



# TECHNICAL NOTE **TNOI31**

## **Title: USB Installation Guide**

### **Product(s): G3, Modular Controller and Data Station Plus.**

#### **ABSTRACT**

The purpose of this document is to describe the set up of the computer USB port to program Red Lion Controls' G3 HMI, Modular Controller or Data Station Plus series.

#### **INTRODUCTION**

Red Lion Controls G3 HMI, Modular Controller Masters and Data Station Plus products all include a slave USB port for programming purpose. This port can also be used to access the CompactFlash™ memory card to visualize its content from a PC (not supported by the CSMSTRV2 due to the absence of a CompactFlash™ slot.)

Any standard master (A style end) to slave (B style end) USB cable can be used.

Since the USB port has multiple functionalities, for proper operation, several drivers are going to be installed on your computer. Fortunately, the USB driver file provided with Crimson 2.0 includes all the required drivers. Crimson 2.0 has to be installed on your computer prior to driver installation. A free copy of the program can be downloaded on [www.redlion.net](http://www.redlion.net).

The driver file can be found under the installation folder of Crimson 2.0\Device\g3usb.sys. If you installed Crimson 2.0 with the default installation path, the file should be under C:\Program Files\Red Lion Controls\Crimson 2.0\Device\g3usb.sys.

NOTE: If your computer requires multiple installations of the driver, always complete the wizard every time. The PC may be requesting different drivers for specific operations.

#### **DRIVER INSTALLATION**

The following shows how to install Crimson 2.0 USB driver successfully on a Windows XP operating system. If the operating system is different, installation procedure should still be fairly close.

##### **Getting the installation wizard**

Connect the computer to the Red Lion device using the standard USB cable and apply power to the Red Lion unit. A new hardware wizard should pop up to help you install the driver so Windows can recognize the panel. Fig. 1.

If the wizard does not pop up, please refer to the troubleshooting section of this document for more information.



Fig. 1

The wizard might prompt to connect to the Internet for a software search. Select No, not this time and click Next.

The following window asks for the preferred method to install the software. Select Install from a list or specific Location and click Next. Fig. 2. Using the recommended method will not find the driver as Windows only looks in the system folder and not where the driver file is (See introduction.)

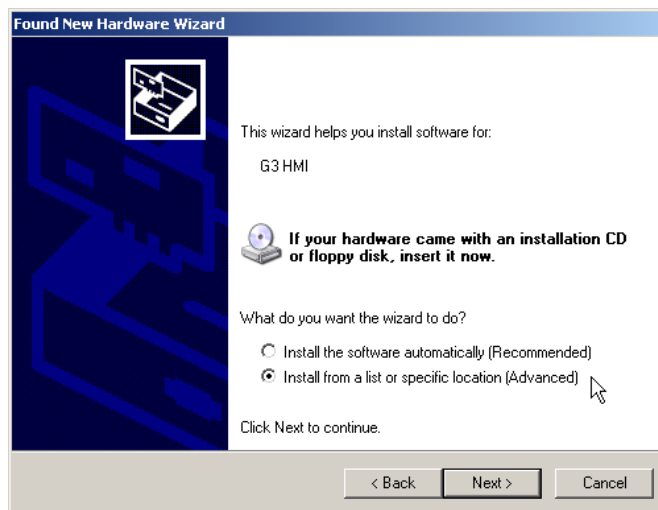


Fig. 2

Since the Advanced installation was selected, the wizard asks for the driver location. Make sure Search for the best driver is selected and include this location in the search checkbox is checked as shown in Fig. 3

Click on the Browse button to navigate to the driver location on your computer. The location should be C:\Program Files\Red Lion Controls\Crimson 2.0\Device\ if Crimson 2.0 was installed under the default folder.

The OK button can be clicked once a system file is detected in the folder. Click OK.

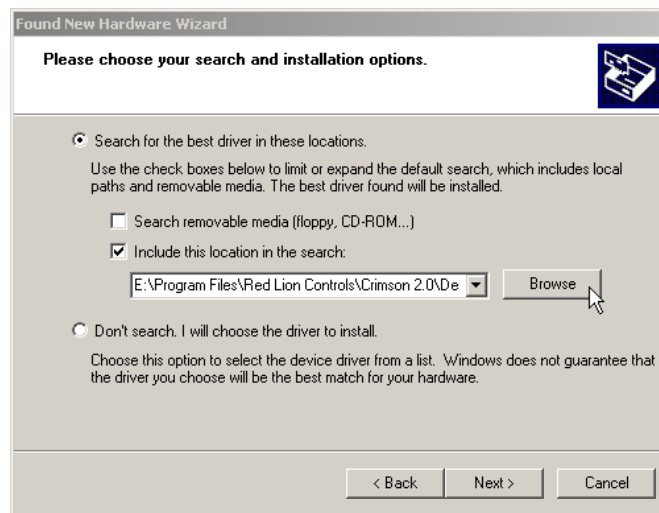


Fig. 3

Click Next. The wizard will now start installing the driver. A warning window pops up to inform that the G3 HMI software has not passed Windows Logo testing. This window is only a warning that you are installing a driver that is not digitally signed by Microsoft; however, this is not required for proper operation. Fig. 4.

Click Continue Anyway.

