Strand

SOFTWARE RELEASE NOTES

NEO OPERATING SYSTEM (PUBLIC RELEASE)			
Released Version:	3.13.0.138	Release Date:	September 2021
Previous Version:	3.12.0.71	Release Date:	March 2020

SUBJECT

NEO Operating System, version 3.13.0.138

PRODUCTS

NEO Console
NEO Playback Controller
NEO PC
NEO Compact 10 Console
NEO Compact 10 PC Wing

INTRODUCTION

Strand Lighting has released a new version of software recommended for all consoles and servers listed above. Version 3.13.0.138 of the NEO Operating System is free-of-charge and available for immediate download from strandlighting.com/global/products/neo-software

These release notes describe the new features, enhancements and bug fixes that have been implemented between versions 3.12.0.71 and 3.13.0.138

COMPATIBILITY

No compatibility issues known from 3.12.0.71.
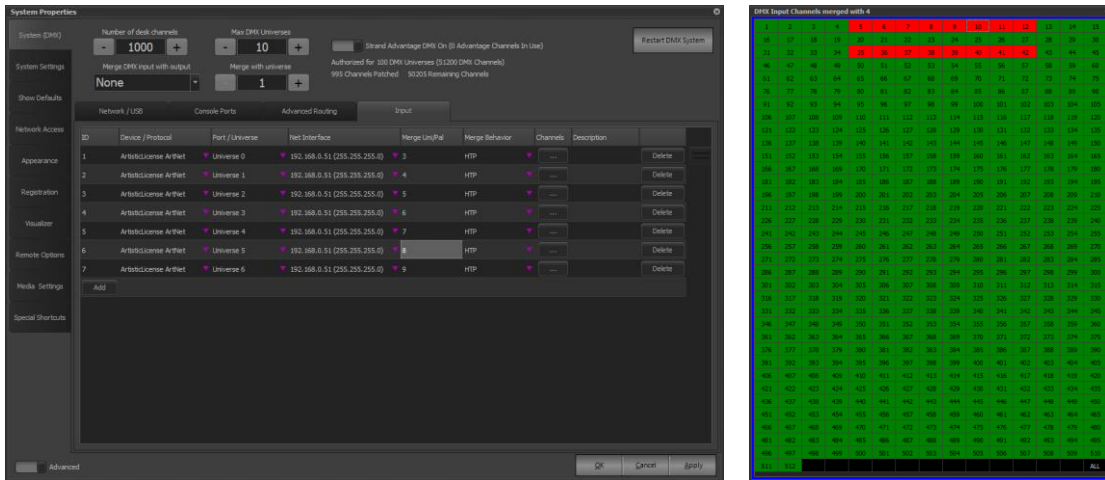
UPDATE INSTRUCTIONS

Please ensure that backups are taken before proceeding with the update, and carefully follow the instructions available at the end of this document.

For assistance, please contact Strand Lighting technical support at 1.800.4.STRAND or 1.214.647.7880.

NEW FEATURES
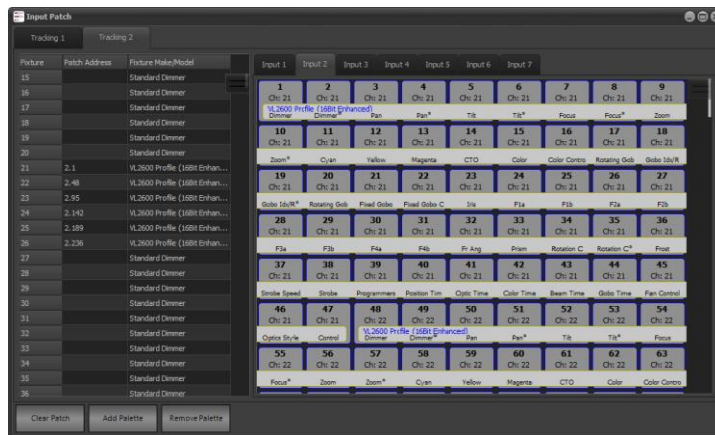
Multi universe DMX input merging

The system is now able to merge multiple incoming DMX streams into the output. The merging of the DMX can be done either HTP, Build or ITP (input takes precedence). DMX input merging can also be mixed between different protocols.

