

4th Edition

Double & Single Gate Controller with Eclipse[®] Operating System (EOS)

Eclipse[®]
MC



MC : Controller for Double and Single Gates
Setup and Technical Information
Includes latest Intelligent Technology



Important warning and safety instructions

All installations and testing must be done only after reading and understanding all instructions carefully. All wiring should be done only by trained technical personnel. Failing to follow instructions and the safety warnings may result in serious injury and/or damage to property.

Elsema Pty Ltd shall not be liable for any injury, damage, cost, expense or any claim whatsoever to any person or property which may result from improper use or installation of this product.

Risk in the goods purchased shall unless otherwise agreed in written pass to the buyer upon delivery of the goods.

Any figures or estimates given for performance of goods are based upon the company's experience and is what the company obtains on tests. The company will not accept liability for failure to comply with the figures or estimates due to the nature of variable conditions affecting for example Radio Remote Controls.

Please keep this setup instruction for future reference.



Installed by: _____

Service date: _____

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Features

- › Suitable for swing and sliding gates
- › Double or single motor operation
- › Eclipse Operating System (EOS)
- › Day and night sensor (DNS)
- › 24 or 12 Volt DC motor operation
- › Motor soft start and soft stop
- › Speed and force adjustment
- › Large 4-line LCD to indicate controllers status and setup instructions
- › 1-Touch control for easy setup
- › Auto profiling using latest intelligent technology
- › Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- › Supports limit switch inputs or mechanical stops
- › Adjustable auto close, obstruction load and pedestrian access
- › Adjustable lock and courtesy light outputs
- › Variable photoelectric safety beam functions
- › Uses industry standard 6 pin receiver input
- › Energy saving mode to reduce running costs
- › 12 and 24 Volt DC Output to power accessories
- › Service counters, password protection, holiday mode and many more features
- › Built in 12 and 24 Volt battery charger for backup batteries
- › 12mA standby current making it ideal for solar gates.

Description

Are you ready for the Eclipse? The MC's Eclipse operating system is a user friendly menu driven system that uses the 1-touch button to control, setup and run automatic gates, doors and barriers. It uses a large 4-line LCD screen showing live reading of the motor performance and status of all inputs and outputs.

The MC controller is not just the next generation but the industry game changer. We wanted to create a controller that is simple to use and does just about any feature required in the gate and door industry. The MC is not just the next generation but the "Next Transformation" in the gate and door industry creating an Eclipse over previously developed motor controllers.

This new intelligent motor controller is the best match for your automatic gate or door motors.

The intelligent controller was built from the ground up, based on customer feedback and using today's technology. With its rich functions, consumer friendly price and with the focus during development being ease of use and setup makes this controller the ultimate board to control your motors.

Elsema's easy options to add remote controls or any type of photoelectric beams makes for a very user friendly approach, while avoiding the lockdown approach to accessories.

The control cards are available with an IP66 rated plastic enclosure for outdoor installations, backup batteries with charger or the card only. The MC is also suitable for solar gates with its low standby current of 12mA.



MC



MC24E2



MC24E or MC12E



Solar24 or Solar12

Part Number:

Part No.	Contents	Part No.	Contents
MC	Double or single gate and door controller for 24 / 12 Volt motor, card only		
MC24E	Double or single controller for 24 Volt motors includes IP66 rated plastic enclosure and transformer	MC12E	Double or single controller for 12 Volt motors includes IP66 rated plastic enclosure and transformer
MC24E2	Same as MC24E plus 24 Volt 2.6Ah backup battery	MC12E2	Same as MC12E plus 12 Volt 2.6Ah backup battery
MC24E7	Same as MC24E plus 24 Volt 7.0Ah backup battery	MC12E7	Same as MC12E plus 12 Volt 7.0Ah backup battery
MC24E12	Same as MC24E plus 24 Volt 12.0Ah backup battery	MC12E12	Same as MC12E plus 12 Volt 12.0Ah backup battery
Solar Gates			
Solar24	Solar kit for double or single gates, includes intelligent solar charger & 24 Volt 12.0Ah backup battery	Solar12	Solar kit for double or single gates, includes intelligent solar charger & 12 Volt 12.0Ah backup battery
SP20*	20 Watt solar panel	SP40*	40 Watt solar panel

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Menu 13 – i-Learning

This feature allows you to do the intelligent travel learning of the gates/doors. Follow the messages on the LCD to complete the learning

Menu 14 – Password

This will allow the user to enter a password to prevent unauthorised users from entering the control card settings. User must remember the password. The only way to reset a lost password is to send the control card back to Elsema.

