Instructions to Update Firmware on HU3, MDR-3, MDR-2

Before You Begin

Recommended Serial to USB adapters

Updating the HU3 and MDR-2 requires a Serial to USB adapter unless you are using an older computer with a dedicated 9-pin serial port. The MDR-3 can be updated via USB cable or USB-Serial adapter. We recommend the following USB-serial adapter:

EasySYNC ES-U-1001-R10: http://www.easysync-ltd.com/product/526/es-u-1001-r10.html

We sell this adapter as well; please contact sales@prestoncinema.com to purchase. **We highly recommend that EasySYNC adapter above and have confirmed it works on PC and Mac with the FTDI driver (installation in next section).**

Drivers

Each USB-Serial Adapter manufacturer should have instructions for installing the correct driver. However, we've found that the FTDI driver to be quite reliable for both USB-Serial connections and direct USB connections. Download the appropriate driver for your system here:
http://www.ftdichip.com/Drivers/VCP.htm.

For PC: Click the link labeled "setup executable" under the Comments section, or direct link:
http://www.ftdichip.com/Drivers/CDM/CDM21224_Setup.zip

For Mac: Select the appropriate driver for your OS X version and Processor Architecture (32-bit or 64-bit). If you're not sure, try this one:
http://www.ftdichip.com/Drivers/VCP/MacOSX/FTDIUSBSerialDriver_v2_3.dmg

USB Driver Installation (to update products through USB port –supported on MDR-3 and MDR-4 only)

Mac
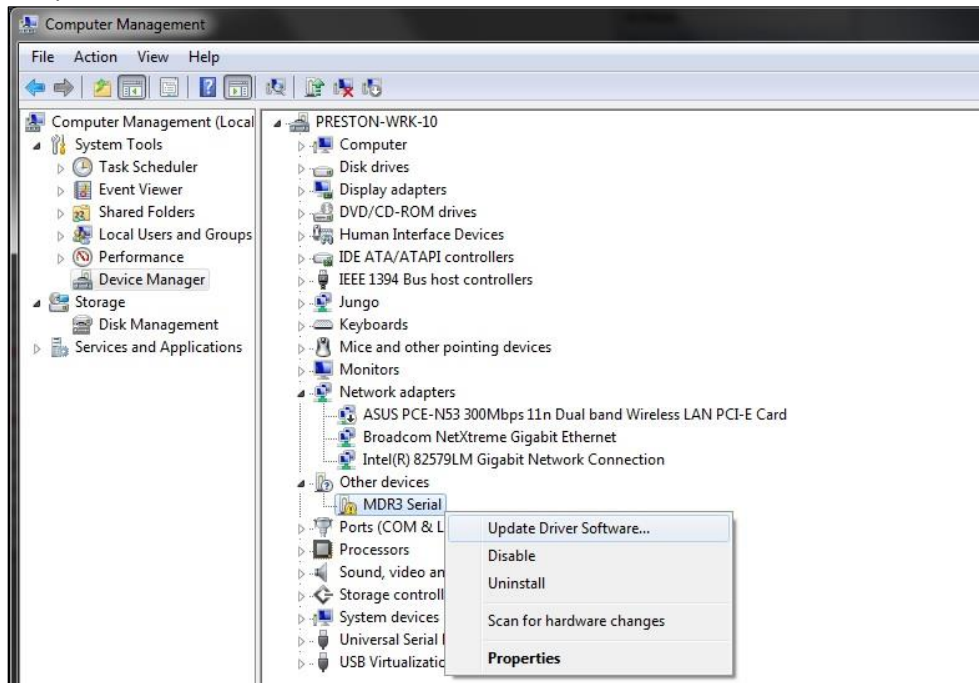1) Obtain the Virtual COM Port (VCP) driver for your operating system version from the FTDI website. **The direct download link for OS X 10.9 and above is:** http://www.ftdichip.com/Drivers/VCP/MacOSX/FTDIUSBSerialDriver_v2_3.dmg. If you have a different OS X version, check the downloads listed at http://www.ftdichip.com/Drivers/VCP.htm.
2) Double-click on the downloaded .pkg file to begin the installation process (using FTDI's install interface).
3) Follow the steps in the installer and enter your password if prompted. Refer to FTDI's installation guide if you have trouble with this driver installation: http://www.ftdichip.com/Support/Documents/AppNotes/AN_134_FTDI_Drivers_Installation_Guide_for_MAC_OSX.pdf.
4) **Restart your computer after following the install steps above.**

