CB Electronics

PD-1

Programming Guide

Version 1.0

CB Electronics

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Contents

Firmware Updates

The USB-422 supplied with the PD-1 is used to update the PD-1 firmware connect the USB-422 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:

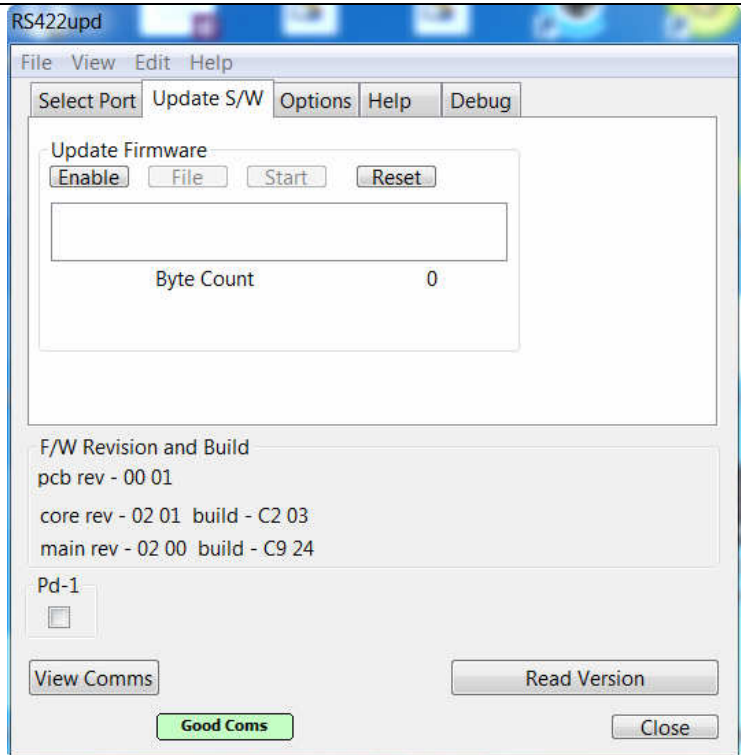PD-1- - http://www.colinbroad.com/cbsoft/pd1/pd1.html