Within a merged universe each DMX channel can be enabled and disabled so that specific parts of the universe can be used.

Tracking Palettes

Tracking Palettes are related to the new DMX input feature. A tracking palette works the same as any other palette in the system however the attribute data associated with the palette is determined by incoming DMX data. Each Tracking Palette has an associated input patch to define the mapping between the received DMX data and the desk channels in the system.
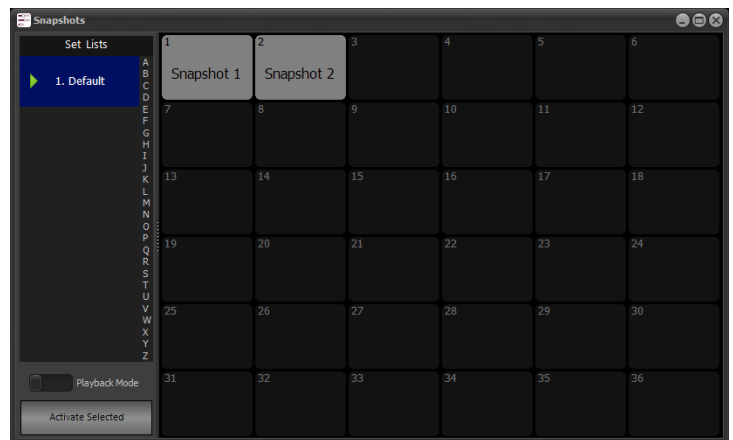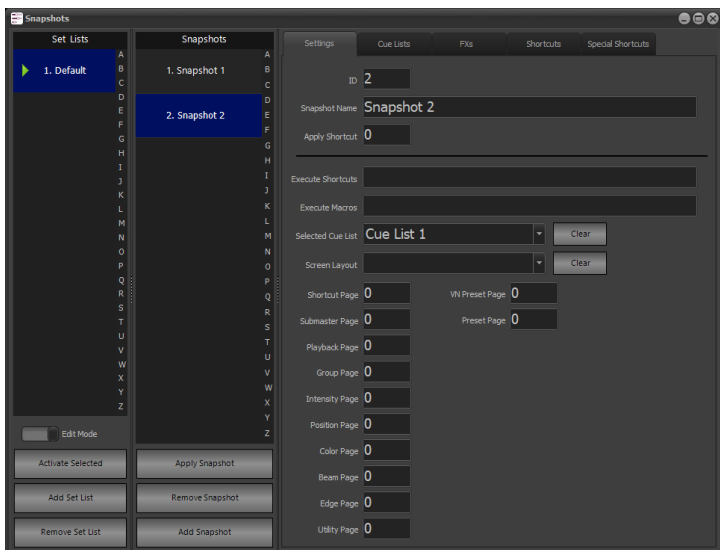
When the Tracking Palette is applied to a channel (either live or in cue playback) then the live display will show the attributes assigned to that palette and the ML view will show the corresponding attributes values that are generated by DMX input.

Snapshots

Snapshots are a way to capture many playback settings so that they can be easily recalled at any time.

A snapshot includes the following settings:

- Currently selected cue list
- Screen layout
- Current selected pages (submasters, shortcuts, palettes etc.)
- Cue List playback, submaster and shortcut assignments
- FX Playback submaster and shortcut assignments
- Playback button functions (Compact 10)
- Shortcuts
- Shortcut page settings

Snapshots can be grouped into "Set Lists" to manage grouping snapshots together. A "Set List" is a collection of snapshots and snapshots can easily be copied between Set Lists.

When not manually editing snapshots a simple button interface is available. Each snapshot can also be assigned to shortcut for quick recall.

The following command syntax has been added to support the new Snapshots feature:

- RECORD SNAPSHOT {number} [TEXT {snapshot name}] [SC {shortcut number}] - Create a new snapshot and capture the current system assignments. Snapshot number is optional.

