

The latest versions can be found in the [downloads section](#) of the website.

Version 6.0.2504.11.

(11th Apr 2025)

This version has 4 updated modules: ShowDesigner, Modeler, Paper and NetRenderServer.

- New: You can now drag DMX and UNIT attributes in a 2D view. [Pro-Pa]
- Improvement: Drawing of views. [Pro-Pa]
- Bug Fix: Rendering could show wrong colors. [SD]
- Bug Fix: Textures were not shown. [SD/Mod]
- Bug Fix: Check in NetRenderServer could fail, preventing it from running. [Pro]
- Several other improvements and bug fixes.

Version 6.0.2501.08.

(8th Jan 2025)

- New: Support for flexible LED strips.
- New: Export of 3D Files. (Vz plugin) [Pro]
- Improved: Timeline bookmarks. [Vz]
 - Added the option to remove all bookmarks to the Options popup menu.
 - Improved Export (and Import) with options also replace or skip the delimiter characters in the field besides the existing escape method
 - Improved Export by adding a Range line before the markers. This range starts at 0 and end at the end of all the content of the timeline. This Range is also required by ONYX when importing a cuelist.
 - Most of the set values in the dialog are now (re)stored in/from the registry.
- Improved: MVR Import plugin is improved. [Pro]
- Improved: 3D File Import plugin is improved and has a few new options. [Pro]
- Improved: Added Inspect Speed setting in 3D Camera Properties. [SD/Mod]
- Bug Fix: Design View was not properly updated after changes made in the Data Sheet. [Pa]
- Several other improvements and bug fixes.

Version 6.0.2312.01.

(1st Dec 2023)

- Improved: handling of gobo/frame rotation with is a rotating prism in the beam. [Vz]
- Improved: No longer displaying removed materials in the part mapping section, unless the material is still used in the scene. [Vz]
- Bug Fix: JPG file handling is done differently now, fixing some issues.
- Bug Fix: Fixed issues in displaying material lists (menu), which could be (partially) outside of the window, causing problems scrolling and/or selecting a material.
- Bug Fix: Fixed issues in fixtures HSV modes. (unpredictable behavior.) [Vz]
- Bug Fix: Fixed issues in internal material storage: transparency information could be lost.
- Bug Fix: Fixed issues in rulers for 2D windows: [Vz]
 - When zooming in and no dimension markers were visible, it could crash.
 - The vertical position of rulers could be wrong in a multi-view layout.
- Bug Fix: Fixed issues in fixture/material interaction which could cause a crash. [Vz]
- Bug Fix: Fixed issues with transparent texture materials. [Vz]
- Bug Fix: Fixed issues with changes in materials, which could cause a crash. [Vz]
- Bug Fix: Fixed issues with patching multi-segment fixtures.
- Bug Fix: Fixed issues in DXF import causing improper placements of elements. [Mod]
- Bug Fix: Fixed issues in DXF import that would cause a crash with lot of DXF files. [Mod]
- Bug Fix: Fixed issues (like placement of sub-objects) in 3DS import plugin.
- Bug Fix: Fixed issues in loading CSG objects.
- Bug Fix: Zoom calculations of LED fixtures projections could lead to no projections at certain zoom angles. [Vz]
- Several other improvements and bug fixes.

Version 6.0.2304.20.

(20th Apr 2023)

- New: A new plugin for importing MVR files.
It is in a test stage at this moment, and feedback is welcome. [Pro]
- Improved: Layers in Sidebar. Replaced the 'Visible' icon (Eye) with the 'Lock' option.
All layer options are still available in the Layer Settings window.
- Improved: Loading and saving of PNG files, and the use of alpha channels (transparency) of PNG files.
- Improved: improved handling of materials in plugin for 'Other 3D objects'. [Pro]
- Bug Fix: Several fixes and improvements related to layers.
- Bug Fix: CITP IDs were duplicated when copying fixtures. [Vz]
- Bug Fix: Using Feet/Inches units and a Grid could cause the program to hang. [Vz]
- Bug Fix: Mesh related code could crash the program. [Vz]
- Bug Fix: Sometimes Color devices in fixtures were not initialized correctly. [Vz]
- Bug Fix: Corrected code for omnidirectional fixtures (bulbs). [Vz]
- Bug Fix: Some JPG files did not load correctly.
- Bug Fix: Material previews would not update sometimes.
- Bug Fix: ShowDesigner did not use the correctly and initialize and limit Pan/Tilt. [Sd]
- Bug Fix: Some color device channels were not always shown in the properties. [Sd]
- Bug Fix: Some (external) DMX drivers were not properly initialized. [Sd]
- Bug Fix: Full view ignores beams. [Sd]
- Bug Fix: Beams of fixtures on hidden layers were visible. [Sd]
- Bug Fix: DWG/DXF Export of CSG operations did not export correctly. [Pro]
- Bug Fix: Some surfaces would disappear sometimes in Paper. [Pro]
- Bug Fix: Sketchup import could fail when filename contained 'special' characters, and fixed some issues loading materials. [Mo]
- Several other improvements and bug fixes.

Version 6.0.2211.23.

(23th Nov 2022)

- New: Added simple (distance) measuring tool in 2D views. [SD]
- Bug Fix: Fixed issue which prevented loading of external DMX-drivers.
- Several other improvements and bug fixes.

Version 6.0.2211.10.

(10th Nov 2022)

- Work Around: Since a Window 11 update, an issue could prevent MSD modules from starting on these Windows 11 computers.
This update contains new modules with a work-around, so they will run again.
- Several other improvements and bug fixes.

Version 6.0.2208.24.

(24th Aug 2022)

- Improved SketchUp interface, fixing some issues during import.
- Improved DWG plugin, fixing some issues. [Pro]
- Improved layer functionality.
- Improved some aspects of the layers User Interface
- Bug Fix: Changed code to fix potential crashes.
- Bug fix: Fixed some code in material handling that could cause crashes when using multiple instances of an object.
- Bug fix: Fixture blocks could cause a crash [Pro/Paper]
- Bug fix: Lux Map mode could casue a crash.
- Added 'AUTO' option to Fast Patch dialog (as a 1 channel default option).
- Several other improvements and bug fixes.

Version 6.0.2205.16.

(16th May 2022)

- Fixed: Install problem of a plugin, causing an error when starting the Visualizer. [Pro]

Version 6.0.2205.12.

(12th May 2022)

- Fixed: Install problem of a dll, causing an error when starting the Visualizer. [Pro]
- Improvement: Added some import options for the new import plugin, to allow tweaking of the imported object. [Pro]
- Bug Fix: Some imported objects were not displayed correctly (mirrored).
- Several other improvements and bug fixes.

Version 6.0.2204.26.

