

Application Note: WinCamD-LCM Series Firmware Upgrades Rev 4, June 2017

Covers:

- **WinCamD-LCM Series Firmware Upgrades.** WinCamD-LCM series allows the user to upgrade both FPGA and USB Firmware without returning the unit for servicing. These upgrades do not require disassembly of the camera, and do not require special tools or skills.
- Software installer versions **iDataRayLCMvD9** and higher.

Minimum PC Requirements: Windows 7, 8 or 10, 64-bit operating system with USB 2.0, 3.0 or 3.1 port.

Earlier versions of Windows & 32-bit operating systems are not supported.

What is Firmware? Firmware is held in EEPROMs on the camera board for both the camera FPGA and its USB interface. FPGA firmware upgrades may be necessary or desirable during early phases of a product cycle, or at a later stage, to correct or enhance product performance. Occasionally the USB interface EEPROM is also upgraded.

If you registered your product, (**Support** pull-down menu in software), you will be notified by email of the existence of new software and or firmware as it becomes available.

To determine the current version of firmware on your system, open the software and look in the green **Ready** box.

The .x part of the text refers to the current firmware revision, in this example rev. 6.

Firmware # <4? You must send your camera to DataRay. Contact us for a free upgrade.

Firmware # ≥4? You may upgrade the firmware yourself.



1) Install Software and Drivers:

- If you download a [software update](#), the software always includes the current firmware version.
- If the software upgrade is not already installed, **before connecting the camera**, 'As Administrator', install the software upgrade received. If after installing the software you see **Camera not found**, see the driver signing discussion on page 1 of the [WinCamD-LCM_Series_Installations.pdf](#).

Click **OK** when the **Launching 64 bit version** dialog box appears.

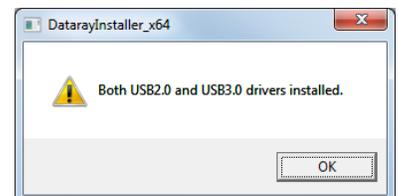
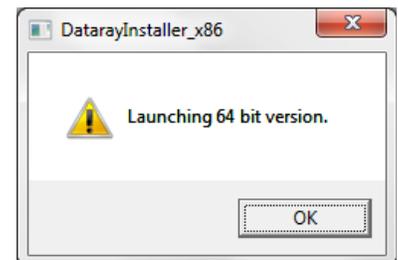
After several seconds (PC dependent) the box shown right will appear. Click **OK**.

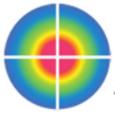
- Attach the camera. Allow the driver to attach to the camera.
- Start the camera.

2) Upgrade the FPGA Firmware:

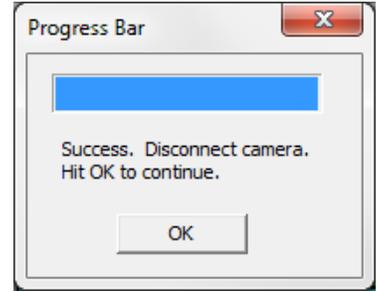
- If a firmware upgrade exists for your camera, when you start the software, a message will appear prompting you to upgrade the firmware from the current version to the new version. Click **OK**.

[You may also access the **Firmware Upgrade Menu** by pressing **Shift F.**]





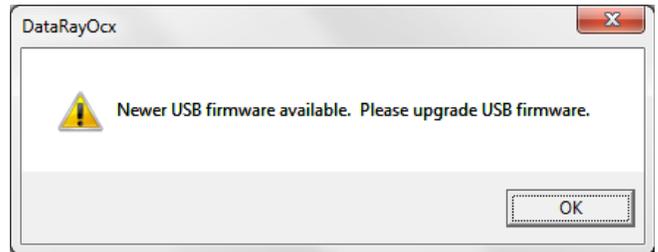
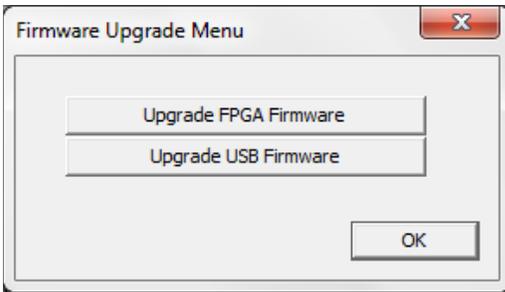
- The Progress Bar will appear. Programming will take several tens of seconds. Once it changes to **Success etc.**, disconnect the camera, count to three, reconnect the camera and hit **OK**.



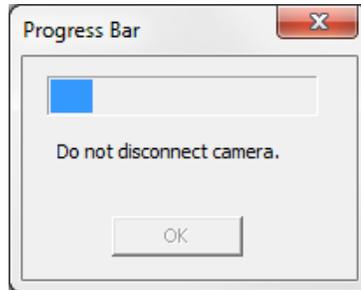
3) Upgrade the USB Firmware:

- If the USB interface firmware also needs upgrading, the box shown right will appear.

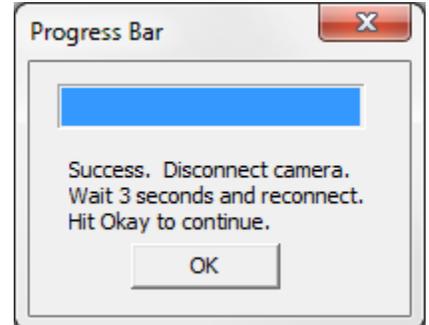
Hit **OK**. Then press **Upgrade USB Firmware**.



- Click **OK** on the **Prompt**. The **Progress Bar** will appear. Programming will take a few tens of seconds. Once it changes to **Success etc.**, disconnect the camera, count to three, reconnect the camera and hit **OK**.

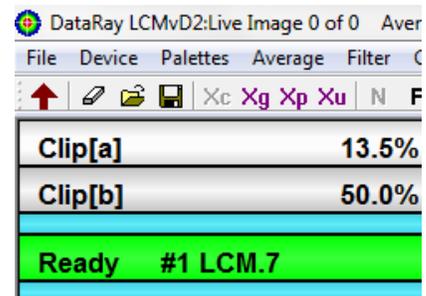


- Press **OK** on the **Firmware Upgrade Menu** button to close that dialog.



- The final number in the **Ready #1 LCM.x** button should have incremented to the rev of the newly installed firmware, **7** in this example. It is not strictly necessary to restart the software, but do so if anything strange is going on.

- Remember that **Stop, File, Load defaults**, gets you back to the default settings.



Problems?

Email support@dataray.com or call (530) 776-0843, Option 3