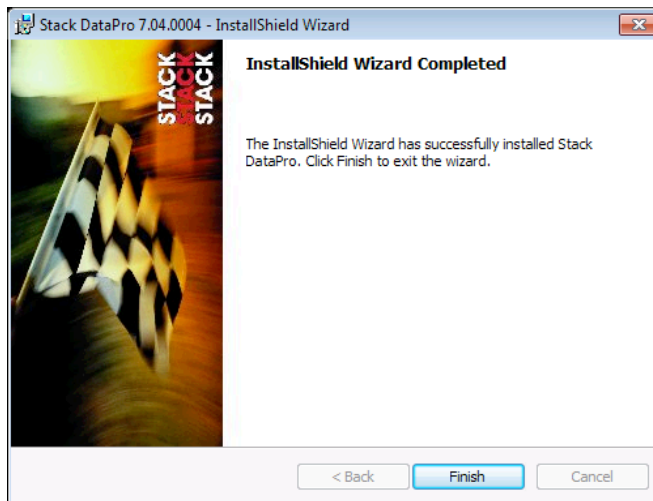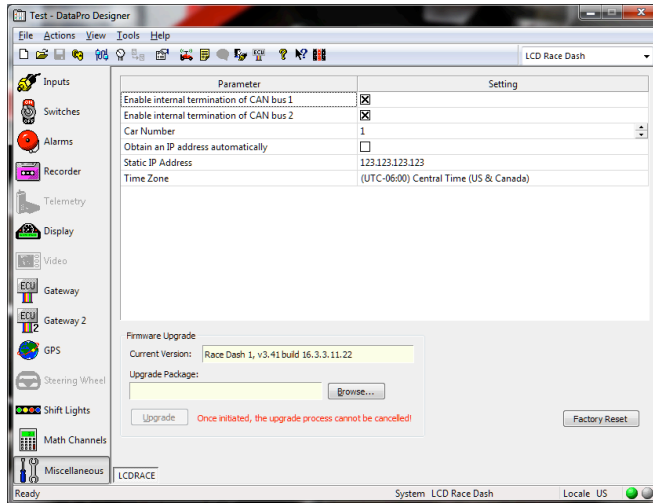# Connecting the LCD Race Display via Direct Ethernet Connection

Using the latest version of DataPro and upgrading the firmware on your Stack LCD Motorsport display provides important improvements to the hardware operation. This document will detail the process for installing the latest version of Stack DataPro, updating the LCD display firmware, and uploading a configuration via direct ethernet connection. Note: This document assumes that you have already installed the Stack hardware in your vehicle per the included instructions and have authorized your hardware in a previous version of DataPro.
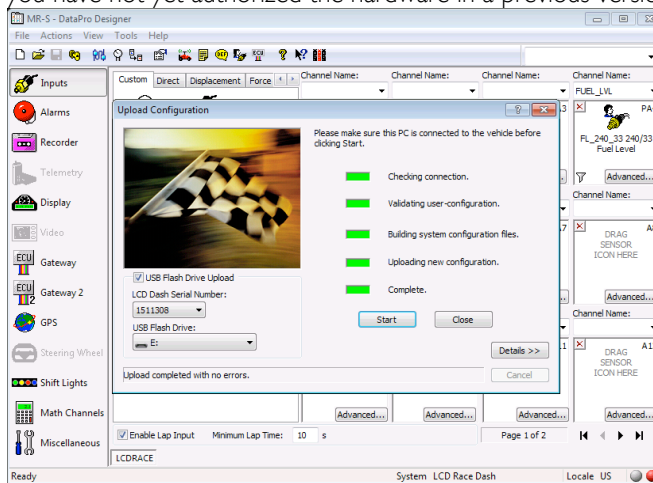
1.) After downloading DataPro, unzip the file and install the application on to the PC.

