

## Roe Racing USA VEC2 Firmware Loader Program

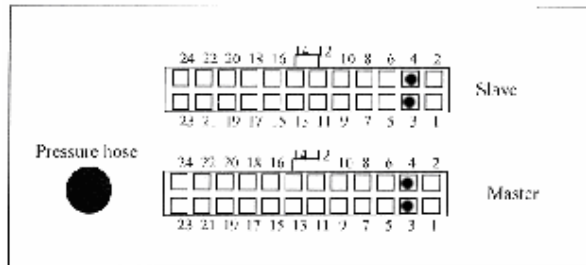
The Firmware Loader program allows you to update your VEC2 at home. This will save the time and expense of sending a VEC2 in and allow you to add features to the VEC2 as available. Please read the instructions fully before proceeding.

To determine the firmware version of your system, link to the VEC2 via the “Direct Connection” link and press the “info” button (see section 5 of your VEC2 software version 3.5.0 manual for details). The Firmware version will be the top line listed. Version 5.79 is being released on 11-10-04.

### Firmware Loader Program installation:

1. Save the “Firmware-Loader” folder from your CD Rom to your desktop on a computer that has the VEC2 software on it. You will be using this program to upload new firmware into the VEC2 master and slave boards, **individually**.
2. Install the enclosed 9 pin D-sub serial connector into either the master or slave VEC2 connector (if not already connected). As you will be switching the wires from one connector to another (master to slave, or visa versa) you should push in the small barbs on the sides of the wire terminal ends before inserting them. This will allow you to push the terminal end into the connector without letting it lock in place, making it easy to pull out and put in the other connector. Install the wires as shown below:

### VEC2 Wiring Diagram



#### Master Pin #

- 3. D-Sub Red
- 4. D-Sub Purple

Connect the remaining D-Sub black wire to ground.

#### Slave Pin #

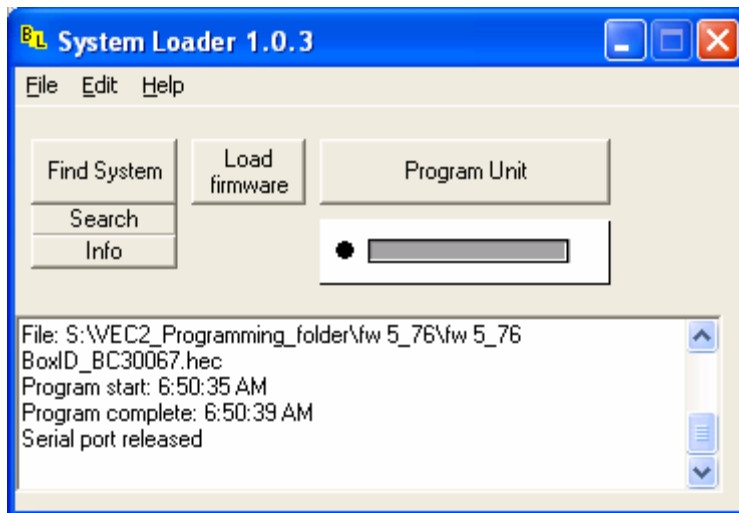
- 3. D-Sub Red
- 4. D-Sub Purple

### Uploading New Firmware

Before updating the firmware in your VEC2, please note that **the current program within your box will be erased during the update process**. You should save the program from the box before updating. Furthermore, different software datasets are not compatible, meaning that if you have a program that was written using software with a dataset id of S105 and you update your VEC2 firmware to an S106 version, you will need to use software with a dataset id of S106 to write a new program to the VEC2.

1. Open the Firmware-Loader folder and double click on the program “VEC2\_boot.exe”.
2. Connect the serial cable from your PC to the D-sub connector, which is plugged into the back of either the master or slave connector of the VEC2. If your computer does not have a serial connector, you can purchase a USB serial adapter from most computer stores for approximately \$39 (Keyspan brand adapter, part # USA-19HS available at CompUSA).
3. Power up the VEC2 normally, by turning the ignition key on.
4. In the loader software click on “find system” or “search” or “info”. The program should find your VEC2 and show your BC number. If not, check your Com port settings (Edit menu, select preferences).
  - It can be helpful to press the “search” button if you’re having trouble establishing a link to the VEC2. This keeps the system looking for approximately 10 seconds. During this time, you should turn the VEC2 power off, then back on.

5. Once the program finds your system, click on "load firmware". Locate the file with the firmware for your box serial number (saved to your computer in the Firmware Loader folder), select the file and click "open" (the program will show only the file you need to select).
6. On the system loader screen, click on "program unit". The bar will move while loading and stop when complete.



#### **Firmware Loader Screen**

7. After updating either the master or slave board, move the D-sub connector pins to the other board in the VEC2 and repeat the process. Both master and slave boards will need to be updated with the new firmware.
8. The box will need to have a program loaded into it (via Smart Card or direct connection) before starting as the update erased the old program that was loaded into it.
9. When finished, we suggest leaving the serial connection in the master board. VEC2 software version 3.4.20 has logging features, which will utilize this connection.

For further assistance, please contact us EST at (904) 529-1219 daytime and weekdays.