



DL.2 and Axon v1.3.1 Release Notes

November 21, 2006

Version 1.3.1 is a major feature and maintenance upgrade for DL.2 and also provides some maintenance fixes for the recently released Axon Media Server.

There are two software upgrade components, the Content Management Application (CMA) Client and either the .dl2 upgrade package for the DL.2 fixture or the .axo upgrade package for the Axon Media Server. Installation of the latest CMA Client Software should always be done prior to initiating an upgrade of the fixture using the .dl2 package.

NOTE: * DOWNGRADE WARNING *****

If, for any reason, after installing v1.3.1 or later you need to downgrade to a version prior to v1.3.x then you must **FIRST** downgrade to v1.2.5 in order to install a special software patch before downgrading to earlier versions. Failure to load v1.2.5 before downgrading from v1.3.1 to v1.2.4 and earlier may result in having to re-image the hard drive before being able to load any other software versions. To go from version 1.3.1 back to version 1.2.3, then the following procedure must be taken:

1. Fixture running v1.3.1.
2. Upload v1.2.5 software (Available from the DL.2 Software Archive web page).
3. Upload v1.2.3 software.

NOTE: CMA Compatibility

The CMA Client must be updated to v1.3.1 in order to communicate with DL.2 and Axon on v1.3.1. Once upgrading, the CMA will be unable to communicate, beyond performing software upgrades, with DL.2 fixtures running v1.2.4 or earlier.

The current version of the **DL.2 User Manual** along with the Software is available at:
http://www.highend.com/support/digital_lighting/dl2.asp

The current version of the **Axon User Manual** is available at:
http://www.highend.com/support/digital_lighting/axon.asp

To automatically be notified of DL.2 and Axon Software Releases you may join the **Software Release Announce List** at:
http://www.highend.com/support/digital_lighting/DLmailinglist.asp

Users with access to DL.2 fixtures and Axon Servers that are interested in joining the **Software Testing Program** may apply to become Beta Testers at: <http://digital.highend.com/library/betesignup.nsf/request>

After updating, the DL.2 Versions reported should be:

- *Software Version:* 1.3.1.1208
- *Firmware Version:* 1.3.1.106
- *Windows XPe:* 1.0.x or 1.2.6

After updating, the Axon Versions reported should be:

- *Software Version:* 1.3.1.1208
- *Firmware Version:* 1.3.0.22
- *Windows XPe:* 1.0.5 or 1.0.6

New Features in v1.3.1:

- Major Improvements to CMA Networking and Sync performance. Routers can now be utilized in the network to speed up fixture discovery with the CMA.
- Collage Generator Effect expanded up to any configuration of up to 8x8 array sizes.
- Enhanced Collage Generator Effect added at DMX Value 141. This new enhanced version is optimized for arrays greater than 2x2, eliminating heavy aliasing of objects and dramatically increases the available image resolution.
- Lamp Eco mode added to automatically reduce the lamp power and increase lamp life whenever the mechanical iris is closed.
- Image Scale and Rotate effects added at DMX value 52 to manipulate the image texture within the object.

Mod1: Scales Image
Mod2: Rotation Angle
Mod3: Rotation Speed

- Film Roll effect added at DMX value 53 to scroll the image texture within the object.

Mod1: Horizontal Speed
Mod2: Vertical Speed
Mod3: Image Size Scale

- Pixelation effect added at DMX value 54.