There are two different programming algorithms depending on the PD-1 core software. The instructions blow describe how to discover the version and setup correctly. You will find both a Mac and Windows version of "RS422updon the same page.
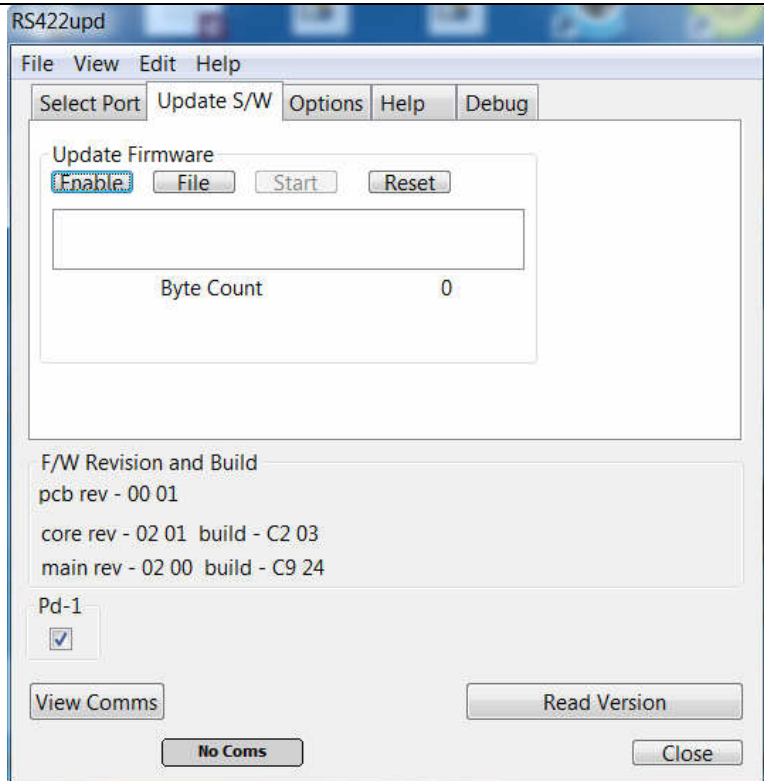
Programming Connection
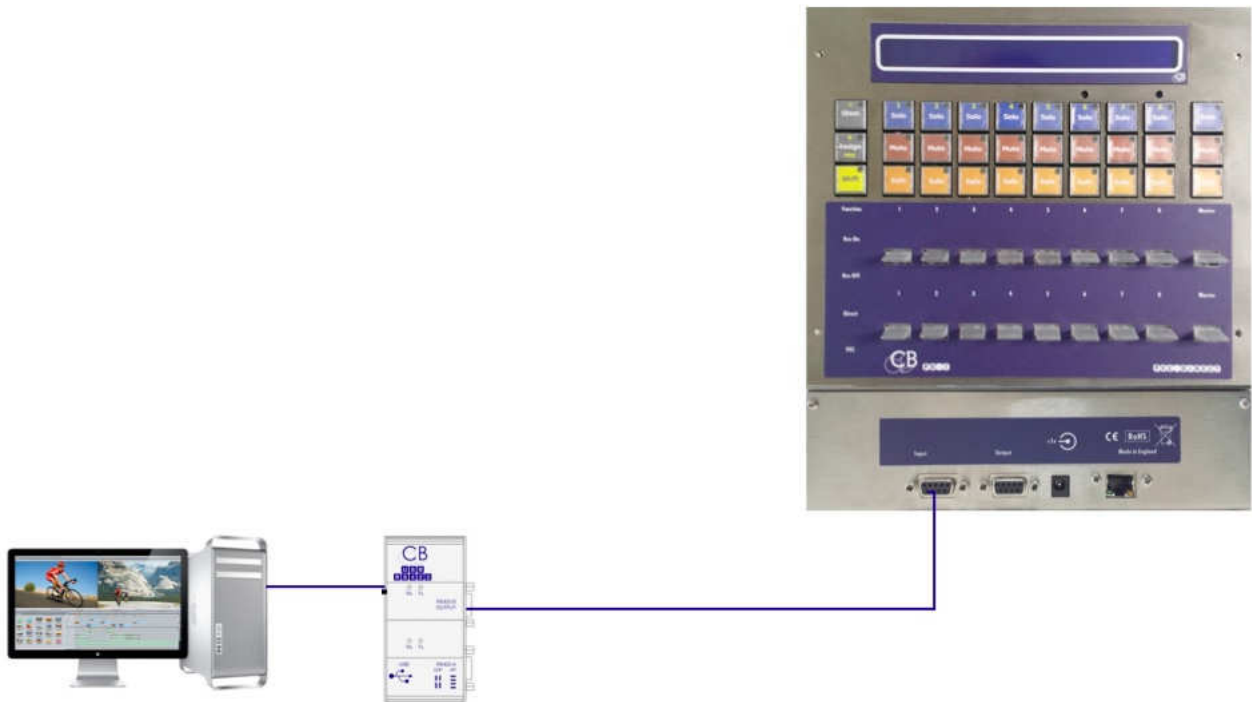
Programming Procedure

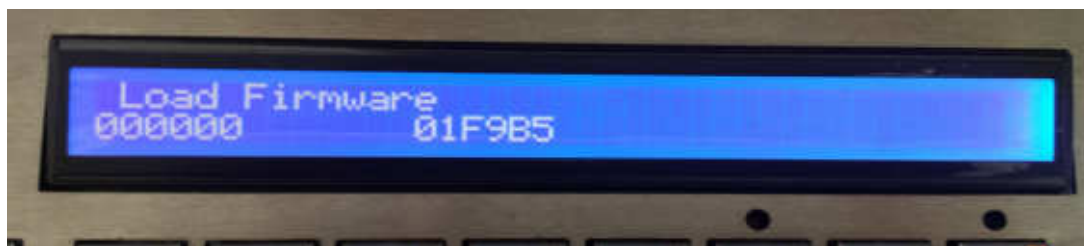|	
Opening Screen showing selected RS422 port. After reading the Version. Note the Green Good Com s indicator.	**RS422upd** File View Edit Help Select Port | **Update S/W** | Options | Help | Debug **Update Firmware** Enable | File | Start | Reset Byte Count 0 **F/W Revision and Build** pcb rev - 00 01 core rev - 02 01 build - C2 03 main rev - 02 00 build - C9 24 Pd-1 ☐ View Comms Read Version **Good 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

