

JMAZ[®]

REGULATOR



Daslight 5

user manual

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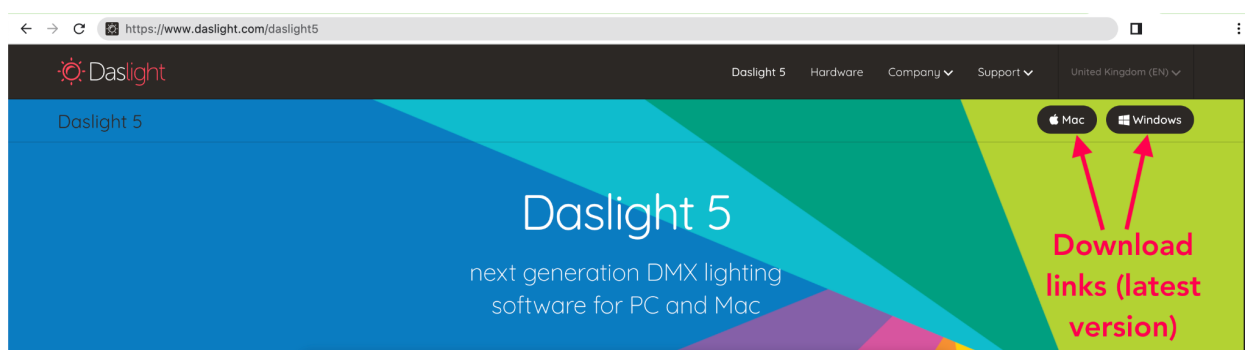
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1. Quick start

1.1. Installing the software

Downloading

Thank you for checking out Daslight 5! The quick start topics contain all the information you need to start using the software in less than 1 hour. The manual then proceeds to explain the functionality in depth. The full software version can be downloaded from our website: [daslight.com/daslight5](https://www.daslight.com/daslight5).



Requirements

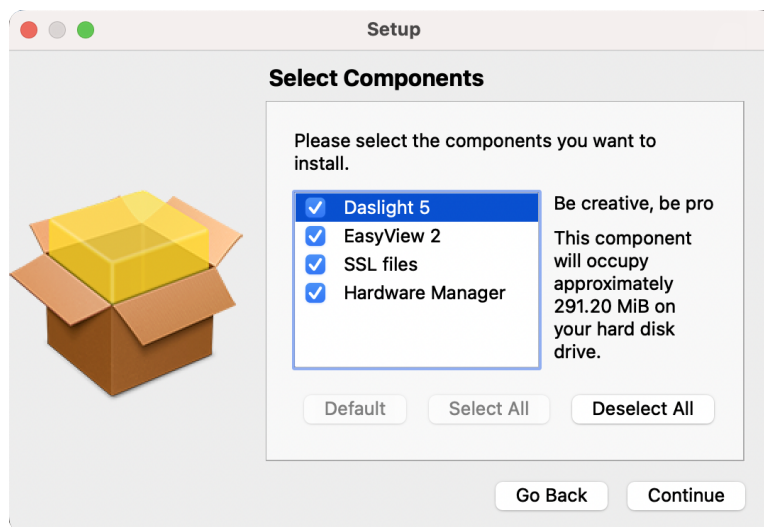
We now write the minimum requirements next to the download link at [daslight.com/download](https://www.daslight.com/download)

Installation

Open the downloaded setup .DMG (Mac) or .EXE (PC) and follow the wizard to install the software. During the installation process, you will have the option to install the following components:

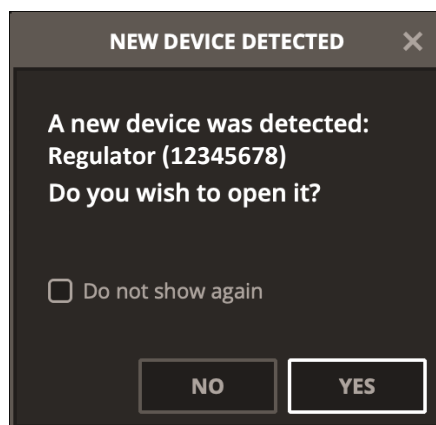
- Daslight 5 - the main lighting controller software.
- Easy View 2 - a real-time 3D visualizer allowing you to see your lights and effects whilst programming.
- SSL Files - the full library of fixture profiles (SSL files).
- Hardware Manager - the tool used to manage your DMX interface (update firmware, test the DMX output etc...).

We recommend that you install all of these options.



Connecting your device

When connecting a device to Daslight, you should see a 'New Device Detected' message pop up on your screen. This will state the device name and serial number and ask whether you want to open it. Selecting 'Yes' will automatically connect your device to Daslight 5, allowing you to start sending DMX output instantly. If you select 'No' the device will not connect automatically. You can also set this up/manage your device(s) through the Settings window.



1.2. Adding lighting fixtures

Further information can be found in section 3- [‘Setup’](#).

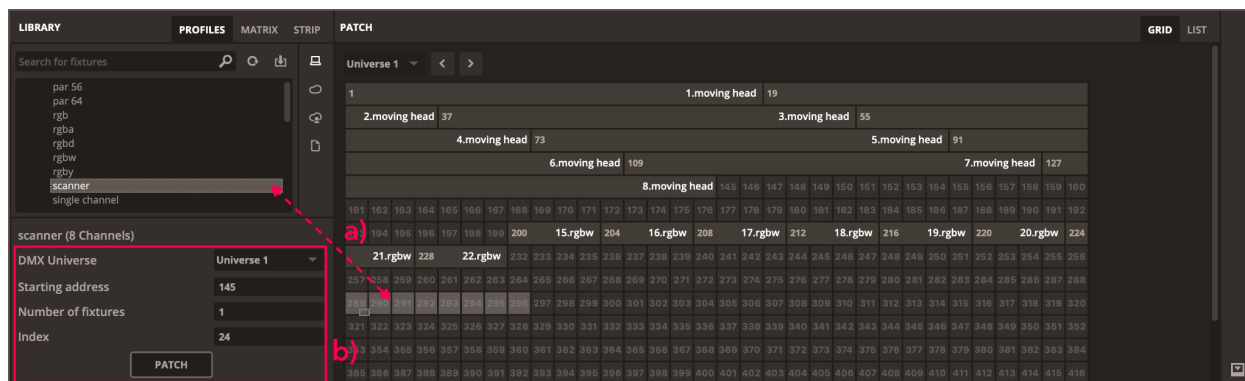
Fixture profiles

Every light used in Daslight has its own profile. This is called a Fixture Profile or an SSL profile. The profile contains all the information about the lighting fixture (for example, which channel controls the Color, Dimmer etc...). If your fixture profile is not available, you can create it yourself using our online Profile Builder website: profile.nicolaudiegroupp.com. Alternatively, you can request a profile to be built via our website.

Patching fixtures

To add a lighting fixture to your show:

1. Navigate to the Setup screen.
2. Select your desired fixture profile from the list.
3. Patch in the fixture(s) by either:
 - a. Drag and drop the fixture to the desired Universe/channel address.
 - b. Use the patch options (DMX Universe, Start Address, Number of Fixtures, Index) to set up your fixture(s), and then press the ‘Patch’ button.

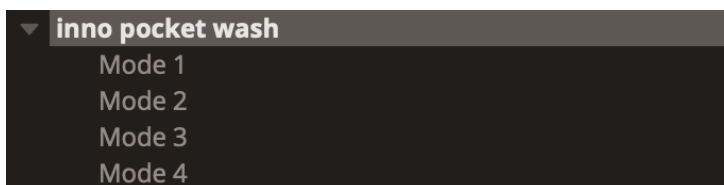


Fixture mode/address

Each lighting fixture has a unique address. This is so Daslight knows which fixture it's controlling. In the example below, "moving head" has an address of 1 and takes up channels 1 - 18. An address is set on the actual lighting fixture with a digital display.

1	1.moving head																	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

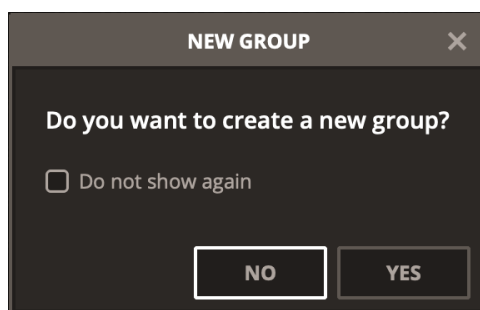
Some fixtures will contain multiple 'Modes', this can be selected when choosing the fixture model from the Library (see example fixture below). These modes usually have a different channel layout which either limits/expands the amount of control you can have over the fixture. For example, a fixture might have a 3 Channel mode, then an 8 Channel mode, then a 12 Channel mode. Generally speaking, the more channels a mode has, the more functionality it will have- however this will come at the expense of taking up more space within your DMX Universe.



Fixture groups & selections

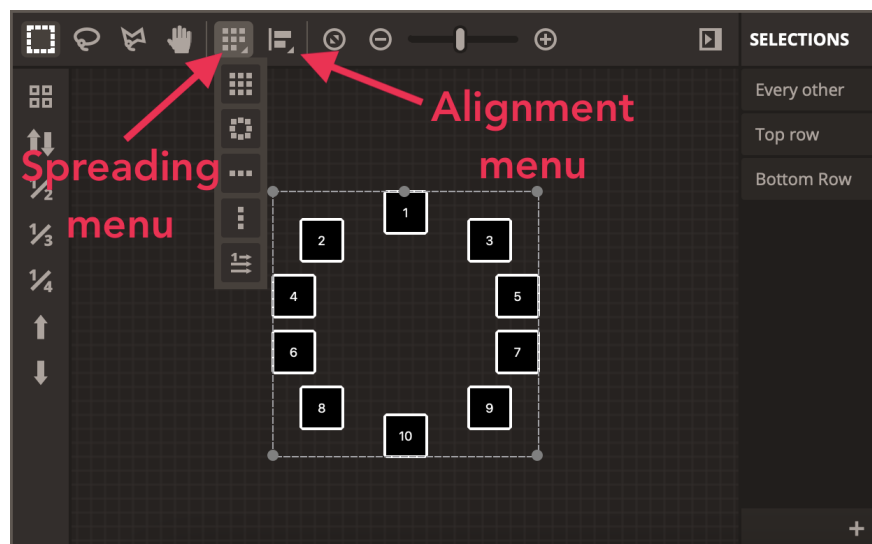
You can now assign multiple types of fixtures to the same group. When patching a fixture, you will be asked if you want to 'create a new group'. Selecting 'Yes' will assign the fixture into a new group, selecting 'No' will assign the fixture to the currently selected group.

You may also create 'selections' within a selected group, which is useful for quick selection. A selection also stores the fixture index allowing several groups to be made with different index orders for different effect looks. To create a selection, select the fixtures you wish to include within the group and click the "+" icon to the bottom right of the 2D view window.



Arranging your fixtures

When in the Setup screen, you can arrange the positions of your fixtures in the 2D view window. This can be done using the selection tools, the spreading menu, or simply dragging and dropping the fixtures.



1.3. Controlling your lights

Faders & Features

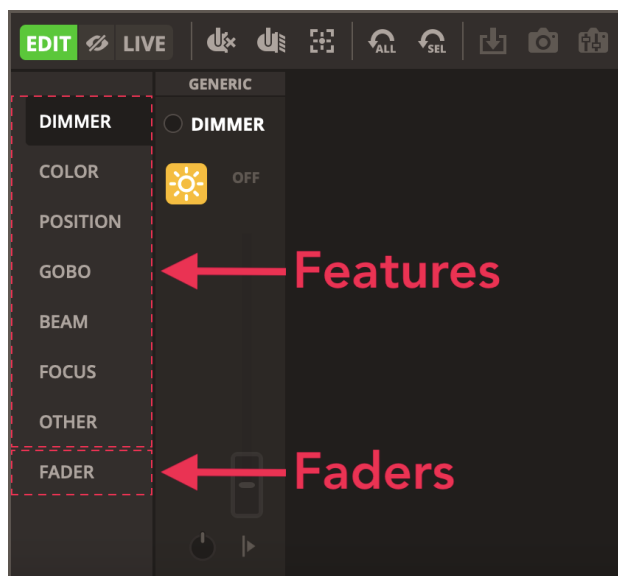
Lighting fixtures can be controlled either by the features or by the faders. To begin with, be sure a scene is selected, then select the fixtures which you wish to control. You can only select fixtures that are in the current active group, so be sure that you are in the correct group or have 'All' selected. You can use the 'Turn beam on' button at the top of the faders window to open the dimmer and set any other channels required to see the light beam (e.g. shutter, iris etc). There are two slightly different ways of controlling your lights, one is known as 'Features' and the other known as 'Faders'.

'Features' are accessed within the Dimmer, Color, Position, Gobo, Beam, Focus and Other tabs. You will see a mixture of controls including: Buttons, which will allow you to jump to a preset (i.e. a particular Gobo or Colour in a colour wheel). Faders, which will allow you to control linear presets (i.e. the rate of a Strobe). As well as an XY grid for pan/tilt control, and a colour picker for colour mixing fixtures.

The 'Faders' can be found in the 'Faders' tab. This will show the full range of channels set within the fixture profile in order. Here, you can see the full DMX fader range of 0 - 255 for each channel. Right clicking on the icon at the top of the channel will allow you to see the full list of presets for that particular channel.

Each channel can be turned ON and OFF by clicking the circle at the top of the fader. If a channel is OFF, it will not be used in the scene. For example: if you have Scenes A and B controlling one fixture, where the Dimmer channel is set to 255 on Scene A, but Scene B has the Dimmer channel set to

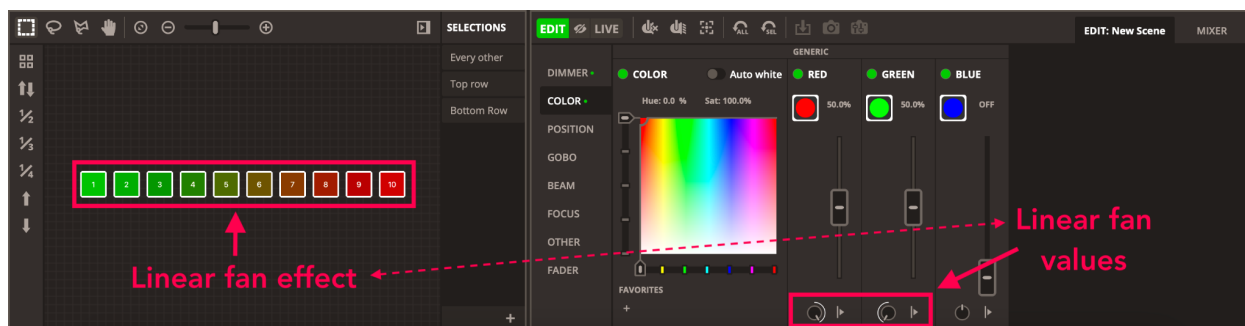
OFF- the Dimmer will be unaffected when Scene B is triggered, and will remain at the value set by Scene A. However- if Scene B has the Dimmer channel turned ON- the Dimmer channel will be overridden by Scene B from the value previously set by Scene A.



Creating a linear fan

In addition to setting fixed values with the 'features', it's also possible to set a range of values across a selection of fixtures. For example, a selection of moving fixtures can be set to fan out in different positions. To create a Linear Fan, see the fan value and type that appears below relevant 'features' sliders. The fan will be arranged based on the fan type, fixture index selection, and the fan value.

There are two fan types - 'fan from start', which will set the effect in ascending/descending order based on the fixture index and fan value. The second fan type is 'fan from centre', which will set the effect to start in the centre and fan out in both directions, or start on the outside and fan inward towards the centre based on the fixture index.



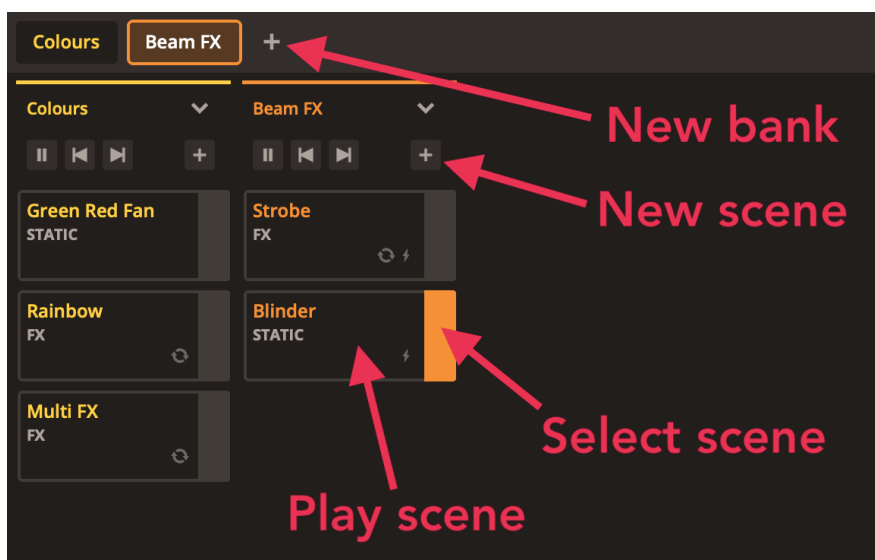
1.4. Creating scenes

Further information can be found in section 4- [‘Control \(programming\)’](#).

Scenes and banks

All scenes are arranged into ‘Banks’ in Daslight 5. By default, 1 scene can play at a time in each bank. Banks are designed to be stacked, for example there may be a group for colour effects, a group for movement effects and a group for strobe effects etc. To create a new bank you can press the ‘+’ button at the top of the screen, just below the Setup, Control and Touch tabs.

To create a new scene within a bank, you can press the ‘+’ button on the bank controls section. By default, any new scene will be a ‘Static’ scene. To edit/select a scene, you can click the tall rectangle on the right side of the scene button.



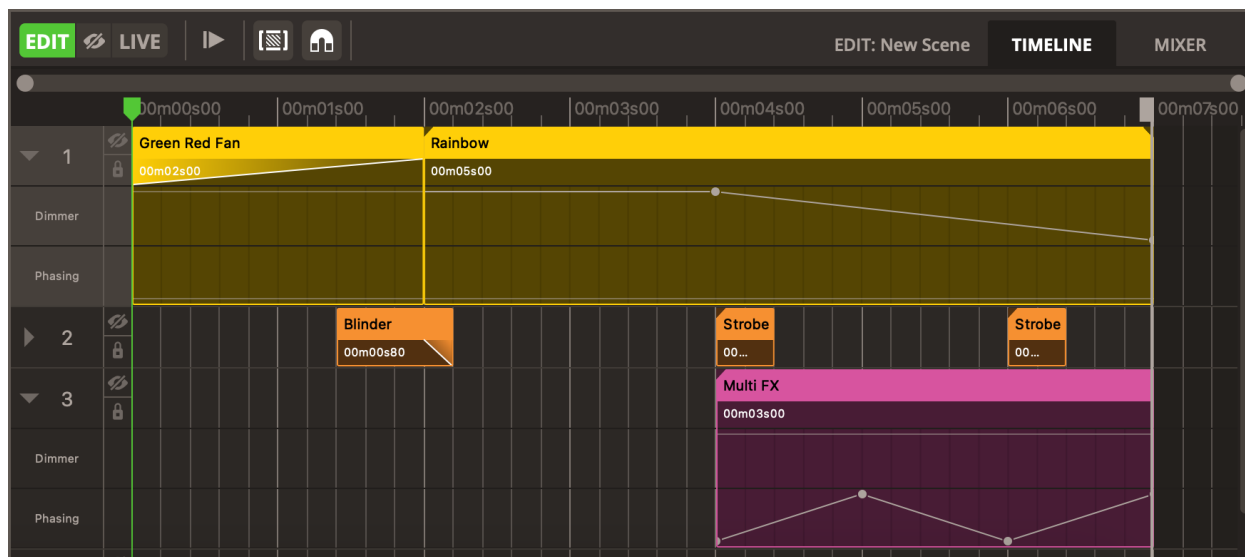
Generating effects

Once you have selected a scene to edit, you can load an effect into it using the scene type options on the right of the screen. Each scene type will have a distinct effect and will come with a different set of options/settings to create the desired effect. A full list of each scene type, and how to use them, can be found in section 4.2. [‘Creating scenes - Scene Types’](#).



Super Scenes

A Super Scene works slightly differently to all of the other scene types. When you create a Super Scene, you will see a timeline view in the bottom right corner of the screen instead of the usual Features/Faders display. Within this timeline, you can import other scenes, as well as audio files to create a complex light show with very precise synchronisation possibilities. A Super Scene has a timeline which plays from left to right, with stacks of scenes layered from top to bottom called 'Tracks'. You can add new scenes or audio files into the timeline by simply dragging & dropping them in, or by right clicking on an empty section of a track, then pressing 'Insert > Insert scene/Insert audio'. Further information on Super Scenes can be found in section 4.3. ['Creating scenes - Super Scenes'](#).

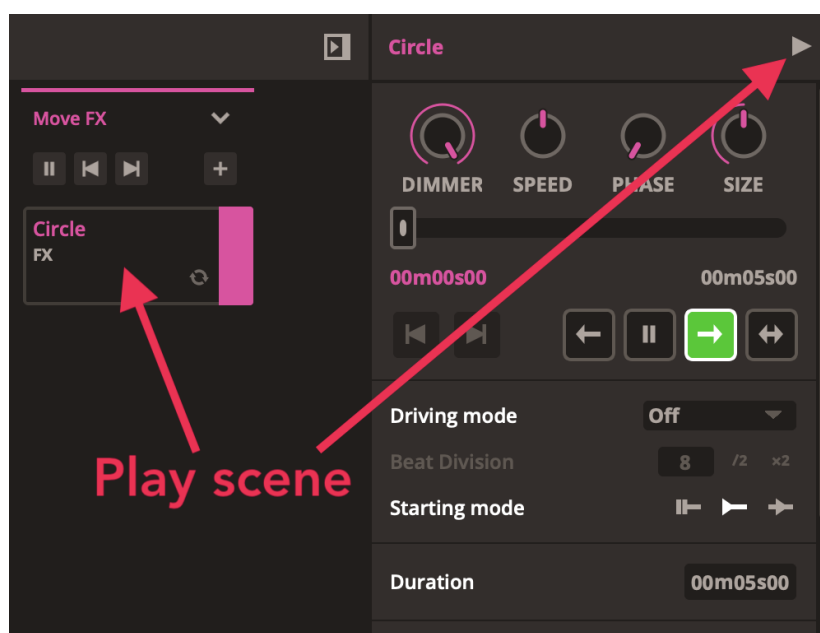


1.5. Live control

Further information can be found in section 5 '[Control \(live\)](#)'.

Playing scenes

The most basic way a scene can be triggered is by left clicking on the wide rectangle section of the button. You can also play the selected scene using the 'Play scene' button found at the top right corner of the scenes editing window. Once a scene is playing you can use the 'Start the next scene' or 'Start the previous scene' buttons to skip between the scenes in the bank.



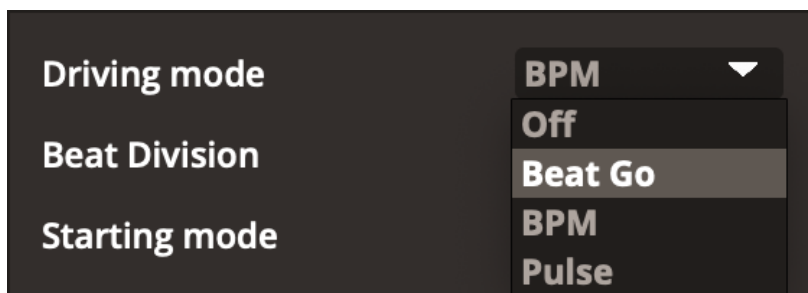
Sound to light & BPM synchronisation

In the Properties tab of your scene, you will find all of your synchronisation options. The 'Driving Mode' setting will allow you to choose how you want your scene to play. The options are as follows:

- **Off** (default): The scene will play back according to the set Duration.
- **BeatGO**: The scene will play according to the Duration, however the playback slider now has beat divisions which can be skipped to using the BeatGO, or Previous/Next Division buttons. The number of divisions can be set in the Beat Division section (you can press '/2' to half, or 'x2' to double the number of divisions).
- **BPM**: The scene will play according to the BPM of the project. The playback slider will now show beat divisions which can be skipped to using the Previous/Next Division buttons. The

number of divisions can be set in the Beat Division section (you can press ‘/2’ to half, or ‘x2’ to double the number of divisions).