Mod1: Amount of Pixelation
Mod2: Horizontal Scaler
Mod3: Vertical Scaler

- Faux LED and Faux Tile effects added at DMX values 55 and 56 to create a virtual LED and Tile walls.
 - Mod1: “LED” pixel size
 - Mod2: “LED” pitch spacing and border color
 - Mod3: “LED” color peaking adjustment
- Fuzzifier effect added at DMX value 57.
 - Mod1: Horizontal Blur adjustment
 - Mod2: Vertical Blur adjustment
 - Mod3: Decay level adjustment
- Drop Shadow effect added at DMX value 58 to create a frame effect for inserting other layers against a backdrop or for I-MAG inserts.
 - Mod1: Horizontal Shadow Size
 - Mod2: Vertical Shadow Size
 - Mod3: Shadow Opacity
- Zoom Blur Effect added at DMX value 59 to zoom in on an image and create a blurring effect.
 - Mod1: Horizontal Position center.
 - Mod2: Vertical Position center.
 - Mod3: Zoom In/Out.
- Chroma Shift Effect added at DMX value 60 to offset the RGB component colors of the image.
 - Mod1: Horizontal Shift.
 - Mod2: Vertical Shift.
 - Mod3: Scale.
- ShakeNBake Effect added at DMX value 61 to randomly vibrate the image.
 - Mod1: Horizontal Shake.
 - Mod2: Vertical Shake.
 - Mod3: Scale.

Known Issue:

- The current beta version of Mac CMA is unable to manage content on Axon Servers. It will communicate as before with DL.2 fixtures. In the interim, for managing Axon Servers use the onboard CMA, or the PC CMA remotely.

Bugs Fixed in v1.3.1:

- 5518 AutoSet DMX on large File Selection dies
- 7542 Negative image from camera loses detail through graphics engine
- 7709 Model type needs to report fixture type, DL2 or Axon
- 8099 Running a router (linksys) without WAN causes CMA connectivity issues
- 8503 CMA needs to handle multiple instances gracefully
- 8626 Layer not playing on boot up with DMX calling for media to play
- 9311 Keystone not centered in output
- 9314 Add Media Mode Pause to pause S-Video input
- 9349 Color mixing needs to be more saturate
- 9606 Connecting network after DL.2s, communication nonfunctional for 5-10 minutes.
- 9615 CMA Unnecessary Tree Collapse
- 9742 Default DMX values not copied to local buffer at startup.
- 9743 Selftest values don't clear properly when no DMX applied.
- 9744 DMX framerate not update upon loss of DMX data.
- 9753 Properly allow running multiple CMA instances
- 9773 Only one texture(material) can be used per 3d object(mesh)
- 9795 Occasional Random Z-ordering when all objects are 4x3 at 0pix Z-position
- 9832 Collage support increased from 4x4 to 6x6
- 9859 Water Drop effect not functioning properly on layers 2 & 3
- 9884 CMA connectivity stops working after changing from Auto-IP to DHCP network
- 9891 Refresh timer on DMX raw view gets turned off every time window is scrolled
- 9892 Right and Left values for edge fade display incorrectly in protocol view
- 9893 FX2 mode listed as FX1 mode in Protocol View for each layer
- 9931 Fixtures need to be intelligently expired from the CMA fixture tree.
- 9936 Client IP does not update when changing from IP address to another
- 9951 Iris opens prematurely when booting with heavy GE load
- 9955 Slim down the 1.3.0.X CMA installer.
- 7062 Crossfades not smooth (scaling)
- 9632 Links to launch the HES Web removed from Axon
- 9850 Menu does not fill the LCD screen when inverted using X1900XT Cards
- 9932 Global clock master/slave algorithm updated.
- 9941 Mac CMA allows drag/drop of folder with trailing space in folder name.
- 10013 Improved Collage Generator.
- 10060 Multiple Master global clocks showing up in the network
- 10080 Add IP information to status display
- 10088 Disable O/S Sleep/Hibernate ability on Axon.
- 10093 Global clock does not appear to work correctly with Auto-IP networks
- 10133 Axon thinks it is set to internal camera capture
- 10138 Client IP field needs to be added to the bottom of the CMA
- 10149 Menu does not fill the LCD screen correctly when booted in non-inverted state
- 10170 Extra async file source filter in movie graph – Memory Leak
- 10181 In the MulticastSocket implementation socket creation can fail.

PREVIOUS RELEASES

New Features in v1.2.5:

- Special version to allow downgrading from v1.3.x releases to v1.2.4 and earlier releases. This build must be installed prior to downgrading from v1.3 or later to v1.2.4 and earlier.

Bugs Fixed in v1.2.5:

None.

