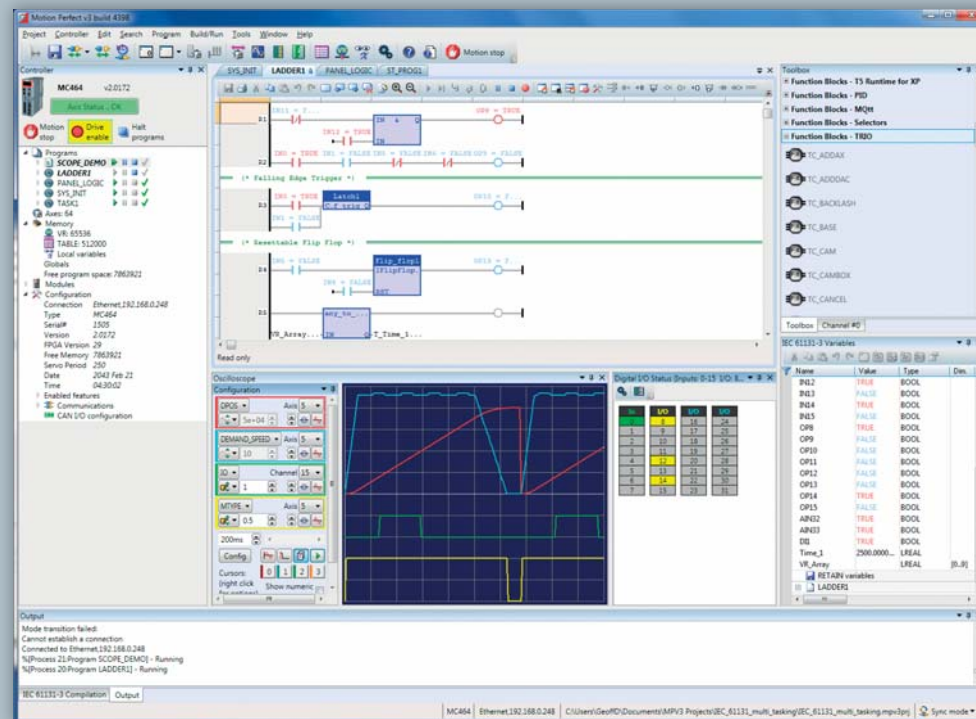


# Motion Perfect v3

Motion Perfect v3 is a Microsoft Windows™ based application for the PC, designed to be used in conjunction with Trio Motion Technology's *Motion Coordinator* MC4 range of multi-tasking motion controllers.

Motion Perfect v3 includes the MC400 Simulator program which allows offline programming.

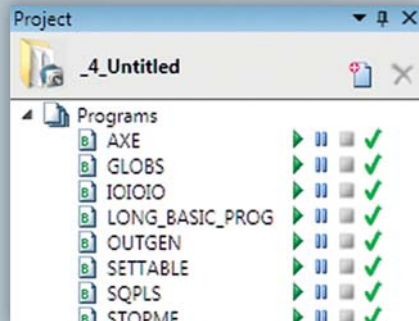
Motion Perfect v3 is available as a **FREE** download from the Trio website: [www.triomotion.com](http://www.triomotion.com)



## FEATURES

- ★ **New clear connection modes...** MPv3 can connect to the *Motion Coordinator* MC4 range in Direct, Tool or Synchronous mode, allowing connection at a level that is appropriate to the operations needed.
- ★ **Tree view of *Motion Coordinator* and Project...** See all the controller and project information in one place, via a familiar intuitive display.
- ★ **Window docking...** Allows the user even more flexibility in how the *Motion Perfect* v3 desktop is laid out.
- ★ **Improved program editor...** The TrioBASIC editor appears in a tabbed layout and includes enhanced breakpoint handling, NEW bookmarks, auto commenting and scope checking.
- ★ **Support for IEC 61131-3 included...** The program editor can be used to create and edit IEC 61131-3 programs in Structured Text, Function Block, Sequential Function Chart and Ladder.
- ★ **Enhanced Axis Parameter display...** Choose which parameter groups to display and which parameters to see live in a continuously updated window.
- ★ **Improved data viewers...** The VR and TABLE viewers can be set to display non-contiguous data ranges and with auto-updating enabled will provide a live display of the values.
- ★ **Real-time-clock synchronisation...** View the contents of the *Motion Coordinator's* real-time clock (where fitted) and synchronise it with the PC clock at the touch of a button.
- ★ **All-new project resolution dialogues...** When connecting to the *Motion Coordinator* a completely new set of windows will guide you through the process of synchronising the controller's project with the copy on the PC.
- ★ **Support for multiple controllers...** View any number of controllers running from one instance of *Motion Perfect* v3
- ★ **Fully integrated HMI support...** Design a complete graphical HMI interface within *Motion Perfect* v3 where buttons and fields can link to any system parameter or command.
- ★ **Oscilloscope...** Increased ranges and parameters lists enables more data to be captured for analysis. X/Y display mode now available to check interpolated motion in 2d. Ability to plot Table points to the oscilloscope to check CAM profiles.

