

3rd Edition

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

Eclipse®  
MC240



**ELSEMA**  
GATE & DOOR CONTROLS  
[www.elsema.com](http://www.elsema.com)

MC240 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)
- › Motor soft start and soft stop
- › Slow speed and force adjustment
- › Large 4-line LCD to indicate controllers status and setup instructions
- › 1-Touch control for easy setup
- › Various inputs, push button, open only, close only, stop, pedestrian and photoelectric beam
- › Supports limit switch inputs or mechanical stops
- › Adjustable auto close and pedestrian access
- › Adjustable lock and courtesy light outputs
- › Variable photoelectric safety beam functions
- › 12 Volt DC Output to power accessories
- › Auxiliary input for fire alarms.
- › Service counters, password protection, holiday mode and many more features

## Description

The 240 Volt AC Motor Controller (MC240) 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 MC240 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 MC240's Eclipse® Operating System (EOS) 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 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 or the card only.

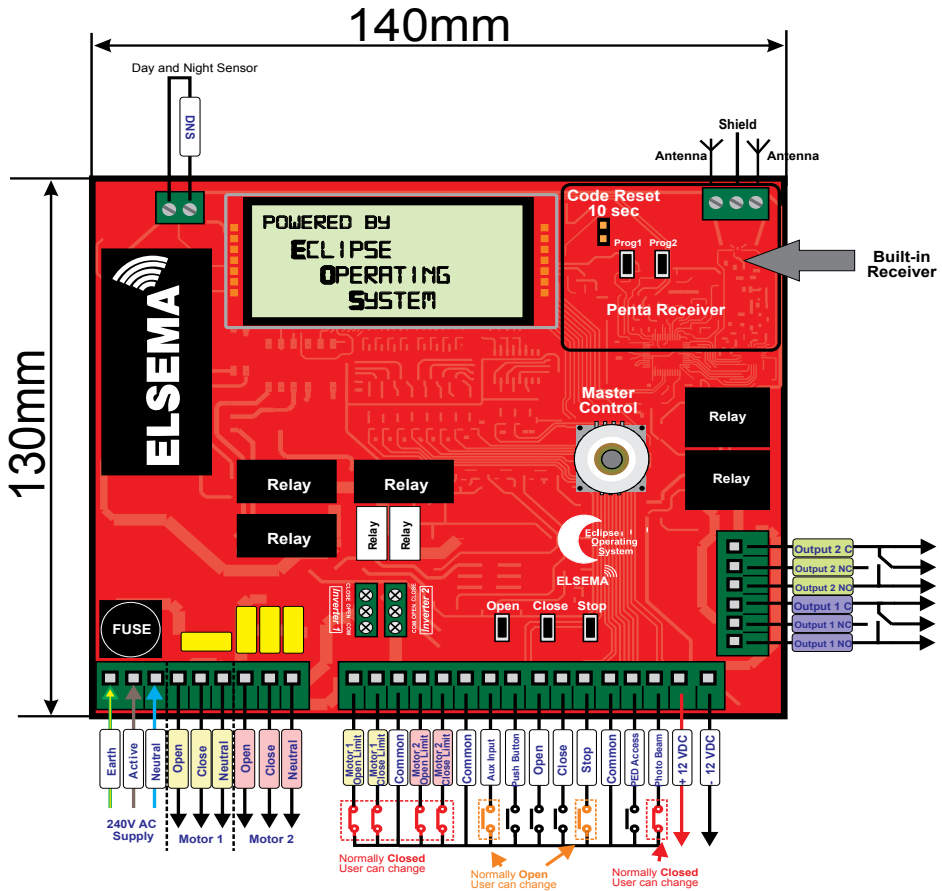


MC240



MC240E

# MC240 Connection Diagram



**DNS Connection :** On the top left corner of the control card is a connection for Day and Night Sensor (DNS). This sensor is available from Elsema and is used to detect day and night. This feature can be used to auto close the gate at night, turn on the courtesy light or lights on your gates during the night and many more features which require a day and night detection.

**For a full version  
of this manual  
contact us**

# 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
15.3	Exit

## 15.1 Event History

The event history will store last 100 events. The following events are recorded into the memory: Power On, All input activations, Successful opening, Successful closing, Auto close, i-Learning and Factory Reset.

## 15.2 Displays Gates/Doors Operations

This displays the number of open cycles, close cycles and pedestrian cycles.



# Menu 16 – Tools

Menu No.	Tools
16.1	Number of Motors, Single or Double Gate System
16.2	Resets Controller to Factory Settings
16.3	Test Inputs
16.4	Travel Time
16.5	Day and Night Sensitivity Adjustment for the DNS
16.6	Open Hydraulic Locking
16.7	Close Hydraulic Locking
16.8	Exit

## 16.1 Number of Motors

This allows you to manually set the control card to a single motor or a double motor.

## 16.2 Resets Controller

Reset all settings to factory default. Also removes password.

## 16.3 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.

## 16.4 Travel Timer

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

## 16.5 Day and Night Sensor

This option is only available when Day and Night Sensor (DNS) is connected. It allows you to adjust the sensitivity of the sensor. This sensor can then be used to switch "On" courtesy light only at night or enable Auto Close only at night.

## Accessories

### Keyring Remotes

The latest PentaFOB® keyring remotes with mini receivers ensure your gates or doors are secure. Visit [www.elsema.com](http://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.

### Strobe Lights

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



PentaFOB Remotes



Flasher  
Lights



Locking Actuator  
LA24

# PentaFOB® Programming Instructions

**Coding the PentaFOB® remotes and receivers can be done in 2 different ways.**

1. Using the Receiver
2. Using another Remote Control

## **Coding using the Receiver**

1. Press and hold the program button on the receiver
2. Press the remote button for 2 seconds, receiver LED will flash and then turn Green
3. Release the button on the receiver and the remote
4. Press remote control button to test the receiver output

## **Coding using another Remote Control** (you should be near the receiver for this procedure)

1. Open the case of a remote control that is already programmed and press and release the program button on the back of the board (The receiver enters learning mode)
2. Press the button of the remote in step 1 which activates the receiver
3. Press the button on the new remote which needs to be programmed for 2 seconds
4. Press the program button again of the remote in step 1(The receiver exits learning mode)
5. Press the new remote control button to test the receiver output

## **Deleting Receivers Memory**

Short the Code Reset pins on the receiver for 10 seconds. **This will delete all the remotes from the receiver's memory.**

## **PentaFOB® Programmer**

This programmer allows you to add and delete certain remotes from the receiver memory. This is used when a remote control is lost or a tenant moves from the premises and the owner wants to prevent un-authorized access.

## **PentaFOB® Backup Chips**

This chip is used to backup or restore the contents of a receiver. When there are 100's of remotes programmed to a receiver the installer normally backups the receiver memory in case the receiver is damaged.