- UPDATE SNAPSHOT {number} - Update an existing snapshot with the current system assignments.
- SNAPSHOT {number} - Apply the settings of the specified snapshot.
- SNAPSHOT NEXT - Apply the next logical snapshot in the list. If no snapshot has previously been applied, then the first will be applied.
- SNAPSHOT LAST - Apply the previous logical snapshot.
- SNAPSHOT {number} TEXT {description} - Set the name/description of the specified snapshot.
- SNAPSHOT {number} SC {number} - Set the shortcut of the specified snapshot. The shortcut can be used to apply the snapshot.
- SETLIST {number} - Make the specified set list active. All snapshot commands will apply to the active set list.
- SETLIST {number} TEXT {description} - Set the name/description of the specified set list.
- SETLIST {number} SC {number} - Set the shortcut of the specified set list.

Relay Command Line

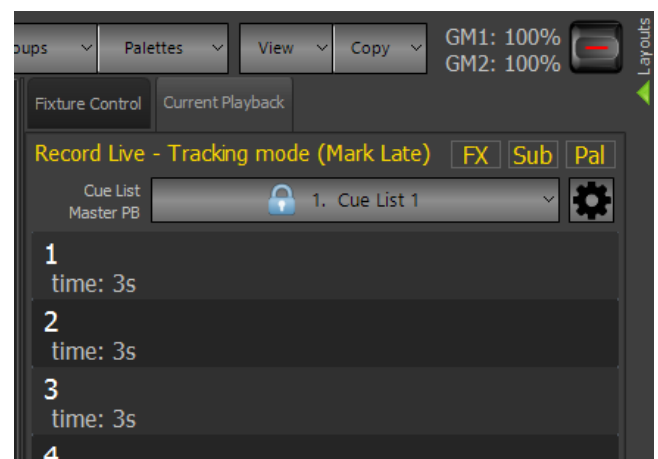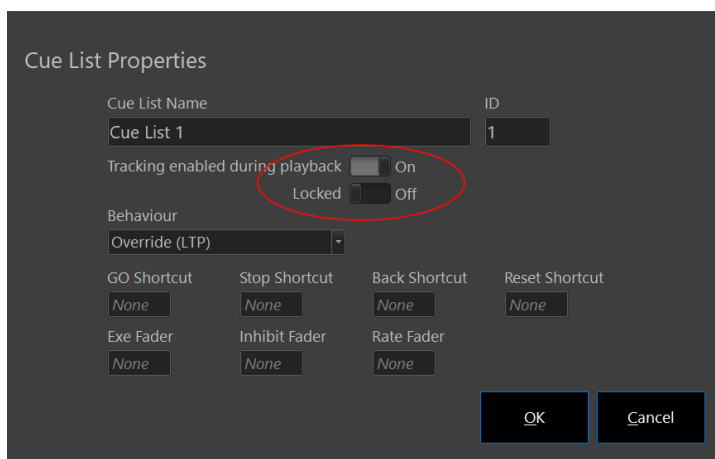Relays can now be controlled from the command line using the following syntax:

- {channel list} RELAY ON
- {channel list} RELAY OFF

Relays are defined in the patch screen and can also be automatically managed by the system.

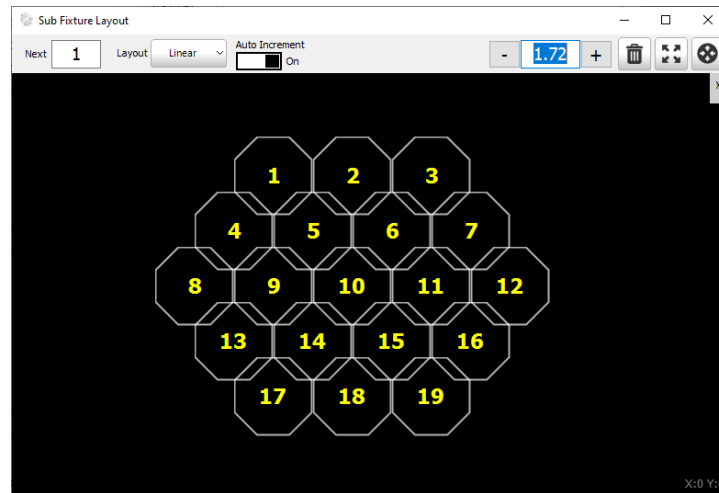"All Relays On" and "All Relays Off" have been added to the "Tools & macros" tab of the select pull down.