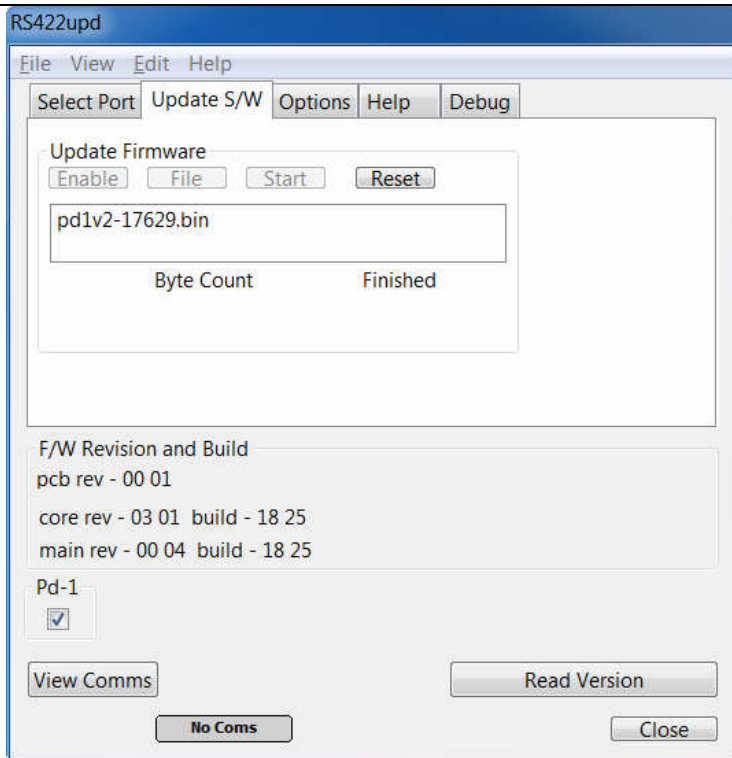|	
Pd-1 ☐	New PD-1 in programming mode, the PD-1Box NOT ticked Load Firmware 000000 01F9B5
Pd-1 ☑	Old PD-1 in programming mode, PD-1 box must be ticked!1 Core:02.01.8C.15.00.01. Upd
Programming Screen after enable and file selection. The firmware files can be posted as a zip file, if they are extract the .bin file before use.	**RS422upd** File View Edit Help Select Port **Update S/W** Options Help Debug Update Firmware [Enable] [File] [Start] [Reset] pd1v2-17629.bin Byte Count 0 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]
