NOT LEARNT	3 slow flashes 2 quick flashes	End of course learning error	Verify the intern motor limit switches
Er 33	ERROR SYNC RSENS	3 slow flashes 3 quick flashes	Synchronization error between the receiver and the transmitter	Program the transmitter RSENS to the RSEC receiver card
Er 36	RSENS RADIO ERROR	3 slow flashes 6 quick flashes	Detection through opening current	Verify the batteries of the RSENS emitter id they are charged, verify the radio signal with the Check function
Er 39	CTROL PANEL BLOCKED	3 slow flashes 9 quick flashes	Control panel cannot enter programming because it is blocked.	Enter the password with V-DPLAY or VERSUS-PROG for unlocking the control panel.

Technical Data

Parameter	Value
Power supply	110Vac - 230Vac ; 50Hz / 56Hz
Maximum motor power	1,2kW for each motor
Maximum motor intensity	6A for each motor
Optional cards	RSEC3, TL-CARD-V
Receiver card connector	Motion STICK
Garage light and flash	Voltage-free outputs
Electrolock	12Vdc output / I _{rated} =0,5A / I _{peak} =3A
Accessories power supply / Photocells test (shared 2A)	24Vac / 24Vdc / 24Vdc TEST outputs
ENCODER connector	Connector for absolute encoder
Operating temperature	-20°C --- +55°C
Watertighness	IP54
Size	285x225x92mm

Regulatory Data

UK Declaration of conformity

JCM TECHNOLOGIES, S.A. hereby declares that the product **M42** complies with the relevant fundamental requirements of the Supply of Machinery (Safety) Regulations 2008 as well as with the Electromagnetic Compatibility Regulations 2016 and the Electrical Equipment (Safety) Regulations 2016 whenever its usage is foreseen; and with the RoHS Regulations 2012.

EU Declaration of conformity

JCM TECHNOLOGIES, S.A. declares that the product **M42** complies with the relevant fundamental requirements of the Machine Directive 2006/42/EC as well as with the Directives 2014/30/EU on electromagnetic compatibility and 2014/35/EU regarding low voltage whenever its usage is foreseen; and with the 2011/65/EU RoHS Directive.

See website <https://www.jcm-tech.com/declarations/>

JCM TECHNOLOGIES, SA
C/COSTA D'EN PARATGE, 6B
08500 VIC (BARCELONA)
SPAIN