

RM-2000 Rack Mount Stage Controller





Features

- 2U 19" Rack Mount Control Unit: 22.8 cm D x 48.3 cm W x 8.1 cm H (9" x 19" x 3.2")
- 100 MHz Microcontroller for faster command processing and servo control
- Closed-Loop DC servo control of up to four motorized axes
- 0-10 Vdc DAC output for additional analog control
- · Firmware upgradable via serial connection
- · Remembers last position on power up
- LCD display shows axes coordinates and status
- USB or RS-232 serial control with rates to 115200 baud
- "Zero", "@", and "Home" buttons on joystick
- · Left- or Right-hand joystick unit

Options Supported

- · Z-drives, with clutch switch
- · Dual filter wheel control
- Dual shutter control
- Piezo Z-axis control
- Linear encoders (XYZ)
- · Hardware video autofocus
- Raster and serpentine scanning routines with TTL synchronization
- Leica Smart MoveTM Digital Potentiometers for XY motion control
- TTL control of Moves to previously stored locations
- Multi-output hardware sequencer functions
- Bare boards and custom firmware are available for OEM applications

Specifications

Digital Servo Loop Time		1 millisecond per Axis
Digital-Closed-Loop Speed Dynamic Range		> 40 dB
Motor Type		Brushed DC Servo Motors
Maximum Motor Current		1.5 Amp
Motor Voltage		6 – 24 Vdc
Encoder Options		Internal Rotary or External Linear Encoders Supported
Number of Axes		Up to four Motor Axes, plus DAC Output Channel
Manual Controls		XY Joystick, Control Wheel, Zero, @, and Home Buttons, Filterwheel Ad- vance to Next, Shutter Toggle, Con- troller Reset
Display		4-line by 40-character LCD Display shows Axes Positions and Status
Computer Interface		RS-232 Serial and USB
Interface Baud Rate		9600, 19200, 115200
Filter Wheel Switching Time		< 40 ms
Shutter Switching Time		≤ 8 ms
Power Requirements	Voltage	100 – 240 Vac 50/60 Hz
	Current	2.3 Amp (max)