New Features in v1.2.4:

- Added support for the ATI X1900XTX video card. Note this video card can only be used in new units with chassis modifications to properly support this video card. Windows XPe image v1.2.6 is also required to support this video card.

Bugs Fixed in v1.2.4:

None.

New Features in v1.2.3:

- Added Curved Surface Support for projecting onto not-flat surfaces. This is a huge advantage when using the Collage Feature on screens that are curved or have a curved portion to them to adjust the screen geometry beyond the normal keystone controls. Curved Surface Support includes a number of different surface types including: conical and spherical type curves, as well as corner surfaces. Full details on how this new feature operates are located at: http://www.highend.com/pub/products/digital_lighting/dl2/docs/Curved%20Surface%20Support.pdf
- Added support for the Christie Digital LX55 Projector.
- Color to Alpha effect added at DMX value 49 and Inverted Color to Alpha at DMX value 50 in Global and Graphic layers.
 - Mod1: Red to Alpha
 - Mod2: Green to Alpha
 - Mod3 Blue to Alpha
- Texture Mixing effect added at DMX value 51 on Global and Graphic Layers.
 - Mod1: Source Layer Select
 - Mod2: Source Effect/Visual Mode
 - Mod3: Crossfade from normal texture to other texture.
- Visual Mode Texture Mixing added at DMX value 12 on Graphic Layers.
 - Mod1: Source Layer
 - Mod2: Crossfade
 - Mod3: N/A
- Four-in-one display divides the display into quadrants showing each graphics layer and the final output image to aid in visualization while programming. This mode is accessed via the Global Control channel with a DMX value of 253.
 - Global Modifier: 4-in-one configuration. See current manual for all the configuration options.

Bugs Fixed in v1.2.3:

- 9639 Add Projector Type field in the Version tab.
- 9653 Opacity getting applied multiple times in collage (i.e. not allowing for crossfades).
- 9448 Loading movies into a paused state does not always start movies on first frame.
- 9610 Turning self test video patterns on should open the iris.
- 9295 Self test modes do not work without DMX applied.
- 8551 Play Once Forward after Pause and Rewind does not always hit last frame.
- 8456 Play Forward Once does not hit last frame after looping.
- 9706 Media clip will not rewind if previously paused on the last frame.
- 9720 Add Projector Type field to CMA configuration screen.

New Features in v1.2.2:

- Added the Collage Feature which allows seamless blending between multiple fixtures acting as one, to create a single large image. Full details on how this new feature operates are located at:
http://www.highend.com/pub/products/digital_lighting/dl2/docs/Collage%20generator.pdf
- Raindrop effect added at DMX value 46 in the Effects Channel.
 - Mod1: Controls the size/speed of the rain drops.
 - Mod2: Seeds the random number generator so that the units sync together across a Collage.
 - Mod3: Controls the rate of rain drops.

Bugs Fixed in v1.2.2:

- 9553 Croaker when switching between S-video capture and content.
- 9510 Scrubbing In-Frame w/Statistics turned on shows the actual Frame spooling up.
- 9339 Head fans running high and unwarranted filter warnings.
- 8151 Play Control Rewind does not always rewind.
- 9505 Computer gets in a state of slow playback.
- 9492 Implement active box fan control.
- 9573 Media playback stops after setting opacity to 0 and then above 0 when using Trigger Opacity.
- 9500 High CPU utilization on Stop and Rewind with High Res media.
- 9136 Display off setting persists when units are put in shutdown then power cycled
- 9579 Media Clip starts over when switching from play mode loop forward to once forward
- 9532 Iris will never open after homing if unit is in a continuous movement effect
- 9591 Media clip starts over when going from pause to once forward
- 9588 Display set to off upon reboot
- 9403 IP address bouncing between 127.0.0.1 and 169.254.x.x, CMA non-functional
- 9293 DL-2 can sometimes home off by a step

New Features in v1.2.1:

- Added Support for 17 flavors of NTSC, PAL, and SECAM video standards for the External S-Video input.

