

# ServoWorks™ MotionLite™ :



## Friendly and Free Servo Configuration, Tuning and Testing

### Overview

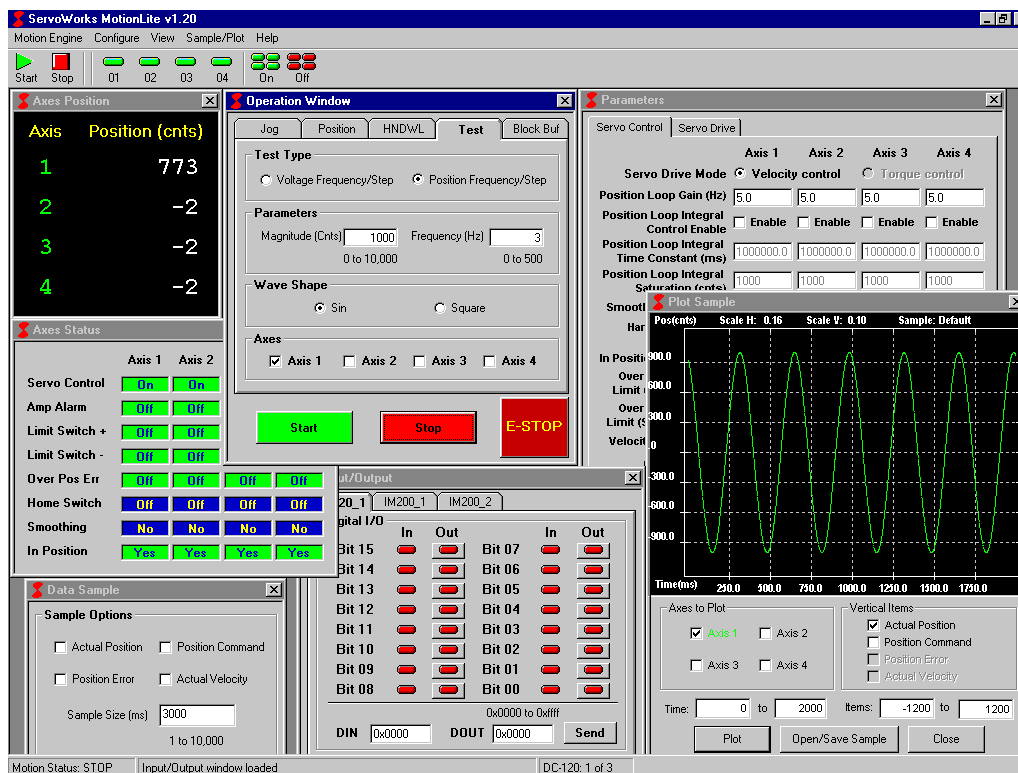
ServoWorks™ MotionLite™, included with ServoWorks MC-Quad™, S-100M™, S-120M™, S-140M™ and S-160M™ is a free utility application for setup, configuration, servo tuning and testing of ServoWorks MC-Quad, S-100M, S-120M, S-140M and S-160M systems. It can also be used for simple motion control to verify the system. ServoWorks MotionLite controls up to 16 axes, 4 axes at a time, with real-time monitoring of motion and I/O status.

### General Features

- Single command 4-axis coordinated linear interpolation
- Operates with or without a touch panel
- Can be used with a manual pulse generator (handwheel)
- Can operate on the EtherCAT, VersioBus™ II, Panasonic Realtime Express™, MECHATROLINK™, Mitsubishi SSCNET™ or CANopen communication platforms

### Comprehensive Setup, Configuration, Servo Tuning and Testing Features

- Includes ServoWorks CNC system setup and configuration functions, such as driver installation, FPGA initialization, setting of servo control and servo drive parameters, etc.
- Includes test operation modes for ServoWorks CNC system tuning such as velocity frequency/step response and position frequency/step response in either sinusoidal or square wave
- Interactive manual PID tuning
- Enhanced data sample and plot utilities (including continuous plot), for a lively visualization of system performance
- Provides real-time monitoring of position and I/O signals
- Provides data sampling and data plotting of actual position, program position, position error and velocity
- Includes windows for viewing and setting motor and servo loop parameters



## Interface Features

- Incorporates simple and intuitive menu- and tab-driven HMI that is easy to learn and easy to use.
- Manual NC modes:
  - 1) Jog Mode
  - 2) Position Mode (4-axis linear interpolation)
  - 3) HandWheel Mode (manual jog with a pulse generator)
  - 4) Block Buffer Mode (consecutive execution of blocks of code in a block buffer, for continuous motion)
- Windows include:
  - 1) Module Configuration Window
  - 2) Operation Window, with tabs for Jog Mode, Position Mode, HandWheel Mode, Test Mode and Block Buffer Mode
  - 3) Axes Position Window
  - 4) Axes Status Window
  - 5) Input/Output Window
  - 6) Parameters Window
  - 7) Data Sample Window
  - 8) Plot Sample Window
- Test Mode: tuning of the ServoWorks system including velocity frequency/step response and position frequency/step response, in either sinusoidal or square wave
- Password protection for parameter settings
- Easy connection of equipment to business-oriented applications running on the network

## Display Features

- Simple, colorful, user-friendly graphical user interface – will seem familiar because it is Windows-based
- Menu-driven HMI based on multiple windows, all of which can be opened or closed as needed, with buttons, slider bars and text boxes for giving commands and accessing information
- Displays position data, plot, I/O status, servo status, NC status and motion monitoring
- Real-time program execution, position display and plotting
- Real-time I/O, servo, NC status and motion monitoring
- Data display is configurable on-the-fly, in terms of what position types are displayed

