

Roost Logger Firmware Loading Instructions

Setting up the PC for the first time.

Note: the PC must have Internet access for most of these operations.

It must be a Windows pc (Windows XP and 7 have been checked for compatibility)

Installing Loading Software

Extract "Customer Firmware Upgrade Package.zip" onto your PC

Installing USB Driver (For Firmware Upgrade)

Plug in the USB cable and place the device into Update Mode by holding the SD Card Remove Button and pressing the Reset Button briefly, and then you may release the SD Card Remove Button after 1 second.

The driver should start installation, select 'No, not this time' click Next, select 'Install from a list or specific location'

unselect 'search removable media and Select 'Include this location in the search'

When prompted point the driver installer to the '**USB Bootloader Driver**' folder within the extracted folder.

Installing USB Driver (For Roost Logger CFCread)

This Installation requires a completely programmed Roost Logger plugged into the USB, It can be performed after the programming steps.

The driver should start installation, select 'No, not this time' click Next, select 'Install from a list or specific location'

unselect 'search removable media and Select 'Include this location in the search'

When prompted point the driver installer to the '**Roost Logger USB Driver**' folder within the extracted folder.

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Upgrading Cave Logger Firmware

To upload new firmware you must put the new firmware into the Bootloader SW folder and **rename the latest .hax file to RoostLoggerMain.hax**

To begin double click '**Program CL1.cmd**'

Connect the USB cable if it isn't already.

Place the device into Update Mode by holding the SD Card Remove Button and pressing the Reset Button briefly, and then you may release the SD Card Remove Button after 1 second. (the SD LED should turn off now, if it did not, try again)

Wait until the device is detected (5 seconds hopefully) you can check using 'Device Manager'

Press Any Key each time you are prompted to start uploading the new firmware.

(If anything fails, close the window and run 'Program RL1 - Debug.cmd' Please Email the results to Titley)

Your screen should look something like this:

A screenshot of a Windows command prompt window titled 'C:\Windows\system32\cmd.exe'. The window contains the following text:

```
Welcome to the Titley Scientific Roost Logger Firmware Upgrader
Please plug in the USB cable and place the device into Firmware Update Mode now
by holding the SD Remove button and pressing Reset, then releasing the held butt
on.
Press any key to continue . . .
Erasing Flash...
Press any key to continue . . .
Programming MCU memory with new Firmware
99900 bytes used (40.65%)
Press any key to continue . . .
Starting Roost Logger, program will now exit
Press any key to continue . . .
```

Good work, the upgrade is complete!

Now you can **press any key** to exit,

Insert a SD Card and then remove USB Cable.

After 5 seconds **press the SD Remove Button** and wait for the **SD LED to turn ON.**

Remove the SD Card and check that everything was successful by viewing the Log File on the PC and checking the version number changed near the bottom of the last log.

It should read something like this:

!!Note: Firmware has been upgraded to: "V5001a" from "V5000a"