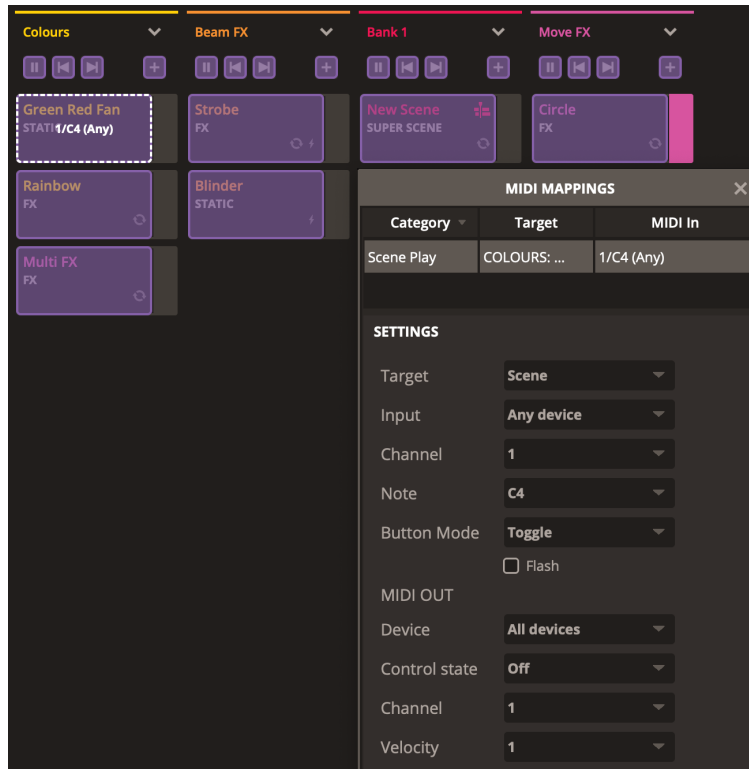
- **Pulse:** The scene will play according to the Duration, however the effect will skip to the next beat division whenever the audio input peaks over the threshold (set with the Pulse slider at the top right of the screen). The number of divisions can be set in the Beat Division section (you can press ‘/2’ to half, or ‘x2’ to double the number of divisions). To enable this, you will need to set your audio input settings in the Settings window.



Mapping options

Scenes, faders, buttons and dials can all be mapped from the Daslight UI to various forms of hardware. These options include MIDI mapping, Keyboard (computer) mapping, DMX input mapping, Dry contact ports mapping, OSC mapping. The final option is Touch mapping, which will allow you to map functions internally to Daslight ‘Touch’ screen (more information on this can be found in section 6. [Touch](#)). Each type of mapping will work slightly differently, and provide different options for customisation, however the process to create a mapping is very similar amongst all options:

1. Select the type of mapping you want to create. You can choose Keyboard, MIDI and Touch mapping in the top right corner of the screen, or from the full list of mapping types via the ‘Mappings’ dropdown menu in the toolbar.
2. Select a function (scene, fader, button or dial) as highlighted by the coloured overlay.
3. Trigger the relevant control that you want to map the function to (i.e. a fader on your MIDI controller, a key on your keyboard, a port button on your DMX interface etc.).



Live mixer

The Live Mixer tab can be accessed through the button in the top right corner of the Control Panel. Each Group of fixtures will have their own 'mixer', as well as a general 'mixer' for All fixtures. A full list of the controls and their function can be found in section 5.8. 'Live controls - Live mixer'.

The Live Mixer controls can be manipulated by left clicking and dragging and they can also be mapped to external controllers, or the Touch screen using the various Mappings settings.

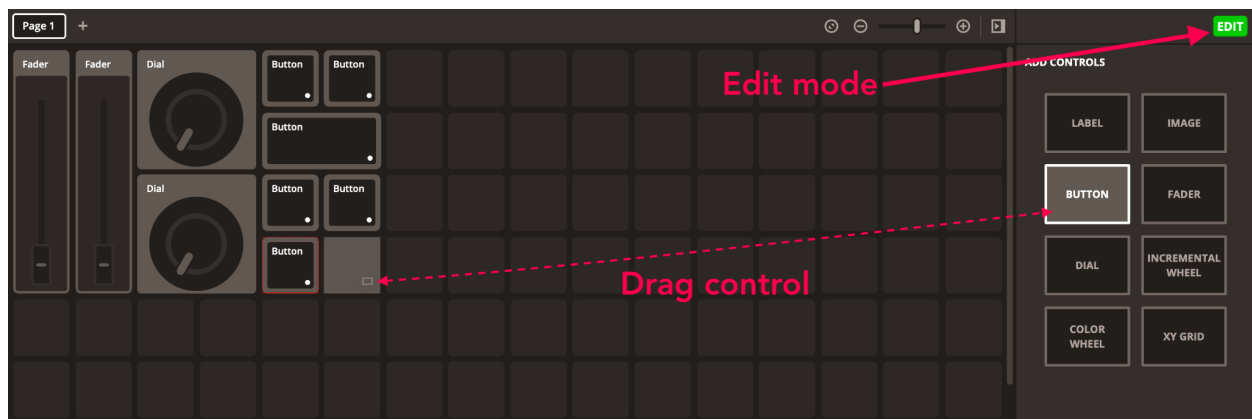


1.6. Creating a graphical interface

Within the Touch screen, you can create your own custom user interface to control your light show. This custom UI can then be linked with your smartphone or tablet, allowing you to control Daslight 5 remotely.

Setting up your user interface

When you first open the Touch screen, you will notice a large empty space to the left, and a list of Controls to the right. To begin creating your user interface, you will first need to enable Edit mode via the 'Edit' button in the top right corner of the window. You will now see the grid lines appear on the left side of the screen.

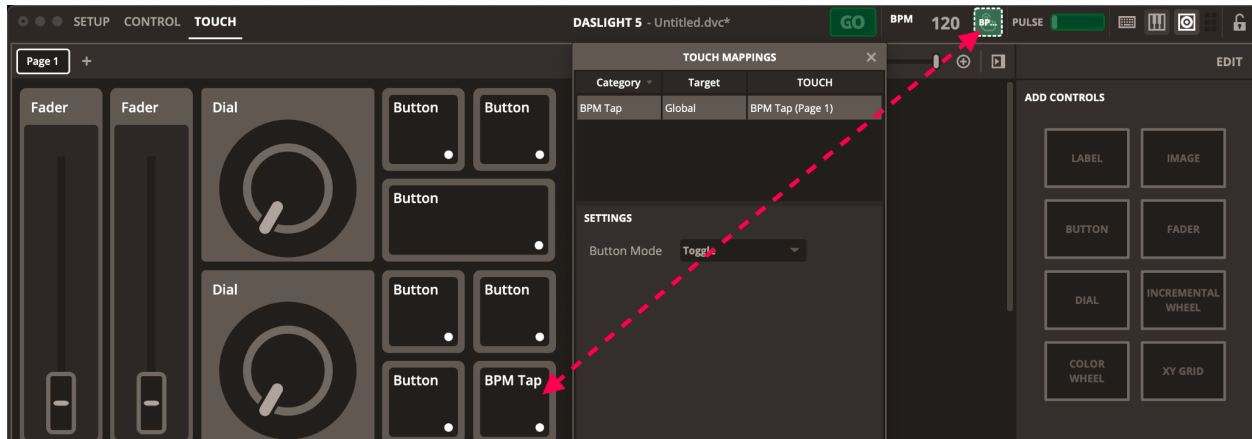


Mapping functions to controls

The quickest way to assign a function (i.e. scene button, strobe fader, speed dial etc.) to the Touch screen is simply to locate the desired function within the Control screen, then hold 'Option' (Mac) or 'Alt' (Windows) and left click the function to automatically create a control to your user interface.

Alternatively, you can set this up manually by completing the following steps:

1. Drag & drop a control from the right side of the Touch screen into the UI grid.
2. Press the 'Touch mappings' button in the top right corner of your Daslight window.
3. Navigate to the function you want to assign to your Touch control (i.e. assign a fixture's Dimmer to a Touch Fader control).
4. Press/move the function you want to assign.
5. Open the Touch screen and disable edit mode.
6. Press/move the control you want the function to be assigned to.



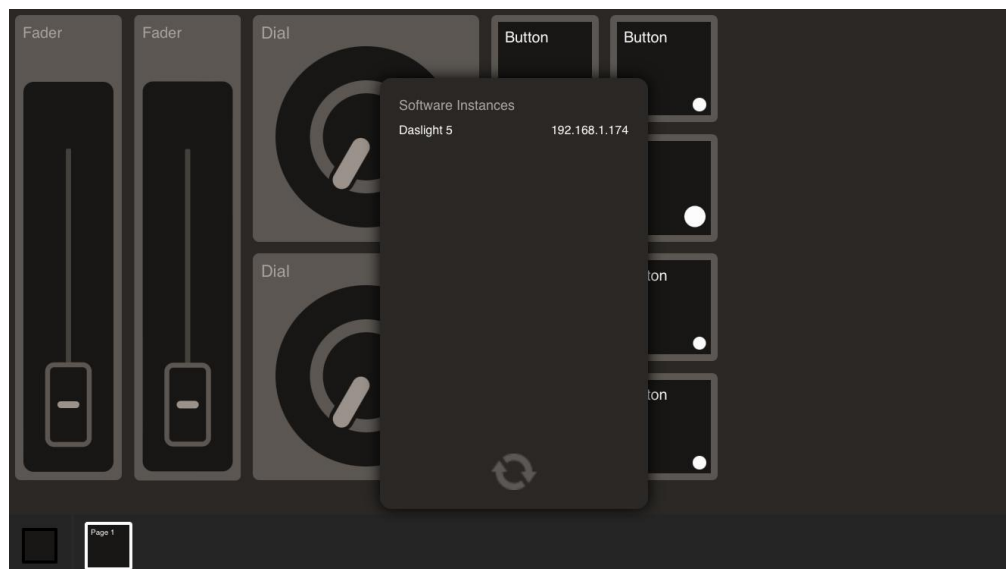
Controlling your show remotely

You can view and control your Daslight Touch window using your smartphone or tablet with the all new Daslight Remote app, which is now available in the Google Play/Apple App Store.

Daslight Remote operates over a Local Area Network, therefore the computer running Daslight 5 and the mobile device running Daslight Remote must be connected to the same wifi network. When the app is first launched, you will see an empty page. Selecting the 'Software Instances' button (bottom left corner of your screen) will then show all Daslight 5 instances on the local network. Select the correct instance (this will display your computer's IP address) to connect.

The size/zoom of your user interface will depend on the dimensions of the device you are running Daslight Remote on. The user interface will automatically resize itself to fit all controls in the view at the largest size possible.

Once connected- you will be able to trigger buttons, control dials/faders, change pages etc. remotely from within the app!



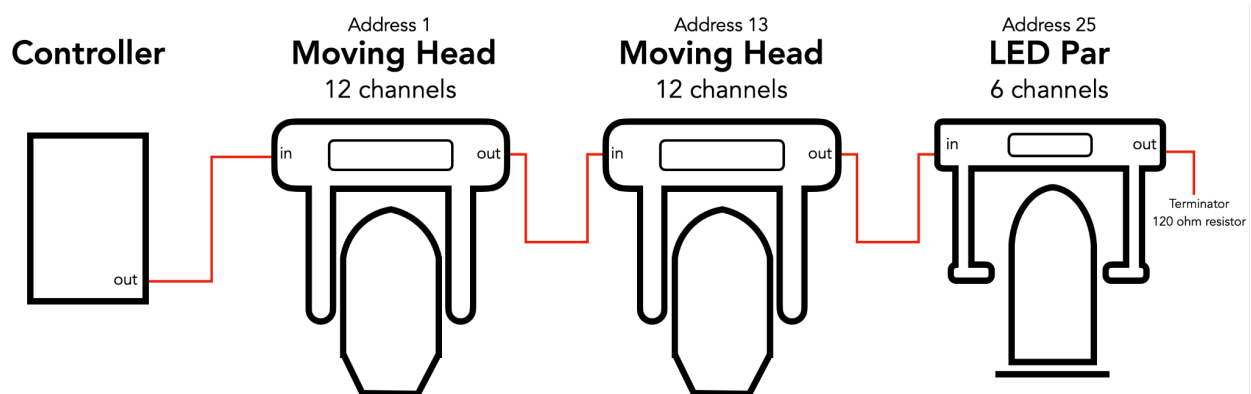
2. Introduction

2.1. What is DMX?

DMX is a universal lighting control system. It stands for 'Digital multiplex' and is a digital data system which allows a DMX controller to take control of any DMX compatible device, regardless of the manufacturer. DMX devices are normally referred to as 'Fixtures' or 'Drivers'. Each fixture has a DMX input and a DMX output. Up to 32 fixtures can be daisy-chained. For connections of more than 32 fixtures, a DMX splitter must be used.

Each DMX device uses a certain number of channels. For example there may be 1 channel to set the gobo, 3 channels to set the colour, 2 channels for movement, 1 channel to control the dimmer etc... 1 DMX universe can control up to 512 channels. Once the universe is full, you need to use a second connection from the controller. The example below shows 2 moving heads and 1 LED Par which take up a total of 30 channels.

Each fixture needs an address so that the software knows which device it's controlling. The address determines the starting channel. In the example below, the LED Par takes up channels 25, 26, 27, 28, 29, 30. An address is usually set via a digital display or a set of switches called DIP switches.



2.2. What is Daslight 5 and what hardware do I need?

Daslight 5 is a DMX lighting control software package. It can be used to control any type of DMX light. The software has been specifically designed for controlling lighting in Discos, Clubs, Theatres and Live shows, and can also be used to control Architectural lighting. To use the software, you will need to connect a compatible USB-DMX interface via USB or Ethernet. This converts the information sent by the software to DMX which a lighting fixture can understand. The software can

also send Art-Net over a local network provided that a compatible device is connected (more information in the '[DMX & Art-Net devices](#)' chapter).



What's included?

There are several application tools included within Daslight:

- **Daslight 5** - the lighting control software
- **Easy View** - a real-time 3D visualizer which allows you to plot a virtual stage allowing you to program your lights off-site
- **Hardware Manager** - a DMX hardware maintenance tool which can be used to upgrade the firmware and set specific stand-alone settings such as the internal clock/calendar



2.3. What's new in Daslight 5?

Daslight 5 has been re-designed from the ground up with a fresh new user interface and improvements to the overall workflow. Users of earlier software versions will find that we have kept all the important features intact, whilst adding a tonne of additional new features. Here we will find out just a handful of new features available in Daslight 5:

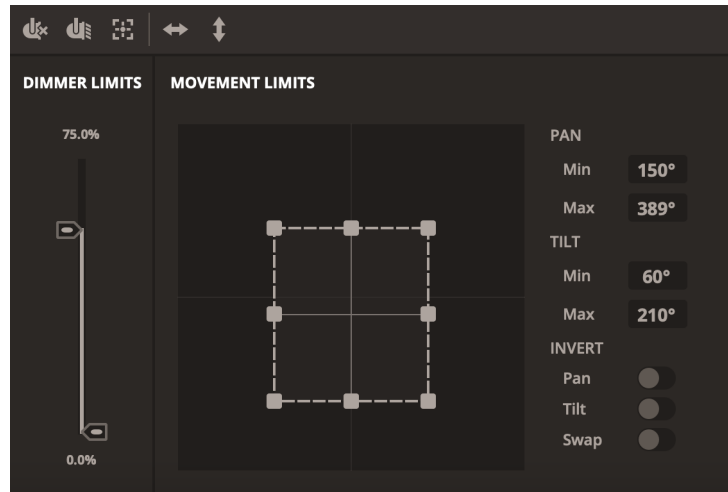


Layout

The 'Patch' screen in Daslight 4 is now known as 'Setup', the 'Edit' and 'Live' screens from Daslight 4 are now merged under the name 'Control', and the 'Show' mode from the previous Daslight is now known as 'Touch'.

Fixture limitations

You can now set dimmer and movement limitations on your fixtures from the Setup screen.

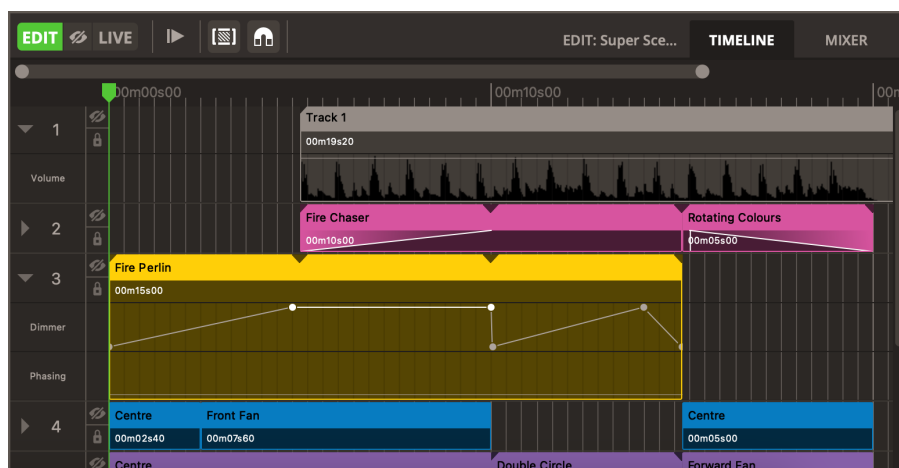


Effects

Effects no longer need to be generated into steps and they are all generated in real time. You can also choose between absolute and relative effect types.

Super Scenes

You can now stack effects into a 'Super Scene' which has a timeline, fade in/out function, as well as dimmer/phasing automation. You can also import an audio file into a Super Scene to sync your light show.



Live mixer & controls

There are now more ways than ever to control your light show live! Using the Live Mixer, the Live Control dials in scene Properties- you can create effective performance techniques with ease.



3. Setup

3.1. Fixture profiles

A fixture profile (often referred to as a Fixture Personality) is a file containing all information about a particular fixture. This includes:

- **Fixture information** - Number of channels, lamp type, name, number of beams.
- **Channel information** - Gobo, Color, Pan/Tilt, Shutter, Iris, Zoom etc.
- **Preset information** - Presets are inside a channel. For example: Gobo star, Strobe on, Macro 01, Shutter closed etc.

Daslight 5 supports SSL2 fixture profiles. A library of over 15,000 is included with the software. Profiles can be created and edited with the online Profile Builder website profile.nicolaudiegroupp.com. The accuracy of the fixture profile is very important, for example if the 'Dimmer' channel is not in the correct place, you will not see a light beam when you click the 'Beam Open' button in Daslight 5.



3.2. Patching fixtures

Fixture library

Before you can begin programming, a fixture must be patched (or added) to the software. Fixtures can be chosen from the Fixture Library list to the left of the Setup screen. There are 4 different library types that you can view:

1. **Display your local fixtures:** Shows the downloaded fixtures from the ScanLibrary folder.
2. **Display the public Cloud fixtures:** Shows the fixtures available on the public Cloud (internet connection required).

3. **Display your user Cloud fixtures:** Shows the fixtures available on the users Cloud account (internet connection required).
4. **Display your project fixtures:** Shows the fixtures already patched into the current project.

To patch a fixture, drag a fixture from the left and drop it onto the patch grid on the right, or select a fixture on the left and click the 'Patch' button. Be sure that the address the fixture has been patched to matches the fixtures address in reality.

The example below shows 4 moving heads patched to address 1, 19, 37 and 55. The address is normally set either by a digital display on the lighting fixture itself or via a set of DIP switches.

- a. **Search for a profile:** Search for a specific fixture or brand.
- b. **Refresh the library:** Refreshed the fixture library.
- c. **Import a fixture file from your disk:** Import a .ssl2 file to the library.
- d. **Select a DMX universe to view:** Navigate to a specific DMX universe using the dropdown or left/right arrows.
- e. **Grid/List View:** View the patched fixtures in a grid or list format.
- f. **DMX universe:** Select a DMX universe to patch your fixture into.
- g. **Starting address:** Select a starting DMX channel for your fixture.
- h. **Number of fixtures:** Choose how many fixtures should be patched.
- i. **Index:** Choose an index number for the fixture (effects are created in index order when the 'Select All' button is clicked within the fixture window).
- j. **Patch:** Patch the fixtures into your project as per the settings above.

The screenshot displays a software interface for lighting control. On the left is a 'LIBRARY' panel with a search bar and a list of fixture categories. On the right is a 'PATCH' panel showing a grid of fixtures. The grid is organized into 14 'moving head' sections, each with a starting address and a range of channels. Red arrows labeled a through j point to specific UI elements: a) search bar, b) refresh icon, c) import icon, d) universe dropdown, e) grid/list toggle, f) DMX universe dropdown, g) starting address input, h) number of fixtures input, i) index input, and j) patch button.

Moving Head	Start Address	Channel Range
1.moving head	1	19
2.moving head	37	55
3.moving head	73	91
4.moving head	109	127
5.moving head	145	160
6.moving head	181	192
7.moving head	217	224
8.moving head	253	268
9.moving head	289	318
10.moving head	325	336
11.moving head	361	372
12.moving head	397	416
13.moving head	433	448
14.moving head	469	480

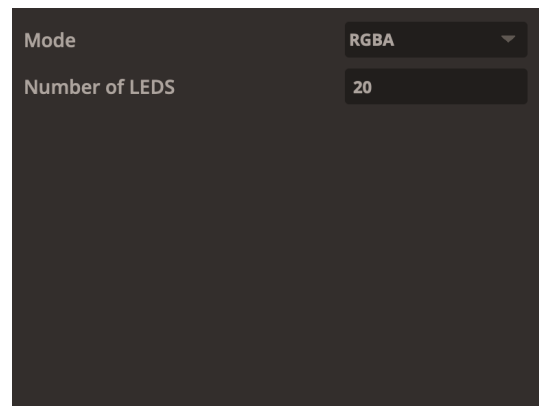
You can highlight/select multiple fixtures at once in either the grid or list view, then right click on them to show various options (copy/paste, delete, duplicate, add to group etc).

Importing a profile

If you have a .ssl2 fixture profile that you want to import into Daslight 5- you can do this by selecting the “Import a profile” button, then selecting the relevant file from your file directory.

Matrix and strip fixtures

You can now create Matrix and Strip fixtures instantly in Daslight 5. For Matrix fixtures- you can select the LED Mode (RGB, RGBW, WWCW etc), the width/height of the matrix and the arrangement. For Strip fixtures- you can select the LED Mode, and the number of LEDs you want to have in your fixture.

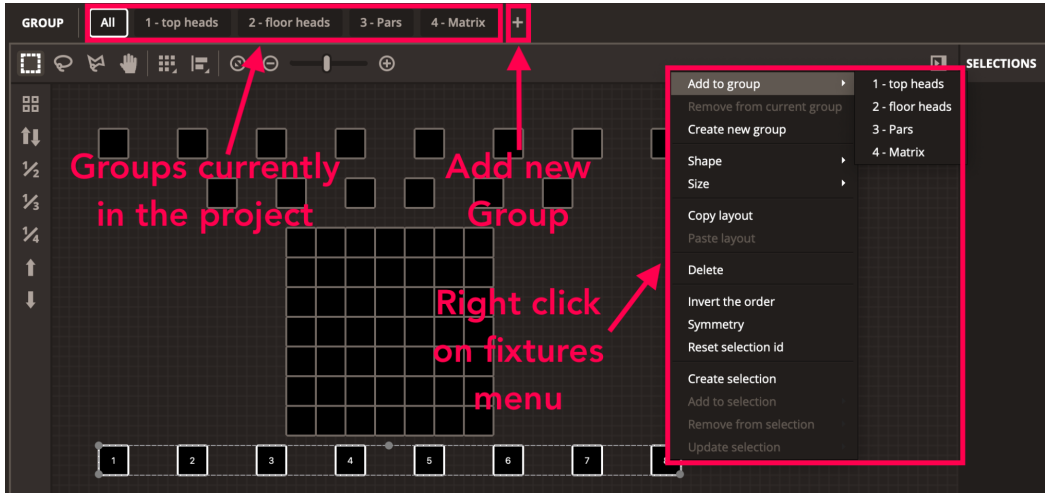


Fixture groups

Fixture groups are used to organise and manage your fixtures. For example- you may want to group all fixtures of a certain type, or by location (i.e. bar lights, stage lights etc). In Daslight 5, you can now have different fixture types in the same group. You can rename or delete a group by right clicking the group button.

When you go to patch in a fixture, it will ask you if you want to create a new group- selecting ‘Yes’ will do so, selecting ‘no’ will place the fixture within the already selected group. You can also create a new group by selecting the ‘+’ symbol in the groups tab.

