

# **Single Axis Servo Controllers**

# Motorised Linear Stages



### **Technical Notes**

The L3297 servo motion controller is a single-axis controller and amplifier designed for use with all servo motor stages. The controller can communicate with the host computer through an RS-232 or 10/100 Base-T Ethernet interface. With built-in high level functionality such as position tracking, contouring and teach/playback, programming the controller is greatly simplified.

The motion controller can operate as a stand-alone system through the digital I/O for synchronizing motion with external events. It utilises a 32-bit microprocessor

to control the trajectory profile, acceleration, velocity, deceleration and program memory with multi-tasking for simultaneously running up to eight programs.

#### Tips

Features: Single-axis motion controller with onboard PWM drive for brush or brushless servo motor and integrated power supply. Ethernet 10/100 Base-T and (1) 19.2kb

RS232 port.

Accepts encoder feedback up to 12 MHz. Advanced PID compensation with velocity and acceleration feedforward, integration limits, notch filter and low-pass filter. Modes of motion include jogging, point-topoint positioning, contouring, electronic gearing and ECAM. Multi-tasking for concurrent execution of up to eight application programs. Non-volatile memory for application programs, variables and arrays.

Over 200 English-like commands executable by controller. Includes conditional statements and event triggers. Home input and forward and reverse limits. Four TTL uncommitted inputs and 4 outputs.

TWO uncommitted analog inputs (0-5V).

Order No.	No. of axes	Input power	Drive current continuous Amps	Drive current peak Amps
L3525.SV1X	One	120-240V AC	7	10



# **Rotary Stages** Motors & controllers





### Separate motor controllers (single axis)





- Standard
- With rotary encoder (512 line)

Servo motor

- Standard
- With rotary encoder (1000 line)



- No need for separate motion controller.
- Inbuilt motor, driver and controller.

### **Options**

- Standard
- With rotary encoder (512 line)





- Standard
- With rotary encoder (1000 line)



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# **Motorised Stages**

### Controllers & accessories



### Controllers



### L3294 Single axis stepper motor controller

- Communicate via RS-232 or Ethernet interface
- Uses virtually any programming language



### L3295 Two axis stepper motor controller

- Communicate via RS-232 or Ethernet interface
- Programming via Labupu, VB, C++ and OSX etc.
- Stand alone programs can be downloaded
- Max output of 1.5A



### L3296 Multi axis stepper motor controller

- Communicate via RS-232 or Ethernet interface
- Can control 4 axis and perform coordinated or independent motion of each or all the axis simultaneously
- Uses virtually and programming language



### L3297 Single axis servo motor controller

- Communicate via RS-232 or Ethernet interface
- Uses virtually any programming language









SB Connector RS422-USB

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**Joysticks** 

Accessories

Digital readout





# **Integrated Motor Controllers**



**Overview** 

These have major benefits as they combine the motor (from size NEMA17 up) with an inbuilt driver and controller.

- Stepper or servo motor versions.
- Simple to install

- CE certified
- Free software programming

### Plug and play

- Download free software
- Connect motor to computer (USB port)
- Connect power supply to the motor
- Start controlling/programming

- Low cost solution.
- The I/O points can be set by users to input, output or analogue input.
- NEMA17, 23, 34, 43 and larger sizes available.
- 12-48VDC.

- High torque stepper motors (1.2 to 10.5 Nm).
- Simple Windows software program provided free).
- Also Labview VB etc. programs.
- IP67, Motor brake.
- Optional Joysticks.