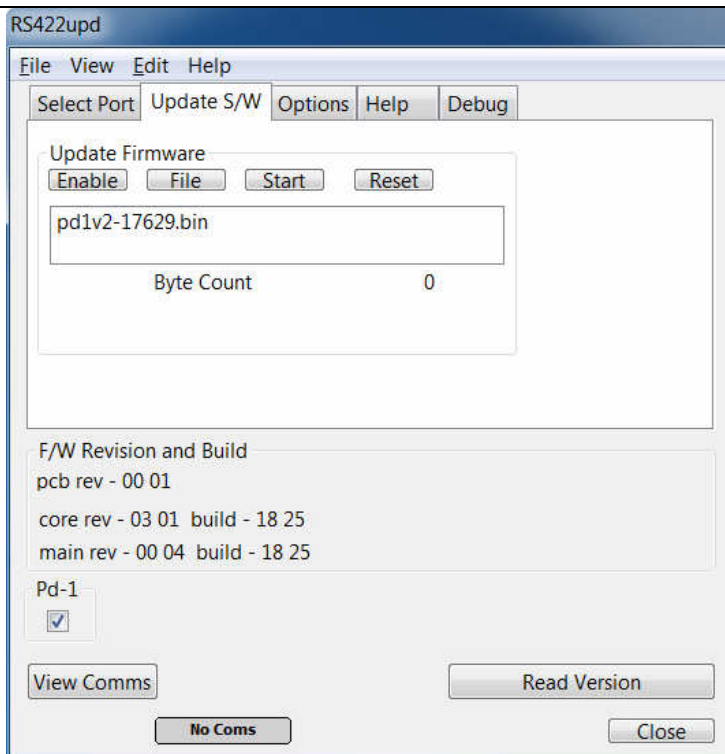
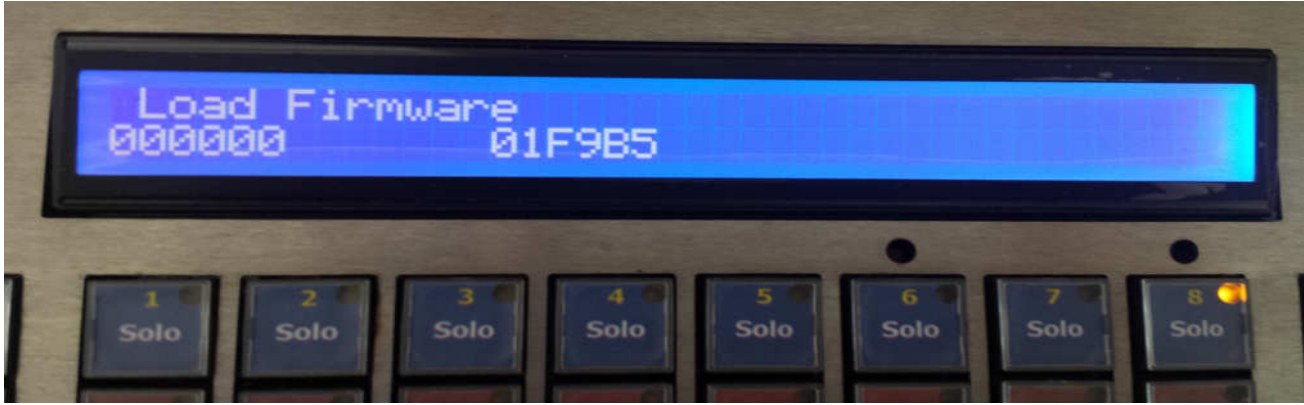|	
Click Start, the progress bar will run and the byte count on both the PD-1 and RS422upd will increment	RS422upd File View Edit Help Select Port | Update S/W | Options | Help | Debug Update Firmware Enable | File | Start | Reset pd1v2-17629.bin Byte Count 6224 F/W Revision and Build pcb rev - 00 01 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
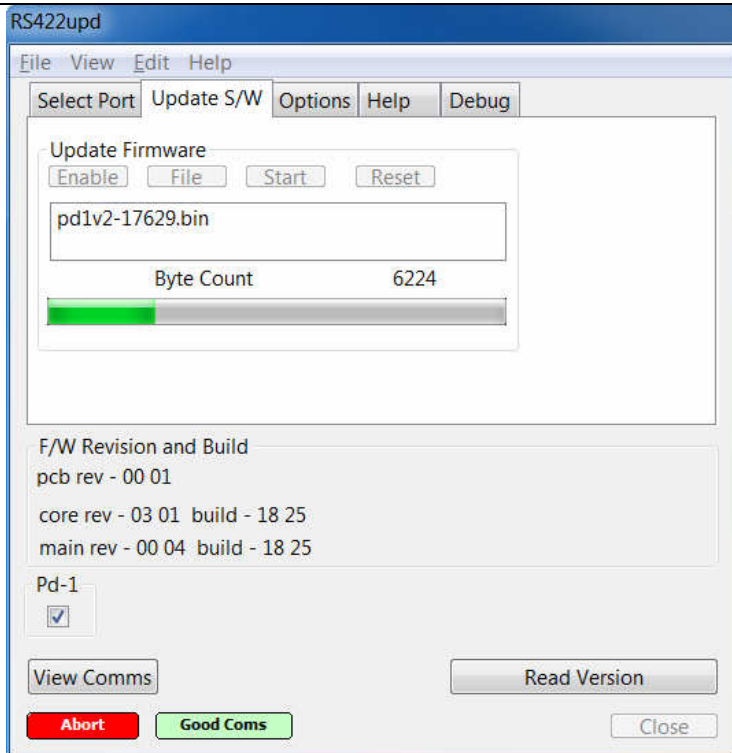
PD-1Recovery

