NEO LIGHTING
CONTROL CONSOLE

USER MANUAL ADDENDUM

VERSION 3.10
“COLOR TABLE” VIEW MODE

Accessed from the view menu, the “Color Table” is designed for simple color changing fixtures. It presents a minimal view of the system channels with each shown as a colored block. If the channel does not support color changing, then the intensity is represented by a scale between black and white.

PROFILE FX CLUSTERING

A new field has been added to profile FXs to cluster channels together when applying any of the stagger functions. The cluster groups together the specified number of channels and will treat these as a single fixture. For example, if the channel list is 1 THRU 10 and the cluster is set to 2 then any stagger applied will operate with the following groupings (1,2),(3,4),(5,6),(7,8),(9,10).
• If the CLUSTER keyword is used when selecting channels then this information is remembered and applied to the FX library when these are run.
• The FX library control will now show an additional wheel for adjusting this parameter. This setting can be changed using the intensity wheel on the console.

QUICK SELECT BAR
Accessed from the “View” menu, “Display Options” is the ability to turn on the Quick selection bar. This will appear on the left of the main screen to provide easy access to selecting fixtures by type, position, purpose, and color. Each of the groupings can be expanded or collapsed by pressing on the heading.

At the bottom of the quick select bar is an option to “Auto filter”. When this is turned on the main live channel display will automatically filter its view to show only the selection.

SENDING UDP MESSAGE
From the command line UDP messages can now be broadcast onto the network. There are 2 versions of this command:

• SEND UDP {port number} {message}
• SEND UDP HEX {port number} {##} {##} {##}...

The first will send a text message via UDP broadcast. The message is sent as ASCII up to 255 characters in length.

The second will send raw 8bit bytes of data via UDP broadcast. Each byte is entered as a 2 character hex value(00-FF) separated by spaces, e.g. SEND UDP HEX 3100 00 01 0A C8 FF
NEW TOOLS ADDED TO SELECTION SHORTCUTS

**FIXTURE TYPE**
A new tab has been added the selection shortcut window to provide a selection tool for fixture types.

**FRAMES AND GOBOS**
Unlike the other tabs in this window the “Frames” tab is not used to select fixtures but rather provide a simple tool to apply any gobo or color frame in the system. The fixtures you want to apply the frame to must already be selected when using this tool.
Clear Other Gobo Wheels
When this option is turned on any adjacent wheels to the one being used will be cleared to their open position.

Find Closest Gobo Match
If the gobo selected is not available in the fixtures being applied to the software will attempt to find the closest match. It will look at each gobo on all wheels and select the one that closely matches the pattern of the gobo.

ENCODER CONTROL OF WINDOW
If no fixtures are selected and no other contextual control is being used (e.g. fan) then the encoders will now provide the most logical control over the view. For example in the live display, the first wheel will scroll the cue list in the sidebar, the second will zoom the channel display, the third will scroll the ML view and the 4th pan this view.

VIRTUAL POSITION PALETTE
Virtual palettes are a way to apply a palette to a fixture that has not yet had information stored. Previously this has primarily been used with color palettes where the software is able to map the stored color of one fixture to another by knowing the color model used by the destination fixture.

Virtual position palettes work is much the same way with some additional information needing to be provided. Once virtual position palettes are setup the user can apply any position palette to any moving fixture and the software will calculate the expected pan and tilt information to match the real-world stage position.

There are two settings required to use virtual position palettes.
- System Properties → Show Defaults → Other → “Lighting rig trim height”. This is a global setting that will define the overall height that your lighting fixtures are set at. You can enter this value in either Meters or Feet and the corresponding value will be calculated.
- Record all moving fixtures into the special group called “Position DSC” at their downstage center position. This information gives the software a reference point for your stage that all other positions are calculated from. Point all fixtures to this downstage center position and then on the command line enter “UPDATE POSITION DSC”.

Once this setup has been done any recorded position palette can be applied to any other moving fixture in the system.

