



# RomUpdate Eprom Replacement Revision 1.x

## Mac Software Installation

Download romupd-mac.zip from

<http://www.colinbroad.com/cbsoft/romupd/romupd.html>

Unzip and move to a suitable location

If you are using the CB USB-422 interface you can find low latency drivers here

<http://www.colinbroad.com/cbsoft/usb422/usb422.html>

## Windows Software Installation

Download romupd-win.zip from

<http://www.colinbroad.com/cbsoft/romupd/romupd.html>

Unzip and move to a suitable location

If you are using the CB USB-422 interface you can find a link to the FTDI drivers here

<http://www.colinbroad.com/cbsoft/usb422/usb422.html>

Please ensure you follow the instructions in our information sheet on adjusting the interface Latency.

## Connecting your MAC or PC to the RM-6

In most cases you will need a USB to RS-422 adaptor, we recommend using the CB USB-422 Dual RS-422 adaptor which is available as an option on the romUpd kit. If you are using CBServer you will already have a suitable interface.

Use a 1:1 RS422 cable between Port B on a CB USB-422 to port F on the RM-6

If you use a different RS422 adaptor you may need a different cable.

## Connecting your MAC or PC to the SR-4

In most cases you will need a USB to RS-422 adaptor, we recommend using the CB USB-422 Dual RS-422 adaptor which is available as an option on the romUpd kit. If you are using CBServer you will already have a suitable interface.

If Port A on the SR-4 is configured as a Output (Controller) use a 1:1 RS422 cable between Port A on a CB USB-422 and port A on the SR-4.

If Port A on the SR-4 is configured as a Input (Device) use a 1:1 RS422 cable between Port B on a CB USB-422 and port A on the SR-4.

If you use a different RS422 adaptor you may need a different cable

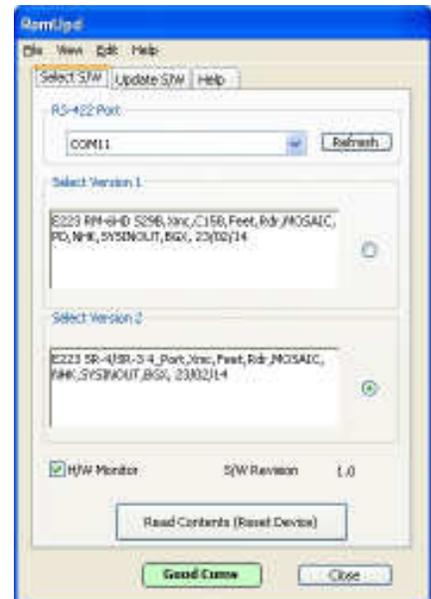
## Updating the Software



When you run the software initially you will see a blank display as shown on the left.

You will need to select the correct RS422 port, the software will remember the port for next time.

Click on "Read Contents" to check which software is currently installed and selected as shown on the right.

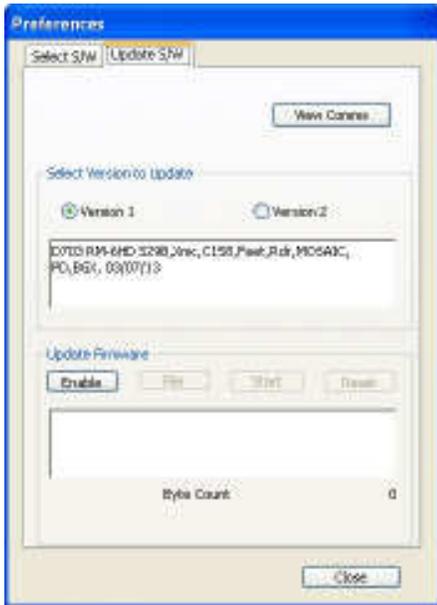


You can change the software in use by clicking on the radio button in the box.

Each time you select a version the unit will reset and start with the new software.

By default the hardware monitor is not enabled, the H/W Checkbox will enable the hardware monitor, the Monitor H/W checkbox updated when the contents are read.

# Installing New Software



To install new software select the "Update S/W" page as shown on the left.

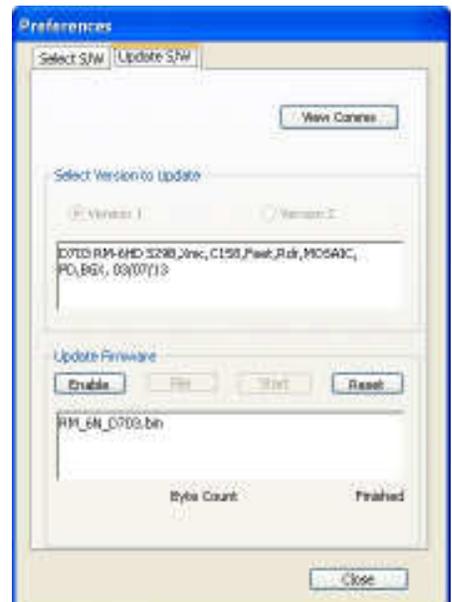
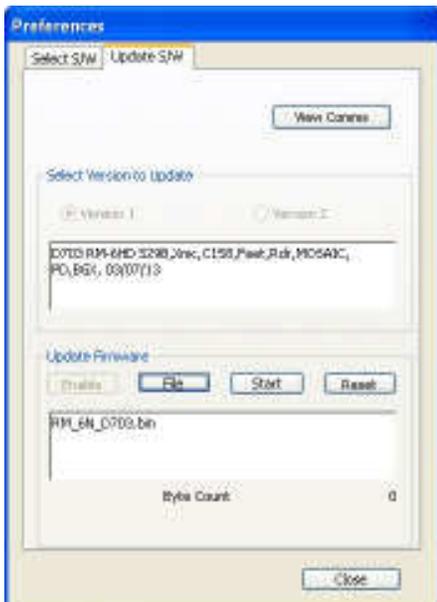
The new software will overwrite the current software displayed.

