## **Upgrade/Load TRIO Programs**

## I. Load Trio Motion programs into Controller

1. Make sure that Motion Perfect 2 is installed on the PC, which is to be connected to the controller.

Motion Perfect 2 can be installed from the Trio Motion CD.

## Welcome to the Trio Motion CD

Install Motion Perfect 2 Install motion application development program

| The second |            |      | -     | <br>- |
|------------|------------|------|-------|-------|
|            | 8          |      |       | -     |
| Press (    | B. 1       |      |       |       |
| Read and   | 1.1        | - 62 |       | <br>  |
| 100        | 8. C.      |      | 1.12  |       |
|            |            | - 21 |       |       |
| 100        | Concerners | 1.12 | 107.2 | 1     |
|            |            | 10   | 101.0 |       |
|            |            | 100  |       |       |

Also, Motion Perfect 2 can be downloaded from Trio web site:

<u>http://www.triomotion.com/tmt2/sitefiles/software\_tools/sw\_tools\_overview.asp</u> (Note: In order to download the software from TRIO website the user needs to register with TRIO, which is free)

2. Make sure that TrioPCMotion is installed on the PC which is to be connected to the controller.

TrioPCMotion can be installed from the CIRS Motion Control CD that comes with the phantom.

| Name                             | Туре        |
|----------------------------------|-------------|
| Install_TrioPCMotion_1_2_9_2.exe | Application |

Also, TrioPCMotion can be downloaded from Trio web site:

http://www.triomotion.com/tmt2/sitefiles/software\_tools/sw\_tools\_overview.asp\_

| Trio PC Motion   |
|--|
| The Trio ActiveX component provides a direct connection to the Trio MC controllers via a PCI bus, USB, Serial or Ethernet link. It can be used in any Windows programming language supporting ActiveX (OCX) components such as Visual Basic, Visual C, C++ Builder, etc. |
| Compatible with: MC224, PCI208, MC206(X), MC302X, MC302-L, MC302-K, Euro209, Euro205(x), MC216, MC204, MC202, MC2  |
| Trio PC Motion Free Download   |

(Note: In order to download the software from TRIO website the user needs to register with TRIO, which is free).

- 3. Start Motion Perfect 2.
- 4. Go to Options Communications.



5. If USB is not listed in Ports Box click Add and select USB then press OK.

| Configure Communications  | Add Port  |
|---|---|
| Ports       Add         COM1       Add         Delete       Add/Delete         Packet       Comms only         available       when not         Controller system version 1.48 or greater)       Image         Controller message timeout       Max = 100)       20         OK       OK | Port Type Port<br>C Serial<br>C USB<br>C Simulation<br>C Ethernet<br>C PCI<br>OK Cancel |

After USB is added to the *Ports Box* use the arrows to put the USB port at the top of the priority list. This will speed up the connection for cases when there is more than one port available as the USB port will be checked first.

| Ports       |                  | NOTE  |
|-------------|------------------|---|
| COM1<br>USB | Add              | NOTE:<br>Add/Delete   |
| COM4        | Delete Configure | ports and<br>change<br>Packet<br>Comms only<br>available<br>when not<br>connected |

6. Go to Controller – Connect.

| 🚡 Motion Perfect 2 |            |                          |       |           |           |      |
|--------------------|------------|--------------------------|-------|-----------|-----------|------|
| Project            | Controller | Program                  | Tools | External  | Options   | Wind |
| 1                  | Conn       | Connect                  |       |           | Ctrl+Alt+ | C    |
| Controll           | Disco      | Disconnect               |       | Ctrl+Alt+ | D         |      |
| C Fixe             | Conn       | Connect to simulator Ctr |       | Ctrl+ALt+ | -s        |      |

Once the connection is established press *OK*. Press *OK* again when the message *Project Checked OK* is displayed in the *Check Project window*.

7. Go to Project – Load project...

| <b>6</b> N | Notion Perfect 2 |         |       |          |   |
|------------|------------------|---------|-------|----------|---|
| Proj       | ect Controller   | Program | Tools | External | 0 |
|            | New project      |         |       |          |   |
|            | Load project     |         |       |          |   |

Select the desired Trio project from the CD/CDs containing Trio Projects that was/were shipped with the phantom and press *Load*.

| Load Project             |         | ×  |
|--------------------------|---------|--|
| Disk directory           |         | Project contents   |
|                          | * III * | CIRS Model 008A<br>MC206x@<br>INITIALIZE<br>TEST<br>A_LINEAR<br>A_SURROGATE<br>M_PAUSE<br>M_RESUME<br>M_START<br>M_STOP<br>M_MOVESTART<br>A_ROTATIONAL |
| Select project directory |         | Select project   |
| CIRS Model 008A          |         | Recent Projects  |

8. Press Yes to acknowledge the message in Project Manager window.

| Project Manager   |  |  |
|---|--|--|
| This will erase the actual contents of the controller<br>and load the project<br>E:\CIRS Model 008A\CIRS Model 008A.prj<br>in its place.<br>Are you sure? |  |  |
| Yes No  |  |  |

Optional: To lock the Trio Project for editing click *Fixed* in the *Controller status box* and press *OK* in the message window.



Once the Trio Project is fixed in controller the following is displayed. Press *OK* to acknowledge the message.

| 🔓 Motion Perfect 2        |  |
|---------------------------|--|
| Project Controller Progra | am Tools External Options Window Help            |
| /= # 🖸 🖡 💾                | 🕷 🚍 🕄 📕 🗐 🔳 🗣 🖬 🖉 🛷 🔌                            |
| Controller status         | Program Flash EPROM                              |
| Fixed C Editable          |  |
| Drives Enabled            | Erasing Application area of FLASH<br>Programming |
| Axis status error         | Verifying<br>Done                                |
| Run Program OK            |  |
|                           |  |
| A_SURROGATI 🗸             |  |
| M MOVESTAR                |  |
| M_PAUSE 🖌                 | ОК   |
| M_RESUME V<br>M_START V   |  |

- 9. After the loading of the Trio Project is done close the connection to the controller using either the disconnect icon either the disconnect icon or by going to *Controller Disconnect*.
- 10. Exit Motion Perfect 2.
- 11. Start CIRS Motion Control.

## Controller use for both Model 008A (Dynamic Phantom) and Model 008PL (Dynamic Platform)

Repeat the above steps (steps 1 and 2 are not necessary anymore if they were performed once) making sure that the Trio Project, which mentions Model 008PL (Dynamic Platform) is selected in step 7.