Note: Currently, changing the video input requires a reboot of the Graphics Engine for the new setting to take effect. Also, when using the camera set to Internal mode, the video input setting must be set to NTSC_M.

- Speed of Pan/Tilt motion has been substantially increased over previous versions.

Bugs Fixed in v1.2.1:

- 9196 Enable the Windows CMA to use .NET Framework 2.0
- 9093 Pin hole leak in iris sometimes present
- 9092 Full Screen Error messages should override display off
- 9082 Pan operation is greatly slowed on some units after position home from 50/50
- 9148 Increase speed of acceleration and maximum velocity without misstepping during can-can type movements.

New Features in v1.2.0:

- Additional Warning/Error messages added to the system for the Air Filter.
- The need to calibrate the Air Filter has been removed.
- Major re-work has been done to improve the motion performance and reliability. *For Optimal performance the Pan/Tilt motors should be recalibrated from the Menu.*
- New Visual Effects added: Color Swap(RGB to BGR, GRB, RBG), Iris and Edge Fade background colors, Background Color and Color Cycle, Glow Color Cycle, Colorize Grayscale, Exposure Control.

Bugs Fixed in v1.2.0:

- 8869 Lamp does not douse during dataloss shutdown when Lamp Mode set to ALWAYS
- 8146 Iris gets caught in loop constantly grinding Iris Open/Closed.
- 8388 DL2 motion gets worse the longer the unit runs.
- 8175 CPU utilization goes up significantly with no network connected.
- 8138 Projector Defaults Button no longer accessible
- 8622 Data Loss Time Out value can be out of sync between menu and motion.
- 7933 Iris grinds loudly when doing a Home All while in Shutdown
- 8453 Pan randomly slams into stops until encoders turn off
- 8485 Inconsistent pan homing
- 8629 Lamp Hours not counting correctly in menu
- 8053 Add Filter Status Messages (connect to firmware)
- 8059 Add Projector Warning/Error Messages (connect to firmware)
- 8139 Projector In By DMX doesn't show current state
- 8170 Spurious USB Comm Errors
- 8152 Play Once after being told to Rewind and Pause does not function
- 8171 Loss of output after pause and change of media file
- 8054 Need to remove forced button nag on Filter Life Warning
- 8145 Iris opens prematurely during global home from certain positions
- 8597 Oddities with coming out of home when using art-net
- 7915 Self Test Video Patterns not working
- 8214 Memory leak related to media mode pause
- 8242 Motor Calibration does not always run or will not finish
- 8790 Add new iris objects to DL2 installer
- 8148 Menu Edit box still active after navigating away
- 8823 Need to add Pan/Tilt Encod Firmware Versions to the Menu
- 8867 Remove Filter Calibrate Button from Menu.
- 8093 Irises Slightly Small
- 8094 Rasterization Errors (4x3 Rectangle)
- 8111 DL-2 needs swap RGB to BGR

- 8155 Tilt Jump at end of slow move
- 8592 Certain aspects of the graphics engine respond slowly on art-net
- 8619 Glow Color Cycle Effect Added
- 8708 New Visual Mode and Global Effects Added.
- 8150 Display Off via DMX doesn't take effect immediately

Bugs Fixed in v1.1.0:

- 8077 Display will not come back on from menu action when display is set to "Off"
- 7937 Factory Defaults followed by Home All initiates a Firmware upgrade
- 7935 SuperObject::CreateFilterGraph: caught unhandled exception crashing individual Graphics Layers, on startup.
- 7695 FailureCGraphicsEngineCore::Render(): caught unhandled exception.
- 7454 Movies pause when inframe has previously been adjusted.
- 7758 Computer takes over 2 minutes to reboot remotely.
- 7653 Global Clock Negotiation Non-existent for synchronization.
- 7930 IR Illuminator not shutting off during fixture shutdown.
- 6789 Info tab: Hours Resets not working properly.
- 7328 Need Menu brightness/contrast control from CMA.
- 7864 Firmware Upload File Handling needs overhaul to verify matching firmware versions in cards.
- 7888 Firmware upload fails on first attempt after freshly imaged hard drive.
- 8058 Keystone Channels do not show up correctly in protocol menu.
- 7831 Values changed by the CMA are not reflected in the DL menu in real time.
- 8051 Added USB Security Error Messages.
- 7802 Iris can briefly prematurely open before GE is ready.
- 7916 LCD needs to become a blank screen in shutdown.
- 7961 Mask Strobe with "Cloud Iris" does not function properly.
- 7615 Loop Once Forward acts as pause.
- 7390 Media mode Stop acts as loop once forward, not pause.
- 7385 Opacity issue with overlaying 2 layers w/ same center point.
- 7548 Some objects tear when rotating one image through another.
- 8022 Glitch in output when changing between Index and Rotate.
- 7815 Shadow of object when wobulation used on 2nd effect mode.
- 7711 Clockwise object rotation should stop on a dime.
- 7734 Raster line on side of rectangle objects when Z position is pushed out.
- 7644 Global Intensity should behave as intensity.
- 8048 Unneeded tiling calculations.
- 7643 Projector Control Menu: OnScreenDisplay functions not active
- 7845 Control functions don't work under Art-Net properly.
- 7834 Menu: Projector input selection by DMX [Off] does not function.
- 7617 Loop Once Forward stops on the 11th frame.
- 6762 Sync modes not working correctly
- 7902 Actual/Expected Firmware version should be compared and uploaded on boot.
- 7245 Sync seems to be broken.
- 7847 Large latency and choppy playback of camera feedback with Preview mode on.
- 7911 GE becomes sluggish and goes to incorrect images
- 8039 Rasterization Errors As Effects Applied
- 7925 Need 'Select All' and 'Clear All' buttons in CMA Clone dialog.
- 7611 Reset Fixture Defaults not all active.

Bugs Fixed in v1.0.1:

- 7857 Fixed Motion Home All from causing Pan/Tilt to slam into stops occasionally.
- 7904 Client Installer now defaults to 'Program Files' location
- 7867 Security failure message added to display.
- 7912 Setting Fixture ID to 0 from CMA causes fixture not to boot
- 7859 CMA/Menu Setting inconsistencies fixed.
- 7910 Tilt motors misstepping fixed.
- 7913 Raw Data in DMX Menu Display now shows first entry for 'channel 0' as '--'
- 7614 Fixed occasional Menu lock ups
- 7822 Fixed Tilt Switch Auto not functioning and/or conflicts w/ registry
- 7868 Iris closes on loss of USB Comm
- 7920 Projector Defaults Menu Lockup fixed.
- 7923 Added 'Select All' and 'Clear All' buttons in CMA Upgrade Wizard
- 7917 DL-2 would not boot with video test pattern to "2"
- 7843 Added 30 second wait after menu keypress before enabling Preview on display.
- 7866 Fixed Security false triggering
- 7927 Data Loss Timeout: 'Off' option removed
- 7890 Projector Defaults sent to Projector
- 7655 Display Default: Left/Right Nav buttons improved
- 7900 Menu w/Invert On was partially off top of screen
- 7621 Fixture Shutdown' behaviour improved
- 6776 Fixed DL-2 position loss after being bumped
- 7566 projector input gets lost, must hard reset to rectify resolved.
- 7772 iris remains closed even when GE running fixed.
- 7862 Fixture should wake up on connecting DMX data after dataloss timeout
- 7532 Lamp/Projector Startup Modes implemented
- 7905 CMA Client Installer needs a EULA
- 6816 Pan and tilt slow just before hitting destination
- 7907 DL-2 loses position after homing
- 7787 Display Auto-invert occasionally not auto inverting
- 7799 iris slightly open upon bootup fixed
- 7932 Menu Button hits/Tilt Switch delays Data Loss Shutdown from happening
- 7560 Pan/Tilt Encoder On/Off setting in menu does nothing
- 7924 Iris closing for loss of USB comm to trimmed to 2 to 4 seconds
- 7914 CMA allows for invalid value for Self Test Video Pattern
- 7903 Chroma effects go away when image pos is not default