To delete a password select Menu 14.2 and press Master Control.

Menu 15 – Operational Records

This is for information only.

Menu No.	Operational Records
15.1	Event History, up to 100 events are recorded in the memory
15.2	Displays Gates/Doors Operations and Currents Levels
15.3	Reset Maximun Current Records
15.4	Exit

15.1 Event History

The event history will store 100 events. The following events are recorded into the memory: Power On, Low Battery, All input activations, Successful opening, Successful closing, Obstruction Detected, Unsuccessful i-Learning Attempt and Factory Reset.

15.2 Displays Gates/Doors Operations and Current Levels

This displays the number of open cycles, close cycles, pedestrian cycles, open obstructions, close obstructions and both motor current levels. All maximum current values can be reset by the user from Menu 15.3

Menu 16 – Tools

Menu No.	Tools
16.1	Number of Motors, Single or Double Gate System
16.2	Set the Supply Voltage : 12 or 24 Volts
16.3	Resets Controller to Factory Settings
16.4	Test Inputs
16.5	Travel Timer for Slip Clutch Motors
16.6	Solar Gate Mode : Optimises the Control Card for Solar Applications
16.7	Fuse Type : 10 or 15 Amps Optimises the Control Card for the correct Blade Fuse used
16.8	Day and Night Sensitivity Adjustment for the LDR
16.9	Exit

16.1 Number of Motors

This allows you to manually set the control card to a single motor or a double motor. The control card will automatically test for motors connected during setup.

16.2 Set the Supply Voltage

This allows you to manually set the control card to 12 or 24 Volt supply. The control card will automatically set the correct supply voltage during setup. To use the control card in a solar application you must set the correct voltage in the Tools. This will disable the automatic voltage sensing which could causes problems in solar applications.

16.3 Resets Controller

Reset all settings to factory default. Also removes password.

16.4 Test Inputs

This allows you to test all the external devices connected to the controllers inputs. UPPERCASE means input is activated and lowercase means input is deactivated.

16.5 Travel Timer for Slip Clutch Motors

This allows you to use the controller with travel timers. Motor 1 and 2 can have separate travel timers up to 120 seconds. Used for Hydraulic Motors

Accessories

Battery Charger

The control card has a built in charger for backup batteries. Simply connect the batteries to the battery terminal and the charger will automatically charge the batteries. This allows you to use your gates or doors when the mains power has failed. The control card built-in charger is not suitable for solar applications.

Solar Applications

Solar applications use Elsema solar charger, CMP12 to charge the batteries and SP20 or SP40 solar panels. Solar gate controller kits are available.

WARNING

To use the control card in a solar application you must set the correct voltage input in the Tools Menu (16.2). This will disable the automatic voltage sensing which could causes problems in solar applications.

Backup Batteries

Elsema has backup batteries perfectly matched to the control card. Three sizes are available:

Lab12-12, 12 Volt 12 AH Rechargeable, ideal for solar and industrial gates and doors.

Lab12-7.0, 12 Volt 7.0 AH Rechargeable, ideal for solar and industrial gates and doors

Lab12-2.6, 12 Volt 2.6 AH Rechargeable, ideal for domestic gates and doors



Solar Panels
SP20 & SP40



Backup Batteries

Keyring Remotes

The latest PentaCODE® and PentaFOB® keyring remotes with mini receivers ensure your gates or doors are secure. Visit www.elsema.com for more details.

Photoelectric Beam

Elsema has several types of photoelectric beams including retro-reflective and through beam with IP-66 ratings.

PentaCODE® Remotes



PentaFOB® Remotes

Flashing Lights

Elsema has several flashing lights to act as a warning when the gate or doors is in operation.



Flashing
Lights



Mini Receiver
PCR43302P