Windows
1) Download the USB driver from http://prestoncinema.com/downloads.html. Extract the contents (the .cat and .inf files) of the driver .zip into a folder you can easily access later.
2) Power down MDR-3.
3) Connect USB to Mini-USB cable to USB port on computer and Mini USB port on MDR-3.
4) While holding down the reset button on the MDR, plug in the power cable. This tells the MDR to boot up in programming mode.
5) Windows should recognize the new device as "MDR3 Serial" and begin searching for a driver. If it doesn't find a suitable driver, you'll need to point windows to the downloaded file.

6) Open Device Manager on your computer and look for the "MDR3 Serial" device. Right-click it and select "Update Driver Software".

7) Next, select "Browse my computer for driver software" and then browse to the folder where you previously placed the driver files.
8) If it warns about installing the driver from an unknown source, select to install it anyway.
9) You should receive a confirmation that the driver installed successfully and the MDR-3 should show up under Ports (COM and LPT) as "MDR3 USB Port (COMx)", where x is the COM port number. The port number must be 1-4 to work properly. If yours gets set to another number, see the instructions on page 4 regarding changing the COM port number.

Updating Procedures
HU3
Equipment needed: Serial to 4-pin LEMO cable (PCS p/n 4538), Serial to USB adapter, Mac/PC, battery.
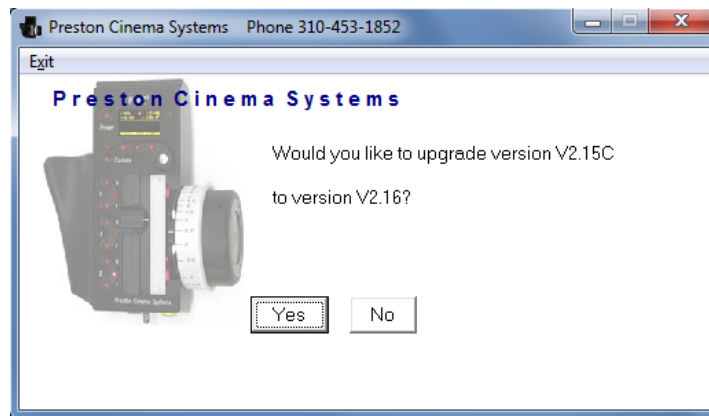
Important: Updating HU3 firmware from v1.xx to v2.xx and above will **erase all stored lenses** in the HU3. This is due to the change from 6-point lens mapping to 10-point lens mapping in firmware versions 2.0 and above. If you would like to make this firmware update, we can pre-load a new lens list into the HU3 under the 10-point mapping system. Please ship or bring in your HU3 to us for this update.
If you would like to retain your stored lenses and 6-point lens mapping (not recommended), make sure to download the version with legacy lens mapping (v1.36 is the latest and only version supported) from http://prestoncinema.com/downloads.html.

1) Ensure your USB driver has been successfully installed, as outlined in the "Drivers" section above. Try using the FTDI driver first (http://www.ftdichip.com/Drivers/VCP.htm).
2) Download latest HU3 updater program from http://prestoncinema.com/downloads.html.
3) Power down HU3.
4) Connect Serial-USB adapter to USB port on computer and to Serial-LEMO cable.
5) Connect Serial-LEMO cable to 4-pin Serial port on back of HU3.
6) With HU3 still turned OFF, open HU3 updater program. It will search for the HU3:

   a. Note: Make sure the HU3 is powered OFF or not connected to the computer when you start the updater program. If not, power off or disconnect the HU3 and restart the updater program.
7) Hold the Iris Set button on the HU3 while powering the unit on. This starts the HU3 into boot mode and the display will read "Ready to load". Plug the HU3 into the serial cable if it's not already connected.
8) When the program successfully recognizes the HU3, it will display the currently installed firmware version and ask if you'd like to update the firmware:

9) Click yes to update the firmware. When the update finishes, cycle power on the HU3.
10) If the HU3 isn't recognized, close the updater program and repeat steps 3-5. If you're still having issues, please contact us at techsupport@prestoncinema.com or (310) 453-1852.