Click on [Enable] and then on [File] to select the software that you wish to install. The file name will be displayed in the window below.



You can then click on [Start] to commence installing the new software. During the install no options will be available until it has finished.

You can then click on [Reset] to restart the device and display the Software installed



# SR-4 RomUpd Installation Instructions

## Cable length 250mm

- 1) Remove PCB
- 2) Locate U16 (HD68B09 40 pin)
- 3) Locate U17 (U29 on SRmicro-F) (27C512 EPROM – Label or Window 28 pin)
- 4) Locate U12 and U13 (SC26C92C1N 40 pin)
- 5) Locate U14 (DS1232 8 pin)
- 6) Unplug U17(U29 on SRmicro-F) (EPROM) from its socket (you can keep the EPROM as a backup)
- 7) Plug the ROMUPD PCB into U17(U29 on SRmicro-F) Socket, check the orientation
- 8) Connect cable 2 to Tx Data A, pin 30 on U13 (SC26C92C1N)
- 9) Connect cable 4 to Rx Data A, pin 31 on U13 (SC26C92C1N)
- 10) Connect Cable 5 to Reset, pin 1 on U14 (DS1232)
- 11) Connect Cable 6 to DMA, pin 33 on U16 (HD68C09)

## RomUpd S/W version 1.1 additions for Monitor function

- 12) Connect Cable 1 to Tx Data D, pin 11 on U12 (SC26C92C1N)

## Addition required for XSR-4/XSR-2 (remote to RM-6) only, but does not affect normal operation.

- 13) Connect cable 3 to TX Data B, pin 11 on U13 (SC26C92C1N)

## SR-4 6 way cable

- 1 – U12 pin 11
- 2 – U13 Pin 30
- 3 – U13 Pin 11 (XSR Only)
- 4 – U13 Pin 31
- 5 – U14 Pin 1
- 6 – U16 Pin 33

Note 1: After modification the unit will take 1 or 2 seconds longer to start up as the software is loaded.

Note 2: RomUpd S/W Version 0.0 is not fitted with the H/W Monitor function; connecting cable 1 will not cause any problems but will not add the monitor function.

Note 3: RomUpd S/W Version 1.x if the H/W Monitor function is fitted and cable 1 is NOT connected then the Unit will Reset about once every 5 seconds.

Note 4: It is possible to update the RomUpd software using the romupd.elf file from the website using a Atmel programmer (AVRDragon, JTAGICE or equivalent).

Note 5: To add the monitor function to an early RomUpd PCB Link U4 (Atmega128) pin 6 to J1 pin 1.

Note 6: To add the monitor function to an early RomUpd PCB Link U4 (Atmega128) pin 8 to J1 pin 3, (Cut any existing track to J1 pin 3)

# RM-6 RomUpd Installation Instructions

## Cable length 480mm

- 1) Remove PCB
- 2) Locate U17 (HD68B09 40 pin)
- 3) Locate U14 (27C512 EPROM – Label or Window 28 pin)
- 4) Locate U20, U24 (SC26C92C1N 40 pin)
- 5) Locate U5 (DS1232 8 pin)
- 6) Remove U14 (EPROM) from its socket (you can keep the EPROM as a backup)
- 7) Plug the ROM Update PCB into U10 Socket, check the orientation
- 8) Connect cable 2 to Tx Data F, pin 11 on U24 (SC26C92C1N)
- 9) Connect cable 4 to Rx Data F, pin 10 on U24 (SC26C92C1N)
- 10) Connect Cable 5 to Reset, pin 1 on U5(DS1232)
- 11) Connect Cable 6 to DMA, pin 33 on U17 (HD68C09)

## RomUpd S/W version 1.1 additions for Monitor function

- 12) Connect Cable 1 to Tx Data A, pin 30 on U20

## RM-6 6 way cable

- 1 – U20 pin 30
- 2 – U24 Pin 11
- 3 – No Connection
- 4 – U24 Pin 10
- 5 – U5 Pin 1
- 6 – U17 Pin 33

Note 1: After modification the unit will take 1 or 2 seconds longer to start up as the software is loaded.

Note 2: RomUpd S/W Version 0.0 is not fitted with the H/W Monitor function; connecting cable 1 will not cause any problems but will not add the monitor function.

Note 3: RomUpd S/W Version 1.x if the H/W Monitor function is fitted and cable 1 is NOT connected then the Unit will Reset about once every 5 seconds.

Note 4: It is possible to update the RomUpd software using the romupd.elf file from the website using a Atmel programmer (AVRDragon, JTAGICE or equivalent).

Note 5: To add the monitor function to an early RomUpd PCB Link U4 (Atmega128) pin 6 to J1 pin 1.