NOTE: Virtual position palettes will only work within 360 degrees of pan. If the source palette is stored with pan outside of this range the system is unlikely to be able to calculate the correct position.
HOLD CHANGES

A new output control option has been added to the “Park” menu called “Hold changes”. This option will toggle the “Hold Changes” mode. When this mode is active all live control (red) will no longer output to the DMX system. All changes will continue to be shown on screen normally but will not affect the output on stage. Cues, Submasters and FXs will continue to output normally.

This mode is known as “Live Blind” on some consoles.

This mode can also be toggled by holding down the LIVE key on the console and pressing BLIND.

When “Hold Changes” mode is active an indicator above the sidebar will flash (red/yellow).

The master fade time can be used to apply smooth transitions in and out of this mode. When toggled the channels will fade between their real output state and the “held” output state over the time set.

FIXTURE ATTRIBUTE DEFAULTS

All fixture attributes have default values that are defined in the fixture profile. When nothing is controlling an attribute, the default is used as the output state.

These default values can now be overridden for each fixture in the patch to provide specific defaults as necessary. A new column in the patch window called “Defaults” has been added. This field will list any attributes that have been adjusted from the fixture profile. Clicking on this field will open the “Default Adjustment” panel.
Any values that have been adjusted will appear in yellow. Values that remain defined by the fixture profile will show as a light grey.

On the right of this window is a simple palette chooser that can be used to set the default to the values stored in the palette. At the top right of this panel is a button labeled “Home Palette”. Click on this to assign the information stored in the special “Home” palette.

**NOTE:** Virtual palettes cannot be applied using this tool. To use a palette the fixture selected must have stored data.

**NOTE:** Attribute defaults do not reference palettes. The palette tool is used to make assigning the correct values easier however if the palette is updated the attribute default will no reflect the change.

**SIDEBAR CUE LIST UP/DOWN PROGRESS**

When running cues with split fade times the sidebar will now show separate progress indicators for the up and down time.

“**TAP TEMPO” ADDED TO CUE TRIGGER**

Cues can now set to trigger from the tap tempo engine by setting the trigger field in the cue list window.

**NEW OPEN AND SAVE SHOW DIALOG**

The open and save dialogs have been completely redesigned to provide one unified location for all file-based operations.

Many of the functions in the main “Options” menu has been moved into the open or save dialog to simplify operations. The “Open File” operation (for example) provides access to opening standard show files, importing from a show, opening a packed show file, importing ASCII shows and restoring from a backup. Tabs down the left of the dialog are used to select the type of file you want to open. A special tab at the top labeled “New Show” will provide access to any show templates that have been stored.
The “Save File…” option can be used for saving a standard show file, a packed show (all settings and media files) and to store a show as a template for use when creating a new show.

In both the open and save dialogs the “Browse” option can be selected at any time to open a traditional windows file dialog and browse the entire file tree.
CLOUD STORAGE
In addition to the new open and save dialogs shown above the system can now directly store any show file in either Microsoft OneDrive, Google Drive or Dropbox cloud services. The console does not need to have any of these services installed.

The first time any of these services are accessed a pop-up online form will ask the user to give permission to access the drive. This will only be requested the first time the system is accessed.

IMPROVED MACRO VARIABLE ASSIGNMENT
Macro variables can now assign values from channels or submasters using the following syntax;
{variable name} = CHANNEL({number})
{variable name} = SUB({submaster number})
e.g. MY_CHANNEL_LEVEL = CHANNEL(5)

CURRENT CUE NUMBER INDICATOR
To the left of the command line is the command line mode indicator (Live, Blind, Patch or Group). This will now also show the current active cue number for the selected cue list.

PLAY-HEAD SCRUBBER IN THE VISUAL TIMECODE EDITOR
The main console wheel can now be used to scrub the play-head in the visual timecode editor when the media is paused. Moving the wheel will move the position of the paused position in 1-second increments. Holding down the shift key will move the play-head by 1 frame.
DESIGNERS COLOR PICKER

More and more in designer & programmer environments, the designer wants to be able to choose their own colors without having to relay their thoughts to the programmer. For this, we have created an independent color picker that can be run on any system connected to the network and is dedicated to applying colors to the selected fixtures.

This new application can be found in the NEO control panel or the Windows start menu.

