

## Description

The V3LC is designed to control industry standard motorized lenses from a computer via serial control. These lenses may allow control of zoom, focus, iris, and lens extenders and may provide position feedback via potentiometers, also called presets. This unit can control up to 8 axes of motion, with read back of the position. Six of the axes allow speed control, and the remaining two axes may alternatively be configured for general purpose relays for turning on and off power to lighting or other devices.

## Features

- Controls lenses with 6, 8 or 12 volt motors
- 6 axes of pulse width modulated motor control output
- 2 axes of relay control for pan/tilt
- 8 analog inputs to read motor position on lenses with presets
- Accurate control of 2 lenses with Zoom, Focus, and Iris
- Control of AC or DC motorized Pan/Tilt
- Interfaces for RS232 (standard) or RS485 (as option)
- Available soon in Ethernet (IP) control version



## Specifications

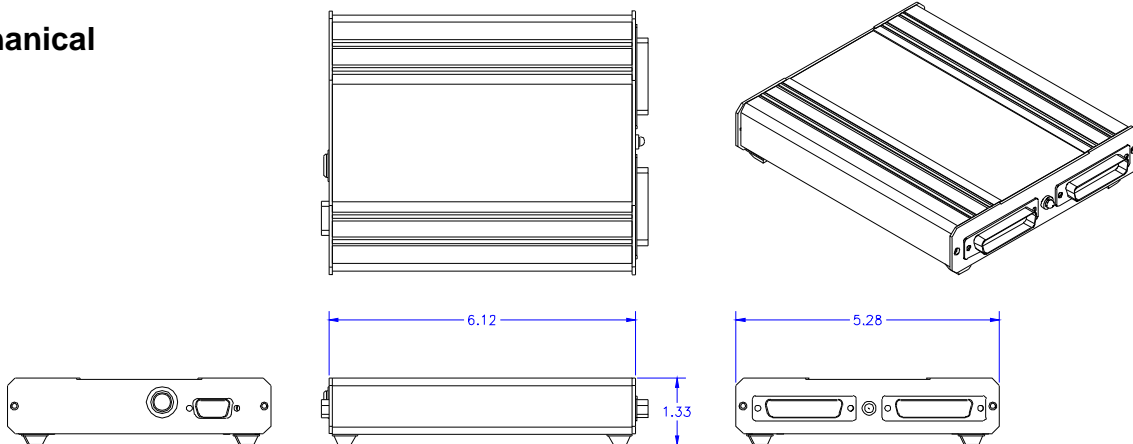
Input Voltage	Lens voltage + 2V typical
Max Input Voltage	30 VDC
Input Current	0.6 A typical plus motor load
Interface	RS232 / optional RS485
Protocol	19200 baud / 8 / N / 1
RS485 modes	Full or half duplex, 4 or 2 wire
Multi-drop addresses (RS485)	16
Output Voltage (M0-M5)	6, 8 or 12 volt models
Output Current Rating (M0-M5)	1 amp per axis, 3 amps total
Current Rating (M6-M7)	2 amps per axis @ 24 VDC/AC
Input Resolution	10 bits
Analog Output	1 output, 0-5VDC, 8 bits

## Typical Applications

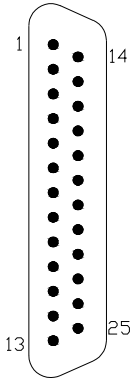
- Automatic Inspection
- Process Control
- Machine Vision
- Stereo Vision
- Security Sites



## Mechanical

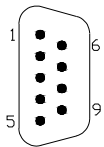


## Control Connectors DB25S (two)



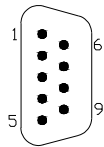
Pin	Signal Type	Signal Name - Left Connector	Signal Name - Right Connector
1	6, 8 or 12 VDC	Motor 0 (zoom) Command Voltage +	Motor 3 (zoom) Command Voltage +
14	6, 8 or 12 VDC	Motor 0 (zoom) Command Voltage -	Motor 3 (zoom) Command Voltage -
2	6, 8 or 12 VDC	Motor 1 (focus) Command Voltage +	Motor 4 (focus) Command Voltage +
15	6, 8 or 12 VDC	Motor 1 (focus) Command Voltage -	Motor 4 (focus) Command Voltage -
3	6, 8 or 12 VDC	Motor 2 (iris) Command Voltage +	Motor 5 (iris) Command Voltage +
16	6, 8 or 12 VDC	Motor 2 (iris) Command Voltage -	Motor 5 (iris) Command Voltage -
4	User signal	Auxiliary 0 (Left) Relay Normally Open	Auxiliary 1 (Down) Relay Normally Open
17	User signal	Auxiliary 0 Relay Common	Auxiliary 1 Relay Common
5	DAC	Future Use(Analog Voltage Output)	Future Use (Analog Voltage Output)
18	User signal	Auxiliary 0 (Right) Relay Normally Closed	Auxiliary 1 (Up) Relay Normally Closed
6	0 – 5 VDC	Iris potentiometer input	Iris potentiometer input
19	GND	Ground	Ground
7	0 – 5 VDC	Focus potentiometer input	Focus potentiometer input
20	GND	Ground	Ground
8	0 – 5 VDC	Zoom potentiometer input	Zoom potentiometer input
21	0 – 5 VDC	VREF; voltage to one side of pots	VREF; voltage to one side of pots
9	0 – 5 VDC	VREF; voltage to one side of pots	VREF; voltage to one side of pots
22	0 – 5 VDC	VREF; voltage to one side of pots	VREF; voltage to one side of pots
10	6-12 VDC	VLENS (may be used for autoiris lenses)	VLENS (not normally used)
23	GND	Ground	Ground
11	VPAN / VTILT	Auxiliary 0 (Pan) Source Voltage	Auxiliary 1 (Tilt) Source Voltage
24	GND	Ground	Ground
12	0 – 5 VDC	Aux potentiometer input - source	Aux potentiometer input - tilt
25	GND	Ground	Ground
13	N/C	Future Use	Future Use

## RS232 Connector DB9S



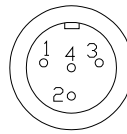
Pin	Signal
1	
6	
2	Transmit
7	
3	Receive
8	
4	
9	
5	Ground

## RS485 Connector DB9S



Pin	Signal
1	
6	
2	Transmit +
7	Ground
3	Transmit -
8	Receive +
4	
9	Receive -
5	

## Power Connector Switchcraft TA4F



Pin	Signal
1	Return
2	VDC
3	N/C
4	N/C

## Ethernet Connector

### RJ45 – 10BaseT

Straight cable to router switch  
Crossover cable to computer

## Model #

### V3LC-vv-int

Where vv is 6V, 8V or 12V for the output voltage to the lens

And int is 232 (standard), 485 or ETH

Example: V3LC-12V-485