(26th Apr 2022)

- New: Extra import options in the Visualizer. [Pro]
- Improvement: FastPatch now uses block sizes for base address allocation. For each base address that needs to be patches a multiple of the entered block size will be used. For instance a blocksize of 10 will allocate 30 channels for a fixture with 24 channels, 20 for a fixture with 12 channels and 10 for a fixture with 3 channels.
- Improved: Grid Options (Added Axis options, and separate transparency options).
- Improved: Color selection dialogs.
- Improved: DMX mapping dialog, multi-selection changes, auto- numbering etc).
- Improved: Now using scalable icons for controls, which size when changing the UI size.
- Bug Fix: setting a material could cause a crash.
- Bug Fix: Auto-patch for fixtures with multiple segments will now patch in segment order if possible.
- Bug Fix: Strobe did not always work correctly.
- Bug Fix: Changing lens systems (manual) could fail to adjust the current zoom angle.
- Bug Fix: Render files created by the ShowDesigner module would sometimes not be rendered correctly using the NetRender module. [Sd]
- Bug Fix: Internal bug caused problems in Hoists. New Hoist could not be inserted, and scenes with hoists could not be loaded. [All]

Version 6.0.2110.22.

(22th Oct 2021)

- Bug Fix: Internal bug caused problems in Hoists. New Hoist could not be inserted, and scenes with hoists could not be loaded. [All]

Version 6.0.2110.19.

(19th Oct 2021)

- Bug Fix: The Strobe of LED Fixtures did not work (correctly).

[Vz]

Version 6.0.2110.14.

(14th Oct 2021)

- New: Project Files. [Vz]
A new addition is the Import/Export of MSD Project files (.msdProj)
You can export a scene file to a project file, and the project file will include all the external referenced files (like video files, audio files etc).
When you import the Project file, you get a choice where the external files should be placed. You can choose to add the external files to your MSD User folders (default), or you can select to place them in the folder where the Project file is located. If a file with the same name exist at the destination location, it will test if it is the same file and if the file is (binary) different, it will be saved with an added number to the filename.
The links in the scene file will be updated to use the new files, so you can directly us it.
- New: Color pick option for chromakey color selection for Video Sources. [Vz]
- New: Added Section menus [Vz]
Some sections in the Sidebar (at the moment 2) now have a settings menu, where you can restore to default values.
- Improved: Render Preview [Vz]
The Render Preview window now has an extra option: 'Update Renderfile'.
When you click on this button, the renderfile will be updated, so you do not need to close and open the window. Also, when you do this while the window is still rendering, it will automatically restart rendering with the updated renderfile.
This means that you can keep a window open, render, changes settings, update the renderfile and then render with the new settings.
- Improved: Video Generation [Vz]
Added start-, end- and lead time to the video generation.
Added Timecode option in video generation (timecode visible in the generated video).
Video files can now be larger than 4GB.
- Improved: Timeline [Vz]
The timeline is now using TimeCode for all time related parameters.
You can select the TimeCode format in the Preference dialog (Units).
Added markers on timeline. When selecting time (for video start, start of DMX show etc, it will have a drop-down box with available markers).
The Audio track now has options to show the Audio Information (peaks)
- Improved: Video Media Source [Vz]
You can now use 1 video source for multiple media feeds, so you do not need to create and use multiple copies of a video file when you want to control them individually, just a new feed to the same source.
- Improved: DMX Motor Map [Vz]
window is now scalable.
Multiple line selection, the first is the one you are editing.
When editing a field while having a multi-line selection will update the field in all selected lines. Doing the same for the DMX address will automatically changes the addresses for the rest as well (sequentially).
new 'Add copy' option, that will make copies of 'the selected block', by default at the end of the current mappings, using sequential DMX addresses.
- Improved: Change Patch [Vz]
You can now edit the DMX address in the Change Patch dialog.
- Bug Fix: Gobo and other projections (projectors) had an incorrect color correction when rendering (or creating render files) in the Visualizer. [Vz]
- Bug Fix: Rendering in Visualizer did not show beams of fixtures on 'invisible' layers. [Vz]
- Bug Fix: Error in lighting, causing some objects to be lit/not lit dependent on from what angle they were lit. [Vz]
- Bug Fix: Projectors did not use the media mapping when rendering. [Vz]Bug
Fix: Omnidirectional fixtures (bulbs) could show 2 colors in certain cases. [Vz]
- Bug Fix: Hitting the PgUp/PgDn keys (to get the next item behind the current pick) in an empty scene could cause a crash. [Vz]

- Bug Fix: DMX Driver for Hog (Hog Network link) could crash if no Hog Connectivity driver could be located.
- Several other improvements and bug fixes.

Version 6.0.2010.01.

(1st Oct 2020)

- Improvement: You can now set a color when using ColorKeying in mediasources, overriding the automatically chosen color. [Vz]
- Bug Fix: Color Mix device was not initialized, sometimes preventing light coming out of a fixture until the color channels were used. [Vz]
- Bug Fix: Billboard Effect panels did not show the shadows correctly. Now All billboards face towards the camera of the active viewport, and the shadows are calculated accordingly. [Vz]
- Bug Fix: Fixed a problem where during playback the camera axis overlay wasn't always drawn. [Vz]
- Bug Fix: Fixed a problem where during video recording moving the app to another monitor, it would crash.
- Several other improvements and bug fixes.

Version 6.0.2008.21.

(21st Aug 2020)

- New: CITP console connection. [Viz]
- New: Added the ability to change the panel shape from within the Visualizer. [Viz]
- New: Added new Media Source type for NDI streams. [Viz/Pro]
- Improved: Media Sources
The 'effect' media sources will disappear. Instead, (almost) all media sources can now have a transparency setting. To use the 'transparency effect', you will need special 'Effect Screens'. (Normal panels will ignore the transparency of the media source.)
The transparency mode of a media source can be changed in the Media Source Settings.
The 'Video Effect' source in existing files will still load as 'legacy' media source, but new ones can no longer be created.)
- Improved: When you pick in the scene, you will always pick the nearest object.
You can now use the TAB and Shift-TAB key combinations to walk through the other objects in the line of sight behind the front object.
- Improved: The connect operation is now supported in the 3D Visualizer.
- Improved: You can now pick a connector and disconnect all of its children.
- Improved: You can allow children of connector to be able to move, rotate and scale when flag is set.
- Improved: When you pick an object that has a pickable master object (like in assemblies, dynamic objects etc.), the master object is indicated by a yellow box.
You can use PageUp/PageDown to traverse up/down the pick hierarchy (so move the pick from the object to the master object).
- Improved: handling of transparency information (alpha channel) in the beams, showing correct shadows for such textures as PNG images and for the new Effect Panels with media sources with transparency. This is also done in Rendering in the Visualizer and NetRender.
- Improved: Better color matching for LED fixtures and LED engines in fixtures.
- Improved: sACN connection handles previous configuration of senders and sender feedback better. [Viz]
- Improvement: Added 'Mirror properties' to the Orientation section in the sidebar for operations (if allowed). [Viz]
- Improvement: Improved the quality of the textures. [SD and Mo]
- Improvement: Memory handling in the Paper module has been improved. [Pa]
- Bug Fix: Reading SDXML files (from VectorWorks Export) did not use 128 universes for the patch, but 64. [Viz]
- Bug Fix: Conventional fixtures (with only a fader) could not be patched.
- Bug Fix: Several bug fixes which could cause a crash, like handling (very) large textures, handling of textures on some graphic cards, etc. [Viz]
- Bug Fix: Mirrored groups were not always handled correctly (which caused objects to show the 'inside' instead of the 'outside'). [Viz]
- Bug Fix: Bug in the TimeLine caused memory leaks, which could cause a crash. [Viz]
- Bug Fix: In the Layers tab of the Scene Contents section, 2 layers with the same name (but different case) would cause one of them to disappear. [Viz]
- Bug Fix: A bug could cause random and or corrupted text to appear in the Fixture- and Model lists. [Viz]
- Bug Fix: When multiple fixture types are selected, and a DMX channels is changed on the picked fixture, only selected fixtures of the same type are also set. (Used to set the other fixtures types as well, on the same DMX channel.) [Viz]
- Bug Fix: The Previews of materials were not calculated correctly.
- Bug Fix: The properties for LED Fixtures were not correctly used when tracing. (beam options and shadow in beam.) [Pro]
- Bug Fix: Symbols text could be scaled incorrectly. [Pa]
- Several other improvements and bug fixes.