You can remove a fixture from a group, add a fixture to an existing group, or add a fixture to a new group by right clicking on a fixture in either the 2D view, or the patch grid/list.



3.3. Fixture properties

Properties

To modify how a particular fixture operates, click the 'List View' button. A list of all patched fixtures is displayed along with their DMX address, fixture name, channel name and fixture profile location. To view the channels used by a particular fixture, click the triangle to the left of the fixture's address. Several checkbox's are visible to the right:

1. **Enable/Disable fading:** determines if the channel follows step fade times.
2. **Dimmer:** determines whether the channel is to be dimmed when the master dimmer or scene dimmer is changed.
3. **Min Value/Max Value:** this value correlates to the values set in the Limitations screen (see below).
4. **Invert Pan:** Reverses the output of the pan channel (when the channel is at value 0, the software will output value 255).
5. **Invert Tilt:** Reverses the output of the tilt channel.
6. **Swap Pan/Tilt:** Swaps the pan and tilt channels. When the pan channel is modified, the software will output the data on the tilt channel and vice versa.

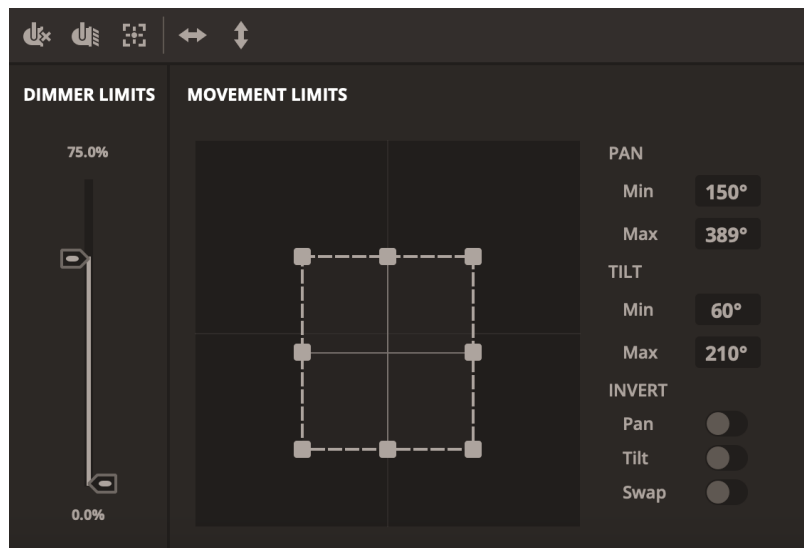
PATCH				GRID LIST						
Address	Name	Library	Group	Fade	Dimmer	Min Value	Max Value	Invert Pan	Invert Tilt	Swap Pan/Tilt
▼ U1: 001 - 018	1.moving head	_Generic/MOVING HEAD.ssi2	top heads	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	X			<input checked="" type="checkbox"/>	<input type="checkbox"/>	31.5%	68.52%			
2	Y			<input checked="" type="checkbox"/>	<input type="checkbox"/>	46.7%	100.0%			
3	ÄpX			<input checked="" type="checkbox"/>	<input type="checkbox"/>	31.5%	68.52%			
4	ÄpY			<input checked="" type="checkbox"/>	<input type="checkbox"/>	46.7%	100.0%			
5	Cyan			<input type="checkbox"/>	<input type="checkbox"/>					
6	Magenta			<input type="checkbox"/>	<input type="checkbox"/>					
7	Yellow			<input type="checkbox"/>	<input type="checkbox"/>					
8	Iris			<input type="checkbox"/>	<input type="checkbox"/>					
9	Zoom			<input checked="" type="checkbox"/>	<input type="checkbox"/>					
10	Dimmer			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0%	100.0%			
11	Color			<input type="checkbox"/>	<input type="checkbox"/>					
12	Gobo			<input type="checkbox"/>	<input type="checkbox"/>					
13	RotGobo			<input type="checkbox"/>	<input type="checkbox"/>					
14	Shutter			<input type="checkbox"/>	<input type="checkbox"/>					
15	Gobo 2			<input type="checkbox"/>	<input type="checkbox"/>					
16	RotGobo 2			<input type="checkbox"/>	<input type="checkbox"/>					
17	Prism			<input type="checkbox"/>	<input type="checkbox"/>					
18	Prism rotation			<input checked="" type="checkbox"/>	<input type="checkbox"/>					
▶ U1: 019 - 036	2.moving head	_Generic/MOVING HEAD.ssi2	top heads	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ U1: 037 - 054	3.moving head	_Generic/MOVING HEAD.ssi2	top heads	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ U1: 055 - 072	4.moving head	_Generic/MOVING HEAD.ssi2	top heads	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ U1: 073 - 090	5.moving head	_Generic/MOVING HEAD.ssi2	top heads	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▶ U1: 091 - 108	6.moving head	_Generic/MOVING HEAD.ssi2	top heads	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Limitations

When you have selected a fixture or group of fixtures, you can set the dimmer and movement limitations in the bottom right corner of the screen. To set the dimmer limitations- you can either drag the fader Min/Max values or manually type the number between the Minimum (usually 0°) and the Maximum pan/tilt range above/below the fader. The pan and tilt range will be set within the fixture profile.

To set the movement limitations- you can drag any of the corners you can either drag from one of the four corners of the square, or type in the values on the right of the grid. You can also move the limitation area by selecting inside the shape, then dragging it to reposition. You can also invert the Pan/Tilt from this screen, or swap the Pan/Tilt channels using the toggle buttons on the right.

To assist in setting up the limitations, there are a few tools. To visualise the dimmer limitations, you can turn the beam(s) on/off using the Beam On and Beam Off buttons. To visualise the movement limitations, you can enable the Centre Beam, Pan Movement and Tilt Movement buttons.



3.4. Arranging fixtures

Each lighting fixture is represented by a square/circle/rectangle which can be seen in the fixture window to the bottom left of the screen. Fixtures with multiple beams such as LED bars are displayed with several shapes that are linked together as one (each shape representing a beam). Each shape is capable of showing the following information (depending on the features of the actual lighting fixture):

- Dimmer
- Shutter/strobe

- Colour
- Iris
- Gobo + Gobo Rotation



Navigating around the fixture window

When fixtures are patched, the position and zoom level of the fixture window will be set automatically so all fixtures are visible. The following toolbar buttons allow you to adjust the position and zoom level:

1. **Zoom Fit:** Fit all fixtures into the view and centre the view.
2. **Zoom Out/Zoom In:** You can either press the “-” button to zoom out, the “+” button to zoom in, or use the slider in between the two buttons.

To move your fixtures, you can simply drag and drop the fixture selection. You can navigate around the 2D view screen by holding Shift, left click and dragging the grid. Alternatively, you can activate ‘Navigate’ mode in the toolbar, then simply left click and drag to move the view.

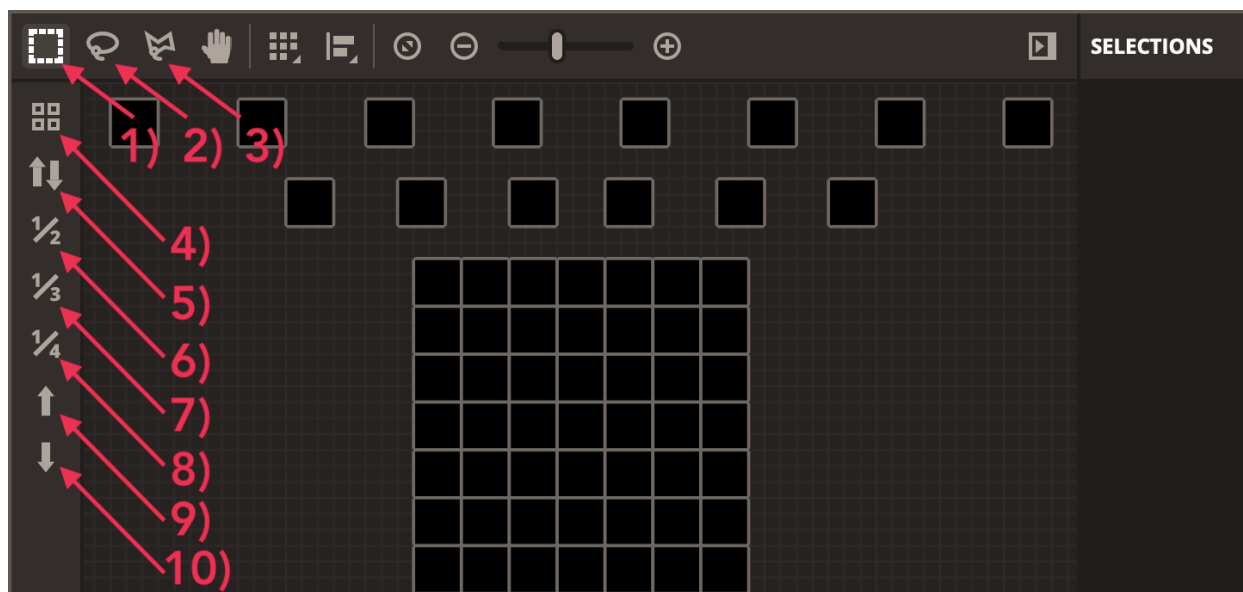


Selecting Fixtures

By default, fixtures can be selected either by clicking the squares or by dragging a box around some fixtures (just like icons within Windows Explorer or OS X Finder). Multi-selections can also be made by holding ‘cmd’ on Mac or ‘Ctrl’ on PC. Several other selection options are available:

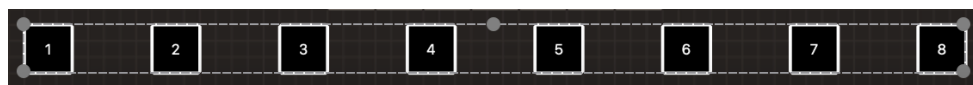
1. **Rectangle selection** (default): Drag a rectangle, any fixtures touching the rectangle will be selected.
2. **Lasso selection:** Draw a shape, any fixtures within the highlighted area will be selected.
3. **Drag over selection:** Draw a line, any fixture touching the line will be selected.
4. **Select all:** Selects all fixtures in the active group.

5. **Invert selection:** Selects all fixtures that are currently NOT selected in the active group.
6. **Select $\frac{1}{2}$:** Selects fixtures 1, 3, 5, 7, 9, etc. based on their position in the 2D view screen.
7. **Select $\frac{1}{3}$:** Selects fixtures 1, 4, 7, 10, 13, etc. based on their position in the 2D view screen.
8. **Select $\frac{1}{4}$:** Selects fixtures 1, 5, 9, 13, 17, etc. based on their position in the 2D view screen.
9. **Shift up selection:** Shifts all selected fixtures one to the right.
10. **Shift down selection:** Shifts all selected fixtures one to the left.



Fixture index

As fixtures are selected, a number appears in the centre of the shape. This is the fixture index. It's important to select fixtures in the correct order when working with effects because effects are generated in the index order. Imagine you have a line of fixtures and want to create a pixel effect with a rainbow scrolling from left to right. In this case, be sure that the fixture index's are numbered from left to right as the example shows below. When the quick selection buttons are used, fixtures are indexed in the order specified in the patch window.

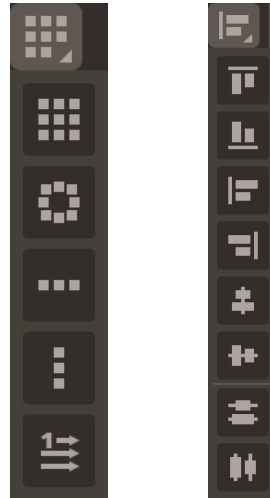


Positioning fixtures

Fixtures can be positioned in the 2D view manually by dragging and dropping them. If a multi-selection of fixtures has been made, you can change the relative positions by adjusting the position of the square with the small circles (like resizing an image). The selection can also be

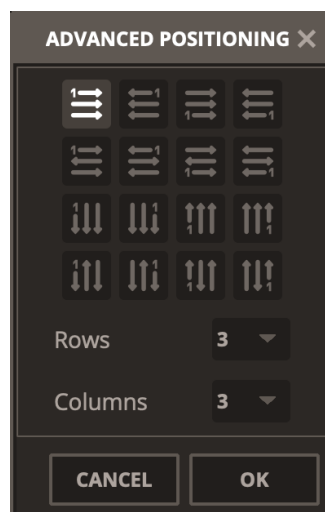
rotated by dragging the small circle at the top centre of the selection perimeter. Fixtures can be quickly positioned in a square, line, circle or custom matrix by clicking the shape icon on the spreading menu.

You can also use the alignment menu to align or distribute your fixtures in a specific way. For example- you may have a selection of fixtures which you want to be aligned vertically but remain in their horizontal position, or you may want to distribute all highlighted fixtures to have equal vertical/horizontal spacing.



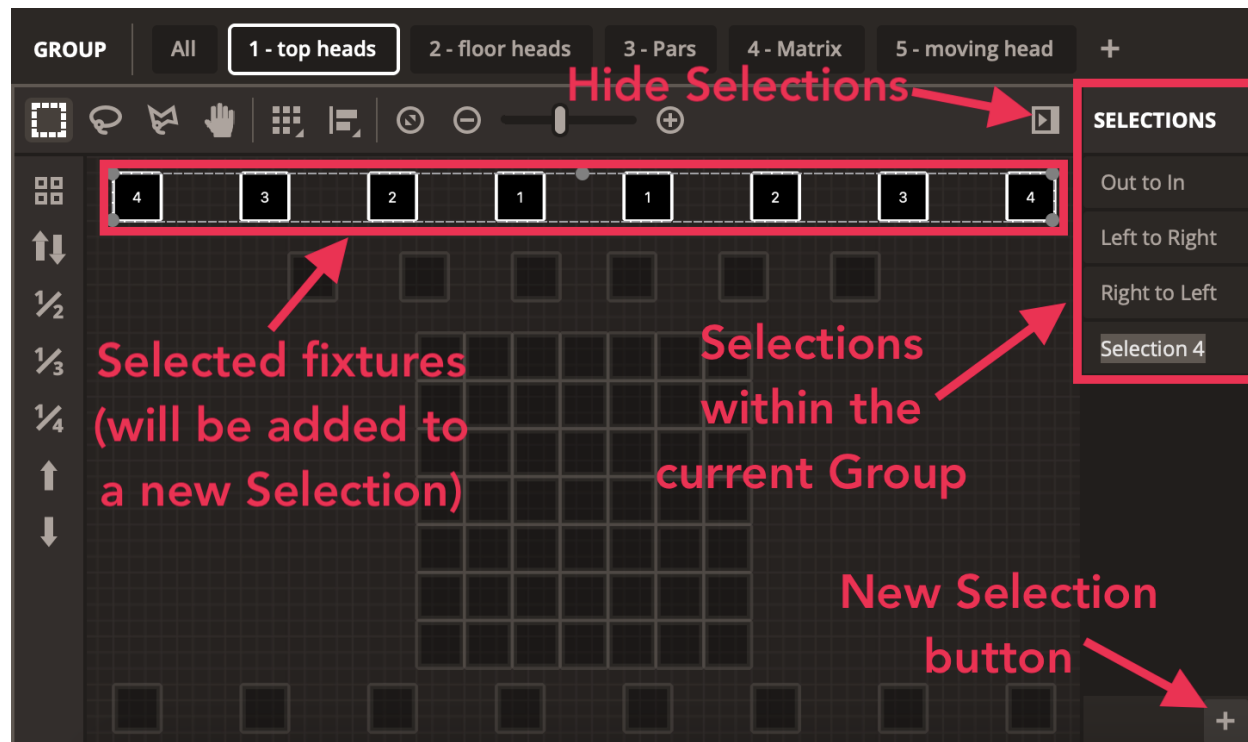
Custom matrix positioning

When setting up a custom matrix in the spreading menu, you will see the Advanced Positioning screen. Here you can set the number of rows and columns you want in your matrix, as well as the fixture index order. To set the desired fixture index order, you will see 16 options- the '1' shows where the index will start from, and the arrows indicate which direction the selection will follow.



Selections

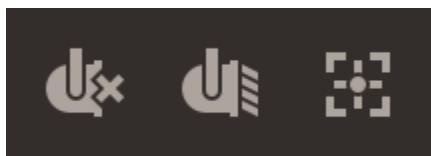
Within each group, you can arrange your fixtures into sub-groups called 'Selections'. A selection will also store the fixture index allowing several groups to be made with different index orders for different effect looks. To create a selection, select the fixtures you wish to include within the group and click the + icon at the bottom right of the 2D View window. By default, the groups are labelled Selection 1, Selection 2, Selection 3 etc. You can hide/show the selections window by pressing the arrow button in the top toolbar of the 2D View. You can rename/delete a selection by right clicking on it.



4. Control (programming)

4.1. Controlling lighting fixtures

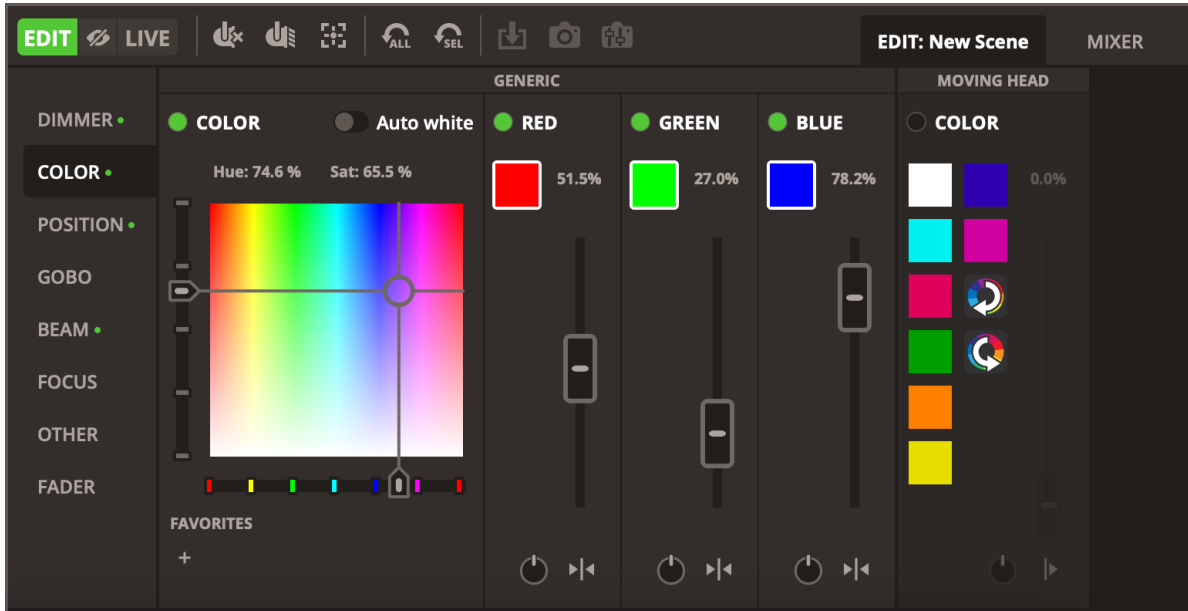
Lighting fixtures can be controlled either by Features or by Faders. To begin with, be sure a scene is selected, then select the fixtures which you wish to control. By selecting a fixture/group of fixtures, you can use the 'Beam On' button at the top of the fixtures window to open the dimmer and set any other channels required to see the light beam (e.g. shutter, iris etc). You can also press the 'Beam Off' button to set any channels required to make the fixture 'blackout' (e.g. dimmer, RGB, shutter etc). If you have a moving fixture, you can centre its position with the 'Centre Beam' button.



Features

Features allow you to quickly control fixtures by displaying the preset information (i.e. Strobe On, Star Gobo, Colour Wheel Rotation etc.) within each channel of the selected fixture(s). This means that not all Features will be accessible for all fixtures (for example - if none of the selected fixtures have a Zoom channel, the Zoom tab will show no options). Features are accessed within the Dimmer, Color, Position, Gobo, Beam, Focus and Other tabs. You will see a mixture of controls including:

- Buttons, which will allow you to jump to a preset (i.e. a particular Gobo or Color in a colour wheel).
- Faders, which will allow you to control linear presets (i.e. the rate of a Strobe). All faders will show a value within the range of 0 - 100, rather than the specific DMX values.
- An XY grid for pan/tilt control. This can be controlled by left clicking and dragging the dot where the two lines intersect, or by clicking anywhere else on the grid for a slower, fine tuning. You can also control using the X (Pan) and Y (Tilt) sliders below/left of the grid.
- A colour picker for colour mixing fixtures. Similar to the XY grid, this can be controlled by left clicking and dragging the dot where the two lines intersect, or by clicking anywhere else on the colour picker for a slower, fine tuning. You can also control using the X (Hue) and Y (Saturation) sliders below/left of the grid. You can save 'Favourite' colours by selecting the '+' symbol. This list can then be used for quick recall.

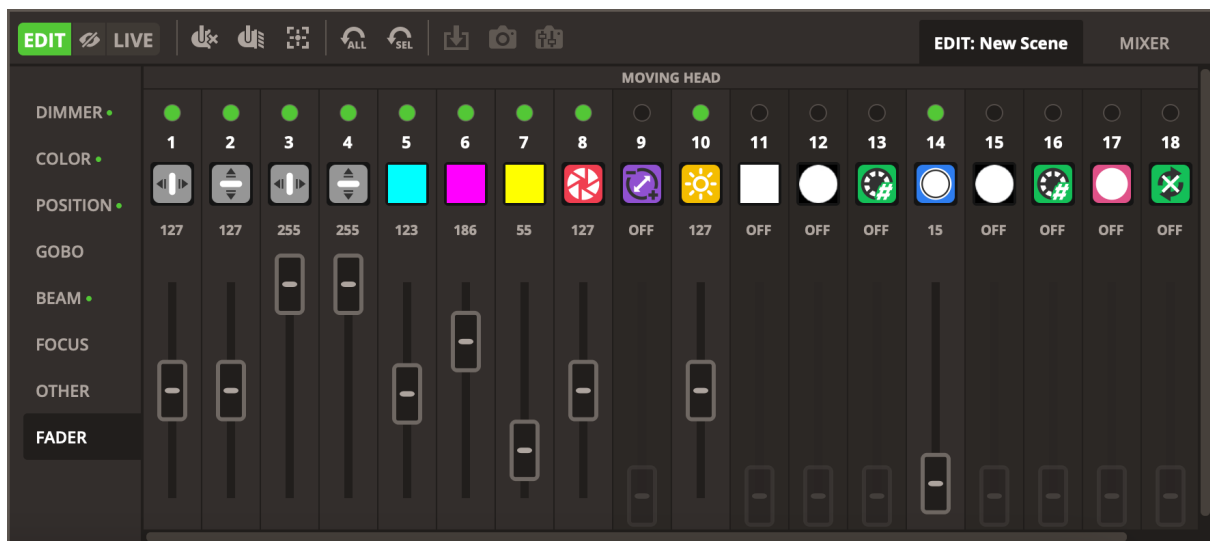


Faders

The Faders tab is located just below the Features tabs. This will show the full range of channels set within the fixture profile in order. Here, you can see the full fader range of 0 - 255 for each channel. Right clicking on the icon below the channel number will allow you to see the full list of presets for a certain channel.

You can set the value of a fader by left clicking and dragging the fader itself, left click and dragging the value displayed, double clicking on the value displayed then typing the desired value, or right clicking on a fader then selecting the desired percentage.

Each channel can be turned ON and OFF by clicking the Green (On) or Black (Off) dot at the top of the fader. If a channel is OFF, it will not be used in the scene. Therefore, if the same channel is being used in another active scene, the output value will remain the same. However, if the channel is switched ON and set to 0, then the output value will change to 0 when the scene is triggered.



Edit mode

To select a scene to edit, you must click the tall rectangular section on the right side of the scene. To then edit a scene's settings, you will need to be in Edit mode. Edit mode will be enabled whenever you create a new scene. Edit mode is also locked by default, however you can disable this by right clicking on the Edit button.