2.) Open DataPro with your configuration. We will need to assign an IP to the dash in order to connect to the LCD via ethernet. Under the Miscellaneous tab, uncheck the "Optain an IP address automatically" checkbox. Additionally, designate an IP address for the dash. This can be any series of 3 digit numbers. (123.123.123.123 used here)
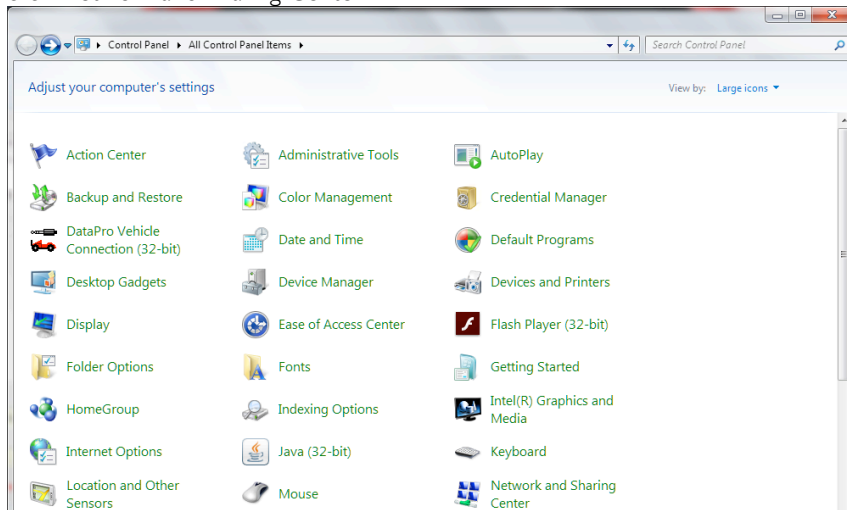
1

3.) Upload your configuration to a USB flash drive. This may require authorizing the LCD dash display, if you have not yet authorized the hardware in a previous version of DataPro.
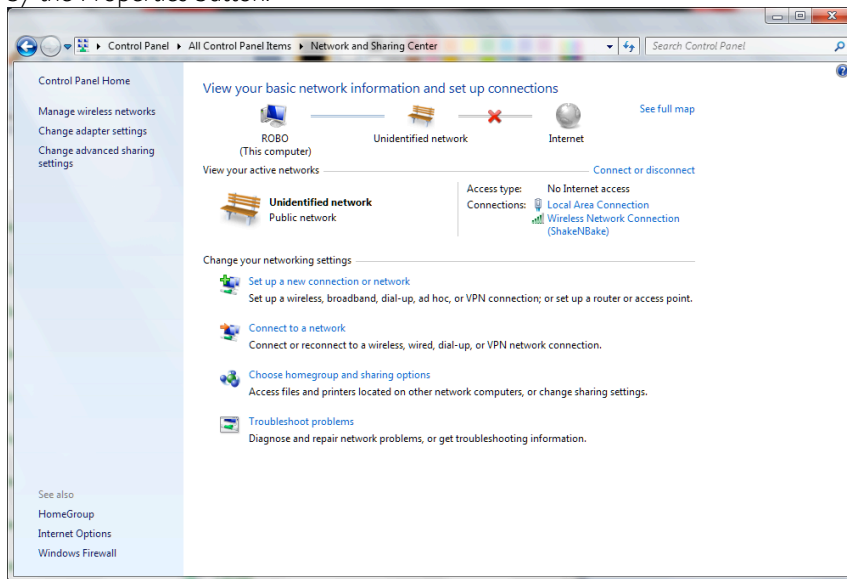

4.) Eject the USB drive from the PC.
5.) Power the LCD dash on in the vehicle.
6.) Plug the USB drive into the USB port on the LCD display's harness.
7.) This should bring up the USB flash drive screen on the LCD display with the options; Upload Configuration, Upgrade Firmware, Download Data, and Exit.
8.) Upload your configuration by pressing the top left button. **Do not remove power from the dash display while this upload is taking place.**
9.) You may now Exit the USB Flash Drive menu and remove the flash drive.

10.) The dash now has the static IP you have assigned. To confirm the IP, press and hold switch 1 when the dash is powered on.
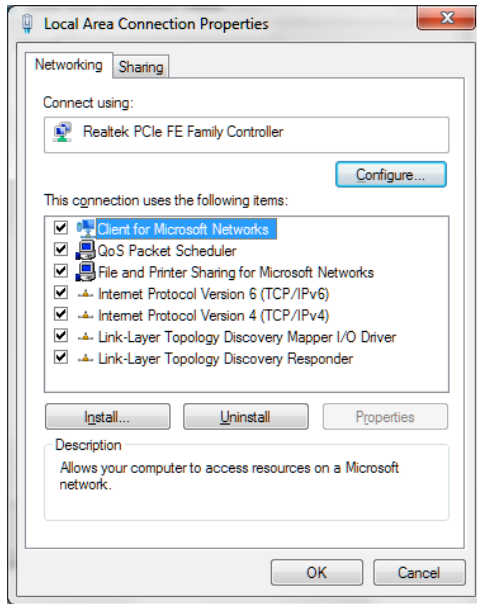
11.) To connect via ethernet, we will need to set a static IP on the PC. Open the Control Panel and then click Network and Sharing Center.
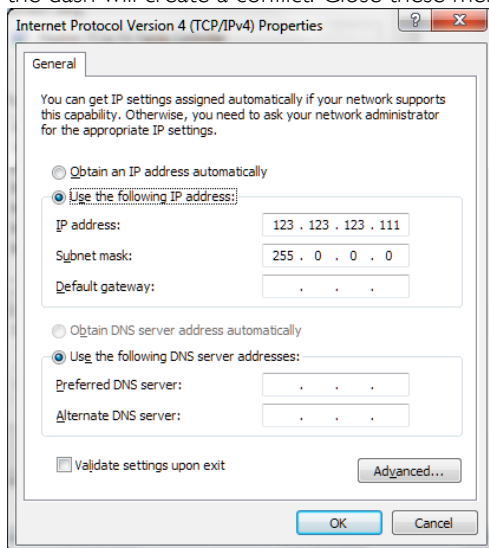

