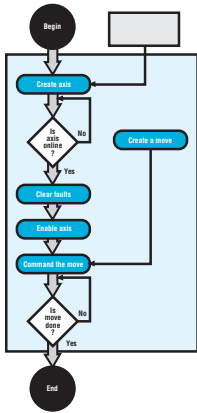


Standard programming tools ...



Utilize Visual Basic, ActiveX or C/C++ to streamline software development.



MotionObjects provides a library of motion control functions that can be easily added to application programs developed in C/C++ or Visual Basic

ORMEC's MotionObjects Class Library and ActiveX Control elegantly integrate motion control into the Microsoft C/C++ and Visual Basic programming languages. This allows programmers to develop software in a single, standard language using Microsoft Visual Studio or QNX Momentics, *while preserving the base of application programming you've already developed.*

The combination of today's high performance processors and carefully layered and distributed software enables the use of true object-oriented programming methods, so you can easily add motion objects to your current base of application programming developed in C/C++ or Visual Basic. In most cases, real-time high-performance servo applications can be solved with standard languages running under Windows with RTX or QNX on standard PCs, saving significant time and money.

Step into a future that unbundles hardware and software, optimizes your development time and simplifies your software and hardware maintenance costs long term. Do all this with a motion control software suite that runs on standard PCs

using standard operating systems, with no per-machine motion software royalties.

Product Overview

Two MotionObjects software development kits (SDKs) provide either a broad array of classes for programming in C/C++ or an ActiveX control to simplify creating motion application programs in Visual Basic.

In addition to offering easy-to-use, object-oriented tools for motion control programming, these development kits provide a real-time software motion engine and an elegant software interface to ServoWire[®] SM Drives via standard, OHCI-compliant IEEE-1394 adapters and inexpensive FireWire cables.

ORMEC also provides a solution for customers who want to use ServoWire[®] SM drives as position, velocity or torque mode servos, and have developed their own motion control libraries and motion engine. The ServoWire[®] SM development kit provides a library and device driver that facilitates communications between a user application program running under RTX and ServoWire[®] SM drives.



Why ServoWire SM Software?

- ✓ An attractive alternative to learning a proprietary motion control language that utilizes standard programming tools and methods
- ✓ Save time developing application programs in Visual Basic or C/C++ using MotionObjects Class Library for object-oriented motion control programming
- ✓ Motion, logic & HMI unified on a single open control platform and programmed in a single language.

Advanced Motion Capabilities

- ✓ Time-based motion offers wide range of programming options.
- ✓ Electronic gearing, including advanced fractional count algorithms, proven in hundreds of applications.
- ✓ Superimposed gears or time-based moves can be run on top of constant-ratio or constant-speed base operations.
- ✓ Repeat moves can be triggered within one position loop update.

SERVOWIRE® SM SOFTWARE PRODUCTS OVERVIEW

MotionObjects ActiveX Control (For use with Windows-RTX)

Overview: Software development kit for developing ServoWire® SM applications in Microsoft Visual Basic or other programs that can act as an ActiveX container. MotionObjects ActiveX Control offers object-oriented tools for motion control programming, a Soft Motion Engine and software connectivity between a host PC running VenturCom RTX, standard FireWire (OHCI) adapters and ServoWire® SM drives.

- ❑ MotionObjects ActiveX Control: ActiveX control library for motion control provides a broad array of methods, properties and events to easily create motion control application programs in industry-standard development environments such as Microsoft Visual Basic. The MotionObjects ActiveX Control offers an attractive alternative to learning and programming a motion control board in a proprietary language.
- ❑ Soft Motion Engine: Software that converts MotionObjects motion commands into drive commands that the host PC or embedded computer sends to the drives as position commands in real-time at the selected position update rate.
- ❑ Win32-based Interface: Provides interface between Win32 application program and ServoWire® SM drives. Users are not required to do any software development in RTX and will only be required to purchase an RTX run-time license.



MotionObjects for C/C++ (Versions for use with QNX or Windows-RTX)

Overview: Software development kit for developing ServoWire® SM applications in C/ C++ using Microsoft Visual Studio or QNX® Momentics. The MotionObjects Class Library offers object-oriented tools for motion control programming, a Soft Motion Engine and software connectivity between a host controller, standard FireWire (OHCI) adapters and ServoWire® SM drives.

- ❑ MotionObjects Class Library: C++ language class library for motion control. Provides a broad array of classes to easily create motion control application programs in industry-standard development environments including Microsoft Visual Studio and QNX® Momentics. The MotionObjects Class Library offers an attractive alternative to learning and programming a motion control board in a proprietary language.
- ❑ Soft Motion Engine: Software that converts MotionObjects motion commands into drive commands that the host PC or embedded computer sends to the drives as position commands in real-time at the selected position update rate.
- ❑ Real-time Control: RTX version provides interface between Win32 application program and ServoWire® SM drives. Users are not required to do any software development in RTX and will only be required to purchase an RTX run-time license.



ServoWire® SM Developer's Kit (For use with Windows-RTX)

Overview: Library and device driver compatible with Windows NT/2000/XP and VenturCom RTX for customers who have developed their own motion control libraries and motion engine and want to use ServoWire® SM drives as position, velocity or torque mode servos.

- ❑ ServoWire® SM Library: Provides an API that facilitates communications between a user application program running under RTX and ServoWire® SM drives. Provides ability to command position, velocity or torque, and read position feedback, for use with a third-party motion engine — and method for configuring axes on the network.

Note: 1394 RTX device driver for interfacing standard IEEE-1394 (OHCI) network adapters provided with all software packages above.