Lock Cue List

For users who do not want to use the full user security feature a lock feature has been added to cue lists. This prevents a cue list from being accidentally changed. A locked cue list cannot be recorded to or updated.
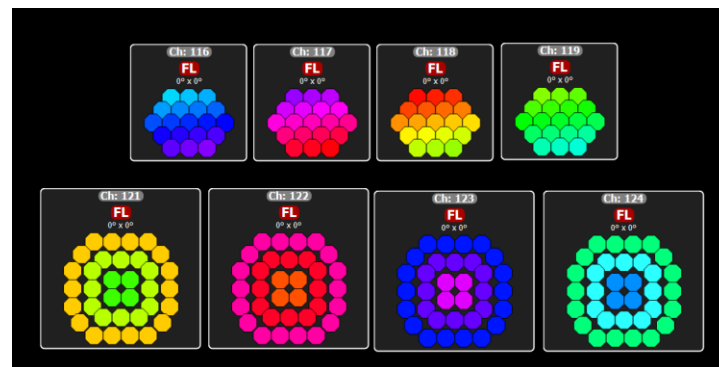
New Sub Fixture Layouts

Previously the layout of sub fixtures in the fixture editor was limited to a ridged grid. This made it difficult to accurately describe the layout of nonlinear fixtures (circles etc). The new sub fixture editor in the fixture editor has a free form editor that allows the cells (sub fixtures) to be placed anywhere in a 2D space.

Multi-cell fixtures on the magic sheet

When a multi-cell (sub fixtures) fixture is placed on the magic sheet as a block (not symbol) then the defined layout will be shown. The layout defined in the fixture editor will be displayed with the corresponding sub fixture color represented.
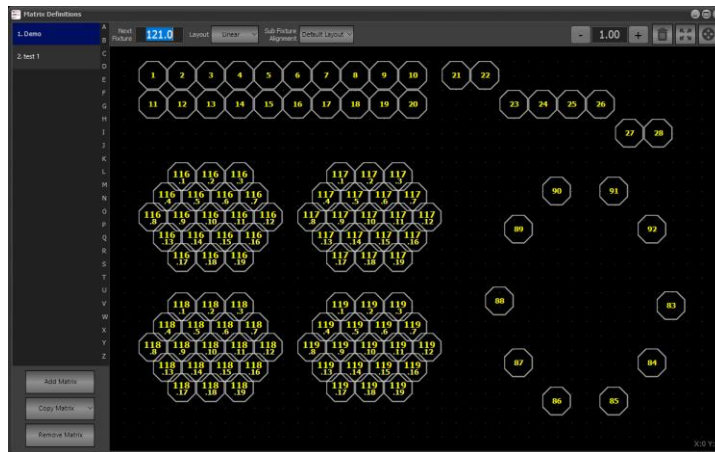
Each of the cells can be clicked on to select or deselect the sub fixtures. The layout can also be rotated to represent the orientation that matches how the fixture is hung.

New matrix definition editor

The matrix editor will no longer confine you to a fixed grid when setting up how fixtures are placed. This new system does not require the user to define the number of rows and columns before placing fixtures.

Several tools are available to layout fixtures in grid, lines and circles. If a multi cell fixture is placed onto the matrix then the system can automatically layout the cells as defined in the fixture editor, or the sub fixtures can be placed independently.
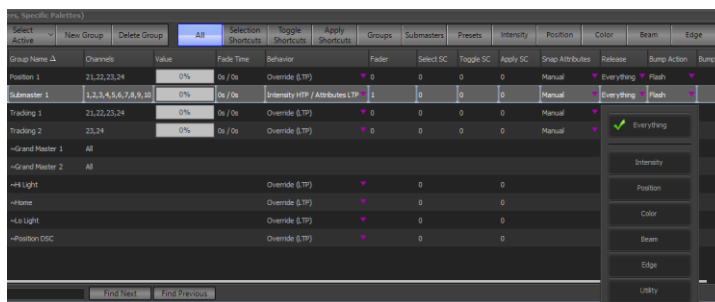

New Group/Submaster Options

The snap attributes feature (snap off zero / snap at full) can now be specified per attribute family.