Version 6.0.2003.17.

(17th Mar 2020)

- **New:** Added driver 'M-Series USB-DMX'.
Replaces 'Martin Usb-DMX' driver (which is still available for backwards compatibility).
- **Improvement:** The layers handling has been improved by allowing multi-level grouping of layers, with a simplified Sidebar control. [Viz]
(More information can be found in the manual '3D Visualizer – Layers' sections.)
- **Improvement:** Added tooltip information while walking through the available fixtures, showing previews and channel count. [Viz]
- **Bug Fix:** Memory leak in fixture scripting fixed. [Viz]
- **Bug Fix:** The 'Save ModelObject As' dialog did not scale correctly. [Mod]
- **Bug Fix:** Rendering a fixture with an effectwheel could cause a crash. [Pro]
- Several other improvements and bug fixes.

Version 6.0.2001.23.

(23rd Jan 2020)

- **New: MSD now supports 128 universes. (was 64).**
- **New: VectorWorks plugin 2020.** [Pro]
(In this version we use the 'DMXAddress' from VW for the patch if available, otherwise we use 'Channel'.)
- **Improvement:** Added a camera transition mode for animation in the timeline. [Pro]
(This allow you to transition from A to B while transitioning the focus point and distance to the focus point, allowing for a kind of 'move around' an object of interest when moving from left to right for instance, but keeping the same distance to that object.)
- **Improvement:** The 'Fixture list', 'Model list' are now sizable. [SD]
- **Improvement:** Some of the layers column headers can now be used to change the properties of all layers.
- **Bug Fix:** The expiration date shown in several places of the different modules could be wrong for users with a trial license.
- **Bug Fix:** Fixed a bug which could 'freeze' video creation in the timeline. [Pro]
- **Bug Fix:** The 'percentages' view in the DMX View showed incorrect values. [Viz]
- **Bug Fix:** Fixed a bug in the color calculations of HSI devices.
- Several other improvements and bug fixes.

Version 6.0.1911.04.

(4th Nov 2019)

- Improvement: Added some new functionality for fixtures.
IMPORTANT:
This means that Fixture libraries from november 2019 and newer can contain fixture definitions that only work correctly with MSD version 6.0.1911.04 or newer!
- Improvement: Some improvements were made for the projections of LED fixtures. [Viz]
- Improvement: Added some UI control in the Sidebar for dynamic objects. [Viz]
- Bug Fix: Some Fixture blocks did not work correctly, causing several problems like not being able to patch.
- Bug Fix: When rendering media, color correction was not done correctly. [Viz]
- Several other improvements and bug fixes.

Version 6.0.1910.09.

(9th Oct 2019)

- Improvement: Added a 'Do not pick parts' option to fixture blocks, so you always pick the whole block. [3D Visualizer]
- Improvement: DMX parameters of sub-objects of a fixture block are now available if the whole block is picked. [3D Visualizer]
- Improvement: Renamed the 'Description' property of a fixture to 'Purpose', and added a new property 'Nickname'.
You can use this property to give a fixture type a nickname which will show in the fixture libraries and which can be used for searching and is also used in fixture symbols in the paper module.
- Improvement: Layers are sorted in menus. [ShowDesigner]
- Improvement: Added a 'Gel' column (with color). [Paper]
- Improvement: Editing a layer in Datagrid will ask if that is a rename, or a new layer. [Paper]
- Bug Fix: Showing a tooltip for fixtures could result in an endless loop of reserving memory, creating an 'out of memory' error. [3D Visualizer]
- Bug Fix: Patching a fixture block could result in incorrect patching of sub-parts of the block. [3D Visualizer]
- Bug Fix: (Very) Bright fixtures were sometimes cut-off to soon (before fader was zero, or when a dark color was selected etc). [3D Visualizer]
- Bug Fix: When using a prism, the entire beam was clipped by the iris. [3D Visualizer]
- Bug Fix: The iris in the ShowDesigner module could be incorrect. [ShowDesigner]
- Bug fix: Full View operations were not added to the undo/redo list. [3D Visualizer]
- Bug Fix: Imported lines could cause a crash. [Paper]
- Several other improvements and bug fixes.

Version 6.0.1906.19.

(19th Jun 2019)

- New: Added a white balance to the environment settings. [3D Visualizer]
- New: Some options of the Environment settings have been merged with the settings in 'Grid and Rulers' into a new section called 'Options'.
Additionally, the settings of the Environment section are now stored in the scene file, so that the environment is restored when you load a scene.
- New: In the Paper module you can select a symbol orientation in the Data Sheet (per fixture type) to use in tables.
Also, the default orientation has changed: for conventionals Top view, for moving heads Back view and for scanners Side view. [Pro]
- New: Support for some new type of devices for fixtures, to implement new functionality for fixtures.
- Improvement: The parsing of Fixture and Fixture Block names are better parsed to present them more consistently in the Library Contents.
- Bug Fix: Fixtures with very narrow beams could have a 'square' projection. [3D Visualizer]
- Bug fix: switching between monitors could crash the 3D Visualizer.
- Bug fix: Projections on transparent objects in the 3D Visualizer were not handled correctly in the previous release version.
- Several other improvements and bug fixes.

Version 6.0.1905.03.

(3rd May 2019)

- New: Rendering of Media (on panels) is now supported in the 3D Visualizer. [PRO]
- New: Updated Sketchup import for 2019.
- Improvement: Memory management of the 3D Visualzier and some performance improvements for large scenes.
- Bug Fix: Import of Fixture Blocks was not correct (defaulted to zero position).
- Bug Fix: Some initialization problems of incorrect values in the Sidebar.
- Bug Fix: Symbol orientation/positioning in Paper. [PRO]
- Several other improvements and bug fixes.

Version 6.0.1901.30.

(30th Jan 2019)

- New: VectorWorks plugin 2019 [Pro]
- New: Dynamic zoom color calculation for LED fixtures (if the definition supports it.)
- Improvement: Performance improvement in loading scenes (especially scenes with large number of large textures) and while importing fixtures into the scene.
- Improvement: The (start of) beams of LED fixtures.
- Improvement: Improved memory management for several modules.
- Improvement: Import of Fixture Blocks with one fixture and/or and user defined lens geometry is now supported.
- Improvement: Rendering in the Visualizer (and render files created by the Visualizer module) now used the shadow status of the layers. [Pro]
- Bug Fix: Sometimes LED fixtures would not show any beam and projection.
- Bug Fix: Material properties were not saved correctly to a render file, which could create different results then in build in renderer.
- Bug Fix: The Paper module was regenerationg the screen to often. [Pro]
- Bug Fix: Groups/assemblies did not snap to other objects.
- Several other small improvements and bug fixes.

