CB Electronics

PD-1

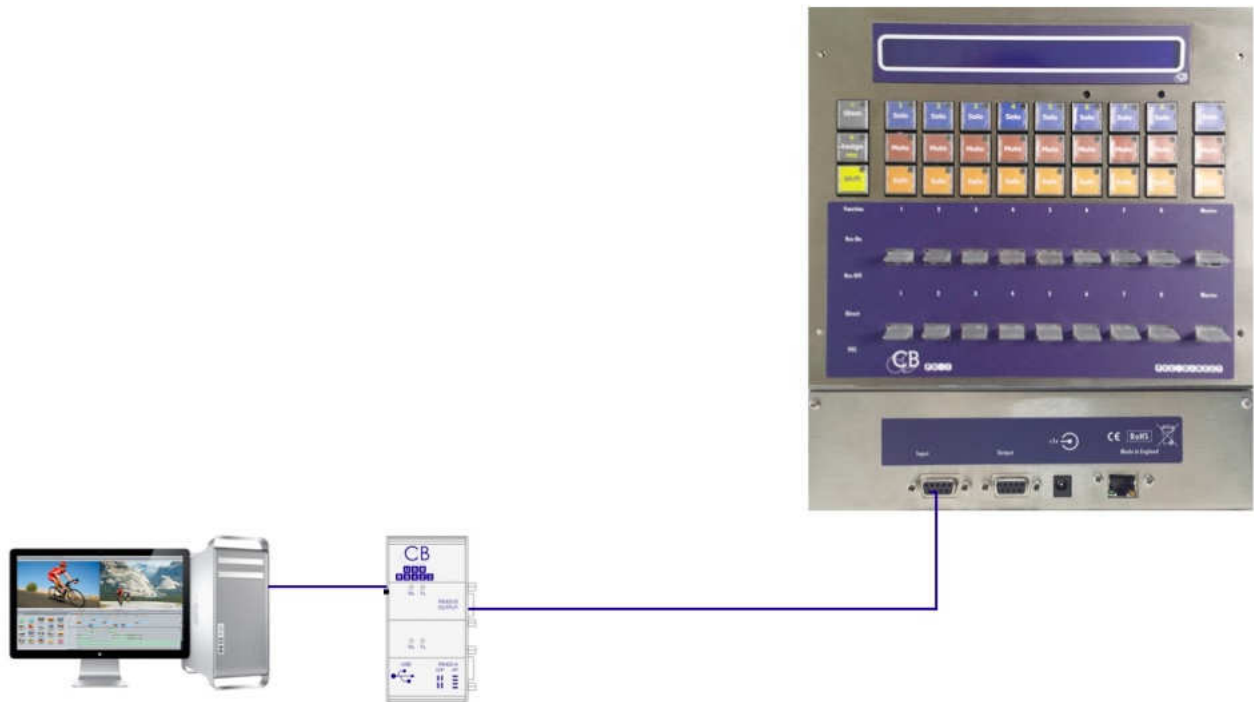# Programming Guide

Version 1.0

CB Electronics

Contents

Firmware Updates

Connect the USB-422 (supplied with the PD-1) output port to the PD-1 input port as show in the diagram below.RS422 Input port is used to update the PD-1. You may need a driver for the USB-422 if you are using a different computer. Firmware updates are posted on the appropriate product page:

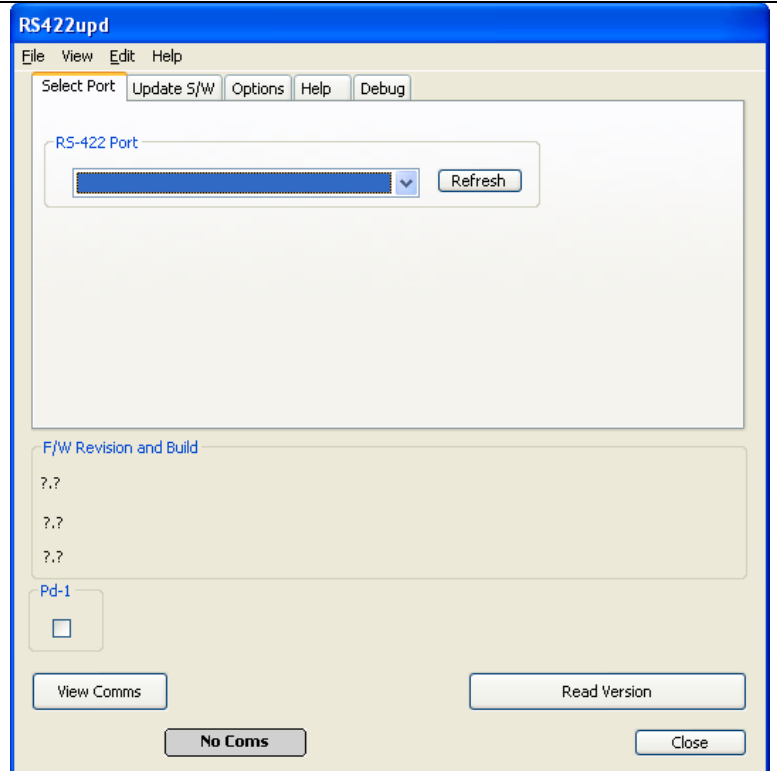PD-1- - http://www.colinbroad.com/cbsoft/pd1/pd1.html