12.) Select Change Adapter Settings (top left) and double click on your local area connection followed by the Properties button.
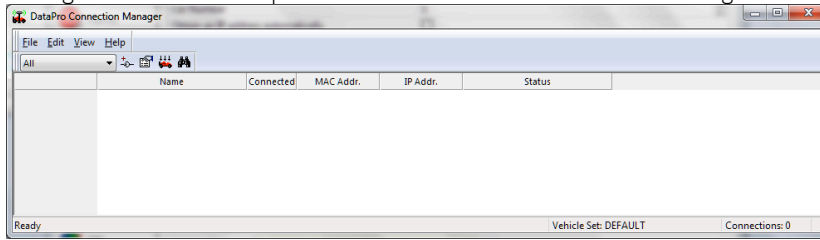
13.) Double click the IPv4 from the items list.

Local Area Connection Properties

Networking | Sharing

Connect using:

🖧 Realtek PCIe FE Family Controller

Configure...

This connection uses the following items:

- ☑ 🖧 Client for Microsoft Networks
- ☑ 🖳 QoS Packet Scheduler
- ☑ 🖳 File and Printer Sharing for Microsoft Networks
- ☑ ⊣ Internet Protocol Version 6 (TCP/IPv6)
- ☑ ⊣ Internet Protocol Version 4 (TCP/IPv4)
- ☑ ⊣ Link-Layer Topology Discovery Mapper I/O Driver
- ☑ ⊣ Link-Layer Topology Discovery Responder

Install... | Uninstall | Properties

Description
Allows your computer to access resources on a Microsoft network.

OK | Cancel

14.) Select Use the Following IP Address and type the first 3 numbers of the IP of the dash. (Used in step 2) The last number should not match the dash, but can be anything else, 0-999. Using the exact IP of the dash will create a conflict. Close these menus once completed.
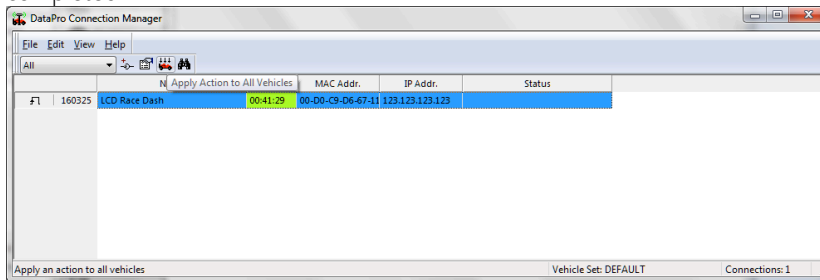
Internet Protocol Version 4 (TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

○ Obtain an IP address automatically
● Use the following IP address:

IP address: 123 . 123 . 123 . 111
Subnet mask: 255 . 0 . 0 . 0
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:

Preferred DNS server: . . .
Alternate DNS server: . . .

☐ Validate settings upon exit

Advanced...

OK | Cancel

15.) Open your template in DataPro Designer. Verify your configuration and click the Connection Manager button at the top of the screen or select Connection Manager from the Tools menu.
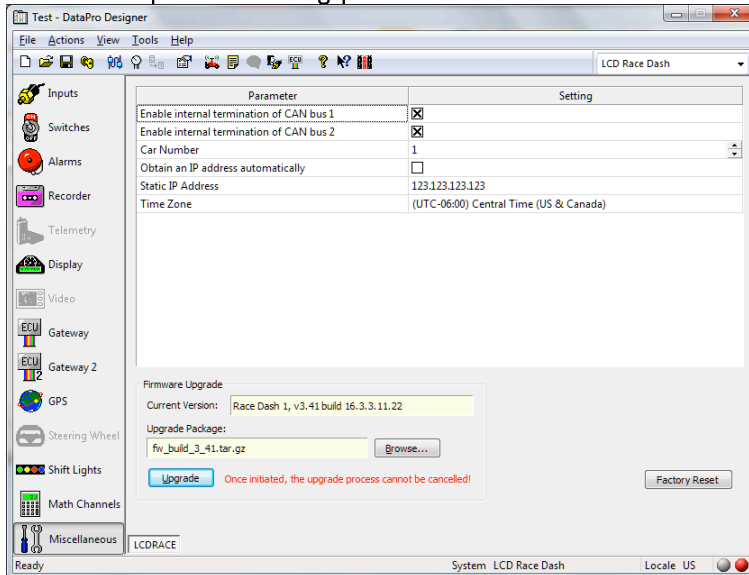

16.) Click the Add New Connection button or select New Connection from the Edit menu.