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

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

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

5. Program the PD-1as normal

PD-1v2 Software Key Request and Installation

When you install PD-1v2 software it will work for about a week before needing a software key. At this point the LCD will display "No PD2 License". The trial period can be extended one time only.

1) Connect RS433upd to the PD-1 as normal

2) Select the option page

3) Read the Signature and email to sales@colinbroad.com with a requiest. For a permanent key make payment by paypal or credit card available on the PD-1 web page. http://www.colinbroad.com/cbsoft/pd1/pd1.html

4) You will receive a key once payment has been received or an extension by return.
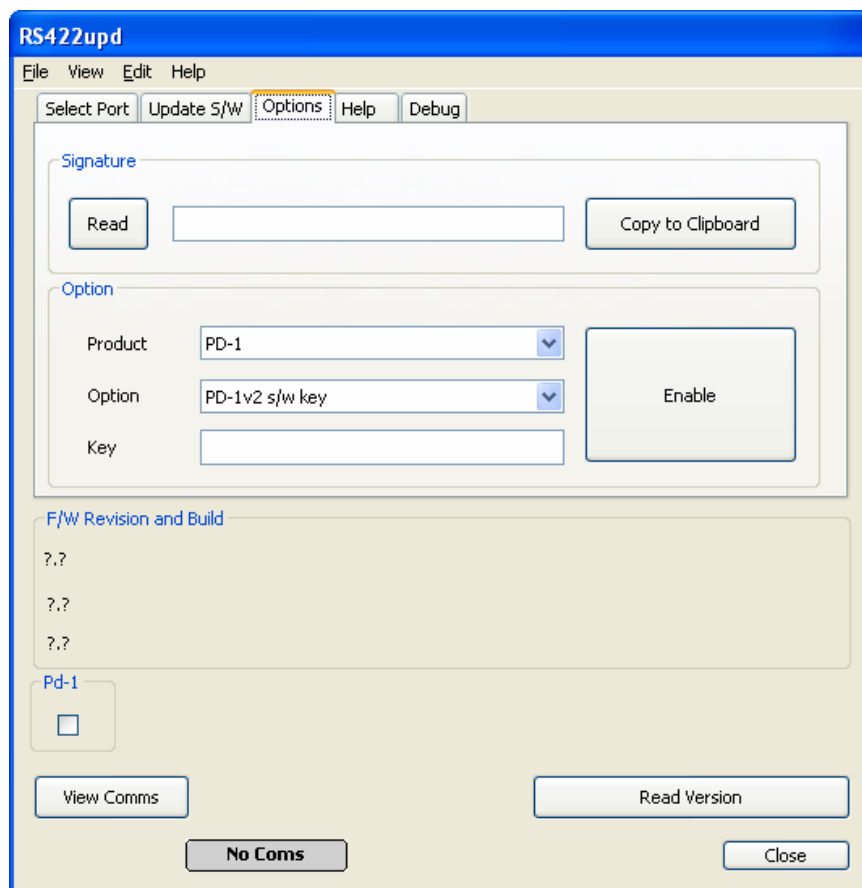
5) Select the Product and Option required

6) Enter the supplied key – copy and paste works well

7) Click on Enable to install key