There are two different programming algorithms depending on the PD-1 core software. The instructions below describe how to discover the version and setup correctly. You will find both a Mac and Windows version of "RS422upd on the same page.
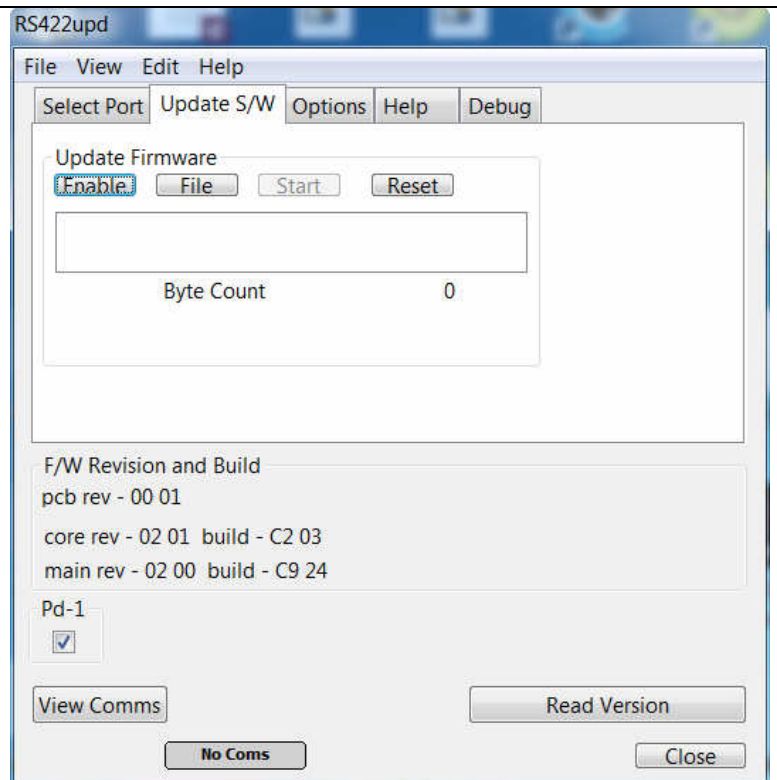
Programming Connection

Programming Procedure

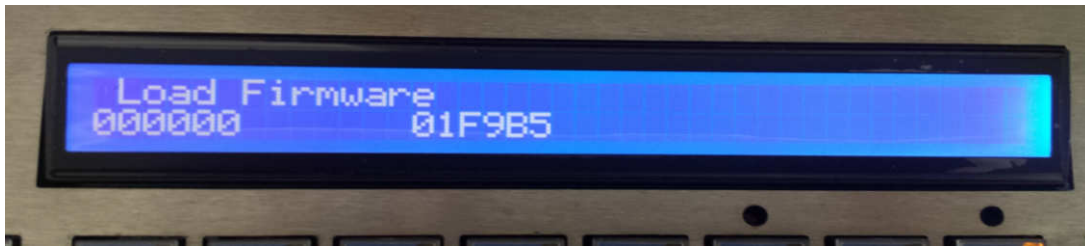|	
Opening Screen showing select RS422 port. After reading the Version. Note the Green Good Com s indicator.	**RS422upd** File View Edit Help Select Port Update S/W Options Help Debug RS-422 Port [▼] [Refresh] F/W Revision and Build ?.? ?.? ?.? Pd-1 ☐ [View Comms] [Read Version] **No Coms** [Close]
Click on enable to discover the correct programming algorithm. Look at the PD-1 Display to check if the box should be ticked or Not	**RS422upd** File View Edit Help Select Port Update S/W Options Help Debug Update Firmware [Enable] [File] [Start] [Reset] Byte Count 0 F/W Revision and Build pcb rev - 00 01 core rev - 02 01 build - C2 03 main rev - 02 00 build - C9 24 Pd-1 ☑ [View Comms] [Read Version] **No Coms** [Close]