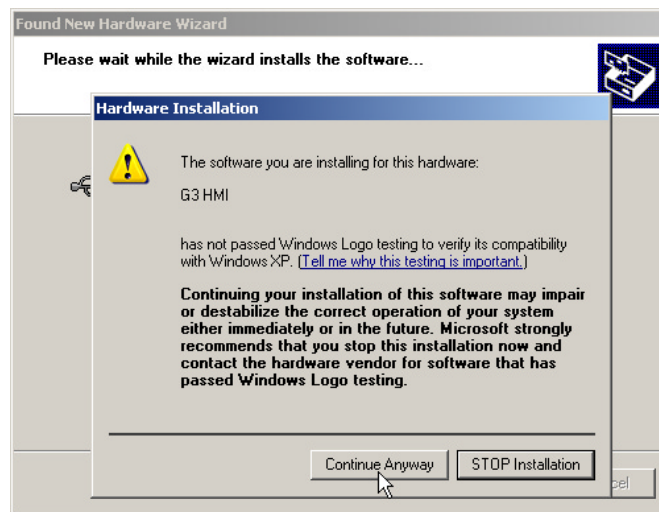


Fig. 4

The wizard finishes installing the driver and should say The wizard has finished installing the software for G3 HMI. Fig. 5.

Click Finish to close the wizard window.

Once this driver has completed installation, another hardware wizard might pop up prompting you to install the G3 Loader software. Complete this wizard in the same manner, and if a CompactFlash™ card is mounted in the Red Lion unit, a third driver installation will be required for a mass storage device. All drivers must be properly installed for the panel to function properly.

NOTE: If the new hardware wizard pops up during a database download or after a firmware upgrade, always go through the process of installing the driver. Firmware change after a software upgrade might require a driver upgrade, hence the new hardware wizard popup.

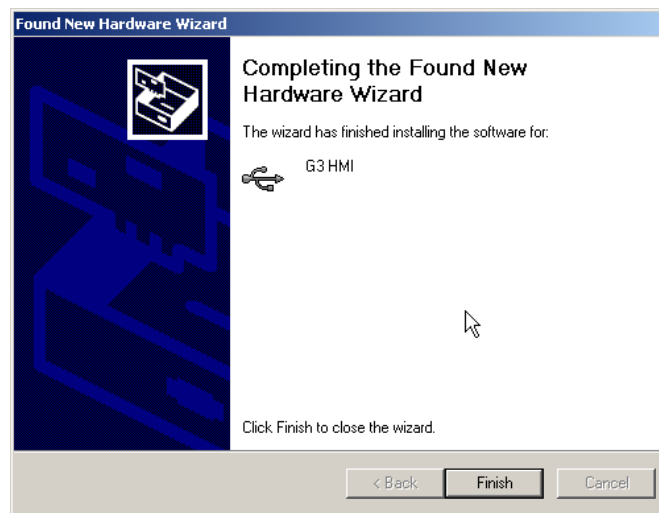


Fig. 5

The final step is to select the USB port as the download method in Crimson 2.0. The download port can be selected via Link>Options.

## TROUBLESHOOTING

In the event that the new hardware wizard does not popup or downloading a database from Crimson 2.0 fails, the following points have to be checked.

- Make sure the USB port is selected in Crimson 2.0 as the PC download port. Default is COM1. To change the port, click on Link>Options.
- Open the Device Manager to check if the driver G3 HMI is present under Universal Serial Bus Controllers. Fig. 6. Make sure the PC and the Red Lion unit are connected and powered up. If the driver does not appear, click on Action>Scan for hardware changes to search for new devices. Install the driver if prompted.

If no devices are found, contact technical support.

- If the driver is present but download fails even though all products are connected and powered up, uninstall the driver, disconnect the Red Lion unit and connect it again after a few seconds. The New hardware wizard should popup. Proceed with the installation as described in the previous section of this document.

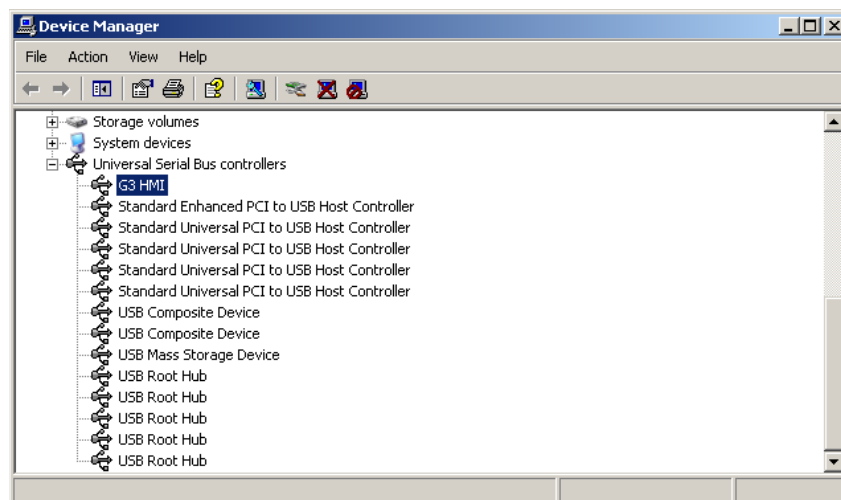


Fig. 6