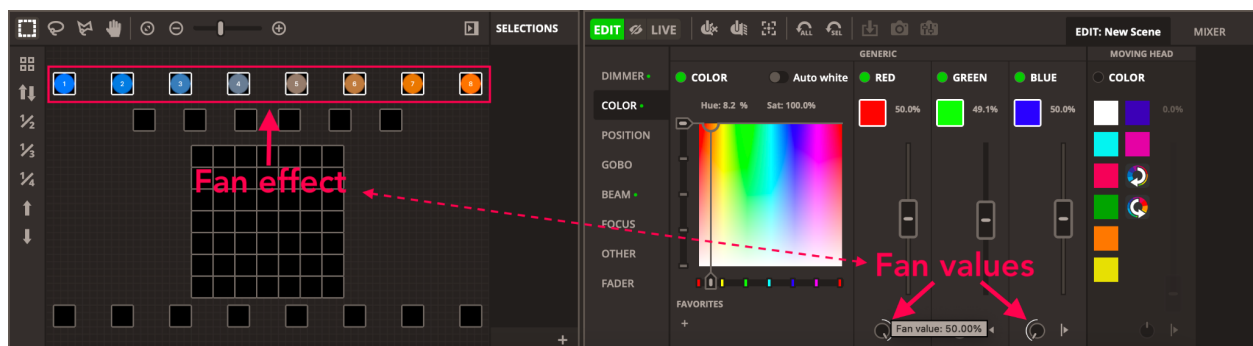
Blind Edit mode is similar to Edit mode, it will not output the scene's DMX values whilst selected. This is particularly useful in a live scenario, where you may want to make a change to a scene without affecting the ongoing light show.



Creating linear fans

In addition to setting fixed values with the 'Features', it's also possible to set a range of values across a selection of fixtures. For example, a selection of moving fixtures can be set to fan out in different positions. To create a Linear Fan, see the fan value and type that appears below relevant 'features' sliders. The fan will be arranged based on the fan type, fixture index selection, and the fan value.

There are two fan types - 'fan from start', which will set the effect in ascending/descending order based on the fixture index and fan value. The second fan type is 'fan from centre', which will set the effect to start in the centre and fan out in both directions, or start on the outside and fan inward towards the centre based on the fixture index.



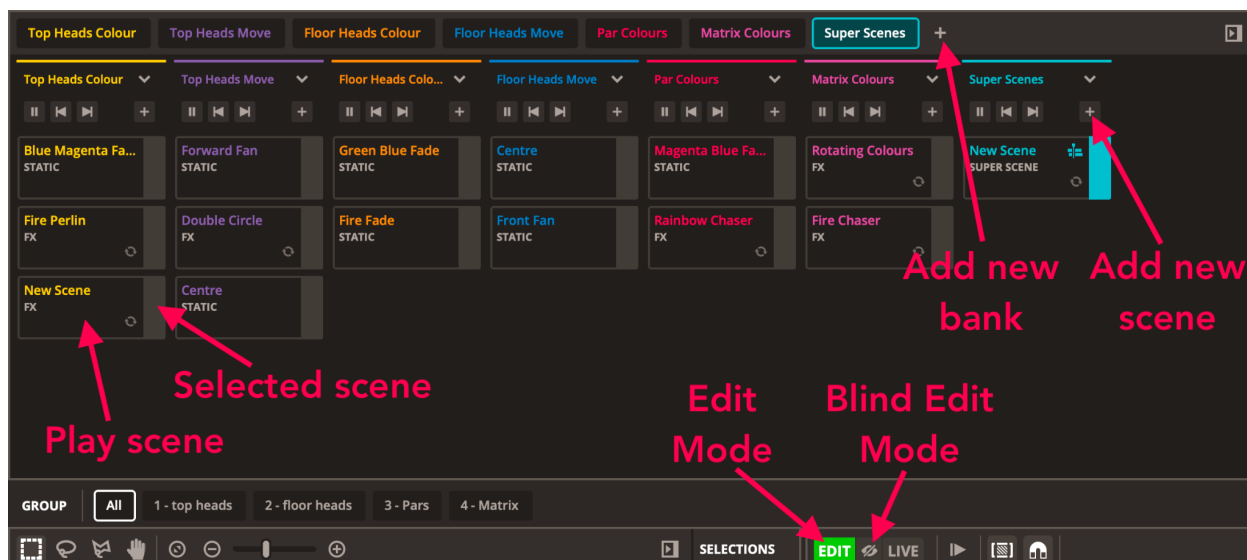
4.2. Creating scenes

All scenes are arranged into 'Banks' in Daslight 5. By default, 1 scene can play at a time in each bank. Banks are designed to be stacked, for example there may be a group for colour effects, a group for movement effects and a group for strobe effects etc. To create a new bank you can press the '+' button at the top of the screen, just below the Setup, Control and Touch tabs.

To create a new scene within a bank, you can press the '+' button on the bank controls section. By default, any new scene will be a 'Static' scene. To rename your scene, you can either right click and select 'Rename', you can also do this by double clicking the current scene name at the top of the scene settings tab to the right of the screen. By right clicking on the scene you can also delete, duplicate, add the scene to a new Super Scene, enable Edit/Blind Edit mode, change the button colour, or add the scene to a new Touch button.

To edit/select a scene, you can click the tall rectangle on the right side of the scene button, pressing the wide rectangle left of this will select play the scene. By pressing and holding the edit/select section, you can drag and drop to move/rearrange the scenes- including dragging scenes into different Banks.

You can choose your scene type via the options to the right side of the screen when a Static scene is selected. To delete an effect, returning to the original Static state- simply press the 'x' in the top right corner. All scene types (besides Static and Steps types) can store static values as well as running the effect engine. For example, you might want to set all Par lights to Red using the same Move FX scene that controls your Moving Heads. To do this, simply set up your effect as desired- then select the other fixtures you want to control and set the static values.



Scene types

There are a number of different scene types you can select, all of which work slightly differently and create different effects. Below is a description of each scene type:

1. **Static** (default): This scene type will be chosen automatically when you create a new scene. This is a non-moving effect. Set the values of as many Faders/Features as you like, then these values will be recalled whenever the scene is played. One static scene can be used to control multiple fixtures.

2. **Steps**: A scene has 1 or more steps. Each step stores a static 'Look'. A dynamic effect can be achieved by adding several steps with fade and hold times. To create a new step, click the '+' button. As the Faders and Features are changed, the data is stored immediately into the selected step. Fade and hold times can be changed by double clicking the time value on a step. The example below shows a scene with 4 steps each with a fade time of 2 seconds and a hold time of 1 second. In this case, the values will hold, or 'freeze' for 1 second, and then gradually move to the next values over 2 seconds. When the final step is reached, the scene will loop back around to the first step. To preview a scene, click the 'Play' button.

You can also edit multiple steps at once. To do this, select a step, hold Ctrl (PC) or CMD (Mac) and select the steps you wish to modify. A range of steps can also be changed by selecting the first step of the range, holding shift and then selecting the final step. To modify the fade and hold times of a selection of steps, continue to hold Shift, Ctl or Cmd whilst double clicking the step, or click the 'Time Settings' button. Steps may also be re-arranged by dragging and dropping or copy/pasting. To remove a step, hit the delete/backspace key or click the 'Remove Step' button.

3. **Colour FX**: This scene type can be used to create dynamic colour changing scenes. You can have up to 10 colours in the Colour Palette, to add a colour to an effect you can select the '+' button shown below. To remove a colour from the palette, you can right click on it then select 'Delete'. If you want to change a colour, you can do so in one of two ways:
 - Left click and drag to set the Hue/Brightness of the colour.
 - Right click and select 'Advanced Colour...' to access the full range of parameters which can be used to set the desired colour. Here, you can also save your favourites into the 'Custom Colours' tab by selecting the '+' symbol.

There are a number of different effect types available including Rainbow, Sparkle, Knight Rider etc. Each effect type will have a unique range of parameters, allowing you to set up the effect to create the desired look.

4. **Chaser FX:** This scene type can be used to create a 'chaser' effect on your fixtures. This is done using the Features controls, of which you can select multiple to be used in the effect. To add a Feature to the effect, please follow the steps outlined in the ['Adding features to an effect'](#) section below.

5. **Move FX:** This scene type is used to control the Pan/Tilt channels of a fixture. You can select a movement shape for the fixtures to follow (i.e. Circle, Curve, Polygon, etc). Each shape can be edited by adding, removing and repositioning the points shown on the grid. You can add points by either double clicking within the area of the dotted lines, or by right clicking and selecting 'Add point'. You can move a point by left clicking and dragging to reposition, and you can delete a point by right clicking on it and selecting 'Delete'.

The overall shape can be moved by left clicking anywhere within the area of the dotted lines and dragging to reposition. You can also resize the overall shape by dragging one of the square points in the corners of the dotted line, and rotate the overall shape by selecting the solid circle point at the centre-top of the dotted line.

This FX mode can be controlled using 'Absolute' or 'Relative' mode. 'Absolute' mode will control the Pan and Tilt according to the absolute value produced by the effect. For example- as the moving dot travels across the XY grid from the bottom left corner to the top right corner, the Pan and Tilt channels will modulate from their lowest value, to their highest value. 'Relative' mode will modulate the channel relative to a value set already by another scene. For example- if you have a static scene that sets the Pan and Tilt channels to 127, then a 'Relative' Move FX overlaying this; you will see the value increase or decrease by a maximum value of 127, depending on the direction of the moving dot (i.e. the bottom left corner will subtract 127 from the relative value, whilst the top right corner will add 127 to the relative value).

6. **Value FX:** This scene type combines functions from both the Colour FX and the Chaser FX scene types. The effect types and parameters are the same as from the Colour FX, however- this scene type is used to control various Features, in the same way as the Chaser FX. Instead of selecting a colour palette, you can select 'values' where Black = 0 and White = 100. To add a Feature to the effect, please follow the steps outlined in the ['Adding features to an effect'](#) section below.

7. **Curve FX:** In this scene type, you can waveforms to control various Features. There are a number of different waveforms you can select from the dropdown list. Using the rate, size, phase and other parameters- you can alter the shape of the waveform to create the desired effect.

This FX mode can be controlled using 'Absolute' or 'Relative' mode. 'Absolute' mode will control the feature(s) according to the absolute value produced by the effect. For example- as the moving dot travels from the lowest trough to the highest peak, the relative channels will modulate from their lowest value, to their highest value. 'Relative' mode will modulate the channel relative to a value already set by a separate scene. For example- if you have a static scene which sets a Dimmer channel to 127, then a 'Relative' Curve FX overlaying this; you will see the value increase or decrease by a maximum value of 127, depending on the direction of the moving dot (i.e. the lowest trough will subtract 127 from the relative value, whilst the highest peak will add 127 to the relative value).

To add a Feature to the effect, please follow the steps outlined in the ['Adding features to an effect'](#) section below.

8. **Mappings:** In this scene type, you can control features by using the video based effect shown in the 2D view window. When a new Mappings scene is created, the effect will appear within the 2D view window on a resizable rectangle. You can click and drag within the shape to reposition it, or drag the corner points to resize. Any fixtures/pixels that are within the range of the effect, will react to the video accordingly. For example: If you have a Mappings scene set to control a Dimmer channel, whenever the effect shows White- the dimmer will be set to Maximum for any fixture overlaying the effect. Then, whenever the effect shows Black- the dimmer will be set to 0 for any fixture overlaying the effect.

There are a number of different effect types you can select from in the dropdown list, all of which are customisable using the effect parameters. The Media effect lets you choose an image or video to play on the mapped area. You can also use the text effect to display or scroll custom text across the mapped area.

As with the Value FX scene type - Instead of selecting a colour palette, you can select 'values' where Black = 0 and White = 100. To add a Feature to the effect, please follow the steps outlined in the ['Adding features to an effect'](#) section below.

9. **Colour Mappings:** This scene type works identically to the Mappings type, however instead of controlling Features - it controls the colour of your fixtures. You can reposition or resize the video effect shown in the 2D View to include specific fixtures in the effect. Any fixtures/pixels that are within the range of the effect, will react to the video accordingly.

There are a number of different effect types you can select from in the dropdown list, all of which are customisable using the effect parameters. The Media effect lets you choose an image or video to play on the mapped area. You can also use the text effect to display or scroll custom text across the mapped area.

10. **Super Scene:** This scene type is new to Daslight 5, please see section [‘4.3. Super Scenes’](#) for more information on this.



Adding fixtures to an effect

Depending on the scene type, you will need to follow one of the two processes outlined below to add a fixture(s) to an effect:

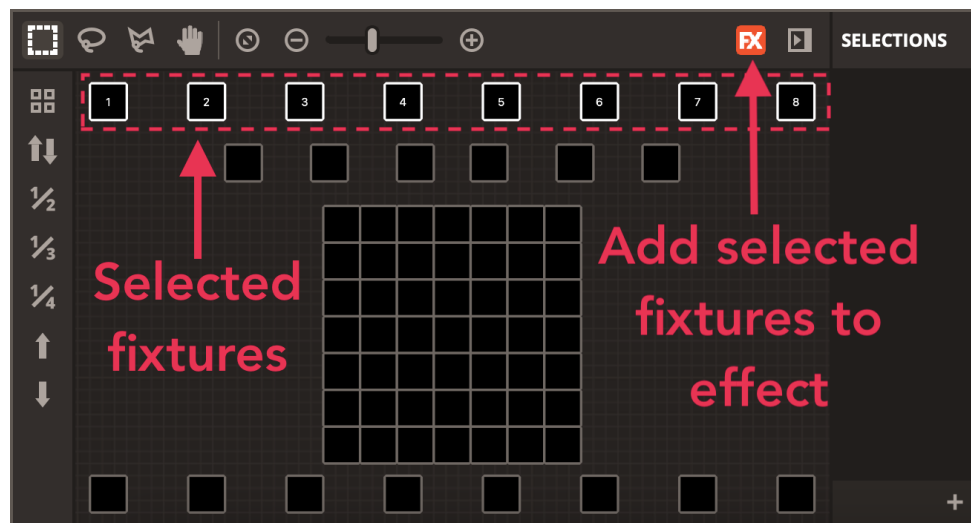
- **Static and Steps** - These scene types do not require any specific set up, simply select the scene and begin editing Fader/Feature values on any fixture, on any step.
- **Colour FX, Chaser FX, Move FX, Value FX, Curve FX, Mappings, Colour Mappings** - With these scene types, you need to add the desired fixture(s) to the effect. To do this you can highlight the desired fixtures, then select the scene type from the menu on the right. If a scene type has already been selected and you want to update which fixtures are included in the effect, you can do this by highlighting the desired fixtures and then pressing the red 'FX' button at the top of the 2D View window. You can also use this method to add individual beams to an effect if you are using a multi-beam fixture.

Adding features to an effect

As described in the 'Scene types' section- certain scene types will require you to manually assign Features to the effect. This is because these scene types do not automatically assign themselves to a function (i.e. Colour, Pan/Tilt), and so can be used to control any other linear Feature available. This is necessary for the following scene types: **Chaser FX**, **Value FX**, **Curve FX** and **Mappings**.

To add a Feature to the effect- first select the relevant scene and be sure Edit mode is enabled. Then, highlight the fixture you want to control, navigate to the desired Feature, then press the relative red 'FX' button attached to the feature. Once you have added a Feature to an effect, it will appear on the list of Features below the effect parameters- here you can set the minimum and maximum range for each Feature, or remove a Feature from the effect.

Once added, the effect will be played according to the fixture index. For example- if I were to put a Chaser effect on the line of fixtures pictured below, the effect would run from left to right starting with fixture index 1, ending with fixture index 8.

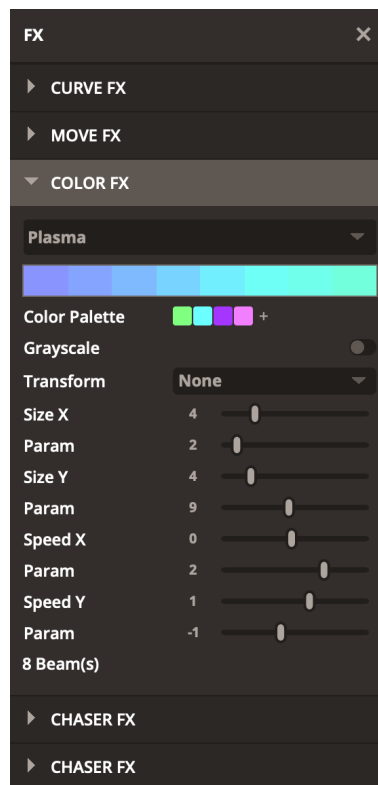


Effect racks

You can create a stack of effects, known as an 'effect rack', to combine multiple effects into one scene. To stack effects, simply select add or select a scene with one effect already added, then press the '+' in the bottom right corner to add another effect. Here, you can choose either a **Colour FX**, **Chaser FX**, **Move FX**, **Value FX**, **Curve FX**, **Mappings**, or **Colour Mappings** (please note - you can not stack Steps or Static effects in this way).

You can expand/collapse the individual effects engines using the arrow found next to the effect name. You can remove an individual effect by selecting the effect, then pressing the Remove FX button in the bottom right corner of the tab. Pressing the 'x' at the top right corner of the tab will delete the whole effect rack.

You can assign different fixtures/beams to the different effects in the effect rack. For example, if you wanted to have two separate Colour FX, with one controlling the Moving Heads and the other controlling an LED Matrix - you can do this in a single scene. To do this, simply select the first effect you want to add fixtures to, highlight the fixtures you want to add, then press the red 'FX' button at the top of the 2D View screen. Then, repeat this process for the second effect, selecting the second lot of fixtures you want to add and pressing the 'FX' button. If one of the scenes in your effect rack uses the 'Relative' Attribute Value setting (only relevant for Move or Curve FX), you will only be able to stack other 'Relative' effects.



Contents, properties and advanced settings

To the far right hand side of the Control screen, you will see three tabs of settings for your scenes. Each tab contains a unique set of functions which I will describe below:

1. Properties

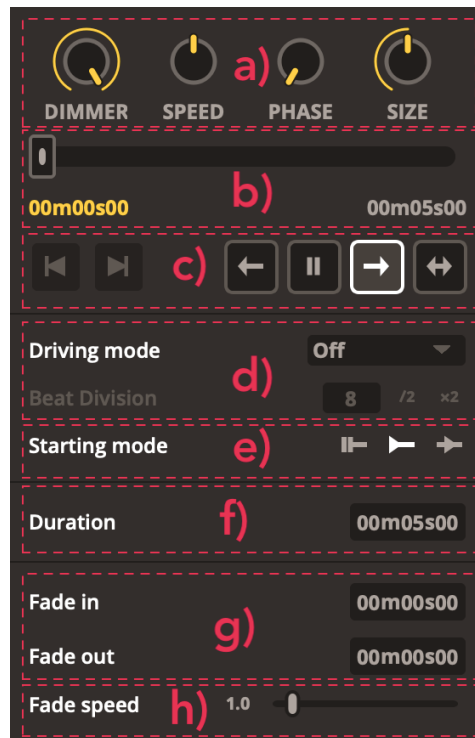
- a. **Live Control Dials** (Dimmer, Speed, Phase, Size): These are used to make live changes to your scene, without affecting the actual contents of the scene. This

means that any value set in the Live Controls will not take effect within a Super Scene. The Live Controls are as follows:

- **Dimmer:** used to control the relative maximum value of selected Features. You can select which Feature(s) you want the Dimmer dial to control by right clicking the dial and selecting the desired Features. Example: you have a Curve FX modulating the Zoom Feature from 127 - 255, you right click on the Dimmer dial and enable Zoom control. Now, when you set the Dimmer to 0% the Curve FX will modulate from 0 - 0, when the Dimmer is set at 50% it will modulate from 63 - 127, when the Dimmer is set at 100% it will modulate from 127 - 255.
 - **Speed:** controls the speed of the scene relative to the scene Duration. For example: a scene with 10 seconds duration- when the dial is set to 0.5, the actual speed will be 20 seconds ($10 \div 0.5 = 20$), when the dial is set the 2, the actual speed will be 5 seconds ($10 \div 2 = 5$).
 - **Phase:** used to increase the phasing value of the scene. This control will only take effect on a Move, Value, or Curve FX.
 - **Size:** used to control the relative range of movement on a Move FX.
- b. **Playback Indicator:** This slider shows the playback position of the effect from start to end. You can click and drag the tab to change the playback position, you can also map this function to a MIDI controller, to a Fader in Touch screen etc. The actual time of the playback position is written in yellow underneath the start position of the slider. The overall time of the effect is written in Grey underneath the end position of the slider.
- c. **Playback Direction:** These options control the playback direction of the scene. You can choose between reverse, pause, forward (default) or bounce. Please note- since these are also 'Live' functions, it will not be saved into the scenes contents and will not take effect within a Super Scene.
- d. **Driving Mode:** This will control the synchronisation of the scene. The options are as follows:
- **Off (default):** The scene will play back according to the set Duration.
 - **BeatGO:** The scene will play according to the Duration, however the playback slider now has beat divisions which can be skipped to using the BeatGO, or Previous/Next Division buttons. The number of divisions can be set in the Beat Division section (you can press '/2' to half, or 'x2' to double the number of divisions).
 - **BPM:** The scene will play according to the BPM of the project. The playback slider will now show beat divisions which can be skipped to using the Previous/Next Division buttons. The number of divisions can be set in the Beat Division section (you can press '/2' to half, or 'x2' to double the number of divisions).
 - **Pulse:** The scene will play according to the Duration, however the effect will skip to the next beat division whenever the audio input peaks over the threshold (set with the Pulse slider at the top right of the screen). The number of divisions can be set in the Beat Division section (you can press

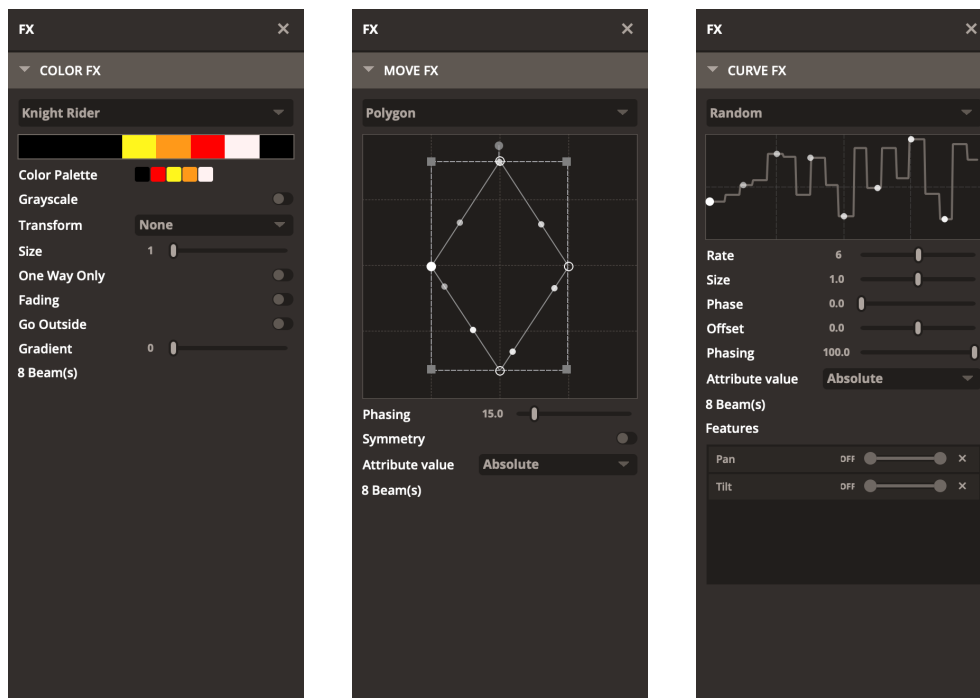
'/2' to half, or 'x2' to double the number of divisions). To enable this, you will need to set your audio input settings in the Settings window.

- e. **Starting mode:** This will decide whether the scene will 'Pause the scene at the beginning', or 'Play from the beginning', or 'Play from last position' when the scene is triggered. If you select 'Pause the scene at the beginning', the scene will need to be unpaused for the scene to start playing each time you trigger the scene.
- f. **Duration:** This will control the overall duration of the scene. When using this to set the duration of a Steps scene, this will alter the Wait/Fade Time of each individual step to fit the overall duration.
- g. **Fade In/Fade Out:** This will control the Fade In and Fade Out times for the scene. To see this effect, you will need to enable 'Live' mode in the control panel above the Features tabs.
- h. **Fade speed:** This controls the relative time of the fade, based on the Fade In and Fade Out values. With a Fade Speed of 1.0 - the actual speed will be as set by the previous parameters. With a Fade Speed of 0.5 - the actual speed will be 2 times slower than the time set by the previous parameters. With a fade speed of 2.0 - the actual speed will be 2 times faster than the time set by the previous parameters.



2. Contents

Scene contents are dependent on the scene type you have selected. Descriptions of each scene type can be found in the 4.2. '[Creating Scenes - Scene Types](#)' section.