When a submaster is set to zero the option to release control can now be defined per family. This allows some families of attributes to remain captured by the submaster while other are released.
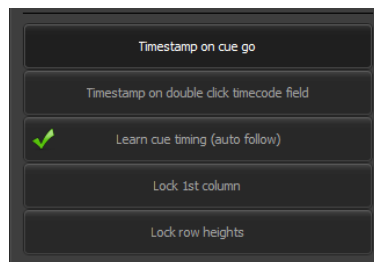
Submasters and groups now support split fade times.

Learn Cue Timing

An option to "Learn cue timing (auto follow)" has been added to the cue list window to automatically set the follow time of cues using the GO function. This can also be temporally initiated by holding down the FOLLOW key.

When this option is enabled the time between GOs will be automatically stored into the "Follow Time" field of the previous cue and the trigger set to "Auto Follow".
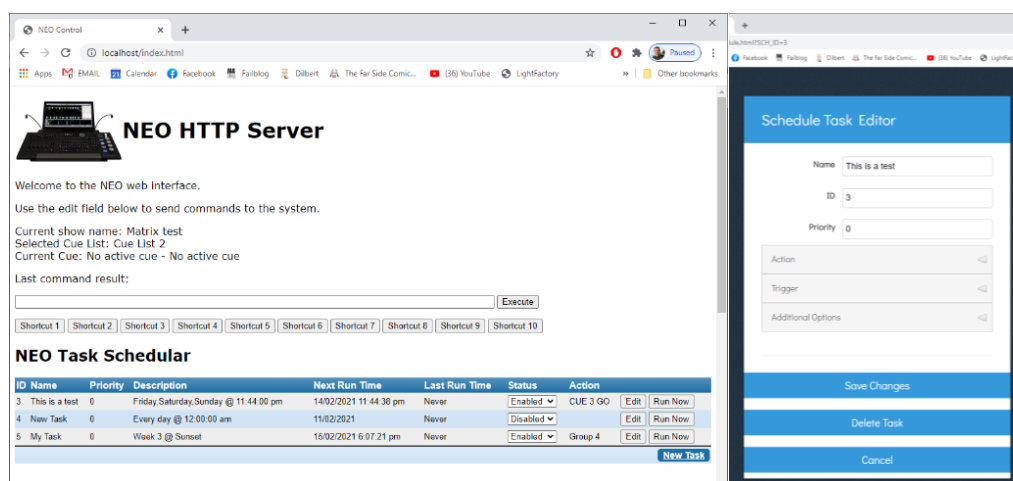

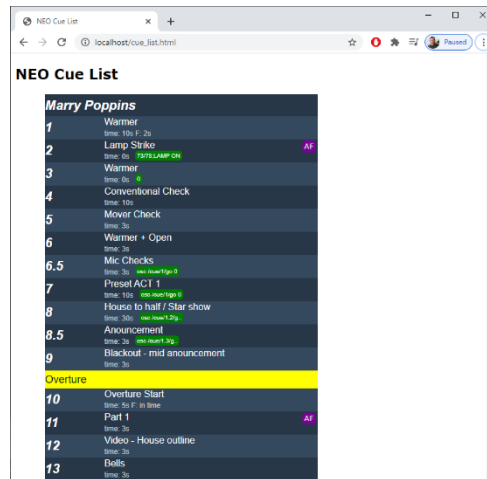
Web Server Enhancements

Task Scheduler Editor

The task scheduler can now be accessed from the web server interface. The software will automatically add the schedule table to a page with the tag %SCHEDULE% on an empty line in the HTML.