Version 6.0.1811.21.

(21st Nov 2018)

[First MyShowDesigner version]

- New: Support for barndoor accessory for Par, PC, Fresnel, Flood.
- New: Align operation now available in the 3D Visualizer.
- Improvement: DWG Plugin now imports materials and 'explodes' the main drawing. [Pro]
- Improvement: 3DS Import will create a 'main' object if none is defined.
- Improvement: The layer option 'cast shadow' is now also used while rendering (raytracing). [Pro]
- Improvement: Paper module resizes areas on the sheet when the size of the sheet changes. [Pro]
- Improvement: New way of working with the 3DConnexion devices to improve the responsiveness.
- Bug Fix: Rendering of LED fixtures in 3D Visualizer. [Pro]
- Bug Fix: Framing shows incorrect after moving between monitors.
- Bug Fix: Saving screen as PNG in the 3D Visualizer did not work correctly.
- Bug Fix: 3DS Import sometimes did not insert the object if requested.
- Bug Fix: DWG Import/Export did not handle 'invalid' characters correctly, causing a crash and stopping the import/export.
- Bug Fix: DWG Import/Export could crash when importing large meshes due to invalid vertices indices.
- Bug Fix: Calculation of amount of light coming from a fixture, used in the calculation of the ambient light was not correct.
- Several other small improvements and bug fixes.

[*Martin ShowDesigner versions*]

Version 6.0.1806.01.

(01st Jun 2018)

- New: Support for continuous rotation on Pan/Tilt.
Only when the fixture profile defines it, so for new fixtures.
(If you need an existing profile to have this feature, please make a fixture requests for it and add as info that the continuous rotation needs to be added.)
- Improvement: Symbols in the Fixture tables can now be drawn in the colors of the layer they are on.
- Improvement: The unit conversion of plugins has been improved.
- Improvement: The representation of using 2 prisms at the same time is improved.
- Improvement: The omnidirectional beam (bulbs etc) is improved.
- Improvement: Subtract/Intersect operations in models can now be visualized in non-render modes as well.
- Bug Fix: plugins are now released last when closing down the program to porevent some memory corruption crashes.
- Bug Fix: 3DS Import plugin could crash on names of exactly 16 tokens long.
- Bug Fix: The measurements in Array Copy could be off.
- Bug Fix: Cues in the 3D Visualizer module did not work correctly.
- Bug Fix: Ambient light was not handled correctly when looking from below.
- Several other small improvements and bug fixes.

Version 6.0.1802.28.

(28th Feb 2018)

- Bug Fix: 3D Visualizer could crash when inserting a Scene Block.
- Bug Fix: The patch field in the SideBar could be disabled for all fixtures.
- Bug Fix: The Materials section of the SideBar was not always updated after inserting a Scene Block.
- Several other small improvements and bug fixes.

Version 6.0.1802.21.

(21st Feb 2018)

- New: Support for inserting Object Blocks in the 3D Visualizer.
- Improvement: Rendering of prisms (raytrace). [Pro only]
- Improved: Ambient light calculation has been improved.
- Bug Fix: DWG Export could stop exporting with an error when it encountered an invalid object. [Pro only]
- Start of beam could be incorrect when rendering split-colors. [Pro only]
- Bug Fix: The DirectX 9 Engine could crash on selection boxes.
- Several other small improvements and bug fixes.

Version 6.0.1801.10.

(10th Jan 2018)

- New: VectorWorks 2018 plugin (Windows) [Pro only]
- Improved: DMX-controlled panels are now rendered. [Pro only]
- Bug Fix: The rendering Preview dialog could crash when closing the 3D Visualizer. [Pro only]
- Bug Fix: ArtNet. MSD Registered as multiple ArtNet nodes, but that created problems with some consoles, so we now register as a single node.
- Bug Fix: sACN is now only active if it is selected as the current driver. Also fixed update problems of the sACN information in the SideBar.
- Bug Fix: Accessories could be defined without a Manufacturer, Model and gels, which could cause a crash.
- Bug Fix: There were some errors with normals in the mesh code that could cause problems.
- Bug Fix: Selecting the Fixture Focus tool in the 3D Visualizer (without using it) could cause a crash when changing the selection in M-PC.
- Bug Fix: The focus of manual gobos would not always work.
- Several other small improvements and bug fixes.

Version 6.0.1712.06.

(6th Dec 2017)

- New: Added a DWG Export plugin. (File-Export) [Pro only]
- Improvement: Lux Map now has iso-lines.
- Improvement: When vector properties (Pos, Rot, ..) are collapsed, the values are displayed more clearly, and editing the values works the same as editing the 'separate' values.
- Improvement: Group now gets the layer from its content, if all the content is on the same layer.
- Improvement: Luxmap settings are stored in the scene.
- Bug Fix: Loading a file while scanning the fixture libraries could cause a crash.
- Bug Fix: Loading scenes with a lot of fixtures would load very slow due to a bug introduced in the previous version.
- Bug Fix: Group operation left one item selected while in the group.
- Bug Fix: some edit fields would remain empty until value was changed.
- Several other small improvements and bug fixes.

Version 6.0.1711.15.

(15th Nov 2017)

- Improvement: Added tooltips for fixtures, and for (text)items in the SideBar that are clipped.
- Improvement: Changed the look of the start of the beam of LED bars.
- Optimization: sACN driver only initializes when selected.
- Bug Fix: Some of the properties in the SideBar with a button did not function correctly when the button is pushed.
- Bug Fix: The 'Eye Sensitivity' and 'Intensity Correction' settings no longer have any influence on the Lux map mode.
- Bug Fix: The media playback during video generation did not always work.
- Bug Fix: Some internal lists were not released properly on program shutdown, sometimes causing a crash.
- Several other small improvements and bug fixes.

Version 6.0.1710.18.

(18th Oct 2017)

- Bug Fix: Selection to/from M-PC did not always work.
- Bug Fix: Using the 'Focus Beam' operation in MSD to Fan/Focus fixtures did not always work in combination with M-PC, so that M-PC did not receive the updated Fan/Focus positions.
- Bug Fix: Selection order from M-PC to MSD was not always correct.
- Bug Fix: Lux Map could show incorrect values.
- Bug Fix: Plugins could crash due to changed interface.
- Several other small improvements and bug fixes.

Version 6.0.1709.27.

(27th Sep 2017)

- Bug Fix: Materials were not always handled correctly when exporting a VectorWorks file using the VectorWorks Export plugin [**Pro only**].
- Bug Fix: Undo/Redo code could cause a crash when closing the scene.
- Several other small improvements and bug fixes.

Version 6.0.1709.15.

(15th Sep 2017)

- Improvement: Cosmetic changes to the Sidebar to tidy it up a bit.
- Bug Fix: Some color wheels and manual gels were no longer working after the introduction of the split colors in the previous version. Should be fixed now.
- Bug Fix: The geometry orientation of conventional fixtures could be wrong after loading a scene after improvements of the memory usage of these geometries (chaching). This should be fixed now.
- Bug fix: Fixtures with asymmetric beams with a small beam angle could have wrong light distribution.
- Several other small improvements and bug fixes.