MDR-3

Equipment needed: Serial to 4-pin LEMO cable (PCS p/n 4538), Serial to USB adapter/Mini-USB cable, Mac/PC, MDR-3 power source (Anton Bauer, XLR cable, etc)

Updating via the Serial Port
1) Download latest MDR-3 updater program from http://prestoncinema.com/downloads.html.
2) Power off MDR-3.
3) Connect Serial-USB adapter to USB port on computer and to Serial-LEMO cable.
4) Connect Serial-LEMO cable to either 4-pin Serial port on MDR-3.
5) With MDR-3 still powered OFF, open MDR-3 updater program. It will search for the MDR:

6) While holding down the reset button on the MDR, plug in the power cable. This tells the MDR to boot up in programming mode.
7) Once the MDR is powered in programming mode the program will display the current firmware version and ask to perform the upgrade. Click yes to update the unit to the new version.
8) After successful upload, cycle power on the MDR to reset it into normal operating mode.
9) If the MDR-3 isn't recognized, close the updater program, power off MDR, and repeat steps 5-6. If you're still having issues, please contact us at techsupport@prestoncinema.com or (310) 453-1852.

Updating via the USB Port – requires USB-Mini USB cable
1) Make sure the USB drivers have been successfully installed, as described in the beginning of this document. Download the latest firmware version from http://prestoncinema.com/downloads.html.
2) Power off MDR-3. Connect Mini USB cable to MDR-3 and USB port on computer.

3) With MDR-3 still powered OFF, open MDR-3 updater program. It will search for the MDR.
4) Hold down the reset button on the MDR-3 while you plug in the power cable. This will boot the unit up into programming mode.
5) Once the MDR is powered up in programming mode, the firmware updater will display the current firmware version and ask to perform the upgrade. Click Update to install the new version.
6) After successful upload, cycle power on the MDR to reset it into normal operating mode. *Note: Even if the updater program doesn't show a Completed message, once the progress bar is full the unit has been programmed successfully and can be disconnected.*
7) **If the MDR-3 isn't recognized**, close the updater program, power off MDR, and repeat steps 3-5. If you're still having issues, please verify your driver installation is correct with the following help document from FTDI: http://www.ftdichip.com/Support/Documents/AppNotes/AN_134_FTDI_Drivers_Installation_Guide_for_MAC_OSX.pdf.

MDR-2

Equipment needed: Serial to 4-pin LEMO cable (PCS p/n 4538), Serial to USB adapter, Mac/PC, MDR-2 power source (Anton Bauer, XLR cable, etc)

The MDR-2 updating procedure is identical to the MDR-3 Serial Port update procedure.
1) Download MDR-2 v1.52 updater program from http://prestoncinema.com/downloads.html.
2) Power off MDR-2.
3) Connect Serial-USB adapter to USB port on computer and to Serial-LEMO cable.
4) Connect Serial-LEMO cable to 4-pin Serial port on MDR-2.
5) With MDR-2 still powered OFF, open MDR-2 updater program. It will search for the MDR.
6) While holding down the reset button on the MDR, plug in the power cable. This tells the MDR to boot up in programming mode.
7) Once the MDR is powered in programming mode the program will display the current firmware version and ask to perform the upgrade. Click yes to update the unit to the new version.
8) After successful upload, cycle power on the MDR to reset it into normal operating mode.
9) If the MDR-2 isn't recognized, close the updater program, power off MDR, and repeat steps 5-6. If you're still having issues, please contact us at techsupport@prestoncinema.com or (310) 453-1852.
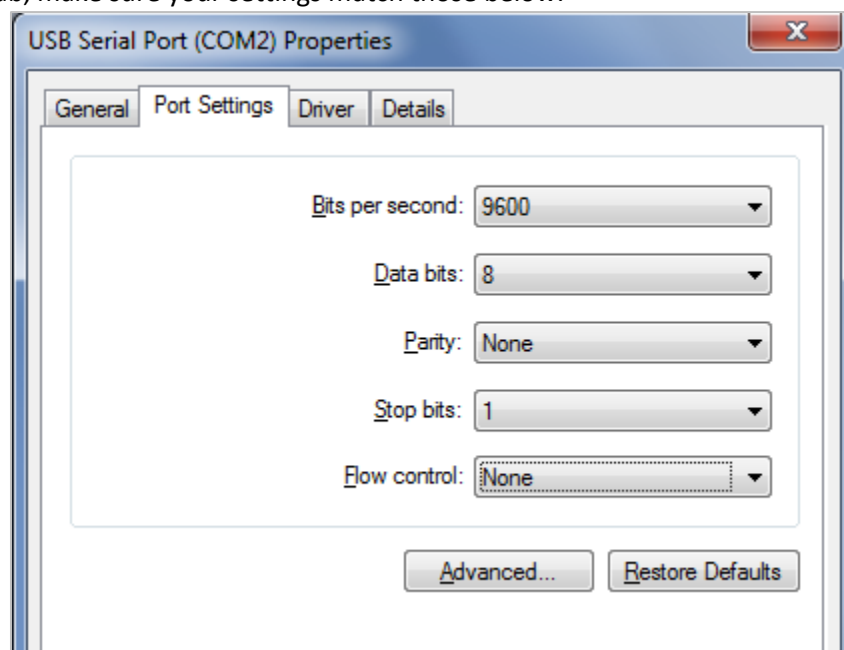
Troubleshooting