## Motion Perfect Projects



One of the keys to using *Motion Perfect v3* is its concept of a "Project". The project aids the application design and development process, by providing a disk based copy of the multiple controller programs, parameters and data required for a single motion application.

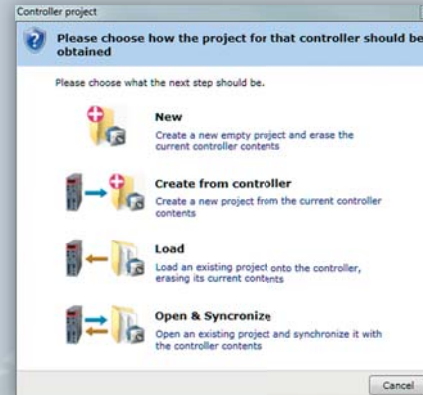
Once the user has defined a project, *Motion Perfect v3* works behind the scenes automatically maintaining consistency between the programs on the controller and the files on the PC.

When creating or editing programs on the controller they are automatically duplicated on the PC which means you do not have to worry about loading or saving programs and you can be confident that next time you connect to a controller you will have the correct information on your PC. *Motion Perfect v3* keeps multiple backup copies of the project in a sub folder, thus allowing the programmer to revert to a previous version.

## HELP

*Motion Perfect v3* comes with complete help files for Trio BASIC and the IEC programming libraries. Using the search function, or jumping to a help topic via the context sensitive help in the editor, the programmer has access to all the information from Trio's technical programming manuals. The help files are also rich in programming examples for many motion applications.

## Project Manager



The multi-tasking capability of *Motion Coordinators* means there will often be a number of different program files associated with an application. In order to keep track of these multiple files and their associated data a major component of the *Motion Perfect v3* environment is the project manager.

- Load and Save multiple programs as a single named project
- Simultaneous saving of program files to both the PC and the *Motion Coordinator*
- Verify that the contents of a controller match the project file on disk
- Load and Save controller variables and table memory to disk
- Automatically generate controller "Startup" configuration files
- Include BASIC, HMI and IEC 61131-3 programs in the same project

## Axis Parameter Screen

- Spreadsheet style interface to monitor and set axis parameters
- Automatically updates real time parameters
- Support for all axis types (including virtual axes)
- Enhanced user configured axis display

## Digital I/O Status

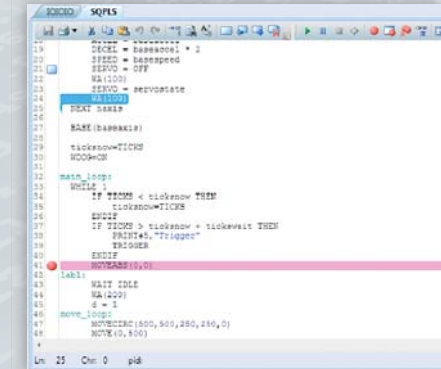
In	I/O	I/O	I/O
0	8	56	64
1	9	57	65
2	10	58	66
3	11	59	67
4	12	60	68
5	13	61	69
6	14	62	70
7	15	63	71

- Display status of all I/O Channels simultaneously
- Automatically configures to support all available I/O
- Set outputs with a mouse click
- I/O's can be named and saved in a Project

## MC400 Simulator

The MC400 Simulator is a Microsoft Windows™ based application for the PC, designed to be used in conjunction with Trio Motion Technology's *Motion Perfect v3* development software. It provides a software simulation of Trio Motion Technology's MC4 range of multi-tasking *Motion Coordinators*.

## Basic Program Editor



- Simultaneously edits the controller program and a copy on disk - programs do not need to be downloaded after editing
- Windows style editor with Cut, Copy & Paste - information may be pasted between programs
- Edit multiple programs simultaneously
- Find & Replace
- Jump directly to any line number or program label
- View and edit programs while they are running
- Bookmark lines for easy access
- Offline editing with advanced MC400 simulator
- Immediate line tokenisation
- Context sensitive help
- Autocomplete suggestions and command line help menus
- Keyword assisted and parameter help
- Auto-formatting, colour-coded syntax to make editing and debugging easier