MS-2000-WK Multi-Axis Stage Controller

Features

- 100 MHz Microcontroller for faster command processing and servo control
- Closed-loop DC servo control of up to four motorized axes
- Firmware upgradable via serial connection
- 0-10V DAC for single piezo axis control
- Remembers last position on power down/up
- LCD display shows axes coordinates and status
- "Zero" and "Home" buttons for simple stand-alone operations
- USB or RS232 serial control with baud rates to 115200 Baud
- Compact ergonomic tabletop control unit 6" D x 9" W x 3" H (16½ x 23 x 9 cm)

Options Supported

- Linear encoders
- Piezo Z-axis control
- Hardware video autofocus
- Z-axis drives with electromechanical clutch
- 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
- Bare boards and custom firmware are available for OEM applications

Specifications

Digital Servo Loop Time	250 µs × number of axes
Digital-Closed-Loop Speed Dynamic Range	> 40 dB
Motor Type	Brushed DC Servo Motors
Maximum Motor Current	1.5 Amp
Motor Voltage	6-24 V
Encoder Options	Internal Rotary or External Linear Encoders are supported
Number of Axes	Up to four Motor Axes, plus DAC Channel for Piezo Drive
Manual Controls	XY Joystick, Control Wheel
Display	4-line by 40-character LCD Display shows Axis Positions and Status
Computer Interface	RS232 Serial and USB
Interface Baud Rate	9600, 19200, 115200
Electrical Requirements from External Power Supply	24V DC 1.5 Amp