Pd-1 ☐ New PD-1 in programming mode, the PD-1Box NOT ticked	
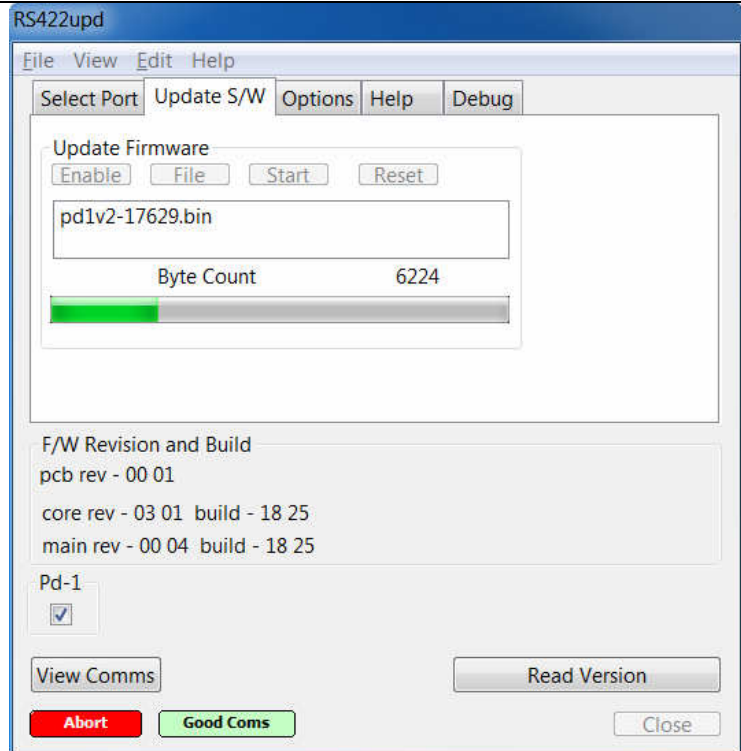
Pd-1 ☑ Original PD-1 in programming mode, PD-1 box must be ticked!1	