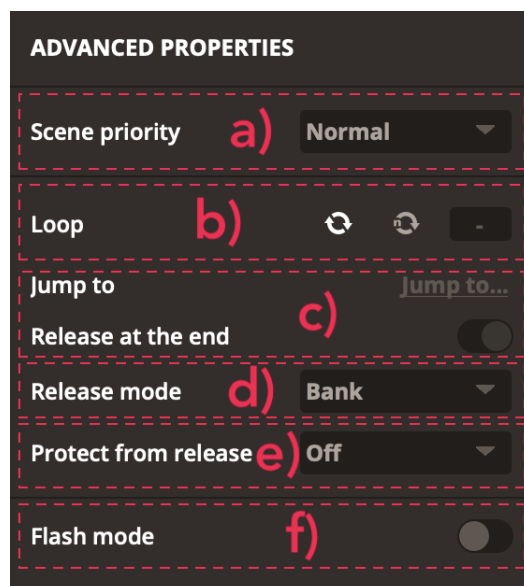
3. Advanced

- Scene priority:** This setting will decide whether a scene will override a current playing scene, or whether it can be overridden by another scene or by Live Edits. For example- if you have a Move FX scene playing, then you trigger a second Move FX scene controlling the same fixture- the second scene will only override the first if it has an equal or higher priority.
- Loop:** Controls how many times the scene will be looped before stopping. By default, the 'Always Loop' will be enabled meaning the scene will play indefinitely until stopped manually. You can select 'Play N Times', then select the desired number, to set a specific amount of loops before the scene will stop automatically.
- Jump to:** This function will only be enabled if 'Play N Times' is selected in the Loop section. Press the 'Jump to...' button to set a scene to play immediately after the current scene reaches the end of its loop cycle. You can set this to jump to either the next scene in the bank, the previous scene in the bank, or a custom scene(s) from

any other bank.

The 'Release at the end' toggle controls how the scene will behave once it reaches the end of its loop cycle. If the toggle is enabled, the scene will be turned off when it reaches the end of its loop cycle. If the toggle is disabled, the scene will pause at the end of its loop cycle.

- d. **Release mode:** This function controls what will happen to all other scenes in the show when the selected scene is played. There are five release modes available for selection:
- **OFF:** No other scenes will be released.
 - **All:** All scenes will be released.
 - **Bank (default):** All scenes within the same bank will be released.
 - **Outside bank:** All scenes outside of the current bank will be released.
 - **Specific bank:** All scenes within a specific bank will be released.
- e. **Protect from release:** This function protects the scene from being released by another scene. Again, the same five release modes are available for selection:
- **OFF (default):** Scene will not be protected and will be released according to any other scenes release mode.
 - **All:** Scene will be protected from all other scenes release mode and will only stop playing if done manually.
 - **Bank:** Scene will be protected from any release modes set within the same bank. A scene from outside the same bank with a relevant release mode can successfully stop the current selected scene.
 - **Outside bank:** Any scene outside of the current bank will not be able to stop the selected scene, regardless of their release mode. A scene from within the same bank can successfully stop the current selected scene with a relevant release mode.
 - **Specific bank:** Scenes within the selected bank will not be able to stop the selected scene, regardless of their release mode. Any scene from any other bank can successfully stop the current selected scene with a relevant release mode.
- f. **Flash mode:** Flash mode is disabled by default- meaning the scene will play when clicked, and will stop when clicked again. When Flash mode is enabled, the scene will play when clicked, then will stop when you release the mouse/keyboard click.



4.3. Super scenes

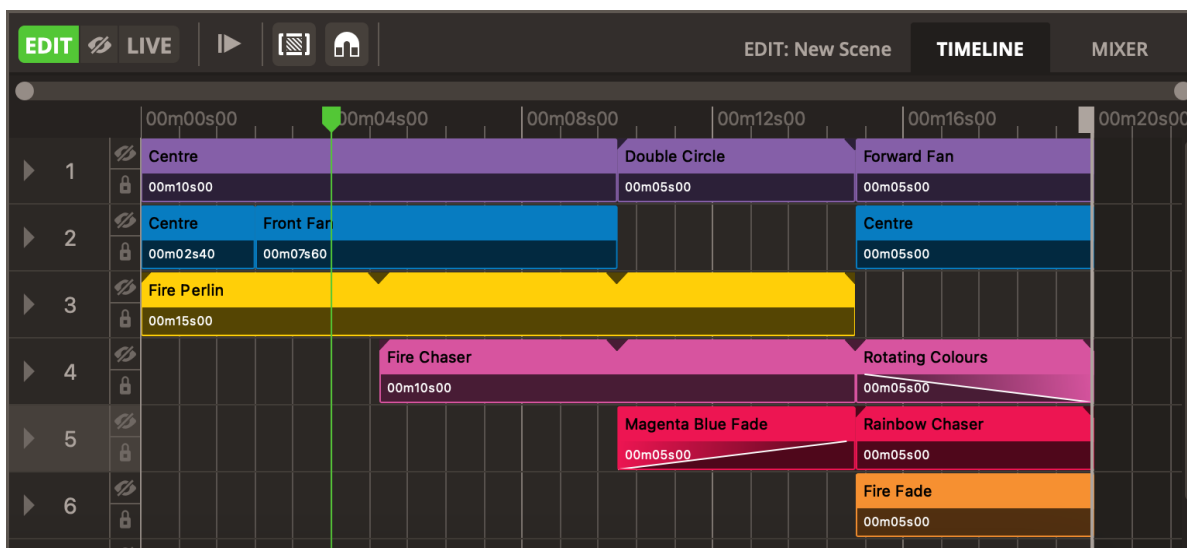
A Super Scene works slightly differently to the other scene types described in section '4.2. Creating scenes - Scene types'. When you create a Super Scene, you will see a timeline view in the bottom right corner of the screen instead of the usual Features/Faders display. Within this timeline, you can import other scenes as well as audio files to create a complex light show with very precise synchronisation possibilities. There are a couple of ways that a Super Scene can be created:

- Select an empty (Static) scene, then select the 'Super Scene' button from the bottom of the scene types tab.
- Right click on a scene, then select the 'Create new Super Scene' button. This will create a new Super Scene with the right-clicked scene already imported to the timeline.

Please note - you can not import a Super Scene into the timeline of another Super Scene.

A Super Scene has a timeline which plays from left to right, with stacks of scenes layered from top to bottom called 'Tracks'. There is always one empty track in a Super Scene, to create a new empty track you can simply drag and drop a new scene to the empty track and if there are no other empty tracks in the Super Scene, a new one will be created. You can have multiple scenes from multiple banks in the same track- however scenes on the same track can not overlap.

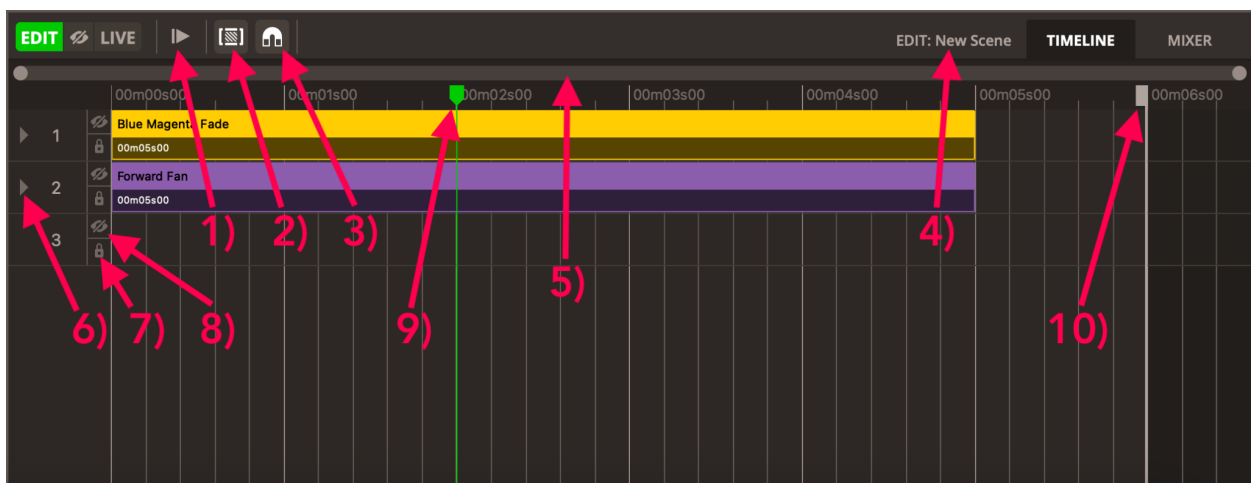
Like other scene types, you can also include static values on selected fixtures within the Super Scene which will trigger whilst running the timeline effect. To set the static values in a Super Scene, you can press the "EDIT: *Super Scene name*" button, highlight your fixtures, then set the desired values.



Navigating the timeline

Within the Super Scene, you will see a few options above the timeline itself:

1. **Play:** This can be used to play the Super Scene. Play will resume from the green marker. You can also use the spacebar to play the Super Scene, or hold shift and click spacebar to play from the beginning of the Super Scene.
2. **Allow block overlap:** When enabled, dragging a scene block and dropping it overlapping another scene in the same track will cause the scene that is being overlapped to be truncated. When disabled you will not be able to drop one scene overlapping another in the same track, it will simply be dropped to either the immediate left or right of the other scene.
3. **Snap to grid:** When enabled, you will only be able to move a segment to the nearest grid line. When disabled, you will be able to move a segment to the nearest half of a grid line also. A scene can only be placed on a grid line that is a multiple of 0.04 seconds.
4. **EDIT: *Super Scene name*:** This can be used to set static values on selected fixtures. These values will trigger when the Super Scene is played, along with the timeline itself.
5. **Zoom/scroll bar:** This bar has two points of adjustment to adjust the zoom, one at each end. To zoom in/out, simply click one of the light grey dots and drag to adjust. You can scroll the timeline by dragging the middle section of the bar left or right.
6. **Expand track:** This button will appear at the far left of each track. Clicking this will show the Dimmer and Phasing automation options for scene tracks, or the Volume automation and waveform of an audio track. See [‘Track automation’](#) for further information.
7. **Lock track:** When enabled, the track will be locked. You can not make alterations to a locked track.
8. **Hide track:** When enabled, any scene segment on this track will not send any DMX output.
9. **Play marker:** The green marker will indicate the playback position of the Super Scene. The marker will move as the scene plays. If the scene is not playing, the green marker will indicate the starting position when playing the scene.
10. **End marker:** The grey marker indicates the end of the Super Scene. This marks the point where the Super Scene will loop. You can adjust the end point marker by clicking and dragging it.



Adding scenes to the timeline

To add a scene to the timeline, you can simply click and hold on the edit/select section of the scene (lighter grey section on the right side of the scene button), then drag & drop the scene into the timeline. Alternatively, you can right click on an empty section of the timeline then press Insert > Insert scene, then select the desired scene. When a scene is in the timeline, you will see that its name and duration are written on the scene block.

Once a scene has been added to the timeline, you can move it by left clicking on the scene block and dragging it to the new position.

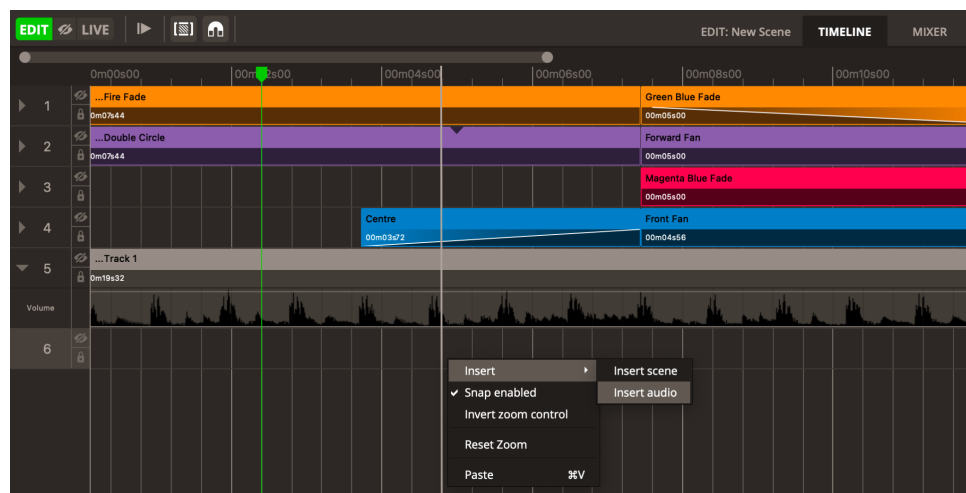
By dragging the start/end of the scene block from the top half, you can either loop or truncate the effect. Dragging away from the scene block will loop the effect, the scenes loop point(s) will be indicated by the white triangle(s) that appear at the top of the scene block. Dragging towards the scene block will truncate the effect.

You can also left click + drag the start/end of the scene block from the bottom half of the scene block to create a fade in/fade out effect.

Adding audio to the timeline

Adding an audio file to the timeline is very simple, and can be done in a couple of ways. You can do this by opening your file directory, locating the desired audio file, then dragging & dropping the file into an empty track. Alternatively, you can right click on an empty track, select Insert > Insert audio, then locate the desired file and confirm. Please note that you can not have an audio file on the same track as a scene block, or vice versa.

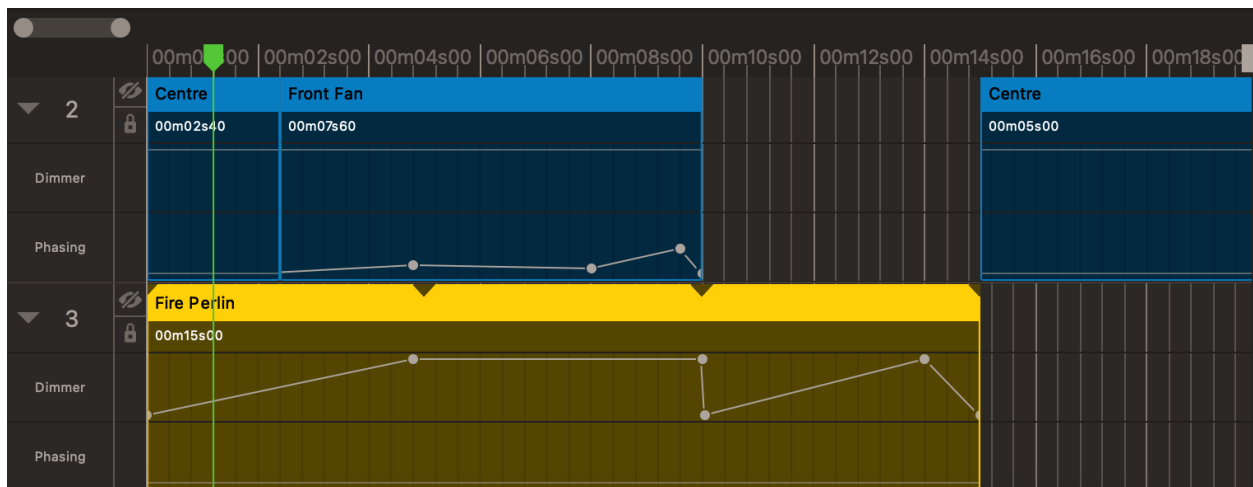
Similarly to scene blocks, you can click and drag the top section of the block to loop/truncate the audio file, or drag the bottom section of the block to create a fade in/out effect.



Track automation

By pressing the 'Expand track' button at the left hand side of a track, you will see some further options for automating your scenes. Each scene block can have its Dimmer and Phasing value automated within the timeline. To add a point to the automation, simply double click anywhere on the automation section. You can then adjust the position and value of the point by dragging the point, or double click on the point to delete it. Dragging an automation line will allow you to move all points at once.

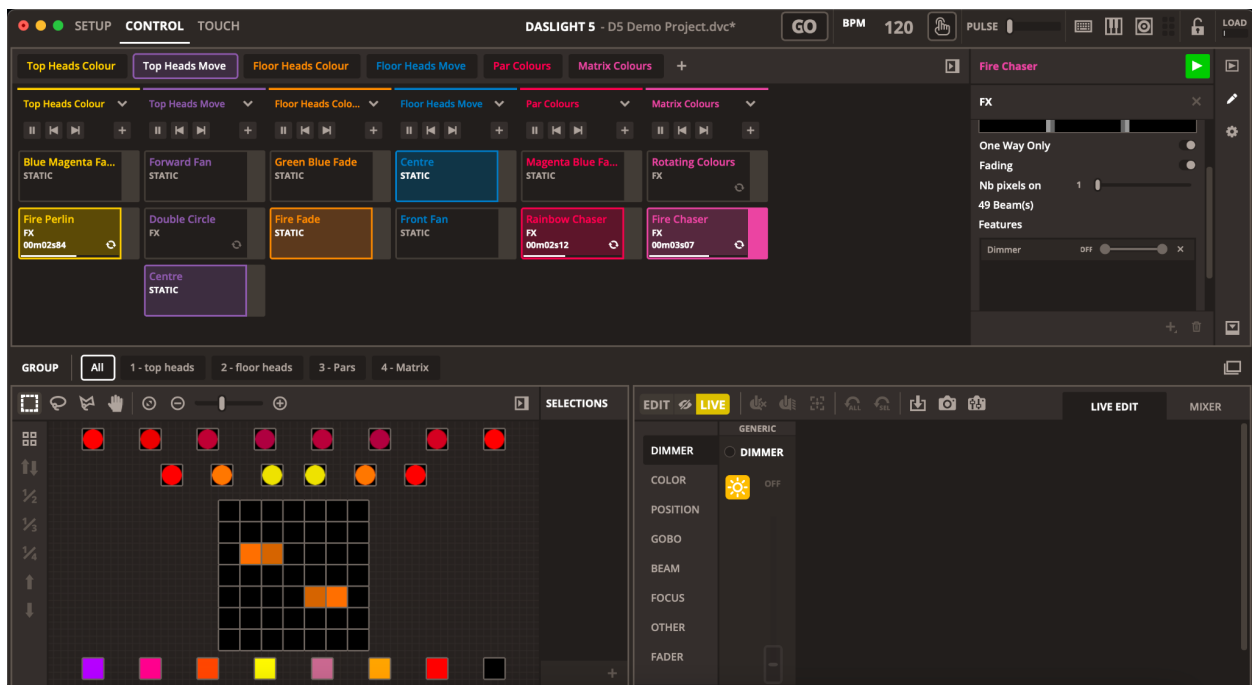
For audio tracks you can automate the Volume of a block using the same method. Pressing the 'Expand track' button will also show the waveform of the audio file(s), allowing you to much more precisely synchronise your scenes with the audio.



5. Control (live)

5.1. Controlling your show live

The Control screen is also where you can control your show. The example below shows several scenes playing at the same time. As long as scenes use different channels, they will be stacked and merged together. If a scene is triggered which uses the same channels as a scene which is already playing, the scene with the highest 'Scene priority' will take effect (if both scenes have equal 'Scene priority', the most recent triggered scene will take effect).



Playing scenes

The most basic way a scene can be triggered is by left clicking on the wide rectangle section of the button. You can also play the selected scene using the 'Play scene' button found at the top right corner of the scenes editing window. Once a scene is playing you can use the 'Start the next scene' or 'Start the previous scene' buttons to skip between the scenes in the bank. You can turn all scenes in a bank to 'small view' by selecting the down arrow in the bank controls section. You can then press the same button to return the scenes back to their default size.

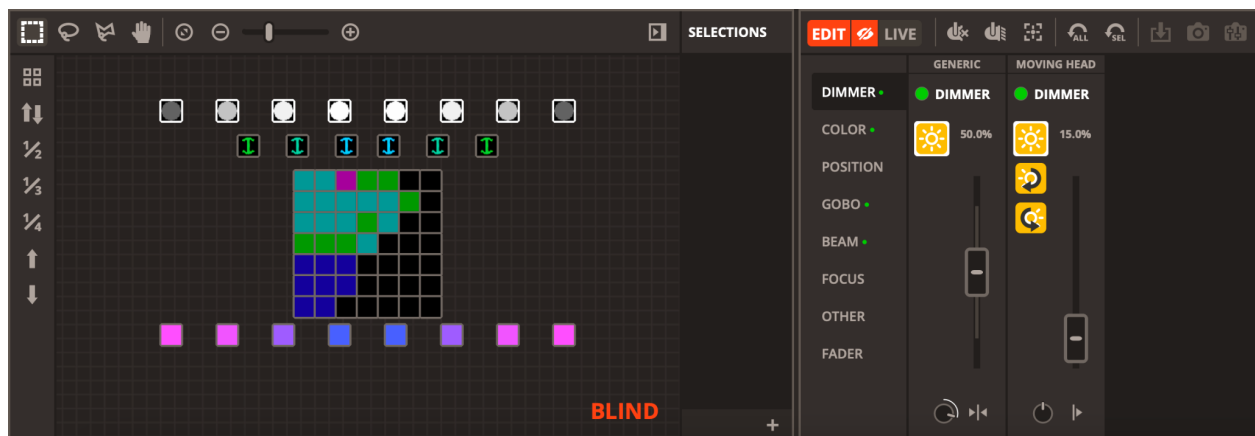


5.2. Live editing your show

Everybody needs to edit their show live at some point- whether it's making a temporary override, using some performance effects, or making a permanent adjustment to a scene parameter. Daslight 5 makes all of this possible and easy to do with many ways to produce the desired outcome!

Creating permanent edits to a scene

When performing your show live, you may notice something you want to change. To do this, you can enable 'Edit' mode, then select the scene as usual. Doing this however will override the show that is currently running. If you want to block the DMX output of the scene currently being edited, you can click the 'Blind Edit' button (shown as an eye symbol) found between the 'Edit' and 'Live' mode button. When 'Edit' or 'Blind Edit' mode is enabled, the changes you make to the scene parameters or fixture channels will be saved into the scene so that whenever you recall the scene again, the changes made are present.

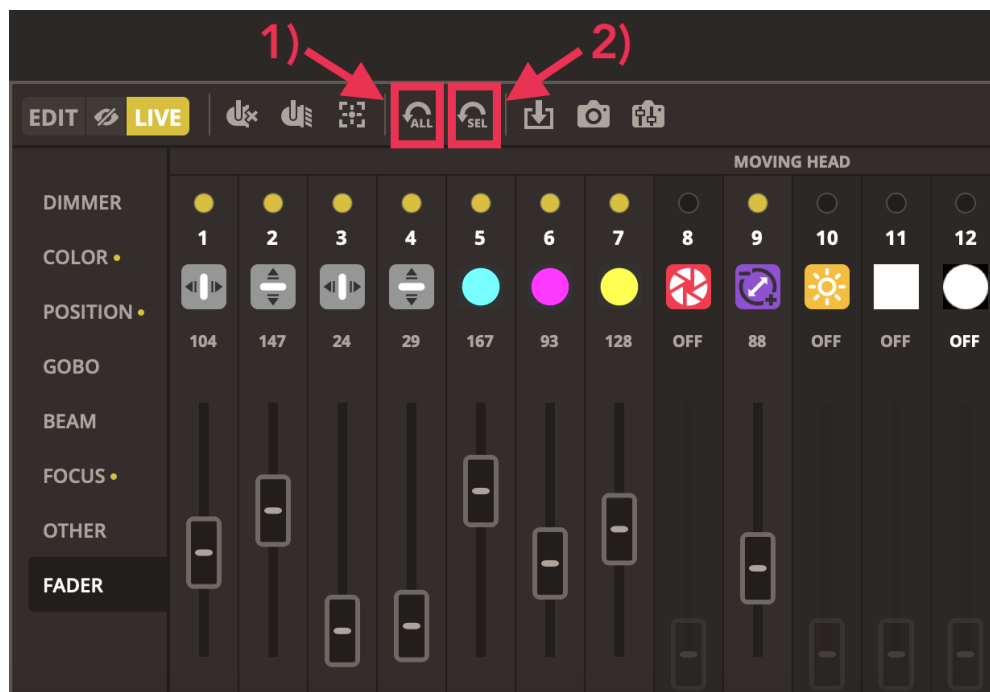


Creating temporary edits to a scene

To create temporary edits to a scene, known as a 'live edit', you will need to have the Live editing setting enabled. Then, select some fixtures and begin adjusting Features/Faders. You will notice that instead of the usual green dot that appears above an edited fader/feature- there is now a yellow dot instead, indicating that this is a 'live' edited channel. The values set will stay at the value you set until a scene which uses the same channel is triggered. Live edits are not stored in scenes, but rather layered over the top of scenes. You can reset a live edit by clicking on one of the 2 Reset buttons on the live toolbar:

1. **Reset All Beams:** resets all live edits in the show.
2. **Reset Selected Beams:** resets all live edits on the selected fixtures.