Version 6.0.1709.06.

(6th Sep 2017)

- New: Added support for Split Colors in colorwheels [**DX 11 graphis engine only**]. (You need to 'Open & Update' a scene to replace the current fixtures with new versions of the profiles.)

NOTE: *Not all profiles have been updated yet, it is a work in progress. When a fixture has a colorwheel with split colors, you can check in the [Fixture Libraries Overview](#) to see if its profile has a date of August 2017 or later. If so, the split colors should be supported.*

- Improved: Improved memory usage of fixture profile geometry.
- Bug Fix: Rotating when using 'Object Axis Mode' could skew objects.
- Several other small improvements and bug fixes.

Version 6.0.1708.09.

(9th Aug 2017)

- New: Panels are now also used to calculate the Ambient Fixture factor.
- Improved: Changed the order in which fixture modes are displayed, interpreting numbers correctly. (So mode '2 ch' comes before mode '11 ch'.)
- Bug Fix: The Cue ordering in the cue 'Save As..' dialog.
- Bug Fix: The rounding of the ' Feet & Inches' unit has been fixed. (Formatting to 2'-0" instead of 1'-12".)
- Several other small improvements and bug fixes.

Version 6.0.1706.21.

(21st Jun 2017)

- Bug Fix: Framing did not work correctly in the previous release of the 3D Visualizer.

Version 6.0.1706.15.

(15th Jun 2017)

- New: Added Plugin for import of 3DS files in Visualizer. (Pro & Lite)
- New: Added Plugin for import of OBJ files in Visualizer. (Pro & Lite)
- New: DMX controlled Layerstates. Similar to Camera Presets you can now set Layer State Presets, which you can select using a DMX channel.
- Improvements: Smoothing of Polygons in 3D Visualizer.
- Improvements: Loading/Importing Polygons speed improvements.
- Bug Fix: DWG Import: Fixed a problem with the unit. A unit of zero is now detected.
- Bug Fix: The VectorWorks Export plugin would sometimes export hidden classes.
- Bug Fix: Long line segments could crash the Model and ShowDesigner modules. (Usually from imported DWG files for example.)
- Bug Fix: The Visualizer could crash if an object has partial UV coordinates.
- Several other small improvements and bug fixes.

Version 6.0.1703.31.

(31st Mar 2017)

- Improvements: Added User/Standard entries to the Model, Fixture and Material sections in the Sidebar.
- Improvements: Changed code for polygons for optimization.
- Bug fix: 3D rotation of instruments in VectorWorks export plugin could be wrong.
- Bug fix: Circular copy converted the spacing incorrectly.
- Bug fix: multiple duplication sometimes did not update the Preview box.
- Bug fix: Manual zoom capabilities were not updated correctly.
- Bug fix: There were some errors in the color temperature calculation of fixture color calculations.
- Bug fix: Color matching in some LED-fixtures could go wrong.
- Bug fix: Assigning a Material to a Part could fail.

Version 6.0.1701.26.

(26th Jan 2017)

- Improvement [Pro]: The smoothing of polygons has improved in some cases.
- Improvement: The framing control will now always be square.
- Bug fix: [Pro] A new VectorWorks plugin for MSD is included, as the previous update did not contain the correct version.
- Bug fix: Some people experienced problems registering some parts of the new Sketchup import during installation, preventing the Sketchup import from working.
- Bug fix: The preview-box of the duplication operation was not updated when the last copy changed (Pan/Tilt for instance).
- Bug fix: Accessories (Scrollers) did not always work correctly, as the internal patch could be incorrect.
- Several other small improvements and bug fixes.

Version 6.0.1701.11.

(11th Jan 2017)

- New: Sketchup import 2017
(As Sketchup has stopped support for 32-bit platforms, we still install the 2016 version of Sketchup Import on 32-bit versions of Windows OS, but this means that you will not be able to import 2017 version models of Sketchup on 32-bit Windows platforms)
- Bug fix: The Search filter of the 3D Visualizer did not show (all) the matching fixtures.
- Bug fix: [Pro] The Render Client did not set the camera angle correctly for render files created by the 3D Visualizer module. (The render files are correct, but the Render Client did not handle the 'normal' camera mode correctly, so you can use the render files to render the images again correctly.)
- Bug fix: [Pro] The VectorWorks plugin for MSD contained an incorrect identifying string in its resources, sometimes preventing VectorWorks from 'seeing' the plugin when trying to add the plugin.
- Several other small improvements and bug fixes.

Version 6.0.1701.04.

(4th Jan 2017)

- Bug fix: Failing to load very large bitmaps could cause the scene not to load correctly or not load at all, causing a crash later on.
You will now get an error in the report that a texture could not be loaded or created, but the scene will load correctly.
- Several other small improvements and bug fixes.

Version 6.0.1612.21.

(21st Dec 2016)

- New: (Pro) New plugin for VectorWorks 2017

- Improvement: The Copy routine has been overhauled to more easily copy and keep copying (optionally with restraining on distance and along the axis).
- Improvement: Mousewheel can be used to zoom in the 'Look through Fixture' window.
- Bug fix: Improved the Sketchup import because the SkpImage was not imported correctly.
- Bug fix: Using the cursor-keys for Move/Rotate/Scale could cause problems.
- Bug fix: The Gel color (for conventional filter gels) was not always set correctly.
- Bug fix: Failing to load very large bitmaps could cause a crash.
- Bug fix: Sometimes selecting the External Driver was not possible.
- Several other small improvements and bug fixes.

Version 6.0.1611.04.

(4th Nov 2016)

- New: Added sACN driver with network card selection and choice of which senders to follow.
- New: 'Look through Fixture' option in the Operations menu.
When a Fixture is selected, this option will open a window where you can 'look though' the fixture to aim it and set its parameters to fine tune aim, zoom, etc.
- New: Move, Rotate and Scale operations now support the arrow keys.
In combination with the SHIFT key, the 'steps' of the keys will increase.
And the CTRL key in combination with the Rotate operations will rotate in steps of 45 degrees, making it easy to flip fixtures and objects to the right orientation.
- New: Managing (Importing and deleting) Materials in the SceneContents area in the SideBar
- Improvement: When using CIP Media connections you can now choose a preview size.
- Improvement: The number of visible DMX Parameters in the SideBar in increased.
- Improvement: Loading of Mesh objects has been improved (speed).
- Improvement: Color matching when RGBAW LED fixtures for example have an RGB control mode.
- Improvement: When working in a multi-view mode, clicking in a non-active view will only activate the view (but not pick) so you can easily change the active view without changing the selection. (Clicking in the active view will work as it always did.)
- Improvement: When working in a multi-view mode, you can use the mouse scroll wheel of the mouse in any of the views, without having to change the active view.
- Improvement: Fixtures that can have 2 prisms active at the same time are now supported.
- Bug fix: Move and Rotate operations now use the World axis/Object axis mode.
- Bug fix: Deleting objects from the SceneContents area in the SideBar failed.
- Bug fix: DMX-controlled panels with a virtual colorwheel override can now work correctly.
- Bug fix: After Fast-Switching to the 3D Visualizer module, the 'Save As...' did not work.
- Bug fix: Sometimes layers added in the ShowDesigner did not show up in the 3D Visualizer.
- Several other small improvements and bug fixes.