PRESETS

A new default palette type labeled “Presets” has been added to the system. Presets will by default record all attributes except intensity and can be considered a global palette for all attribute families. A unique feature of the “preset” palette type is its support for nesting of other palettes. This means that a preset can reference other palettes for attribute data. If a preset is recorded into a cue the cue will reference the preset and the preset may reference other palettes.

NOTE: A preset cannot reference another preset.

This nested behavior is shown most clearly in the ML view where the > symbol will show the reference link.

On the NEO console SHIFT + SUB will add the keyword PRESET to the command line.

When updating a cue, a new option labeled “update palettes nested in presets” is available. If this is turned on, then the system will update the nested palette data with the changes made. This will keep the original cue structure and the change will propagate to all cues that reference this palette. If this option is turned off, then the preset will be updated to hold raw data and the link to the palette will be broken.
SUBMASTER PALETTE TYPE

Previously submasters were stored in the system as Groups. To help eliminate conflicts a configuration option allowed submasters to have an offset on their ID. This meant that submaster 1 would (by default) be stored as a group with its ID set to 1001.

In the latest version, this has been changed so that submasters have their own palette type. This means that both group 1 and submaster 1 can both have an ID of 1. The submaster offset has been removed as it is no longer necessary.

IMPROVED TRANSITIONING WITH HUE BASED FXS

Hue based profile effects will now correctly transition in and out of cues if a fade time is set. Previously Hue based FXs would start abruptly regardless of the fade specified. This relates to profile and library FXs that use the “Hue” attribute.

SELECT DARK MOVES

A new selection tool has been added to the “Select Active” menu labeled “Select dark moves”. This will select all channels with attributes moving in the current live or blind cue that does not have intensity. The resulting selection will exclude any changes resulting from marking.

SELECT REDUNDANT DATA

A new selection tool has been added to the “Select Active” menu labeled “Select channels with redundant data”. This will select all channels in the current live or blind cue that have instructions redundant to the previous tracked state.

IMPROVED CONTROL OVER MATRICES IN THE MAGIC SHEET

When a matrix is added to the magic sheet the user can now select individual cells or groups of cells directly on the sheet. Using the same click or press used in any of the grid views will select or deselect the channel or subfixture associated with the matrix cell.

Use the “Clear Sel” button below the matrix to un-select all channels and sub fixtures in the matrix or use “Sel All” to select all channels and subfixtures.
SIMPLE TRUSS OPTION ADDED TO THE MAGIC SHEET

A default object of simple box truss has been added to the “Misc” tab in the magic sheet editor. Use the “Add truss” button to add a single stick of truss. When adding the truss you will be prompted to enter the length required.

CUELIST COMMAND

A new base keyword “CUELIST” has been added for referring cue list via their newly exposed ID. The following command syntax is now valid.

- CUELIST {number} CUE... any valid cue command. The CUE command will operate on the specified cue list.
- CUELIST {number} GO/STOP/BACK/RESET
- CUELIST {number} RECORD... any valid cue recording command. The RECORD command will operate on the specified cue list.
- CUELIST {number} UPDATE... any valid cue updating command. The UPDATE command will operate on the specified cue list.
- CUELIST {number} GOTO {cue number}
- CUELIST {number} LOAD {cue number}
- RECORD CUELIST {number} CUE... any valid record command. The RECORD command will operate on the specified cue list.
- UPDATE CUELIST {number} CUE... any valid update command. The UPDATE command will operate on the specified cue list.

SHIFT + CUE on the console will now add CUELIST to the command line where appropriate.
IMPROVED ACCESS TO LAYOUTS

An ID field has been added to all window layouts. The layout manager provides access to changing the ID of any of the layouts.

The window layout quick access will no longer populate sequentially but rather use the new ID field for its location. While window layouts can have any ID number the quick access will only display the first 16*.

* The actual number of layouts displayed in the quick access bar will depend on the screen resolution. On a 1080p screen, the system will display 16.

Right-clicking (or long press) on any of the valid layouts will result in a popup menu that allows layouts to be deleted or moved. Selecting “Move” will change the cursor to a drop icon. Click on any empty cell to move the selected layout. To cancel the move operating click on the original cell.