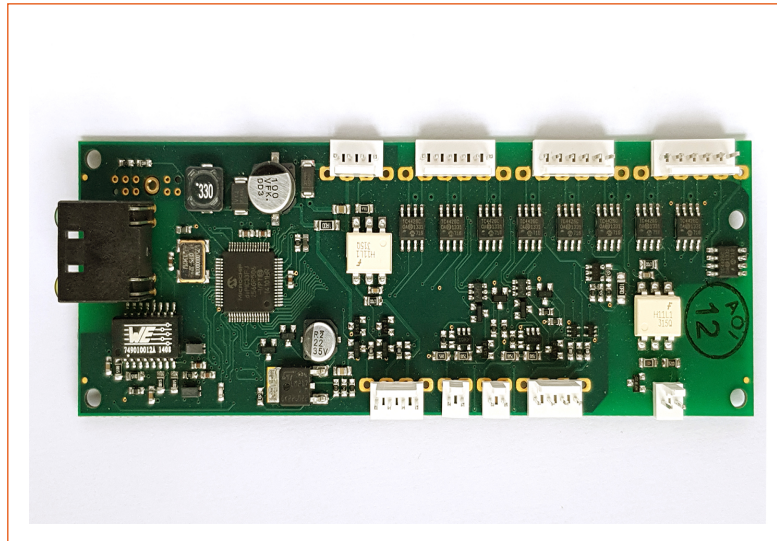


## Embedded motorised lens control module



This document describes a specimen specification for an Embedded Lens Control Module. The information provided should be regarded as representative of what can be provided by Gardasoft for embedded use. Please contact Gardasoft to discuss your particular application.

### Overview

The Embedded Motorised Lens Control Module is able to drive the zoom, focus and iris mechanisms on motorised lenses and is also suitable for pan and tilt motors. Supported Iris control features includes auto-iris, voltage drive and motor drive. External control of the Controller is via an Ethernet link with support for RS232 and external digital inputs also available. This Module is compatible with Pentax, Fujinon and Computar motorised lenses; however, other lenses can also be supported. The basic model has three motor drives which are intended for zoom, focus and iris. Optionally, up to 9 motor drives can be supported.

### Compatibility

The controller supports lenses with the following features:

- » Type 1, 2, 3, 5 Pentax lenses
- » Zoom direct drive +/- 6V, 8V or 12V at 50mA
- » Focus direct drive +/- 6V, 8V or 12V at 50mA
- » Iris direct drive +/- 6V, 8V or 12V at 50mA
- » Iris Video Drive, 1V pk-to-pk
- » Pan direct drive +/- 6V, 8V or 12V at 50mA
- » Tilt direct drive +/- 6V, 8V or 12V at 50mA
- » Iris auto/manual switch
- » Reading zoom and focus position

# Embedded motorised lens control module

## Specification

Feature	9-Drive Option	3-Drive Option
Number of double ended DC drives (5V, 6V, 8V, 12V)	9	3
Auto iris video outputs	2	1 (0-12V)
Digital inputs	Trigger, mains monitor	0
Digital outputs	2	1 OC and 1 TTL
Analogue inputs (0-12V)	0	3
TTL RS232	Y	N
Ethernet	Y	Y
Enclosure	Optional	Optional
Iris controls	DD and VD	DD
Dimensions with enclosure	133mm x 50mm x 30mm	
Dimensions without enclosure	130mm x 45mm x 20mm	

## Connections

Pin	9-Drive Option	3-Drive Option
1	Lighting trigger output (open collector)	Trigger output (TTL)
2	Camera trigger output (open collector)	Trigger output (open collector)
3	+5V output (low current)	+5V output (low current)
4	GND (common for trigger outputs)	GND (common for trigger outputs)
5	Auto-iris video output 1	Auto-iris video or DAC output 1
6	Auto-iris GND 1	Auto-iris GND 1
7	Auto-iris video output 2	NF
8	Auto-iris GND 2	NF
9	Lighting RS232 Tx (TTL level, input to MD292)	NF

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Pin	9-Drive Option	3-Drive Option
10	GND	NF
11	Lighting RS232 Rx (TTL level, input to MD292)	NF
12	GND	NF

### Functions

The following functions are supported, depending on the features of the lens.

#### ***Set Model***

Select the lens type.

#### ***Move Focus/Zoom***

The focus or zoom moves in or out by a fixed amount or to a given position.

#### ***Read Focus/Zoom***

The physical focus or zoom position is returned.

#### ***Move Iris***

The iris closes or opens by a fixed amount. For direct drive, a timed pulse is output. For Video Drive, the video brightness is increased/decreased for a fixed period of time and then return to the previous brightness.

#### ***Set Video Brightness***

The video output brightness is set to a given amplitude.

### Inputs

The input connections are:

- » Power supply 12V
- » Ethernet
- » (Optional) digital inputs for controlling lens motors

### Outputs

Leads with connectors are available for OEM customers.

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## User Interface

The Ethernet interface has a mini web server and will support Internet Explorer access. It also supports communications using TCP/IP or UDP. RS232 may be offered.

## Enclosure

This product can be supplied as a PCB or in an enclosure with a DIN rail option.

Screw terminal connections are provided for all connections except Ethernet.

## Approvals

- » CE
- » RoHS

*Document version - v001, July 2018*

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