The resulting scheduled task table will show the details of when the next time a task will run, when it was last run and what action it is set to perform. The tasks can also be enabled and disabled from this interface. A "Run Now" button will execute the task immediately and an "Edit" button can be clicked to open the task editor.
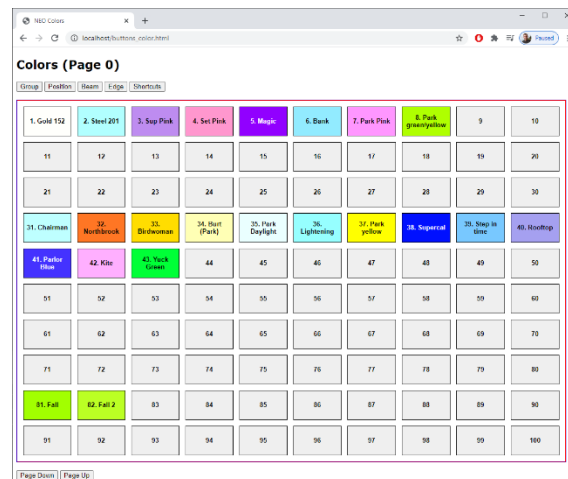
Cue Lists

A new tag (%CUELIST #%) can be added to a web page served by the software to display an interactive cue list. The cue list number can be specified after the "CUELIST" keyword to identify what cue list is displayed. Clicking on a cue in the resulting cue list display will run that cue.

Button Arrays

A new set of tags (%BUTTON_ARRAY_SHORTCUTS%, %BUTTON_ARRAY_GROUP%, %BUTTON_ARRAY_POSITION% etc) can be added to a web page to display a button array for various palette types and shortcuts.

An example of all the above web server improvements has been added to the default install. When the HTTP server is enabled on a system then this default set of web pages is loaded into the "HTTP Home" folder of the users Documents folder.
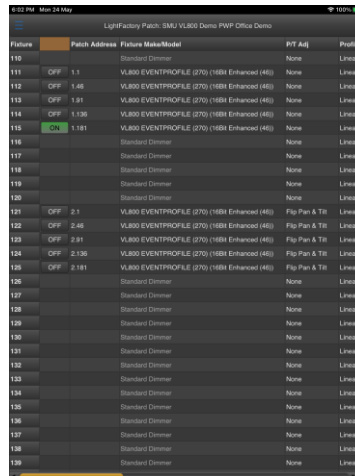
Support for HTML style sheets has also been added to the HTTP server.

Mobile & Desktop Patch Tool

An external application available on iOS, Android, Mac and PC will soon be available to do offline show patching. This tool will retrieve the patch from the system over a network connection and then store a copy of the patch locally. The app does not need to be connected to NEO to make changes to the data. The patch information can be saved locally to remove the requirement of connecting to the system each time the user wants to edit it.

Once the changes have been finished the patch can be pushed back to NEO and updated live. A new option in the "Network settings" tab of the System Properties will allow or prevent patch changes from the Patch Tool.

A patched channel can also be turned on or off (live control) from the interface. This does not require the app to be connected to the system but does require it to be running on the same network and UDP messaging enabled in the software.