Selecting/Configuring COM Port
On a PC, the USB-Serial adapter and USB drivers for MDR-3 USB updating will create a virtual COM port when the drivers are installed. The port should work immediately after setup, but if you're having issues recognizing the HU3 or MDR, you may need to configure the COM port with the correct settings.
1) Open Windows Device Manager.
2) A) USB-Serial Adapter: Under Ports (COM & LPT), look for "USB Serial Port (COMx)", where x is the port number.
   B) Updating Straight from USB Port: Under Ports (COM & LPT), look for "MDR3 USB Port (COMx), where x is the port number.
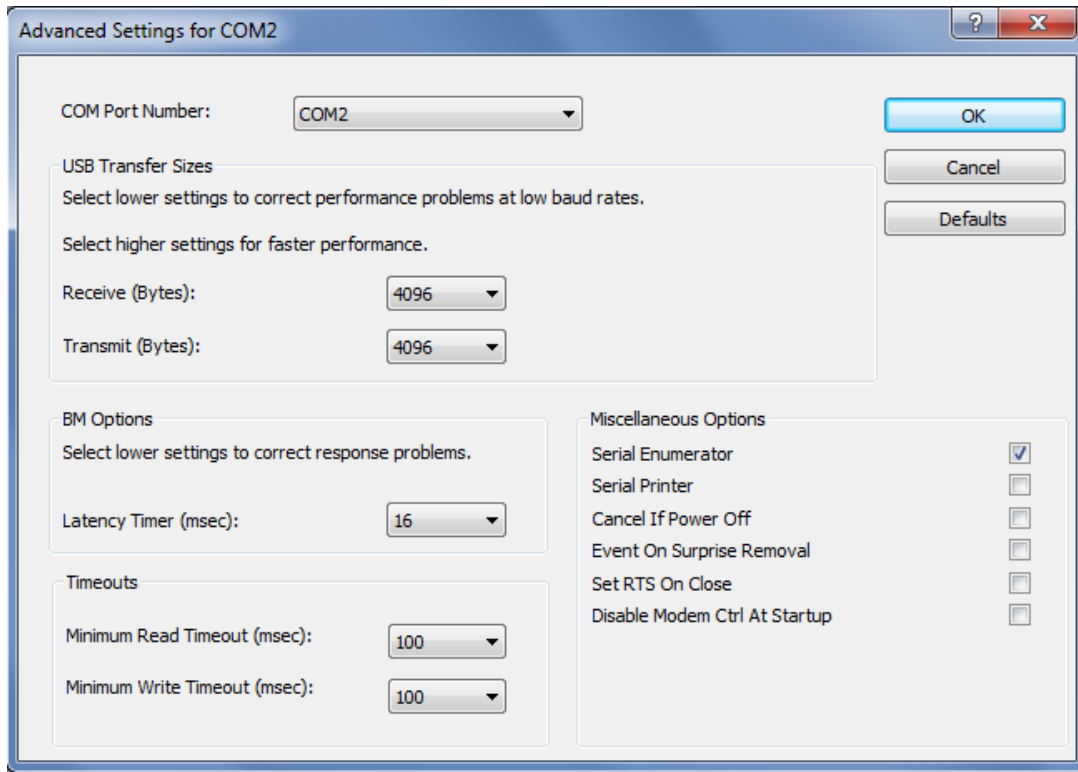   **For the updating process to work, the COM port must be COM1-COM4.**
