

ServoWire® Pro Software

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Setup, Monitor, Tune, Upgrade, Cam/Profile Designer

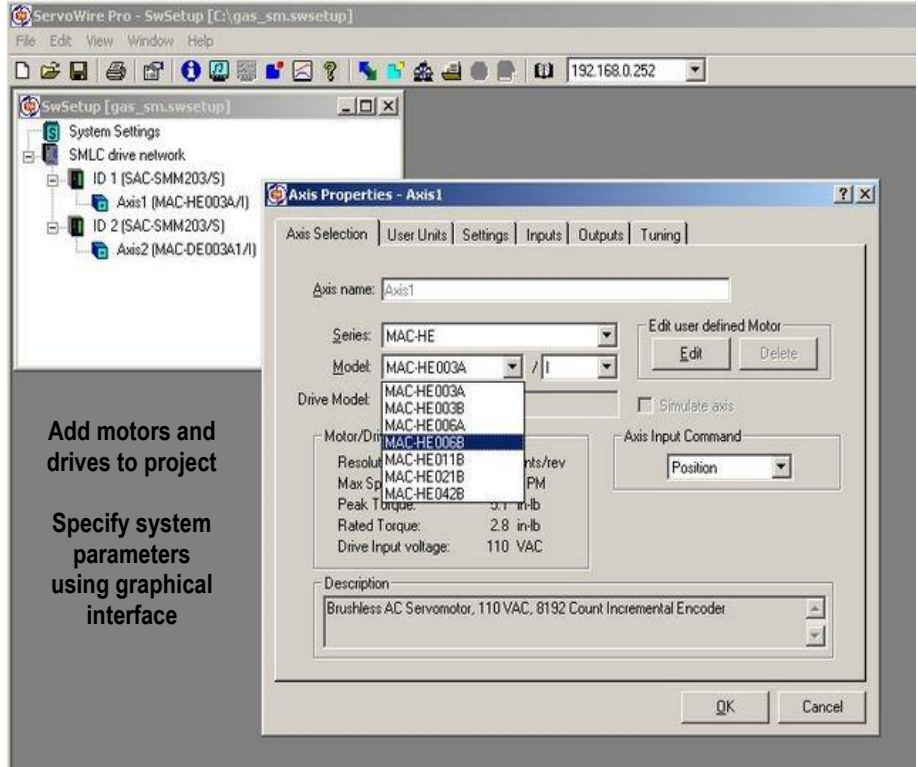
ServoWire Pro provides an integrated suite of configuration, diagnostic and maintenance utilities that assist in the development and on-going support of ServoWire (S2D and SD) drive systems. The software is designed to run on a Windows-based development PC.

ServoWire Setup

ServoWire Setup simplifies the process of configuring ServoWire drives. This includes system settings such as loop update rates, the types of drives that make up the system as well as initial parameter settings.

Setup Utility Features

- Configure system parameters such as loop update rate and drive types.
- Add, remove, copy and paste up to 16 drives onto the ServoWire network.
- Add motors to the ServoWire drives either by selecting from a pre-defined list of ORMEC products or by selecting from a user-defined library of custom motors.
- Configure each drive's operating voltage, local I/O and external regen resistor (optional).



Add motors and drives to project

Specify system parameters using graphical interface

- Configure axis position, velocity and acceleration units and establish the maximum range limits.
- Configure axis response to drives' high-speed discrete inputs (rising-edge, falling-edge or level).
- Configure axis output for brake control
- Establish initial axis tuning parameters for position, velocity and current control loops.