ENHANCEMENTS AND BUG FIXES

- The C10 "Select" tab will now automatically select the "fixtures" page if no groups exist in the system.
- Added an encoder color key to the bottom of the C10 file dialog screen to map the encoder function.
- The "Active Sel Mode" and "Inclusive Mode" soft keys on C10 will now show with a red background when enabled.
- Added the FX library "Mirror" switch to the C10 screen.
- Added the on-screen keyboard button to the "Info" panel in the C10 patch display.
- Improved the save dialog in the fixture editor to avoid it appearing stuck during the save process.
- The RDM soft key on C10 will now show with a red background when either in discovery or RDM is enabled.
- Minor visual changes to the cue properties pop up from the side bar.
- Implemented date limited licensing.
- Added the ability to send raw data bytes over TCP connections. The CONNECT and CONNECTTO commands can now be prefixed with HEX. e.g., SEND HEX 00 01 02 03
- Added buttons to the patch display on C10 to show and hide the on-screen keyboard.
- RECORD CUE NEXT will now better calculate the next logical cue to be recorded depending on the location of the live cue.
- Added Christmas and New Year's Day to the include and exclude settings for scheduled tasks.
- SHIFT + GOTO will now immediately assert the current live cue.
- Holding down the GOTO key and pressing a playback key will assert the live cue in that playback.
- Added the ability to send raw data bytes over TCP connections. The CONNECT and CONNECTTO commands can now be prefixed with HEX. e.g., SEND HEX 00 01 02 03
- Groups added to the magic sheet will now show an indicator when in edit mode and selected to differentiate them from shortcut buttons.
- Added security option to the web server. Username and Password can be set in the Network Settings tab of the System Properties.
- Added the ability to copy a snapshot to another set list to the right click menu when the snapshot window is in edit mode.
- When running as a tracking backup Vision.Net will now be disabled on start-up and re-enabled if the backup takes over.
- When the tracking backup takes over it will now force a disconnect from the main to prevent executing commands sent from the main.
- New detail cue report now correctly shows position and color information.
- If there is less than 10Gb of space left on the drive during the fixture library install the system will now remove old library backups.
- Added option for the Compact 10 to set the shortcut range that the user keys will link to.
- Added SHIFT + encoder movement to change splitter positions in the live, blind, group and cue list window.

- When holding down the shift key to adjust the split positions the encoder screen will now show the function.
- Added a button to the Compact 10 to open the 7" screen as a window for testing under NEO PC.
- Double clicking on a "Set List" will allow the user to edit the name and shortcut in the UI.
- Added hotkey "shift + F6" to open the snapshot window.
- New snapshot editor requires edit security privileges to open.
- Added windows border to the control panel on the full-size console.
- New matrix editor now can specify the angle for the first fixture in a circle.
- Added Cue, Copy and Paste options to the new matrix editor. Top cut/copy/paste parts of one matrix to another.
- Added a button on the virtual console screens to switch between the full-size NEO and C10.
- Added option to the Network tab of the System Properties to allow/disallow patch changes from remotes.
- Group and Cue list detail converted from Form to Frame to resolve drawing issues and improve performance.
- If a profile is assigned to a channel and the purpose field is not being used, then the profile name will populate this field to identify this in the live display.
- Added check that the software is included in the Windows firewall "allowed application" list. If the software is not whitelisted, then a message will be shown in the command history and a message displayed when attempting to open a remote show.
- The FADER virtual key has been added to the C10 Macro window.
- Added support to get and set patch data via the TCP bulk transfer interface.
- Pressing the LIVE button on screen will now re-sync the selected and active cue as it does with the LIVE button on the console.
- Pressing RELEASE+GROUP will no longer auto complete as this requires the user to add a group number at the end of the command.
- The "record group" dialog now as an option to store the new group as a preset palette type.
- New rotation feature on multi cell fixtures now supports cell selection.
- System will broadcast clock time over the network. When connecting to a remote system a warning will be displayed if the system clocks are not in sync.
- When assigning a submaster to a cue list or FX the button color will now show red for inhibit, purple for FXs and white for execution.
- When creating a new dynamic color attribute in the fixture editor the default and highlight fields were not copied from the previous attribute.
- The GOTO command was not working with the new CUELST/CUE syntax.
- Possible crash pressing an arrow key on the console when there is no active control assigned.
- Fixed minor spec compliance issue with receiving OSC messages that do not have any arguments listed.
- New matrix editor will now allow for a cell to be edited (single cell selection only).

- The SUB PAGE and SC PAGE commands will now apply to the focused window when using multiple shortcuts and submaster windows. If no shortcut or submaster window has focus, then it will apply to all of them.

