TRIO
MOTION | TECHNOLOGY

Doc No.:	**AN-231**
Version:	**1.0**
Date:	**29 January 2009**
Subject:	**How to interrupt the Autorun settings on Power-up**

APPLICATION NOTE

www.triomotion.com

1. *Motion Perfect* "Does Not Connect"

There can be many reasons why Motion Perfect fails to connect to a Motion Coordinator.

This document deals with the case where the User Program in the Motion Coordinator has either changed the Port 0 settings, or the User Program is sending a lot of serial characters out of Port 0.

In this case it is necessary to break into the power up sequence and stop the programs from Auto-running.

2. Default Baud rates

On power up, the Motion Coordinator will always begin with the Port 0 set to the default baud rate. Default baud rate can be one of these two settings, depending on how the RS232_SPEED_MODE parameter is set.

```
RS232_SPEED_MODE=0;  9600, 7 bits, 2 stop, even parity
RS232_SPEED_MODE=1;  38400, 8 bits, 1 stop, even parity
```

RS232_SPEED_MODE is an EPROM parameter that is set from the Motion Perfect terminal. It must not be set from a Program.

The LEDs on the front of the Motion Coordinator* tell you which default baud rate is being used. If they come on and are steady, then it is set for 9600 baud. If the OK and Status LED flash for a few seconds after power-up, then port 0 is set to the high speed default of 38400 baud.

The exception is the MC302X. This has 38400 baud set as default, but the LEDs are steady.

3. Interrupting the Autorun sequence

It is possible to interrupt the running of the programs on power up. Follow this proceedure:
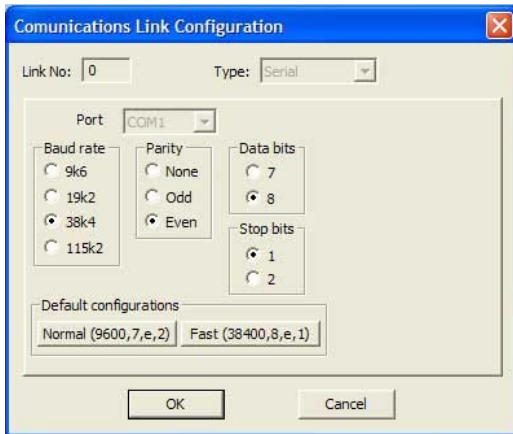
- With Motion Coordinator not powered, start *Motion Perfect* in Disconnected Mode. (Hold down the shift key when starting *Motion Perfect*)
- Check that the COMM port setting in *Motion Perfect* is the same as the Motion Coordinator default setting.
- Make sure the terminal is open in *Motion Perfect* and that it is for the correct COMM port on

the PC.

- Connect the serial cable between the Motion Coordinator and the PC.
- Power up the Motion Coordinator.
- See the power-up text messages displayed in the terminal.
- Press the Enter Key about 10 times during the display of the messages.
- The User programs will NOT compile and you will see the >> prompt in the terminal.

You can now connect *Motion Perfect* fully in the usual way.
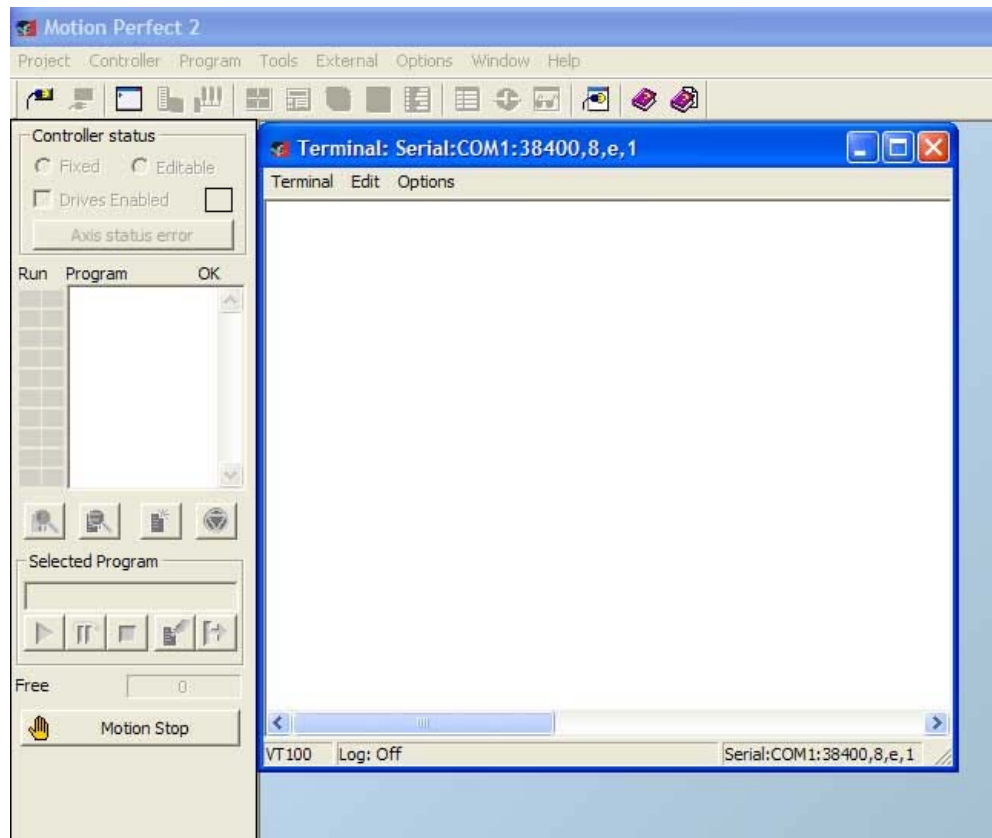
4. Screenshots

Communications dialogue in Motion Perfect 2.

Select from the Menu:

Options → Communications

Select the port from the list and click the Edit button.

Select either Normal or Fast Default by clicking the buttons shown at the lower part of this window.

Motion Perfect Terminal Window in Disconnected Mode