Version 6.0.1609.02.

(2nd Sep 2016)

- New: (Pro version only) Video can now be generated up to 4K resolution.
- New: It is now possible to generate a 360° video, so that (with the right playback software) you can look around (from the camera viewpoint) in the scene while playing the video. (The Video Settings window has an extra option called 'Movie Effect' where you can select '360 degrees' besides the default 'Normal' mode.)
- Improvement: The fixture libraries (version 6.0.1609.01. or newer) are scanned/loaded more quickly.
- Bug fix: Some light distributions of LED fixtures were not done correctly, and sometimes the light of LED fixtures were off when they were actually on due to an overflow (fixed now).
- Bug fix: Colors in effect wheels were ignored.
- Bug fix: If there were Audio Tracks in a scenefile, loading the file would not load this information.
- Several other small improvements and bug fixes.

Version 6.0.1608.04.

(4th Aug 2016)

- Bug fix: Loading scenes in the ShowDesigner could a crash when lthe scene contains fixtures that can change lenses using DMX.
- Several other small improvements and bug fixes.

Version 6.0.1607.21.

(21 Jul 2016)

- New: DWG / DXF Plugin in the 3D Visualizer module (*MSD Pro only*)
You can now directly import DWG (and DXF) files into the scene.
(You can find the Import plugin in 'File – Import' sub-menu.)
- Improved: Camera zoom in/out operations are handled better.
- Improved: Memory management by handling large arrays better for example.
- Bug fix: Explode function in ShowDesigner module handles Materials better than it used to.
- Bug fix: A bug in the 64-bit version of the RenderServer could cause it to crash in certain cases.
- Bug fix: Triangulation in DX11 engine failed in certain cases.
- Bug fix: Zoom angles were not adjusted if the lens system was changed using DMX.
- Several other small improvements and bug fixes.

Version 6.0.1603.25.

(21 Jul 2016)

- Bug Fix: The Copy operation of an assembly could go wrong, corrupting the copied assembly.
- Bug Fix: The indicator boxes of the multiple copy operation were no longer visible due to a change in the code.
- Several other small improvements and bug fixes.

Version 6.0.1603.22.

(21 Jul 2016)

- Improved: Performance of the graphics engine.
- Improved: Length of beams. (Sometimes the reach was too short.)
- Improved: Martin USB-DMX Box driver now works when Martin M-PC 3.50, Lightjockey 2.110.2 or later versions are installed on the same PC.
- Bug Fix: DMX Controlled focus did not update.
- Bug Fix: Auto-Save could stop functioning.
- Several other small improvements and bug fixes.

Version 6.0.1602.11.

(21 Jul 2016)

- Improved: Import of Sketchup 2016 files is now supported.
- Improved: VectorWorks 2016 plugin added.
- Bug Fix: 'Auto Save' could become active while the document was being loaded, which could cause a crash.
- Bug Fix: When changing scene files, MSD could crash.
- Bug Fix: MSD Compact would delete model objects that are used as Panel shape.
- Several other small improvements and bug fixes.

Version 6.0.1602.03.

(03 Feb 2016)

- Bug Fix: 'Auto Save' could crash if the folder where the program is trying to backup the scene does not exist.
- Bug Fix: A problem with IDs within Fixture blocks.
- Bug Fix: Document was not set to 'changed' when the Fast-Patch operation was used.
- Several other small improvements and bug fixes.

Version 6.0.1601.13.

(13 Jan 2016)

- Improved: Added mouse Scroll-Wheel support to the Time-Line.
- Bug Fix: A bug in DMX-Controlled Panels could corrupt memory when using these panels in a scene, causing a crash.
- Bug Fix: A bug could cause the Logo control (Preferences) to disappear when changing a scene and could also cause problems when cleaning up when closing down the program, sometimes causing a crash.
- Several other small improvements and bug fixes.

Version 6.0.1601.08.

(08 Jan 2016)

- Improved: Added mouse Scroll-Wheel support to the Time-Line.
- Bug Fix: Fixed the Array-Copy section in the Sidebar, which had a wrong header, causing the size of the dialog to be incorrect, and hiding the Apply and Cancel buttons.
- Bug Fix: Manual Gobos were not correct loaded when creating a render (raytrace) scene.
- Several other small improvements and bug fixes.

Version 6.0.1512.23.

(23 Dec 2015)

- Improved: The Fast NetRender Server now comes in 2 versions (32-bit and a 64-bit).

- The installer will detect what version OS is installed and based on that, the correct Fast NetRender Server is installed.
The 64-bit version can make better use of all the available memory.
- Improved: The 3D Visualizer and the Fast NetRender Server are using improved code, making the rendering (raytracing) faster.
- Improved: The 3D Visualizer now also has an Auto-Backup feature (like the ShowDesigner and Model modules).
You can easily switch it on and off in the Statusbar, and set the time interval in the Preferences. These settings can also be stored in Workspaces (Preferences).
When AutoBackup is enabled, a backup of the scene is stored in the MSD User Folder 'Other' as long as the programs runs, refreshing it every now and then (interval), and which is removed after the program closes.
- Improved: Setting the Manual Color (Gel) of a fixture now allows selection from a list of known gels (just like in a scroller accessory).
- Bug Fix: Fixed some issues when moving the application to another monitor, which could cause problem with LED fixtures.
- Bug Fix: Fixed some issues with Fixture Blocks (Materials, IDs, etc.).
- Bug Fix: Camera Animation in the timeline is now shown in the active viewport instead of the first viewport.
- Bug Fix: Rendering of conventional fixtures could have the lens in the wrong location.
- Bug Fix: Several Memory leaks were fixed.
- Several other small improvements and bug fixes.

Version 6.0.1512.01.

(01 Dec 2015)

- Improved: If a camera effects is active, it is used when creating a Render Preview of File.
- Improved: Material Edit section of Sidebar: The previews are buffered to improve performance.
- Bug Fix: LED Fixtured sometimes rendered (raytraced) with a wrong color, giving the color a distinct red shift.
- Bug Fix: Panels with a custom lens geometry could show the geometry wrong (missing parts).
- Several other small improvements and bug fixes.

Version 6.0.1511.11.

(11 Nov 2015)

- New: DMX interface for the Camera, so it can be operated from a console. (Information on the DMX layout of the camera interface can be found in this document: [Shortcuts-Mouse-CameraDMX.pdf](#).)
- Improved: Mouse scroll events are now handled by the control 'under' the mouse.
- Improved: SideBar
 - Added 'collapse all' button to the Sidebar header.
 - Changed 'open/close' arrow directions to be compatible with windows and other programs.
 - Rearranged Material Edit section, and added Previews/Tooltips for the images.
 - Less 'flickering' while using the SideBar.
 - Added animation to scroll an opening section into view.
 - Mouse wheel scroll can now be used to set the properties in the Sidebar.
 - Added an 'Shadows always' option to the 'Options' section of the Render Preview dialog.
- Bug Fix: Trailing 'Rubber banding' artifacts while moving an undocked SideBar.
- Bug Fix: Texture 'wrapping' was not set correctly when switching devices (monitors).
- Bug Fix: Fixed some other bugs that could occur during switching devices.
- Bug Fix: Entering a filter string that resulted in an empty list could hang the program.
- Bug Fix: Fixed some memory leaks.
- Bug Fix: Recording of a DMX Show could crash.
- Bug Fix: Material mask 'wrapping' was not done correctly.
- Bug Fix: Material assigned to the 'Default' part would ignore the lock-settings when rendering (raytracing).
- Several other small improvements and bug fixes.