Changing from 'live' to 'edit' or 'blind edit' mode will also reset all live edits.

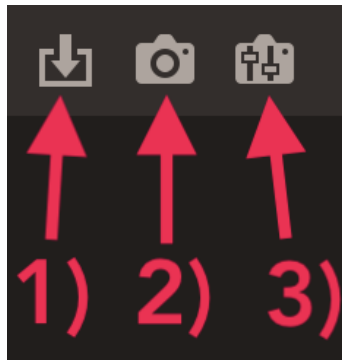


Snapshots

It is possible to save your live edits, so that the same values can be recalled again at the touch of a button. There are 3 different ways to save your live edits:

1. **Save Adjusted Live Values into the current scene:** This will save all live edited values into the selected scene, overwriting any value that is already set in the scene.
2. **Snapshot All Values into a new scene:** This will save ALL active values in the Daslight project into a new scene.

3. **Snapshot Adjusted Live Value into a new scene:** This will save only the live edited values into a new scene.

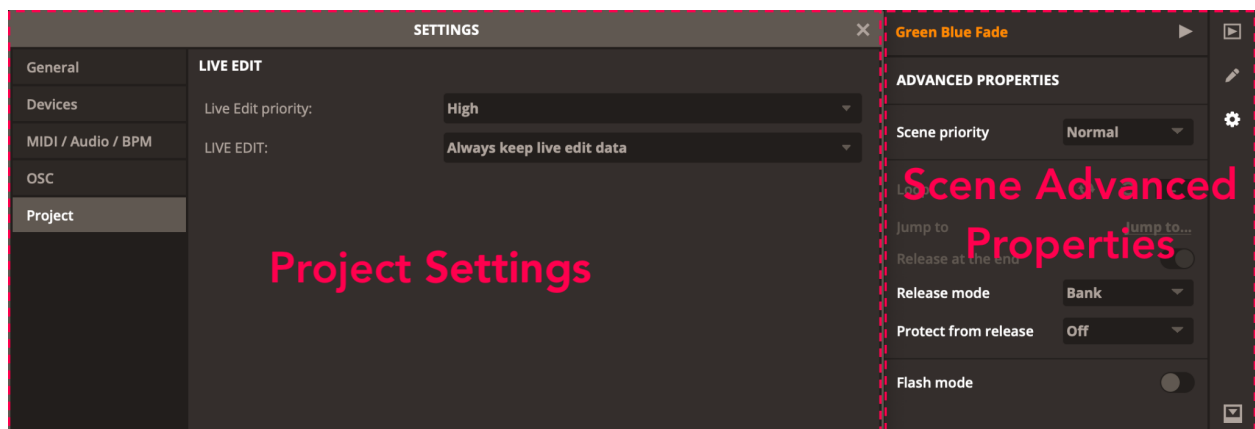


Live Edit settings

Within the Project tab in Settings, you can alter how Live Edits are handled in your project.

A Live Edit can only override a scene if the 'Live Edit priority' setting is equal to or higher than the 'Scene priority', set within the Advanced Properties of a scene. For example- if you have the Live Edit property set at 'normal', Live Edits will only take effect over a playing scene if it has a 'Scene priority' of 'normal' or lower.

When you select the 'Always keep live edit data' option, the values set by a Live Edit will be held when triggering a new scene. If you select the 'Reset live edit when new scene is triggered' option, the values set by a Live Edit will be reset when triggering a new scene.

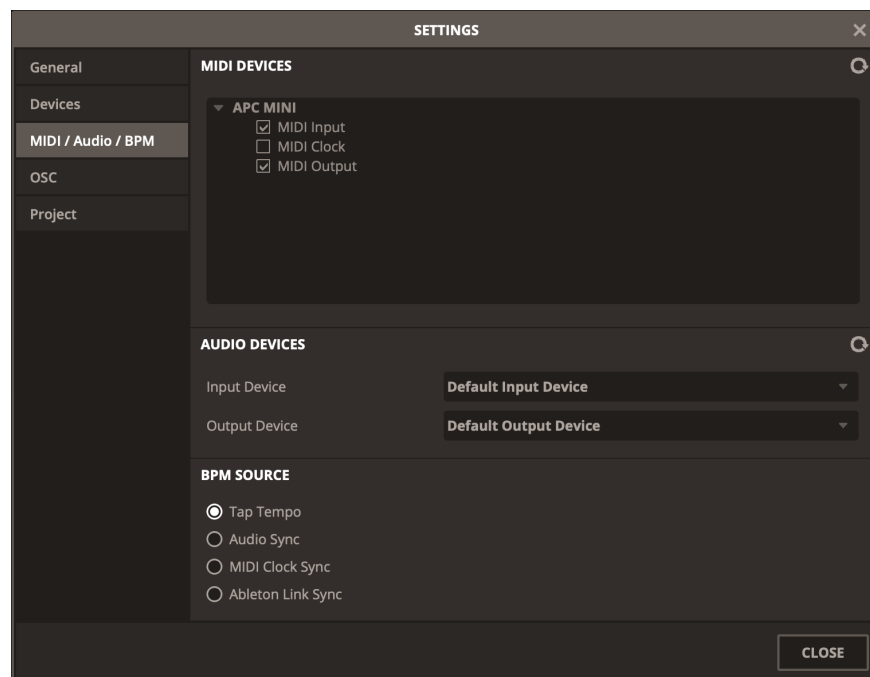


5.3. MIDI

MIDI stands for Musical Instrument Digital Interface and is a system which is used to communicate between different devices in the audio/visual industry. Many parts of the software can be controlled with a MIDI controller such as scenes and faders.

MIDI devices are normally connected with a USB cable, or through a USB-MIDI interface with a DIN cable. The software can also send MIDI to the MIDI input of the MIDI controller. Some MIDI controllers can interpret this data to switch on internal lights and move motor faders.

To connect your MIDI controller to Daslight 5, simply plug in your controller, go to the Settings window, then navigate to the “MIDI / Audio / BPM” tab. You should automatically see your MIDI controller detected in the ‘MIDI Devices’ list, you can then enable MIDI Input and/or MIDI Output for your controller.



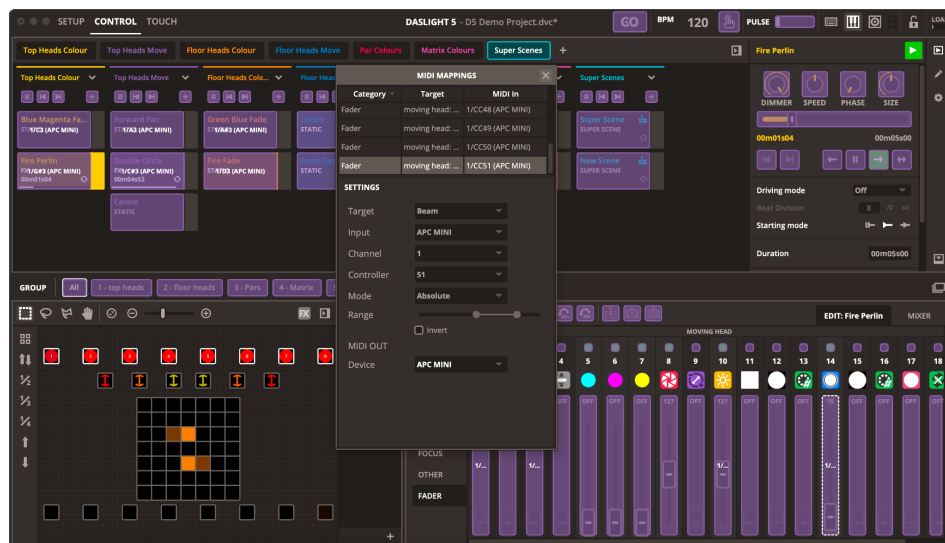
MIDI mapping

To pair a button within Daslight 5 to a button on your MIDI controller, you first need to activate the MIDI Mapping screen (found in the top right corner of the toolbar, in between Keyboard Mapping and Touch Mapping buttons. This can also be activated from the ‘Mappings’ drop down menu). While this is active, you will see a purple overlay on all mappable functions. Selecting a button within Daslight will show a dotted line highlighting the selected button, you can then simply press a button to pair on your MIDI controller. This mapping will now appear in the mappings list. Similarly,

if you want to pair a dial or fader from Daslight to your MIDI controller- you can do this following the exact same process, replacing button pressing for fader/dial moving in both Daslight and on your MIDI controller.

Alternatively, you can set up a MIDI control manually by opening the MIDI Mappings tool, right clicking on a relevant function (available functions will have a purple overlay), then selecting the 'Create Note Shortcut...' (for buttons) or 'Create Control Shortcut...' (for faders/dials). This can be done without a MIDI controller attached to your computer. You can access and adjust all of the functions settings by selecting the shortcut from the mappings list.

If you want a single function (i.e. a Dimmer fader, a Scene button etc.) to also be assigned to a second MIDI mapping control- you can do this by: opening Touch Mappings, right clicking on the purple overlay of the desired function, pressing 'Duplicate'. You should now see a second mapping in the list. You can then select this mapping and assign it to the desired MIDI control via the same steps outlined previously in this section.

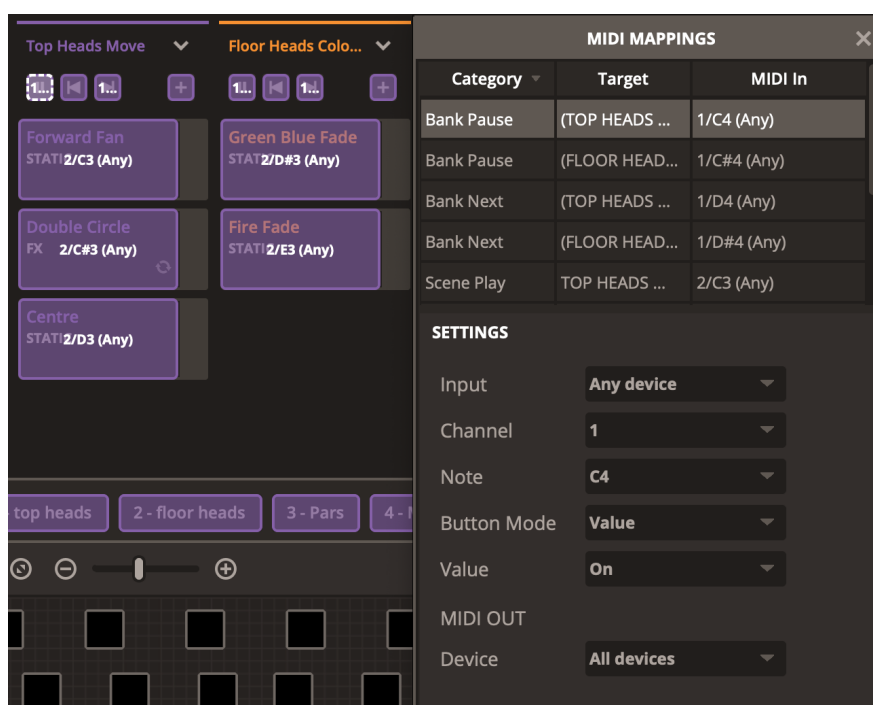


Advanced MIDI mapping (buttons/MIDI note)

It is possible to change the individual components of the MIDI message. The full range of options can be found by selecting a mapping from the MIDI mappings list. The options available will depend on the type of function you are mapping. For example, with a button/MIDI note mapping- you will see a combination of the following options:

1. **Target:** Determines how the mapping will control the function within Daslight. The options shown will differ depending on the function type.
 - a. For specific 'Scene' related functions (i.e. Scene play, Live Control dials etc.):
 - i. **Scene:** Will target only a specific scene. The scene name can be found in the 'Target' column.

- ii. **Selected:** Will target whatever scene is currently selected.
 - iii. **Index:** Will target the specific index of that specific Bank.
 - iv. **Bank:** Will target all scenes in a specific Bank.
 - b. For specific 'fixture'/'beam' related functions (i.e. a colour wheel preset, a Dimmer fader etc.)
 - i. **Beam:** Will target only a specific fixture/beam. The fixture name can be found in the 'Target' column.
 - ii. **Selected:** Will target whatever beam(s) are currently selected.
2. **Input:** This option will appear if you have mapped a software control (i.e. Beam On, BPM Tap, a specific Group etc). You can choose from 'Any Devices', or a specific MIDI controller.
3. **Channel:** Sets the input channel number from 1-16.
4. **Note:** This option determines the exact note and octave that the function will be mapped to on your MIDI controller.
5. **Button Mode:** This determines whether the button will 'Toggle' On/Off, or whether it will only send one specific 'Value' (either On or Off).
 - a. **Toggle:**
 - i. **Flash:** When enabled the button will be On whilst the button is held, then Off when released. When disabled, the button will toggle On/Off on when pressed.
 - b. **Value:**
 - i. Determines whether the MIDI mapping will turn the Daslight button 'On' or 'Off'.
6. **Device:** Determines what controller to send MIDI Output to.
7. **Control State:** This function works with the **Velocity** below to determine what values will be sent to the MIDI Controller when the button is On, Off and Fading (Fade).
8. **Channel:** Sets the output channel number from 1-16.
9. **Velocity:** Determines the value that will be sent to the controller listed in **Device** below when the button is On, Off and Fading. In certain controllers, e.g. the Akai APCmini this will allow you to set the illumination colour of a button based on its Off, On and Fade settings.



Advanced MIDI mapping (faders & dials/MIDI CC)

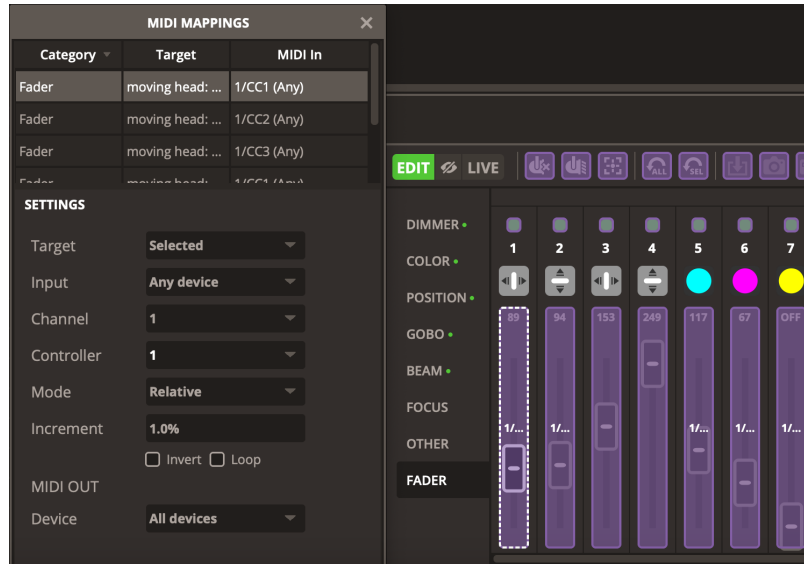
As with MIDI mapping a button, you can also control more advanced settings of a fader/dial (or MIDI CC) mapping. These options can be accessed by selecting the relevant mapping in the MIDI mapping list and will be a combination of the following:

1. **Target:** Determines how the mapping will control the function within Daslight. The options shown will differ depending on the function type.
 - a. For specific 'Scene' related functions (i.e. Scene play, Live Control dials etc.):
 - i. **Scene:** Will target only a specific scene. The scene name can be found in the 'Target' column.
 - ii. **Selected:** Will target whatever scene is currently selected.
 - iii. **Index:** Will target the specific index of that specific Bank.
 - iv. **Bank:** Will target all scenes in a specific Bank.
 - b. For specific 'fixture'/'beam' related functions (i.e. a colour wheel preset, a Dimmer fader etc.)
 - i. **Beam:** Will target only a specific fixture/beam. The fixture name can be found in the 'Target' column.
 - ii. **Selected:** Will target whatever beam(s) are currently selected.
2. **Input:** This option will appear if you have mapped a software control (i.e. Beam On, BPM Tap, a specific Group etc). You can choose from 'Any Devices', or a specific MIDI controller.
3. **Channel:** Sets the channel number from 1-16.
4. **Controller:** Sets the corresponding value for the fader/dial from 1-127.
5. **Mode:**
 - a. **Button:**

Button Mode: This determines whether the button will 'Toggle' between a Minimum/Maximum value, or only send a set 'Value'.

 - i. **Toggle:** The button will 'Toggle' between a Minimum/Maximum value.
 - **Flash:** The button will be set to Maximum value when pressed and held, then to the Minimum value when released.
 - **Range:** Determines the Minimum and Maximum values of the button.
 - ii. **Value:** The button will send a specific 'Value'.
 - **Value:** Determines the value to be sent when pressed.
 - b. **Absolute:**
 - i. **Range:** Sets the minimum/maximum percentage value for the dial/fader.
 - ii. **Invert:** Inverts the minimum/maximum values.
 - c. **Incremental:** The value will move up/down in increments.
 - i. **Increment:** Determines the value of the increment.
 - ii. **Invert:** Inverts the direction the increment will move in.
 - iii. **Loop:** Decides if the value will loop once maximum/minimum value is reached.
 - d. **Relative:** This can be used to modulate a fader/dial relative to an already set value.
 - i. **Increment:** Determines the value of the increment.

- ii. **Invert:** Inverts the direction the increment will move in.
 - iii. **Loop:** Decides if the value will loop once maximum/minimum value is reached.
6. (MIDI Out) **Device:** Determines what controller to send MIDI Output to.

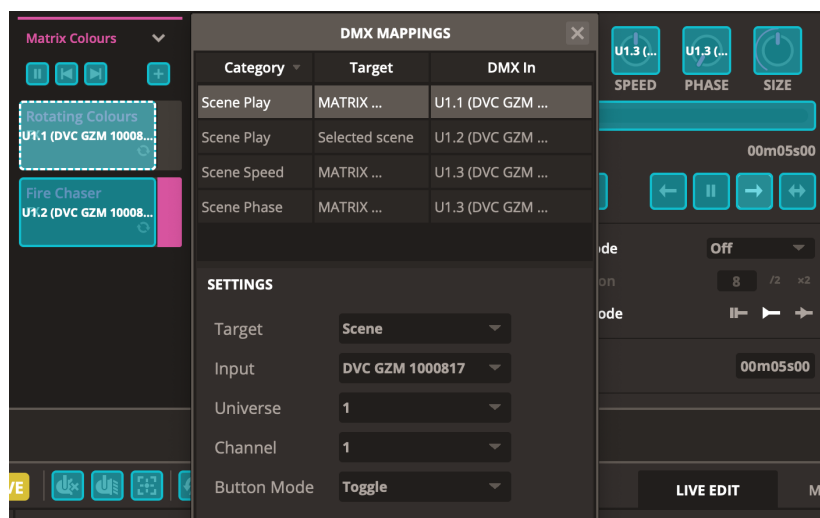


5.4. DMX mapping

If your DMX interface has a DMX input connection, faders and scenes may be triggered via a DMX input message. First of all, be sure that the correct connector on your interface is set as a DMX Input. This can be done within the Settings.

You can access the DMX Mapping tool from the Mappings drop down menu in the toolbar. When enabled, you will see a light blue overlay on all assignable functions. To map a function- simply manipulate the button/fader/dial within Daslight, then trigger the desired control on your external DMX controller.

You can edit your mappings behaviour settings by selecting the desired mapping from the list, and then making the relevant adjustments to the settings below.

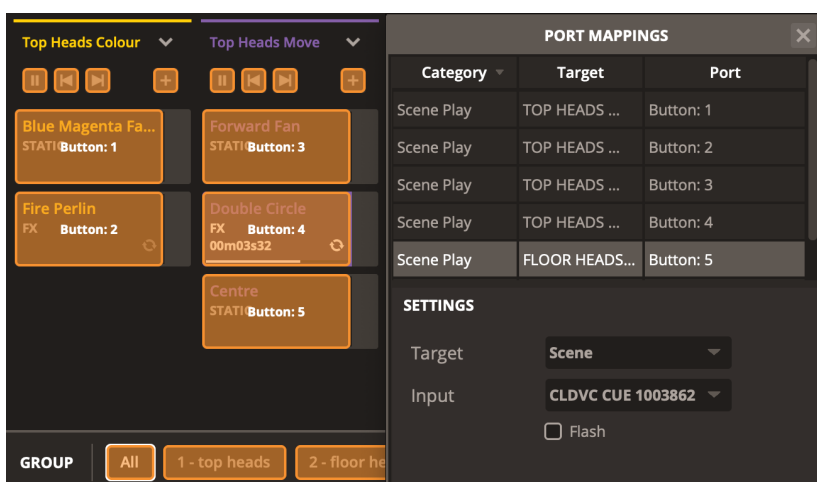


5.5. Dry contact ports mapping

You can map certain Daslight 5 functions to the dry contact ports of a compatible DMX interface, or the buttons of the DVC Gold. For example, using the 1 - 10 buttons on the DVC Gold interface will allow you to trigger scenes, control a live mixer button, toggle between two values on a fader etc.

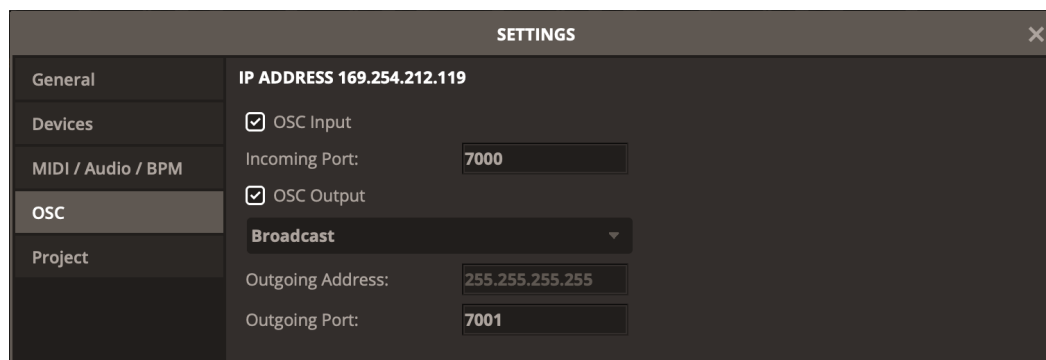
You can access the 'Ports Mapping' tool from the Mappings drop down menu in the toolbar. When enabled, you will see an orange overlay on all assignable functions. To map a function- simply manipulate the button/fader/dial within Daslight, then trigger the desired dry contact port to link the two.

You can edit your mappings behaviour settings by selecting the desired mapping from the list, and then making the relevant adjustments to the settings below.

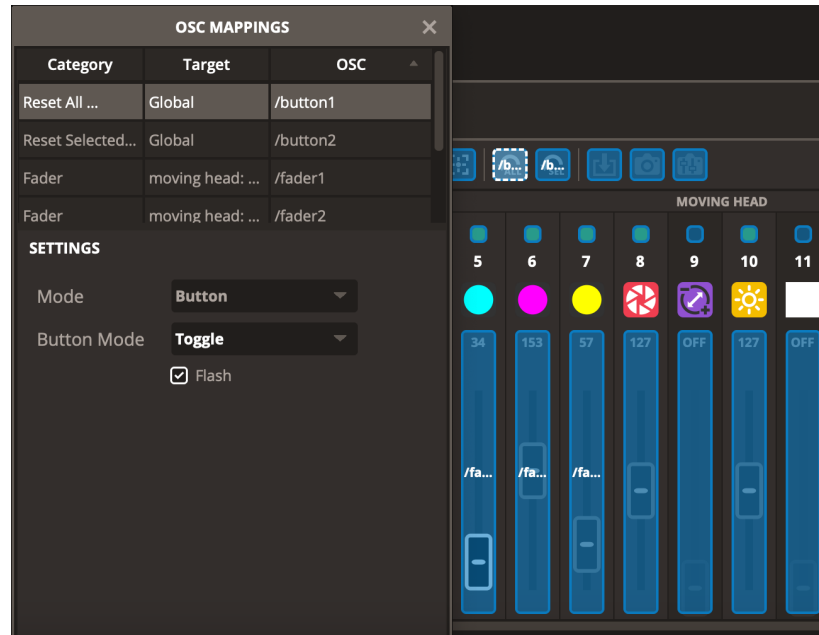


5.6. OSC mapping

OSC messages can be sent to Daslight 5 via internet connection using UDP/IP and Ethernet. In order for Daslight to receive OSC messages, you will first need to set the correct options within the OSC tab of the Settings window. You can enable OSC Input and OSC Output by clicking the relevant checkboxes. The Incoming Port will decide which port Daslight receives OSC messages from, and the Outgoing Port decides which port Daslight will return OSC messages to. You can also choose the type of OSC Output (Broadcast, Local Host or IP Address. Choosing IP Address will require you to set the relevant IP to send your OSC output to.