INCLUDED LIBRARIES & FIRMWARE

Fixture Library	DMX Board (Full card)	DMX Board (Mini card)	Encoder Board
Rev 88 **UPDATED**	v1.30.101*	v1.36.105*	v1.7.2
Playback Board	Program Board	Wing Control	Wing Display
v1.22.3	v1.22.2	v1.1.13	v1.1.8 **UPDATED**
Rack Display	Compact 10 PC Wing	TIVA MCU	
v.1.1.0	v1.0.20 **UPDATED**	v1.0.18	

* Note: DMX Boards contain firmware for both DMX and MIDI/SMPTE. DMX firmware is the first two numbers (eg v1.30.xx or v1.36.xx) while the MIDI/SMPTE firmware is the last number (eg vX.XX.101 or vX.XX.105).

KNOWN ISSUES

No known issues.

SOFTWARE UPDATE INSTRUCTIONS

INTRODUCTION

Please familiarize yourself with these update instructions before proceeding. Instructions must be followed accurately and in order. Deviations or omissions could render the controller unusable and require it to be returned to the factory for recovery.

If any difficulties are encountered at any point, or you are in doubt on any of the instructions below, then do not proceed any further with the update and contact Strand Lighting for assistance.

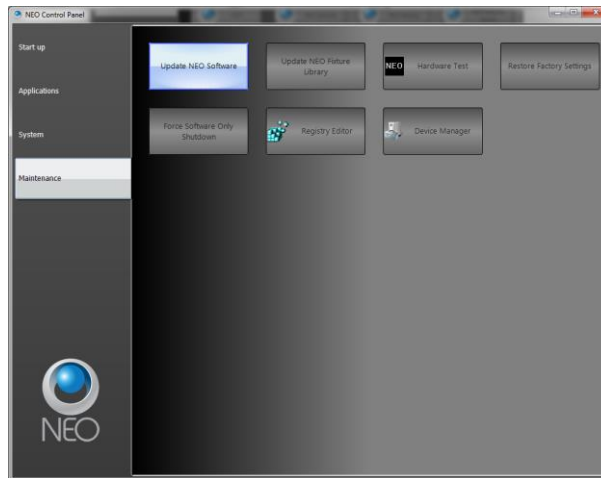Please ensure that backups are taken before proceeding with the update.

When performing a software update it is important to ensure that the power supply to your controller is stable and reliable. Power loss during a software update can render your controller unusable.
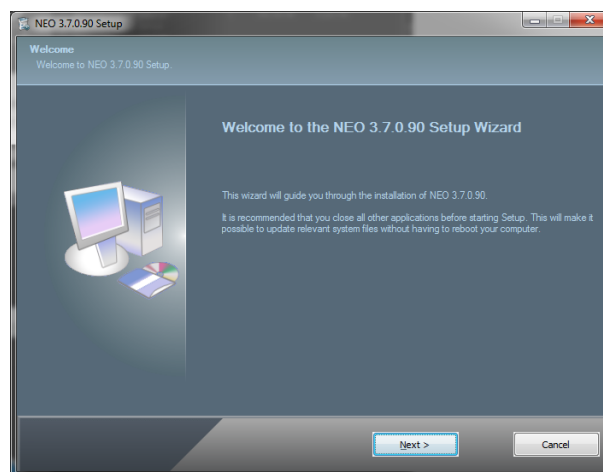
SOFTWARE UPDATE PROCEDURE

1. Download the software from the Strand Lighting website (file name example: NeoConsole_Setup_3_X_X_XX.exe) - strandlighting.com/global/products/neo-software

2. Copy the software onto a USB key.

3. Plug the USB key into the console.

4. On the console, open the Control Panel (More > Control Panel)

5. Go to the Maintenance environment and select "Update NEO Software". The updated will look for the latest version of the software both on the hard drive first and then any USB key. Confirm that it is the right version. If it's not the right version, then check the hard drive and remove any old version that exists or correct the version that is on the inserted USB key.

6. On the console, the User Account Control dialogue box will appear.

7. Confirm the program name is the correct version of software and click "Yes".

8. The NEO software installation screen will appear. Click "Next" and follow all prompts to install the software.

9. The console will need to reboot to complete the installation.

Once all the software is up to date, you can get on with enjoying the new features in the desk software. Strand Lighting recommend printing these Release Notes and having them with you when operating the desk, as some functionality may have changed which is explained in these notes.