In the document [Shortcuts-Mouse-CameraDMX.pdf](#) we have also included a list with the shortcut keys in the MSD 3D Visualizer module, and how the different camera operations can be used.

An M-Series camera profile which is called '**Camera Control**' can be found in the standard libraries (with '**MSD**' as manufacturer).

Version 6.0.1510.01.

(01 Oct 2015)

- Bug fix: Adding 2 new materials could create an endless loop, crashing the program.
- Bug fix: The program could hang if a video source could not be found or is invalid (or has zero length).
- Several other small improvements and bug fixes.

Version 6.0.1509.14.

(14 Sep 2015)

- Improved: Shortcut keys now also work (in most cases) if the focus is on the Sidebar.
- Changes: Updated the way the Camera operations on the middle and right mouse buttons work.
New Assignments :

	No key	Shift	Ctrl	Shift+Ctrl	Alt	Double-click
2D View/Middle	Move XY	Move XY	Move XY	Move F/B	Zoom	Full view
2D View/Right	Rect Zm	Move XY	Move XY	Move XY	Move F/B	Full view
3D View/Middle	Inspect	Move XY	Swivel	Move F/B	Zoom	Full view
3D View/Right	Rect Zm	Move XY	Swivel	Inspect new picked obj	Move F/B	Full view

- Bug fix: Intensity of Omnidirectional fixtures was incorrect (DirectX11).
- Bug fix: Fixed problem with Video Textures (DirectX9).
- Bug fix: Fixed bug which would inadvertently move the toolbar after opening a sub-menu.
- Bug fix: Renaming a material would not update the material related lists.
- Bug fix: Changing a material would update all objects using the material incorrectly. (Individual mapping was ignored.)
- Bug fix: Imported objects with texture coordinates would always use these coordinates (even when instructed not to).
- Bug fix: Single copy in a 2D window will set the 'missing' coordinate the same as the original (instead of zero).
- Several other small improvements and bug fixes.

Version 6.0.1507.01.

(01 Jul 2015)

- Bug fix: There was a problem with bulb fixtures in the DirectX11 engine, causing a wrong intensity, which was the same for all.
- Bug fix: Importing a fixture from an external library in the 3D Visualizer would crash the program.
- Several other small improvements and bug fixes.

Version 6.0.1506.26.

(26 Jun 2015)

- Improvement: Added filters to the Object list and Fixture list in the Library Contents section of the Sidebar.
- Improvement: Improved the feedback of the drivers status light:
 - **Red [DMX OFF]**: DMX Connection Disabled.
 - **Orange [DMX ON]**: Not receiving DMX.
 - **Green [DMX ON]**: Receiving DMX Data.
 - **Green [DMX ACT]**: Receiving DMX Changes. (If connection supports detection of changes.)
- Improvement: Array Copy switches off after apply. (Operation works once.)
- Improvement: Array Copy has a new 'advanced' option 'Select the copies', which (as the name suggest) selects the copies after the operation is applied. (This way you can directly group the original with the copies, or control them for example.)
- Bug fix: Fixed ambient lighting of the viewports.
- Bug fix: Dynamic objects (and their 'purple' helpers) were always visible, even if the layer they were on was turned off or the 'Show dynamic helpers' option was off.
- Several other small improvements and bug fixes.

Version 6.0.1505.29.

(29 May 2015)

- A number of bug fixes and maintenance of code.

Version 6.0.1505.11.

(11 May 2015)

- Improved: Added properties in the Sidebar to be able to change the PanTilt Swap, PanInvert and Tilt Invert.
- Bug fix: The 'Current Camera' media source did not work correctly.
- Bug fix: Projection on the backside of a (semi)transparent surface was not visible.
- Several other small improvements and bug fixes.

Version 6.0.1503.24.

(24 Mar 2015)

- Improved: The transparency of Effects is now determined by the color difference between a pixel and the background color (background color is determined by the upper left corner pixel), allowing for green-screen videos as well as black-background videos to be used.
- Improved: The default threshold values (low and high) for effects can be overwritten using the media command functions of the Video Controller 'fixture'.
- Improved: Improved accuracy of the shadows. (Sometimes the light went 'to far'.)
- Several other small improvements and bug fixes.

Version 6.0.1503.09.

(09 Mar 2015)

- Bug fix: At the very end of generating a video, the program could hang.
- Several other small improvements and bug fixes.

Version 6.0.1502.12.

(12 Feb 2015)

- Bug fix: A bug was found in the previous (removed) version 6.0.1502.04. of the 3D Visualizer. This bug could cause the program to hang during loading (in new optimization code). (This problem could occur if the scene contains Hoist Platforms.)

Version 6.0.1502.04.

(04 Feb 2015)

- Bug fix: A bug was found in the previous (removed) version 6.0.1502.02. of the 3D Visualizer. This bug could corrupt the scene during loading (in new optimization code).

If you have such scenes (problem scene, which was opened and saved in the 3D Visualizer version 6.0.150202), you can open and save it with this new version, and that should make the scene workable again. (This 'recovery' process may have replace corrupted assemblies with groups.)

Version 6.0.1502.02.

(02 Feb 2015)

- Improved: Some optimizations have been made to the internal structure to improve speed.
- Improved: Some code optimizations have been make to speed up the group/assembly operations on Fixtures.
- Bug fix: Unexplainable shadows in the center of the beam when the beam was hitting the base of the fixture have been fixed.
- Bug fix: Fixtures with (noticeable) leak light could have beams that started out larger than the lens diameter.
- Bug fix: Fixture IDs could be cleared.
- Bug fix: Changing zoom angle operations did not always update the view correctly. (For example while using the mouse scroll wheel, causing the grid to be displayed in the wrong place.)
- Bug fix: Improved handling of scenes when some Materials were not stored correctly due to an earlier bug. We now try to recover the Material where possible during loading of the scene file.
- Several other small improvements and bug fixes.

Version 6.0.1501.06.

(06 Jan 2015)

- Bug fix: Loading a scene while the 3D Visualizer has multiple views open could cause strange effects in the viewport(s).
- Bug fix: Creating a Render scene (while starting a Render Preview) could cause a crash with some panel type fixtures.
- Bug fix: The material library in a scene file was sometimes not saved correctly, which would cause a failure to load materials when loading the scene again in MSD.
- Several other small improvements and bug fixes.

Version 6.0.1412.19.

(19 Dec 2014)

- Updated: MSD 6 now supports Sketchup 2015 files.
- Bug fix: Undo / Redo could cause a crash and undetermined behavior.
- Several other small improvements and bug fixes.

Version 6.0.1412.16.

(16 Dec 2014)

- Bug fix: Fast Patch did not patch conventional fixtures.
- Bug fix: Fast Patch settings were not correctly initialized.
- Several other small improvements and bug fixes.

Version 6.0. 1411.26.

(26 Nov 2014)

- Improved: ArtNet drivers - Selection of network interfaces and better cooperability with other ArtNet users.
(In both the MSD 3D Visualizers internal ArtNet driver and the external ArtNet driver.)
- Several other small improvements and bug fixes.