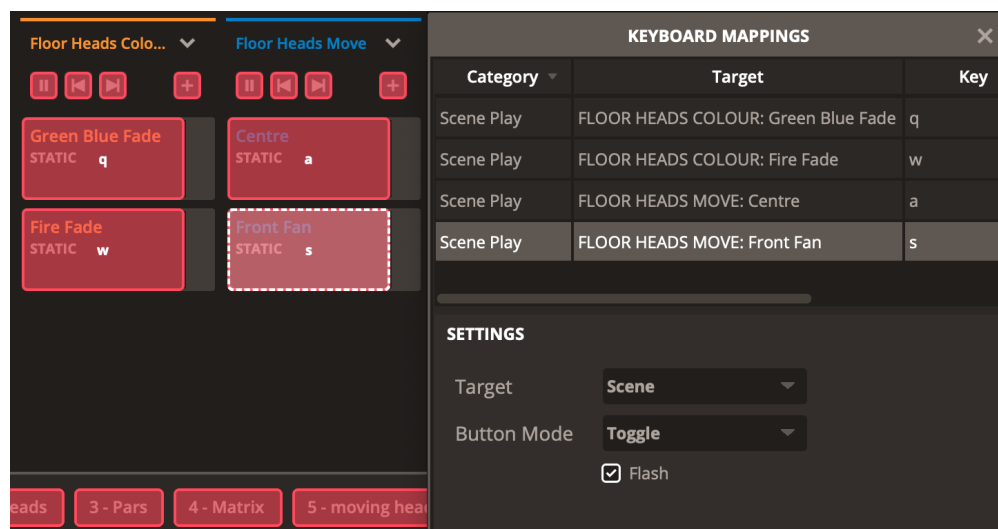


You can map a Daslight function to an OSC control by opening the OSC Mappings tool (found in the top right corner of your screen, or via the Mappings drop down menu) will show a dark blue overlay of assignable functions. To map a function to your keyboard, simply select the relevant function (i.e. a Scene play button, a Dimmer dial etc.), then trigger the desired OSC control to link the function. You can then access and adjust all of the mapping's settings by selecting the shortcut from the mappings list.



5.7. Keyboard mapping

You can also map a Daslight function to your computer's Keyboard. Opening the Keyboard Mappings tool (found in the top right corner of your screen, or via the Mappings drop down menu) will show a red overlay of assignable functions. To map a function to your keyboard, simply select the relevant function (i.e. a Scene play button, a Dimmer dial etc.), then press the desired keyboard button to link the function. You can then access and adjust all of the mapping's settings by selecting the shortcut from the mappings list.



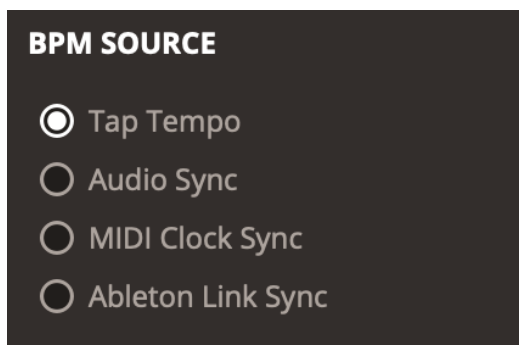
5.8. Synchronising your light show

There are a number of ways you can synchronise your light show within Daslight 5. You can select which option to use via the 'Driving Mode' setting within the Properties section of a scene.

BPM Source

If you want to use BPM to synchronise your light show, it is good to ensure you are using the desired BPM Source. The following options, which can be found in the "MIDI / Audio /BPM" tab of the Settings, are available:

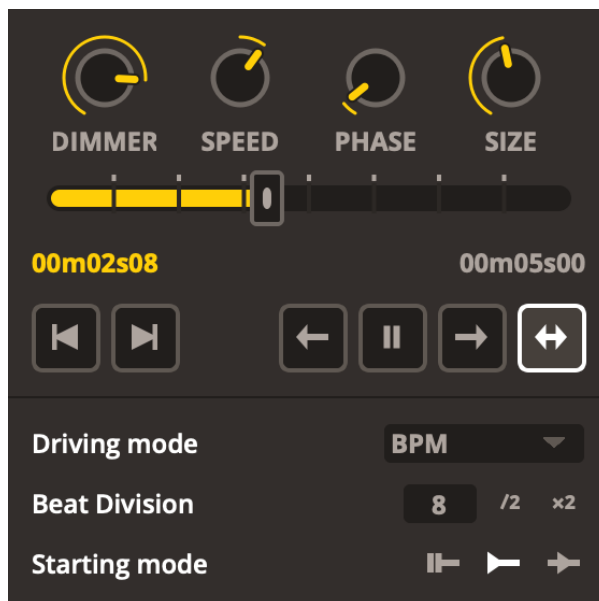
1. **Tap Tempo:** The BPM will synchronise according to the Tap Tempo button, or to any manual changes made to the BPM value in the top of the screen. You can manually adjust the BPM setting by typing in a value, or by left click + dragging.
2. **Audio Sync:** This will try to set the BPM according to audio peaks detected by the Audio Input device. This will respond best to music or audio with a strong, consistent pulse such as a metronome click.
3. **MIDI Clock Sync:** The BPM will synchronise according to the MIDI Clock. You will need a compatible MIDI device to be activated within the same Settings tab to enable this.
4. **Ableton Link Sync:** The BPM will synchronise to your Ableton Link. This can be used to synchronise tempo with an external software, such as certain DJ programs.



BPM

When you select the BPM setting in Driving Mode, you will straight away see the Beat Divisions which have been added to the playback slider. The playback of the scene will reach the next Division on each beat, as determined by the BPM. For example: setting the Beat Division to 1 will loop the scene every 1 beat, setting the Beat Division to 8 will loop the screen every 8 beats. You can instantly half or double the Beat Division value by pressing the "/2" or "x2" buttons. If you

want your scene to step from one beat division to the next, you can do this by selecting the “Pause Playback” button directly above the Driving Mode list.



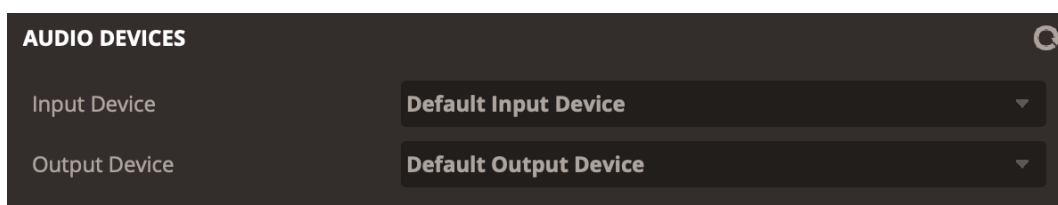
Pulse

To use Pulse control for synchronising your scenes, you will first need to set up your audio input settings correctly to ensure you are receiving the desired audio signal. This can be done within the Settings window under the “MIDI / Audio / BPM” tab.

Once you have selected the correct Audio Input device- you will need to set the desired input threshold using the Pulse slider found at the top right of your Daslight window. Setting this slider will decide the minimum audio input needed to cause the scene to ‘react’. For example, having the slider at 90% will mean that only very loud peaks in audio will cause the scene to react, whilst setting the slider to 10% will mean that very quiet peaks in audio will cause the scene to react.

When you select the Pulse setting in Driving Mode, you will straight away see the Beat Divisions which have been added to the playback slider. The playback of the scene will be determined by the scene duration and playback direction settings. The scene will jump to the next Beat Division whenever an audio peak reaches above the set Pulse threshold.

If you want your scene to be static by default, but step from one beat division to the next whenever an audio peak is detected- you can do this by selecting the “Pause Playback” button directly above the Driving Mode list.



5.9. Live controls

Live control dials

Every scene has its own set of 4 'Live Control Dials', which can be found in the Properties tab of a scene:

1. **Dimmer:** Controls the selected Features from 0% to 100% (which will equate to the value set within the scene). You can choose which Features you want to be controlled by the Dimmer dial by right clicking on it, then selecting the desired Features. For example- if you have a static scene that sets a fixtures Zoom channel to 80%, then assign the dimmer dial to control 'Zoom': When the dimmer is set to 100%- the Zoom will output the equivalent to 80% Zoom. When the dimmer is set to 50%- the Zoom will be set to 40% Zoom.
2. **Speed:** Controls the relative speed of a scene. The speed value ranges from 0.00 - 1.00, then from 1.00 - 4.00. The scene's duration will be divided by the value shown in the speed dial to speed up/slow down the scene. For example- a scene with a duration of 10 seconds, and the speed dial set to 2 will become 5 seconds long ($10 \div 2 = 5$), if you set the speed dial to 0.5 then the scene will become 20 seconds long ($10 \div 0.5 = 20$).
3. **Phase:** Used to increase the phasing value of the scene. This control will only take effect on a Move, Value, or Curve FX.
4. **Size:** Used to control the relative range of movement on a Move FX.

Please note - Live Control Dials will not take effect on a scene playing within a Super Scene.



Live mixer

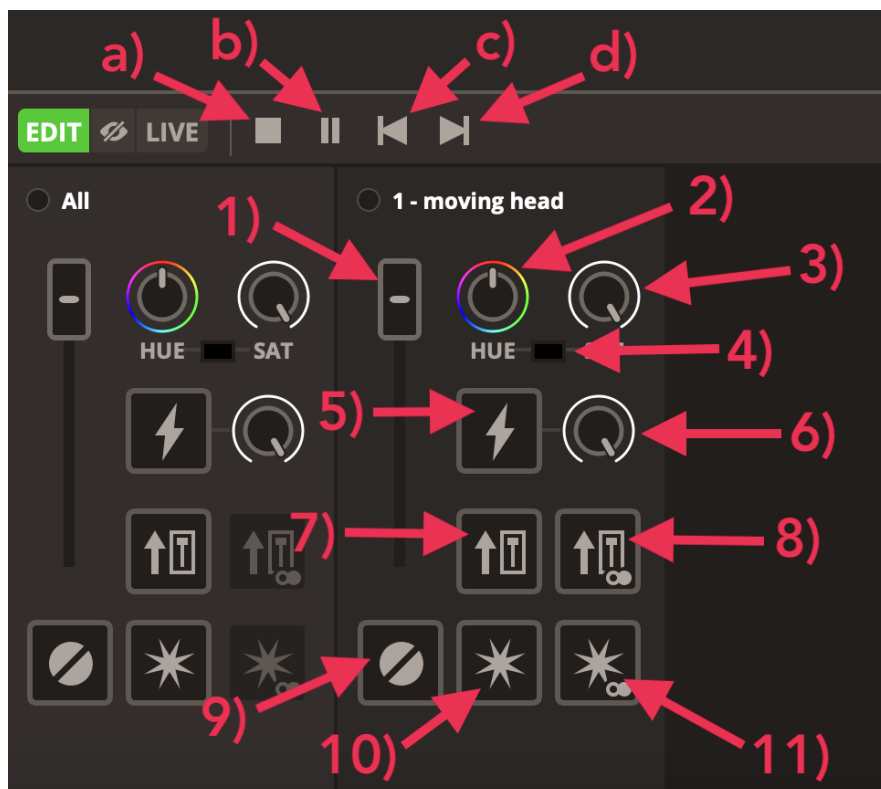
The Live Mixer tab can be accessed through the button in the top right corner of the Control Panel. Each Group of fixtures will have their own 'mixer', as well as one 'mixer' for All fixtures. Within each mixer, you can control the following functions:

1. **Dimmer:** Controls the overall brightness of the relevant fixtures.
2. **HUE:** Controls the colour of the relevant fixtures.
3. **Saturation:** Controls the saturation of the HUE value set.
4. **Reset colour:** Resets the HUE and Saturations values, the fixtures will return to their previous state.
5. **Strobe:** Activates the strobe for the relevant fixtures.
6. **Strobe frequency:** Controls the speed of the strobe.
7. **Full:** Sets the mixer's dimmer to full brightness.
8. **Exclusive full:** Sets the mixer's dimmer to full brightness and sets all other groups to 'blackout'.
9. **Blackout:** Sets the mixer's dimmer to minimum brightness.
10. **Flash:** Sets the mixer's dimmer to full brightness and the colour to white.
11. **Exclusive flash:** Sets the mixer's dimmer to full brightness and the colour to white, also sets all other groups to 'blackout'.

The Live Mixer controls can be manipulated by left clicking and dragging and they can also be mapped to external controllers, or the Touch screen using the various Mappings settings. You can latch the Live Mixer buttons on by holding CTRL (PC) or CMD (Mac) whilst left clicking on the control.

You can also control a number of playback features within the Live Mixer view:

- a. **Stop all scenes:** Stops all scenes currently playing. A warning message will appear asking you to confirm this action before stopping the scenes.
- b. **Pause all scenes:** Pauses all scenes currently playing. Button will be highlighted while paused, press again to resume playback.
- c. **Play previous scenes:** All scenes skip to the previous scene in their respective bank.
- d. **Play next scenes:** All scenes skip to the next scene in their respective bank.



6. Touch

Using Daslight 5's Touch Mode, you can create a custom user interface for your light show. It can then be displayed on an external monitor or in full screen. Show mode is ideal for installations and kiosks.

6.1. Introduction to Touch

Navigating the Touch screen

The layout of the Touch screen is as follows:

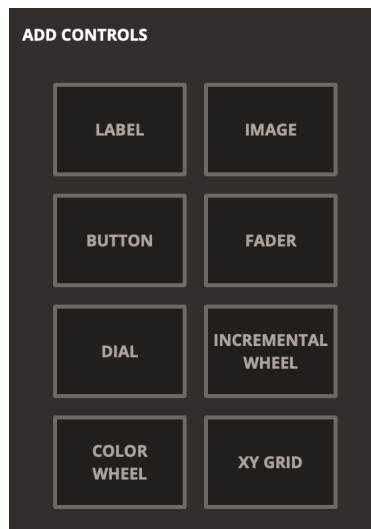
1. **Pages:** In the top left corner of the screen, you can manage different 'pages'. Within each page you can create a different display using different settings and functions (for example you may want to have different displays for easier use with different display sizes, or you may want to have one page for scenes and one for faders etc). You can add a new page by pressing the "+" button. You can also right click on a page to delete, rename or duplicate it.
2. **Zoom:** In the top right corner of the screen, you will see the zoom controls for your user interface. You can either press the "-" button to zoom out, the "+" button to zoom in, or use the slider in between the two buttons. To the left of the "-" button you can press the 'Zoom Fit' button to automatically adjust the zoom to fit all controls into the UI window.
3. **Hide properties:** Pressing this button will hide/show the 'Controls' tab on the right side of the screen.
4. **Edit:** When highlighted green, Edit mode will be enabled. This will show the user interface in grid form. You will need to be in Edit mode to make any changes to your Touch display, and you will need Edit mode to be disabled to be able to use the controls on your Touch display.
5. **Detach window:** The Touch screen will detach into a new window.
6. **Controls:** To the right side of the screen, you will find 8 control options which can be used to create your user interface.



Touch control types

There are 8 different controls that you can add to a Touch interface:

1. **Label:** Allows you to enter custom text to help organise your UI.
2. **Image:** Upload your custom images to your UI. Daslight 5 also comes with a number of default/preset icons built in.
3. **Button:** Adds a button to your UI. Can be used in toggle (default) or flash mode.
4. **Fader:** Adds a fader to your UI.
5. **Dial:** Adds a dial to your UI.
6. **Incremental Wheel:** Adds an incremental wheel to your UI. This control resembles the functionality of an infinite rotary dial, which can turn infinitely in either direction. The value will increase in increments, rather than absolute values (as with a dial or fader).
7. **Colour Wheel:** Adds a colour wheel to your UI. This can be used to control the colour of the relevant fixtures.
8. **XY Grid:** Adds an XY grid to your UI. This can be used to control the Pan and Tilt of a selected fixture.



6.2. Setting up a Touch interface

Adding controls to the Touch screen

Adding controls to the Touch screen in Daslight 5 is easy. You will first need to enable 'Edit' mode in order to make changes, then you can simply drag and drop a control from the 'Add controls' tab onto the grid to the left of the screen. Alternatively, you can right click on an empty space in the grid and select Insert, then choose the desired control type. You will not be able to add a control to

a space overlapping an already existing control, this will result in an error message “This position or size is invalid”.

Some controls are resizable- you can change the dimensions of a control by left dragging from the edge, or corner of the desired control. Please note- there are size limitations on some controls.

Right clicking on an existing control will allow you to Delete, Cut, Copy, Rename, or set a display Colour for a control. Right clicking on a Button control will also allow you to choose between ‘Push’ and ‘Toggle’ button types. A ‘Push’ button will toggle the mapped function(s) ‘On’ whilst the mouse is pressed, then ‘Off’ when the mouse is released. A ‘Toggle’ button will toggle the mapped function(s) ‘On’ when pressed once, then ‘Off’ when pressed a second time. If you right click on an Image or Button control, you will also be able to add/change the image by pressing “Load a background image...”. This will allow you to either set a custom image, or use one of Daslight 5’s default icons.

Mapping functions to a control

The quickest way to assign a function (i.e. Dimmer channel, Scene play, Pan/Tilt grid etc.) is to locate the function you want to control in the Touch screen, then hold “Alt” (Windows) or “Option” (Mac) and left click the function. This will automatically assign a control to the Touch screen with the function assigned to it.

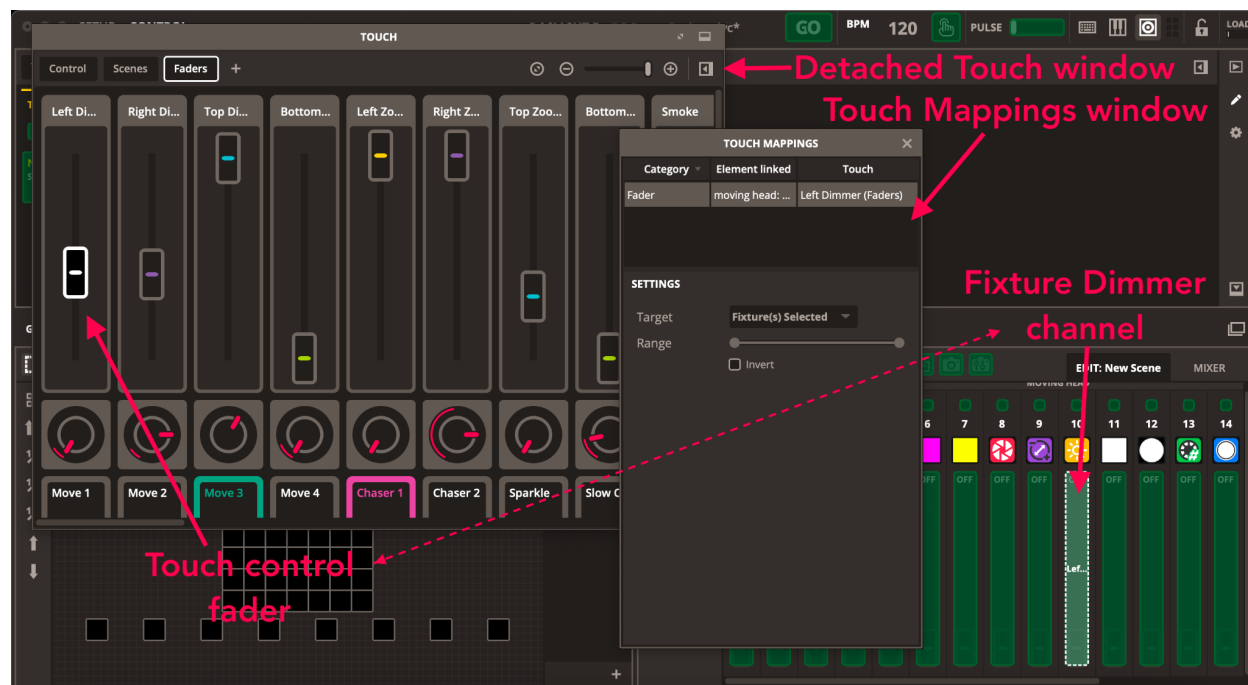
If you want to manually assign a function to a pre-existing control, you must first select the ‘Touch Mappings’ button, revealing a green overlay onto all mappable functions. Once you have selected the desired button/fader/dial, a dotted line will then appear highlighting the function. Next, you can simply activate the Touch control to map the function to the control.

You can adjust the settings of an individual mapping by selecting the mapping from within the Touch Mappings list. For example- you may want to set the range of a fader when controlled from the Touch screen.

If you want a single feature (i.e. a Dimmer fader, a Scene button etc.) to be assigned to a second Touch control- you can do this by: opening Touch Mappings, right clicking on the green overlay of the desired function, pressing ‘Duplicate’. You should now see a second mapping in the list. You can then select this and assign it to the desired control by activating the control in the Touch screen.

6.3. Daslight Remote

You can view and control your Daslight Touch window using your smartphone or tablet with the all new Daslight Remote app, which is now available in the Google Play/Apple App Store.

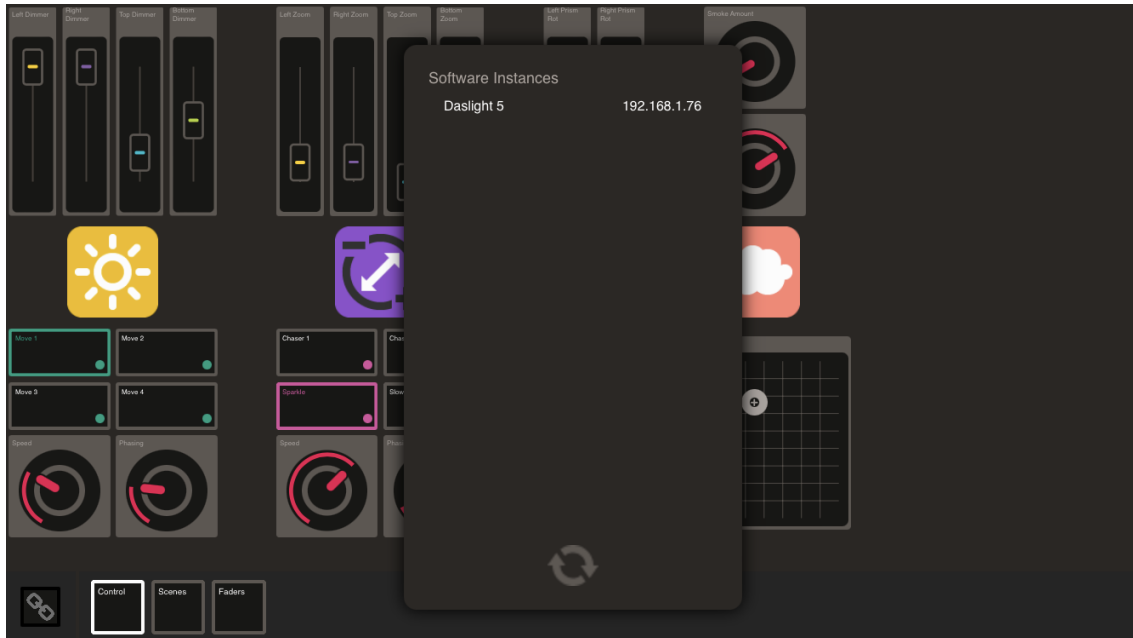


Connecting Daslight Remote to Daslight 5

Daslight Remote operates over a Local Area Network, therefore the computer running Daslight 5 and the mobile device running Daslight Remote must be connected to the same wifi network. When the app is first launched, you will see an empty page. Selecting the 'Software Instances' button (bottom left corner of your screen) will then show all Daslight 5 instances on the local network. Select the correct instance (this will display your computer's IP address) to connect. If you do not see your Daslight instance, you can refresh the list using the button at the bottom of the 'Software Instances' section. Select the Daslight 5 instance and then the interface will be built automatically as it appears on your Touch screen.

The size/zoom of your user interface will depend on the dimensions of the device you are running Daslight Remote on. The user interface will automatically resize itself to fit all controls in the view at the largest size possible. You may want to create different pages within Daslight 5 to accommodate for different devices (i.e. a smaller & more narrow page for an iPhone, then a larger & wider page for your tablet etc).