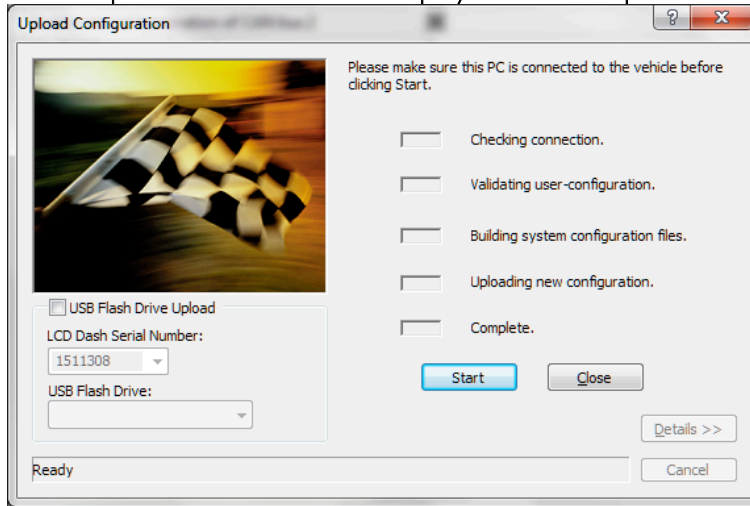17.) Name the connection and enter the exact IP assigned to the dash (Step 2). Click OK when completed.

With the LCD race dash connected, you can now preform a few tasks. Upgrading firmware, Uploading a configuration, and Calibrating vehicle sensors.
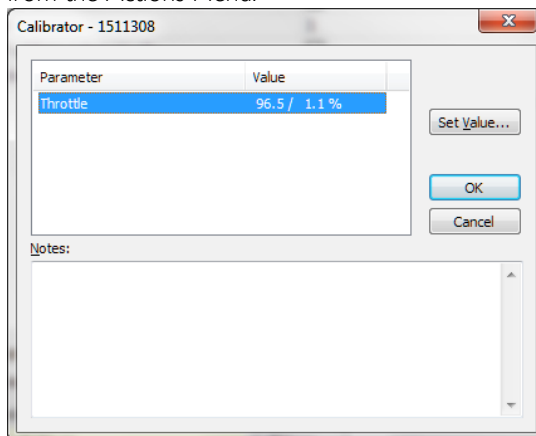
1) To upgrade the firmware, use the Miscellaneous tab and browse fo the firmware file. The file type should .tar.gz. Click the Upgrade button. Do not remove power from the dash display while this upload is taking place.

Stack Motorsport North America
Sycamore, IL USA 60178
Tel: 888 867 5183
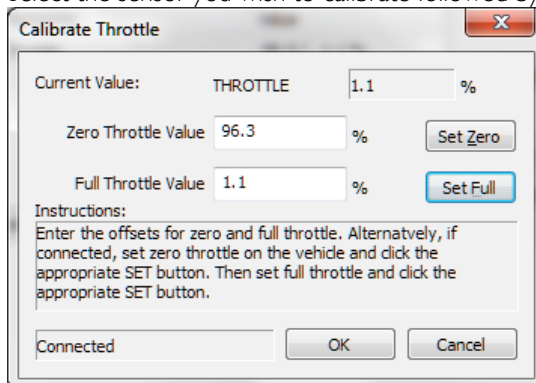Fax: 888 364 2609
Email: sales@stackltd.com
www.stackltd.com

2) To upload a configuration, use the Upload button on the top of DataPro Designer or select Upload from the Actions menu. Make sure the USB Flash Drive Upload box is unchecked. **Do not remove power from the dash display while this upload is taking place.**

3) To calibrate sensors, click the Calibrate button at the top of DataPro Designer or click Calibrate from the Actions Menu.

3a) Select the sensor you wish to calibrate followed by the Set Value button.

3b) When the sensor is at each location, click the Set Zero and Set Full respectfully. Click Ok on the menu and on sensor capture menu and click OK on the Calibrator menu when finished. A prompt will appear asking to upload, select Yes to upload or No to upload later.

Upload Required	X

Configuration must be uploaded to complete calibration.

Do you want to upload now?

[Yes] [No] [Cancel]