Version 6.0.1411.13.

(13 Nov 2014)

- New: Added support for a new type of panel fixture, which will turn its lens towards the camera (sometimes called 'billboarding').
This can be especially useful for effects, always showing the effect video towards the camera, making the effect look less '2D' and more '3D'.
- New: The new Display Mode option called 'Lux Map' is now also available for the DirectX 9 Engine.
(Activating this option will show the illuminance in false color.)
- Bug fix: Intensity calculation of LED fixtures was incorrect, which could result in low output at short distances.
- Bug fix: Panel fixtures with a an override of the default lens shape did not show correctly.
- Bug fix: Initialization of the DirectX 11 engine could crash while detecting if the graphics card(s) support DirectX 11 (instead of presenting the user with the option to switch to the DirectX 9 engine).
- Several other small improvements and bug fixes.

Version 6.0.1411.07.

(07 Nov 2014)

- New: Added a new Display Mode option called 'Lux Map' [DirectX 11 Engine only].
(Activating this option will show the illuminance in false color.)
- Improved: Media mapping can now also be applied to a Group of fixtures, mapping the panels as one big panel.
- Several other small improvements and bug fixes.

Version 6.0.1410.24.

(24 Oct 2014)

- Improved: Added more commands to the Video/Effect playback, including a 'go to' command.
- Bug fix: Video recording did not work with the Video/Effect playback commands.
- Several other small improvements and bug fixes.

Version 6.0.1410.21.

(21 Oct 2014)

- New: Added support for DMX control of Video/Effect playback using a special 'controller' fixture.
- Bug fix: Transparent objects were not handled correctly, sometime 'occluding' other transparent objects.
- Bug fix: The Smoke animation could stop when moving window to second monitor.
- Several other small improvements and bug fixes.

Version 6.0.1410.09.

(09 Oct 2014)

- New: VectorWorks plugins for VectorWorks version 2015.
(Both 32-bit and 64-bit versions of the plugin are available.)
- New: Effect media source.
This is the same as a Video media source, but for the Effect, the transparency is set by the intensity of the color. This allows you to use videos of pyro etc (with a dark background) to simulate effects.
- Bug fix: The minimal camera front distance has changed from 1 cm to 25 cm. This fixes some issues with the depth buffer. (We also added a setting in the Camera section where you can tweak this value if necessary.)
- Several other small improvements and bug fixes.

Version 6.0.1410.03.

(03 Oct 2014)

- New: You can now create and apply license request and license update files directly from the MSD 3D Visualizer.
- Bug fix: The Pick and selection are visible again in the Scene Contents.
- Bug fix: Several memory leaks.
- Several other small improvements and bug fixes.

Version 6.0.1409.10.

(10 Sep 2014)

- Improvement: The DMX shows can now store 64 universes (was 32 universes).
- Bug fix: Compact could crash on certain scenes.
- Bug fix: Fixed a few memory leaks in the graphics engine(s).
- Bug fix: Fixed a problem with monitor switching where the scene window turned black.
- Several other small improvements and bug fixes.

Version 6.0.1409.01.

(01 Sep 2014)

- Bug fix: Fixed a problem in de Media servers (CITP) in the DirectX11 engine.
- Bug fix: Fixed a memory leak in the DirectX11 engine which sometimes occurred using LED Panels.
- Bug fix: Fixed a problem in replacing Fixture blocks.
- Bug fix: Fixtures on layer where visibility is turned off did not update from DMX.
- Several other small improvements and bug fixes.

Version 6.0.1408.15.

(15 Aug 2014)

- Bug fix: Workspaces did not work correctly.
Due to change in code from MSD 5 to MSD 6, a bug was introduced which corrupts the stored data for the workspaces, which causes problems when restoring them.
The bug has been fixed, but because the stored workspaces have corrupted data, the list of workspaces is cleared and you need to build a new list of workspaces, sorry for that.
- Bug fix: Several issues with Fixture Blocks have been fixed:
 - Patch could not be changed on Fixture Blocks.
 - Camera Inspect operation, with a picked Fixture Block inspected around (0,0,0) instead of insertion point.
 - Fixture Blocks could not be inserted in the Visualizer.
 - Auto patching did not work correctly.
- Several other small improvements and bug fixes.

Version 6.0.1408.04.

(04 Aug 2014)

- Changed: The 3D Visualizer build-in ArtNet driver has been improved to get better connection with M-Series software.
- Changed: All MSD programs, drivers and installers now have a digital signature from Lighthouse Holland Sales BV.
- Several other small improvements and bug fixes.

Version 6.0.1407.21.

(21 Jul 2014)

- Changed: M-PC and MSD have both been updated.
This means that for M-PC version 3.40 (from V3.40.358.0 and up) you will need at least MSD 6 version 6.0.1407.21. (or up) to get a correct DMX connection.
- Bug fix: Shutter blades were very jagged.
- Bug fix: Video panels had an incorrect offset. (Paper).
- Several other small improvements and bug fixes.

Version 6.0.1407.10.

(10 Jul 2014)

- Improved: (*MSD 6 Pro*) Pick and selection are cleared when you start creating a video.
- Correction: (*MSD 6 Lite*) Some DMX connections were not included in previous installs.
- Bug fix: Mirrored objects were not handled correctly for lighting.
- Bug fix: Objects close to a fixture would not cast shadow.
- Bug fix: Fixed a bug which could cast light behind the fixture.
- Several other small improvements and bug fixes.

Version 6.0.1407.04.

(04 Jul 2014)

- Bug fix: 3D Visualizer hanging at the end of the timeline.
- Bug fix: Issues with the online help file.
- Several other small improvements and bug fixes.

Version 6.0.1406.18.

(18 Jun 2014)

- Bug fix: DMX Controlled LED Panels/Strips did not always map the leds to the right channels.

Version 6.0.1406.12.

(12 Jun 2014)

- Updated: The grandMA driver has been updated. For more information, please see the [grandMA DMX Connection](#) forum topic.
- Bug fix: The update check in the 3D Visualizer module did not work correctly.
- Several other small improvements and bug fixes.

Version 6.0.1406.05.

(05 Jun 2014)

- Updated: The Sketchup import of the Modeler has been updated to be able to import models made with the 2014 version.
- Bug fix: DMX Controlled LED Panels/Strips did not always map the leds to the right channels (in the DirectX11 Engine).
- Bug fix: Other minor changes to the initialisation of the DirectX11 Graphics Engine.
- Several other small improvements and bug fixes.

Version 6.0.1405.23.

(23 May 2014)

- Bug fix: The beams (smoke) are visible again.

Version 6.0.1405.22.

(22 May 2014)

- Improved: M-PC DMX data can now again be received without having to make a connection from within M-PC.
- Bug fix: Video mapping on objects used as lens of panel fixtures was calculated incorrectly.

Version 6.0.1405.21.

(21 May 2014)

- Bug fix: VectorWorks plugins should now work again.
- Bug fix: The license problems of the plugins have been fixed.

Version 6.0.1405.14.

(14 May 2014)

- Bug fix: The M-PC driver only supported 2 universes when connected to a free M-PC version, now it supports 64 universes again for visualizing.