3) To change the COM port number, right-click on the port and select Properties. Under the Port Settings tab, make sure your settings match those below:
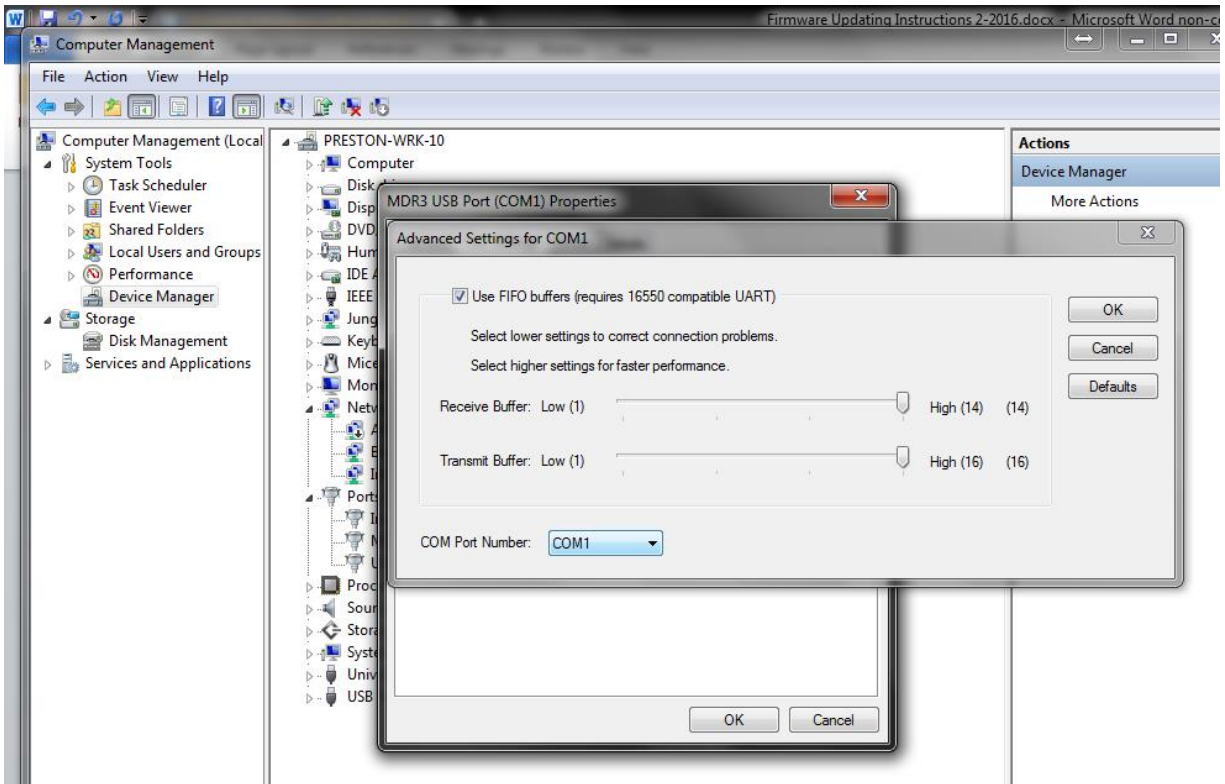

4) Click Advanced to go into the Ports Advanced settings menu.
5) If the COM Port number is not set to 1-4, set it to an open port 1-4.
6) Under Timeouts, if the Minimum Read Timeout (msec) is set to 0, set it to 100.

7) Ensure all other settings match the appropriate figure below:

Serial-USB Adapter Connections

USB Port Connections

8) Click OK to save changes. You may need to restart your computer for the changes to take effect.