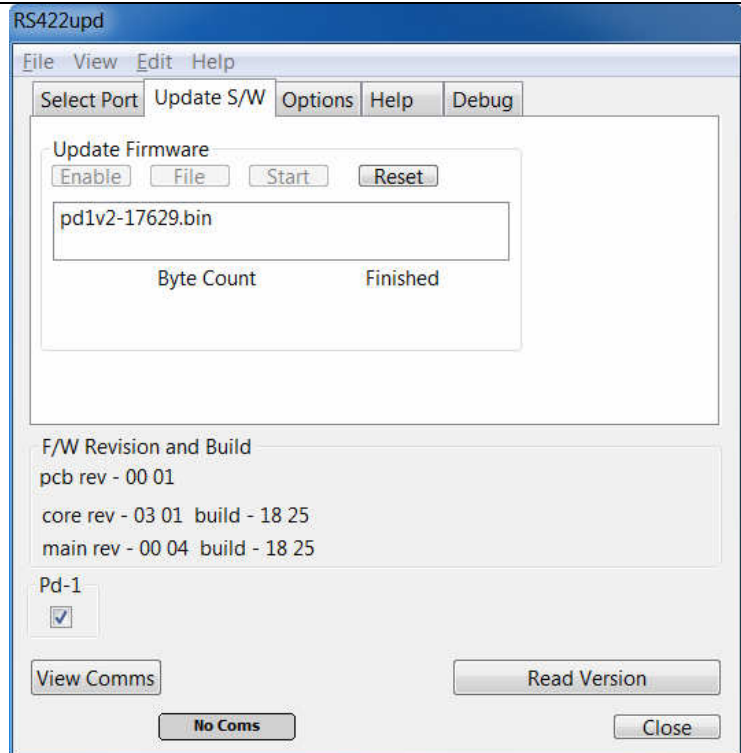|	
Programming Screen after enable and file selection. The firmware files can be posted as a zip file, if they are extract the .bin file before use.	
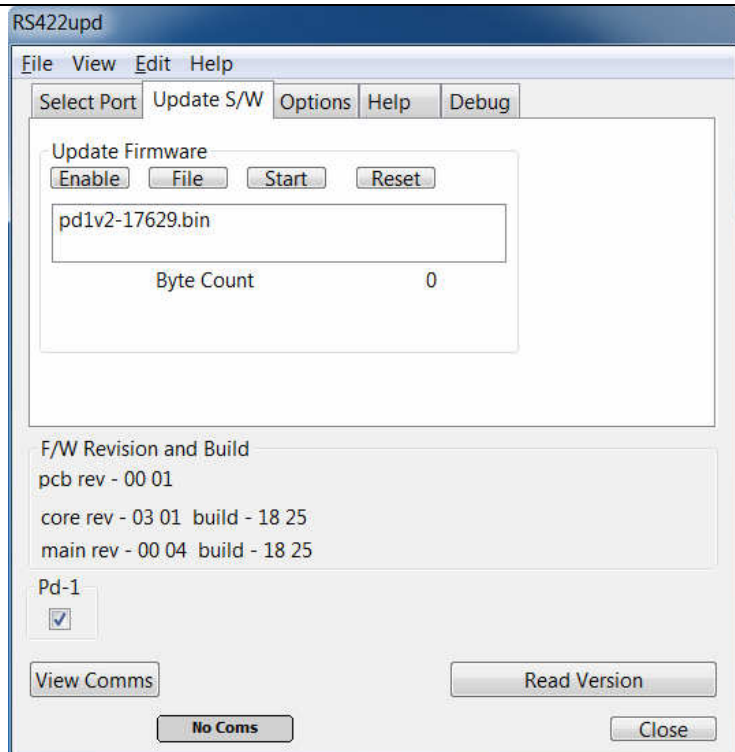
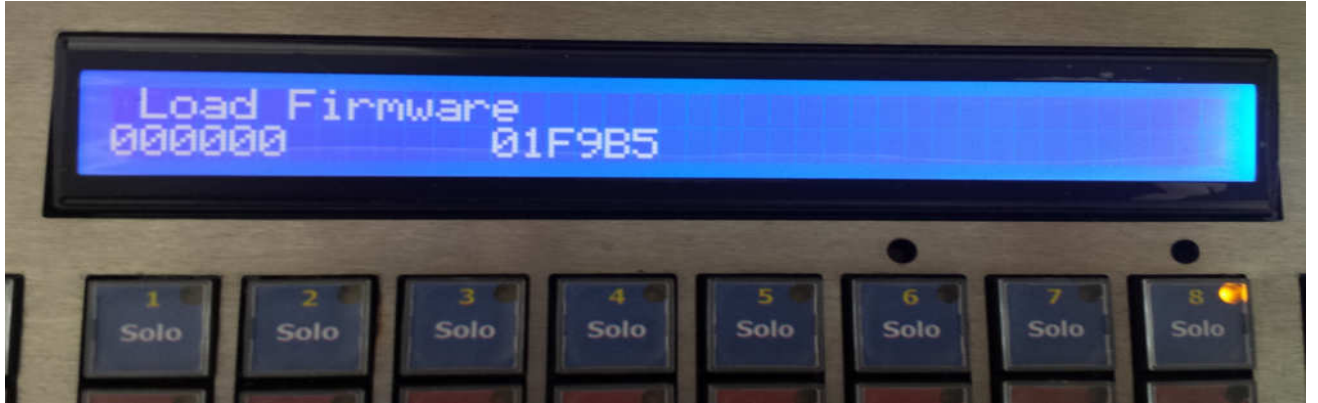|	
Click Start, the progress bar will run and the byte count on both the PD-1 and RS422upd will increment	**RS422upd** File View Edit Help Select Port | Update S/W | Options | Help | Debug Update Firmware Enable File Start Reset pd1v2-17629.bin Byte Count 6224 F/W Revision and Build pcb rev - 00 01 core rev - 03 01 build - 18 25 main rev - 00 04 build - 18 25 Pd-1 ☑ View Comms Read Version Abort Good Coms Close
When Finished Click on reset to restart the PD-1, if you program with the wrong software or have a problem you can use the recovery mode as described below.	**RS422upd** File View Edit Help Select Port | Update S/W | Options | Help | Debug Update Firmware Enable File Start Reset pd1v2-17629.bin Byte Count Finished F/W Revision and Build pcb rev - 00 01 core rev - 03 01 build - 18 25 main rev - 00 04 build - 18 25 Pd-1 ☑ View Comms Read Version No Coms Close

PD-1Recovery

In the case of power failure or other problems when updating the PD-1 firmware.

1. Abort and exit from "RD422upd"

2. Disconnect the Power then reconnect whist depressing [Stem] and [Assign]. The Software Download screen will be displayed as below.

3. Restart "RD422upd". You may need to re-select the correct port.

4. Check the display to see if the PD-1 box should be ticked

New PD-1 in programming mode, the PD-1Box NOT ticked

Old PD-1 in programming mode, PD-1 box must be ticked!

5. Program the PD-1as normal