ServoWire Monitor

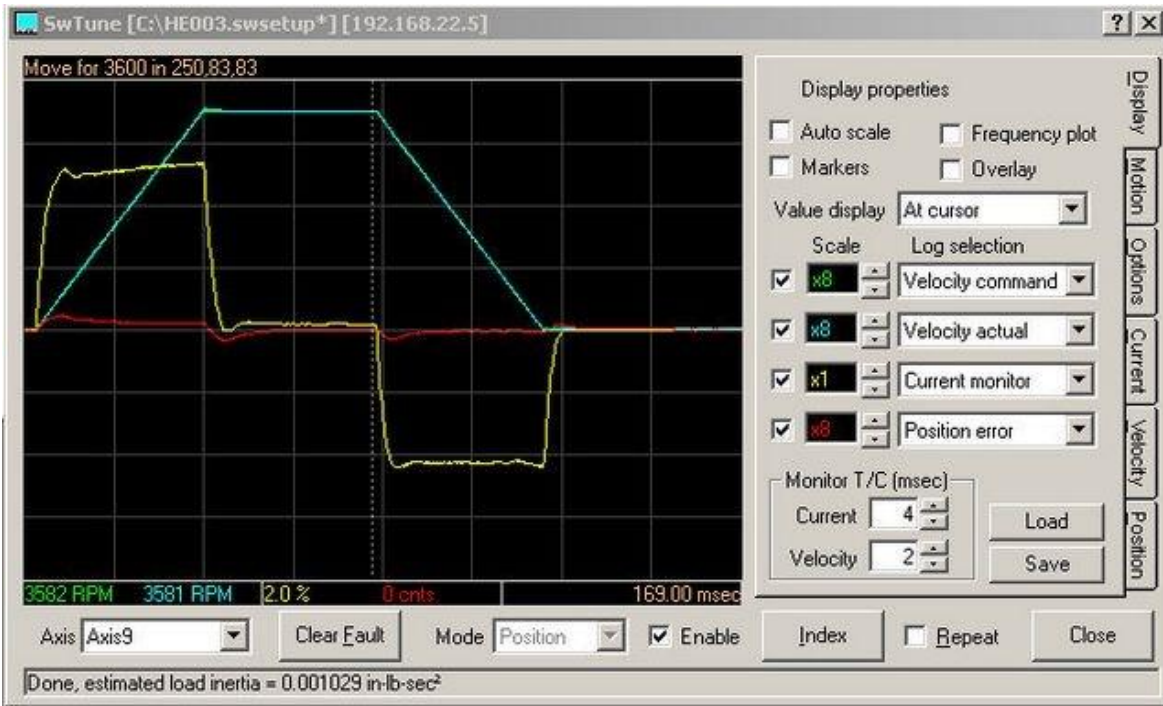
The ServoWire Monitor provides a way to view devices on the ServoWire Network. This includes the 1394b Adapter Card in the SMLC and all drives and devices on the 1394b network.

Monitor Utility Features

- Displays 1394b Adapter Driver Information.
- Displays drive model and serial numbers, firmware revisions, hardware revisions and modifications.
- Provides real-time drive performance information. Data is presented for: drive DC bus, drive fault data, Hall sensor status, drive I/O status, network performance and more.
- Monitor system data while user application program is running.



ServoWire Monitor provides an effective method for viewing devices on the ServoWire Network.



ServoWire Tune allows modification of the control system parameters to provide the proper response to motion profiles specific to your application with a real-time display of position error, velocity command, actual velocity and torque response.

ServoWire Tune

ServoWire Tune provides users software utilities for optimizing motion performance, and documenting tuning parameters for future reference.

Tuning Utility Features

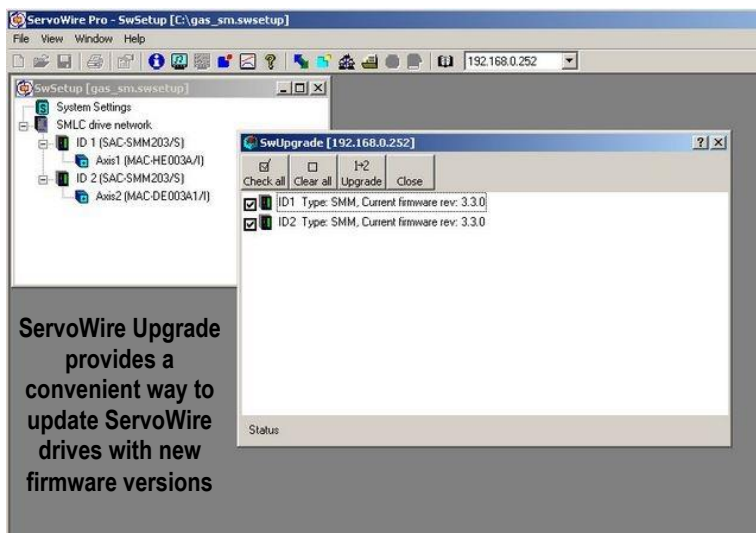
- Perform user-specified motion on a ServoWire axis and graphically display up to four performance parameters.
- Change tuning parameters for position, velocity and current loops and immediately observe the effects on system performance.
- Graph data including velocity, torque, position error, drive bus voltage and motor phase currents. Zoom/Pan views allow for precise and thorough examination of the data.
- Frequency Plot graphing simplifies locating machine resonance frequencies, which can be reduced using Soft Motion's digital filter algorithms.
- User-friendly interface with ability to save motion and graphing setups. The user can also save and/or retrieve displayed graphical data for viewing or printing.

ServoWire Cam/Profile Designer

ServoWire Cam/Profile Designer aids users in creating Cam (master pos. vs. follower pos.) and Profile (axis pos. vs. time) data. Users can enter the data directly into Cam/Profile Designer, or they can import data from a file.

Cam/Profile Designer Utility Features

- View commanded position, velocity, acceleration and jerk data for the specified motion.
- Set the type of interpolation used on a segment by segment basis.



ServoWire Upgrade

The ServoWire Upgrade Utility provides the user with the means to update ServoWire Drives with new firmware versions as they become available from ORMEC.

Upgrade Utility Features

- Displays current version of firmware of all connected ServoWire Drives.
- Allows for download of a different firmware version (older or newer), which is burned into the drives' Flash memory.