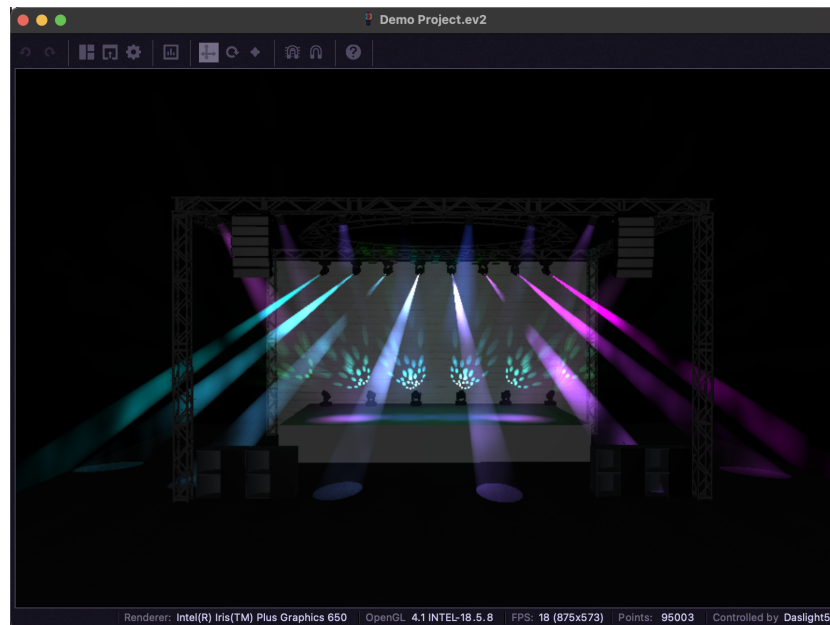
Once connected- you will be able to trigger buttons, control dials/faders, change pages etc. remotely from within the app!



7. Other information

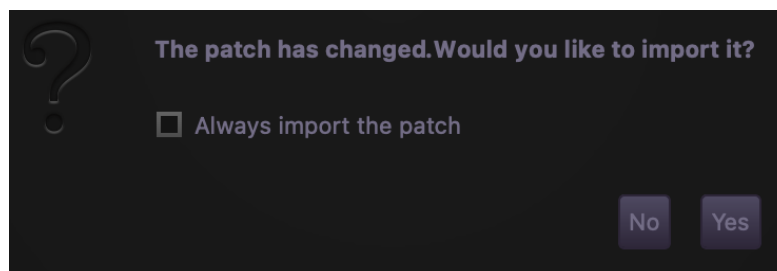
7.1. 3D Visualizer

The 3D Visualiser, also known as Easy View 2, allows you to visualise your light show using 3D models. This tool can be extremely helpful as it allows you to very quickly gain a better idea of how your light show might appear in real life, without having to set up all of your physical fixtures!



Setting up a 3D show

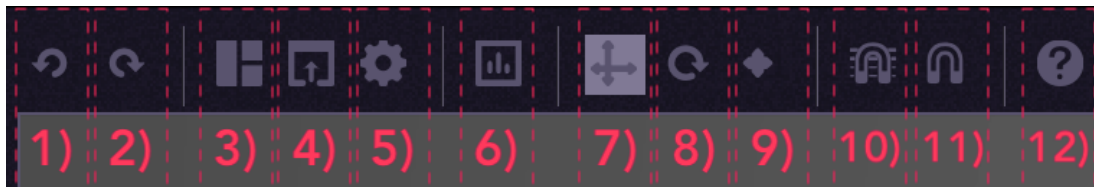
When you open the 3D Visualizer, you will see a prompt stating that the “patch has changed” and asking if you would like to import it. Selecting ‘Yes’ will automatically import all of the fixtures within your Daslight project to their correct DMX addresses. Selecting ‘No’ will open an empty 3D Visualizer project, allowing you to set up the show manually as you please.



Navigating Easy View 2

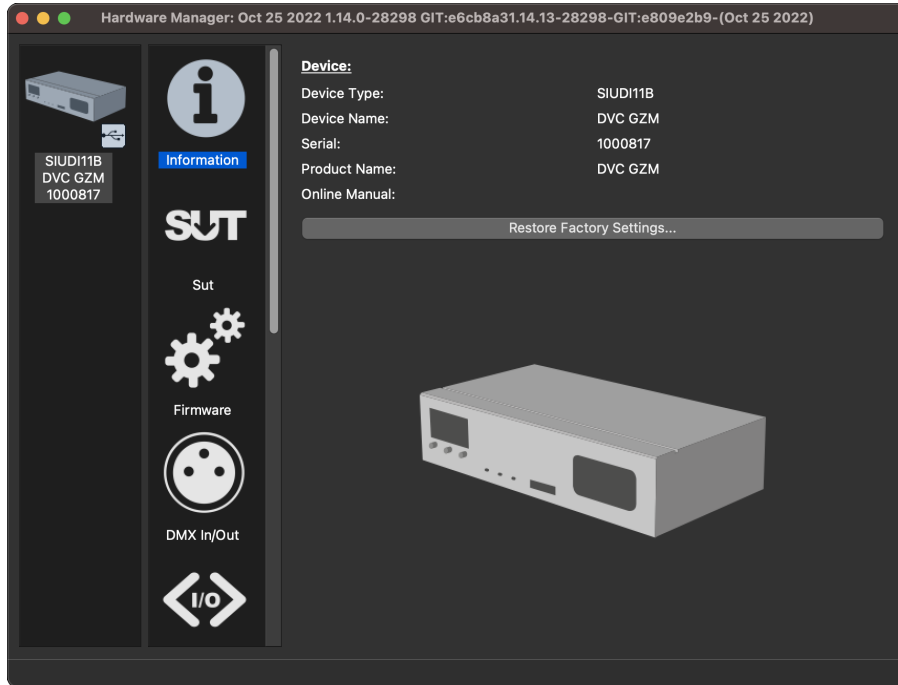
Easy View 2 has a number of buttons in the toolbar, located at the top of the window. When you hover over a button, it's name will appear in the bottom left of the window. The following explains what each button is/does:

1. **Undo:** Undoes the previous action.
2. **Redo:** Redoes the undone action.
3. **Build view:** This will show the setup options for Easy View 2. Here you can patch fixtures, add 3D models, and adjust the visual settings. You can also move, rotate and align your fixtures.
4. **Keep this dialogue always on top:** When enabled, the 3D View window will remain on top of the Daslight window. This will allow you to play scenes or adjust your light show within Daslight, whilst still being able to use the 3D Visualizer tool.
5. **Settings:** Allows you to adjust specific settings for the program (i.e. grid spacing, render quality etc).
6. **DMX input:** Allows you to view the DMX levels being sent to the program from Daslight.
7. **Allows to translate the selected object(s):** Within build view, allows you to move objects manually in the X, Y and Z axis using the red, blue and green arrows.
8. **Allows to rotate the selected object(s):** Within build view, allows you to rotate objects manually in the X, Y and Z axis using the red, blue and green circles.
9. **Allows to scale the selected object(s):** Within build view, allows you to scale objects manually in the X, Y and Z axis using the red, blue and green pointers.
10. **Snap to grid:** When enabled, your fixtures will snap to the grid when you move them.
11. **Snap to objects:** When enabled, your fixtures will snap to the other fixtures/objects when you move them.
12. **About Easy View 2:** Shows the information about your version of Easy View 2.



7.2. Hardware Manager

Hardware Manager is a tool for managing and maintaining your DMX interface. You can access this within Daslight 5 via the 'Tools' dropdown menu, or within the Daslight 5 folder in your computers file directory. Through Hardware Manager- you can update the firmware, view your licences, adjust your device settings etc. The user manual for Hardware Manager can be found [here](#).



7.3. DMX levels

You can view the DMX levels screen via the 'Tools' dropdown menu. This will show you the DMX values being produced by your Daslight 5 project in real time.

The screenshot shows the "DMX LEVELS" window with "Universe 1" selected. It displays a grid of DMX values for 512 channels, arranged in 16 rows and 32 columns. The values are color-coded: blue for values between 100 and 200, and red for values between 200 and 300. The grid shows a repeating pattern of values across the channels.

Channel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
231	70	20	184	255	113	127	127	194	220	78	214	29	224	255	127	127	1	194														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	
142	127	127	8	194	169	115	163	23	255	60	127	127	10	194	159	122																
97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	
102	125	250	254	127	127	11	194	149	129	41	226	138	255	127	127	13	194															
129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	
138	137	235	71	42	255	127	127	15	194	255	53	187	67	52	120	134	50	53	201	49												
161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	
241	13	53	174	80	51	107	147	50	40	214	49	228	26	53	161	93	51	93	161	50	26	228	48	214	40	52	147	107	51	80	174	
193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	
50	13	241	48	201	53	52	134	120	51	67	187	49	255	48	104	216	35	179	6	6	104	216	35	179	6	28	6					
225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	
104	216	36	179	6	56	6	104	216	37	179	6	85	6	104	216	37	179	6	113	6	104	216	38	179	6	141	6					
257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	
104	216	39	179	6	170	6	104	216	39	179	6	198	6	104	216	40	179	6	226	6	104	216	41	179	6	255	6					
289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	
141	77				102	197	197	172	108					102	125	125	180	139														
321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	
53	150	169			102	16	238	184	135					102	225	29	154	165														
353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	
41	213	123	187		102	112	112	92	156				102	184	184	127	191															
385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	
137	117	96	160		102	209	209	66	130				102	25	24	92	99															
417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	
102	158	96	70	134		102	49	49	88	103			102	134	121	119	72															
449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	
102	62	193	149	85		102	246	246	115	76			102	37	217																	
481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	

7.4. Stand alone

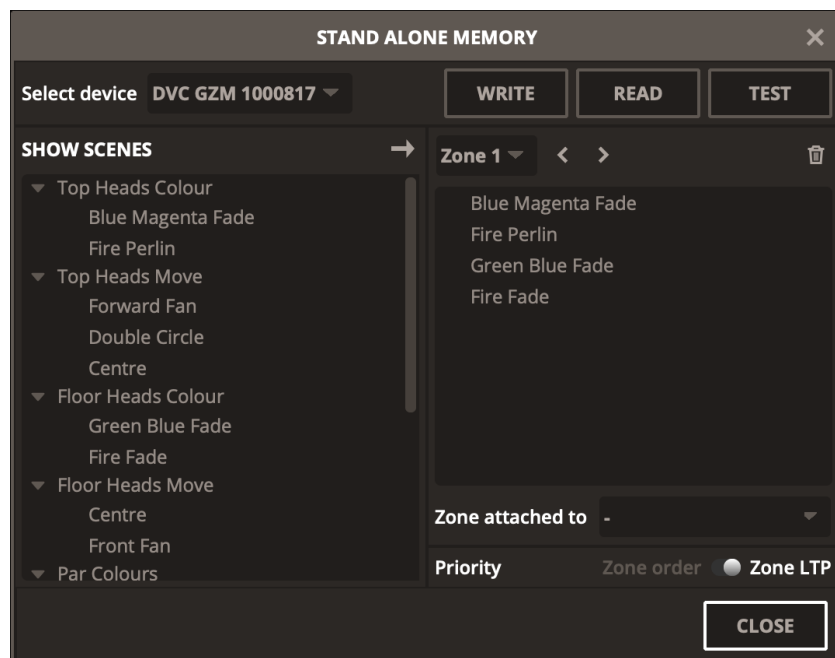
Scenes from a Daslight 5 show can be transferred to a compatible DMX interface and run in Stand Alone without a computer. This is useful to have as a backup, or for a small show or architectural installation where a computer is not always required. Stand Alone features vary depending on the connected interface. For example, some interfaces can play several scenes at the same time while others are restricted to one scene at a time. Other features include calendar triggering and SD card memory to play larger shows. The 'Stand Alone' window can be accessed from the 'Tools' menu.

Creating a stand alone show

A Stand Alone show can be created by selecting a connected Stand Alone compatible interface from the 'Select device' dropdown menu in the top left corner of the window. A list of all scenes/banks in the show appear on the left. Scenes can be assigned to Stand Alone by selecting the scene(s) from the 'Show scenes' list on the left, then pressing the 'rightwards arrow' button at the top right corner of the list. You can remove a scene from your Stand Alone show by selecting it in the list on the right, then pressing the delete button in the top right corner of the list.

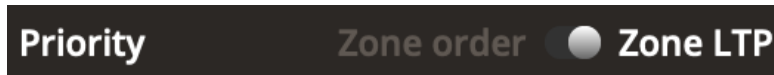
For Multi-Zone devices you can select which zone you want to add the scene(s) to by choosing the zone from the 'Zone' dropdown in the top left of the list on the right. By moving one scene to Zone 1 and another scene to Zone 2, both scenes can be played simultaneously, providing that they are not controlling the same channels.

The 'Zone attached to' dropdown lets you choose which groups of lights from the software are affected by the scenes loaded in the current zone of the device. Choose which groups are affected by clicking a checkbox of the group you want. Note- If you do not select any groups from this dropdown, there will appear to be no DMX output from the device when in Stand Alone mode.



The 'Priority' toggle options are explained below. This is for multi-zone devices only.

1. **Zone order:** This will mean that lower numbered zones (e.g. zone 1) take priority over higher numbered zones (e.g. zone 2).
2. **Zone LTP:** LTP is an acronym for 'Last Takes Priority'. This means the scene that is last selected, regardless of the zone order, will take priority.



Once the Stand Alone show has been built, click '**Write**' to write the show to the device. Other buttons available include:

1. **Write:** Once the Stand Alone show has been set up as you want, press 'Write' to write the show to the device.
2. **Read:** Takes the show from the device and loads it into Daslight 5. Note that on devices with limited memory, only essential information is saved (i.e. scene names may not be recalled). In general, reading the memory should only need to be used if the .dvc file has been lost.
3. **Test:** Temporarily sets the DMX interface to Stand Alone mode allowing for the Stand Alone show to be tested. Press 'Stop' to return to the previous screen.



Port triggering, jumping & looping

Scenes can be triggered via the DMX interface's dry contact ports. The port is set via the 'Ports Mapping' function from the Mappings drop down menu in the toolbar. See the 5.5. ['Dry contact ports mapping'](#) chapter for more information on this.

A scene can be set to loop a certain number of times and then jump to another scene. These settings can be found within the scene's 'Advanced Properties' window of the Control tab.

Time triggering

Some interfaces include a clock and calendar allowing a scene to be automatically recalled at a certain time of day or a certain day or date when the device is in Stand Alone mode. To add a time trigger to a scene, right click the scene in the Stand Alone window of Daslight 5 and select 'Time Trigger'.

There are 3 ways to trigger a scene :

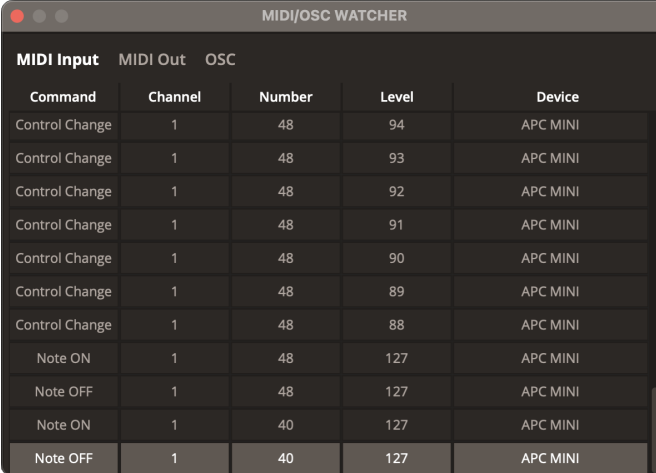
1. Appointed time: set a time of the day when a scene is triggered.
2. Repeating time slot: Re-trigger a scene several times between a start and end time (if you have a scene set to Always Loop, this function will restart the scene).
3. Sun Time: Triggers a scene at sunrise and sunset (compatible device required). Check that the location settings are correct within the Hardware Manager application.

By default, the time set will be triggered every day. This can be changed to just 1 day each year (for example, maybe you would like to have your lights green on St Patricks day) or every day between 2 dates. You can also select a scene to trigger on a certain day of the week, or a certain day of the week between 2 dates. The days of the week can be found at the bottom of the date selection box. Note-: It is not possible to set a time to turn a scene off from the calendar. The scene will be activated until another is triggered.

7.5. MIDI/OSC watcher

The MIDI watcher tool can be used to view in real time all MIDI input messages that Daslight is receiving (MIDI Input) as well as the MIDI messages Daslight is sending (MIDI Out). When a message is sent, it will be visible in the list. You will see the Command type, Channel, Number, Level as well as the Device the message is being sent by/to.

You can also monitor any incoming OSC messages by pressing the OSC tab. Here you will be able to see the Address, Type, Value and Device of the OSC messages.



The screenshot shows a window titled "MIDI/OSC WATCHER" with three tabs: "MIDI Input", "MIDI Out", and "OSC". The "MIDI Input" tab is active, displaying a table with the following data:

Command	Channel	Number	Level	Device
Control Change	1	48	94	APC MINI
Control Change	1	48	93	APC MINI
Control Change	1	48	92	APC MINI
Control Change	1	48	91	APC MINI
Control Change	1	48	90	APC MINI
Control Change	1	48	89	APC MINI
Control Change	1	48	88	APC MINI
Note ON	1	48	127	APC MINI
Note OFF	1	48	127	APC MINI
Note ON	1	40	127	APC MINI
Note OFF	1	40	127	APC MINI

7.6. Profile Builder

Within the Tools dropdown menu, you can access the Profile Builder website. When selected- the webpage will be loaded into a new tab on your default browser. The Profile Builder website can be used to create your own custom fixture profiles, which can later be accessed within the Setup screen in the 'Display your user Cloud fixtures' library (see 3.2. [Fixture library](#)). It is also possible to search through our 'official' fixture library, where you can duplicate the profile and make any custom adjustments for personal use.

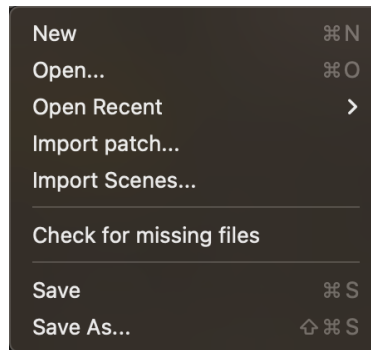
7.6. Miscellaneous UI components

Saving and opening

Within the 'File' dropdown menu, you will see a few options for project management.

- **New:** Opens a new, empty project. You will be prompted to save any changes to the current project.
- **Open:** Opens your computers file directory, locate the desired .dvc file to open.
- **Open recent:** Shows a list of recently opened projects, select one to open.
- **Import patch:** Opens a .dvc project but only imports the 'Setup' screen (fixtures).
- **Import scenes:** Opens a .dvc project but only imports the 'Control' screen (scenes).
- **Check for missing files:** Checks project for missing files (i.e. an audio file within a Super Scene).
- **Save:** Saves current project to the already set file path.

- **Save as:** Saves a copy of the current project to a custom file path.



General settings

Within the 'General' tab of the Settings window, you can set the following options:

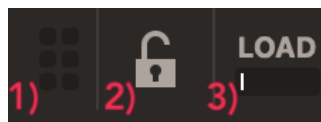
- **Language:** Sets the language for the software.
- **Display ratio:** Adjusts the display ratio for specific screen resolutions.
- **SUT dialog:** Choose when the SUT dialog appears (when connecting a DMX device).
- **Enable high DPI scaling:** Enables high DPI scaling.
- **Lock edit mode:** Edit mode will be locked by default.
- **Reset 'do not show again' messages:** Any messages marked as 'do not show again' will re-appear.
- **Startup- Load the last file:** When opening the software, the last file will also be opened by default.
- **Startup- Open Touch mode in full screen:** When starting the software, the Touch screen will be opened in full screen.

Other UI functions

Within the top right corner of your Daslight 5 window, you will see six small dark squares in two columns of 3. This is known as the 'Input Indicator'. Each square displays a type of input to Daslight 5. For example, if you have a MIDI controller linked to Daslight- when the software receives a MIDI message, the middle-left square will fire. When Daslight 5 receives a keyboard message, the top-left square will fire etc.

To the immediate right of the input indicator is the 'Lock' button. When selecting this, you will see the option to lock each of the screens in Daslight 5 (Setup, Control & Touch). You can also set a custom password to ensure that no permanent changes are made to your show by mistake.

To the right of the lock button, you will see the 'Load' indicator. This will monitor the CPU usage of Daslight 5 during use- the more the bar fills up, the higher the CPU usage.



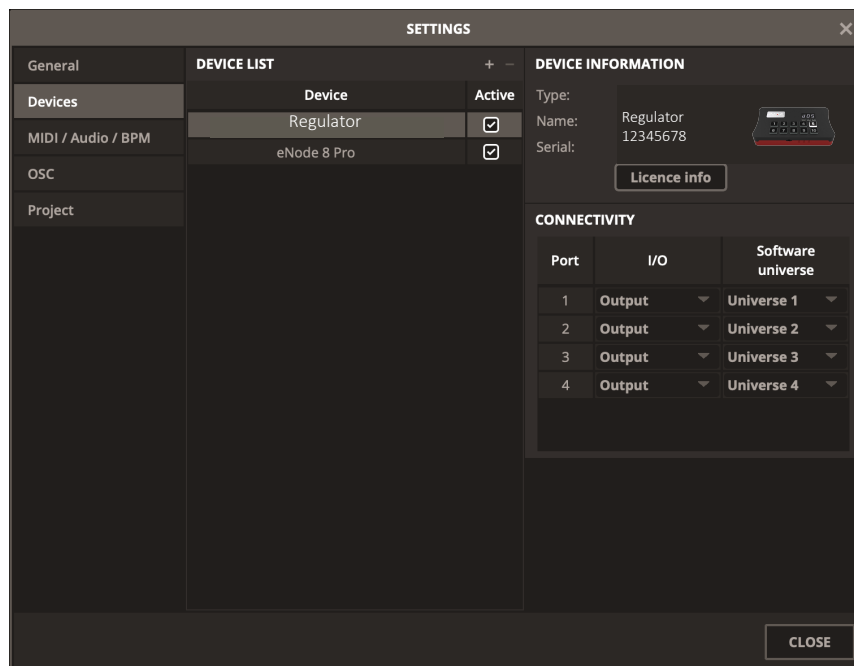
7.6. DMX and Art-Net devices

DMX devices

Daslight 5 is capable of sending and receiving DMX from several different devices simultaneously. These can be configured within the Settings > 'Devices' window. Compatible interfaces include:

- JMAZ REGULATOR

Available devices are listed in the centre of the Settings window, along with the 'Active' checkbox. The checkbox will indicate which devices are currently being used by Daslight. Further information on the selected device is displayed on the right including connection type, serial number, assigned DMX universe and whether each universe is set as an input or an output.

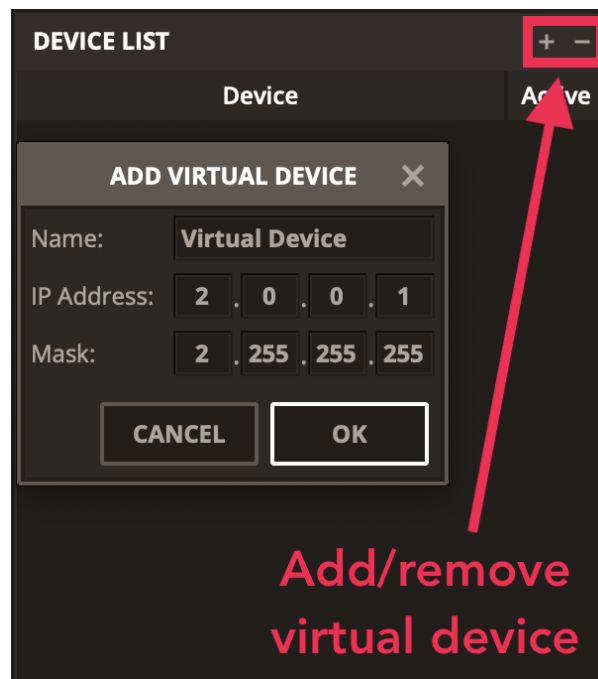


Art-Net devices

Daslight 5 can send DMX over Art-Net, providing that a compatible SUT device is connected with a valid Art-Net licence already purchased. Art-Net devices are detected automatically in the centre of the Settings window as with USB and Ethernet devices. The software universe can be mapped to the corresponding Art-Net universe on the right.

By default, Daslight will send the Art-Net data to the IP address of the Art-Net device. Messages can also be broadcast across the entire network by clicking on the 'Broadcast' checkbox.

Art-Net devices can also be added manually by clicking the "+" button ("Add Virtual Device") at the top right corner of the window, then entering the name, IP Address and Mask. You can remove the selected virtual device by pressing the "-" button.



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