

Light Rider



User Guide
V1.4

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Hardware Setup

To get going with Light Rider BeamZ, connect a compatible DMX interface by USB (Android only) or by WiFi (iPad and Android).

Connecting to a DMX Interface

Light Rider BeamZ WiFi DMX Interface

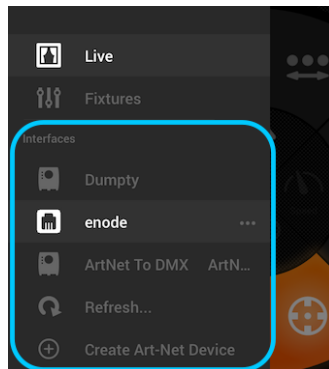
Light Rider BeamZ has been designed to be used with the Light Rider BeamZ WiFi DMX device. Simply connect to this DMX device over WiFi, then start Light Rider BeamZ. The device may take up to 20 seconds to connect. No further purchases are required.

There are 2 possible default passwords for the Light Rider BeamZ WiFi DMX interface:

- Newer Devices (Serial Numbers ABOVE 180000): smartdmx0000
- Older Devices (Serial Numbers BELOW 180000): 00000000

The Android version of the app may also be used with the Light Rider BeamZ USB DMX device. Connect the device to your tablet with an OTG (On-The-Go) cable.

To connect to a DMX interface, tap the menu button and tap on the interface you would like to use.



'Other' DMX Interfaces

Light Rider BeamZ can also be used with other specific devices with the correct additional purchases described below.

Light Rider BeamZ for Android:

- SUSHI-DS BeamZ Edition
- STICK-GU2 BeamZ Edition
- STICK-CW4 BeamZ Edition

Light Rider BeamZ for iPad:

- STICK-CW4 BeamZ Edition

Interface Configuration

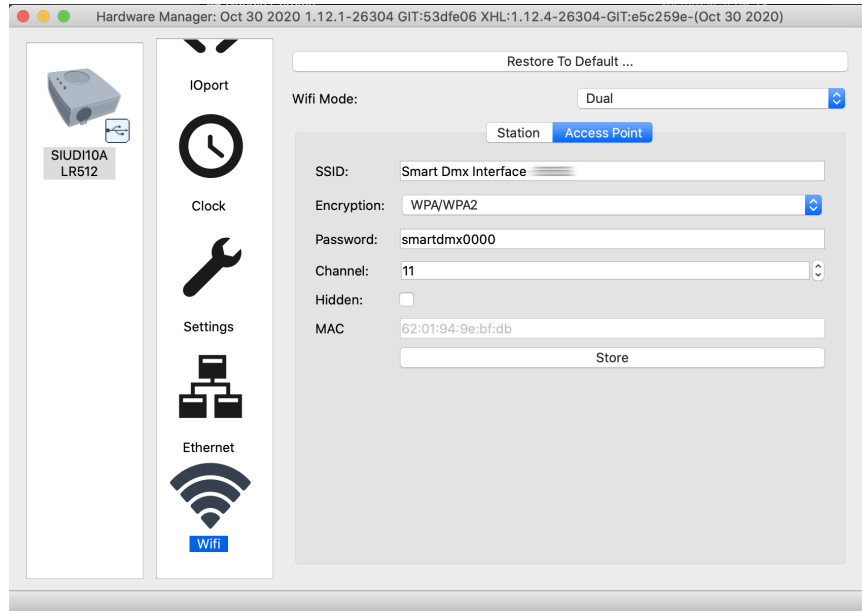
Light Rider BeamZ WiFi DMX Device Connection Types

Dual Mode is what the Light Rider BeamZ WiFi DMX Device is set to as standard, This means you can connect to the Light Rider BeamZ WiFi DMX Device directly from the tablet (this is called Access Point mode). And you can also set the Light Rider BeamZ WiFi DMX Device to connect to a WiFi network (this is called Station Mode). When the Light Rider BeamZ WiFi DMX Device is in Dual Mode, it will allow a tablet to connect to it directly, and it will allow a tablet to connect to it via a WiFi router.

If you change Dual Mode to Access Point, it will only allow a tablet to connect to the Light Rider BeamZ WiFi DMX Device directly. If you change the Dual Mode to Station Mode, it will only allow a tablet to connect via a WiFi router.

When a Light Rider BeamZ WiFi DMX Device is setup in Station Mode, your tablet is connected to a WiFi router. If the WiFi router has an active internet connection, then you can use the Light Rider BeamZ WiFi DMX Device whilst also having the internet on the tablet.

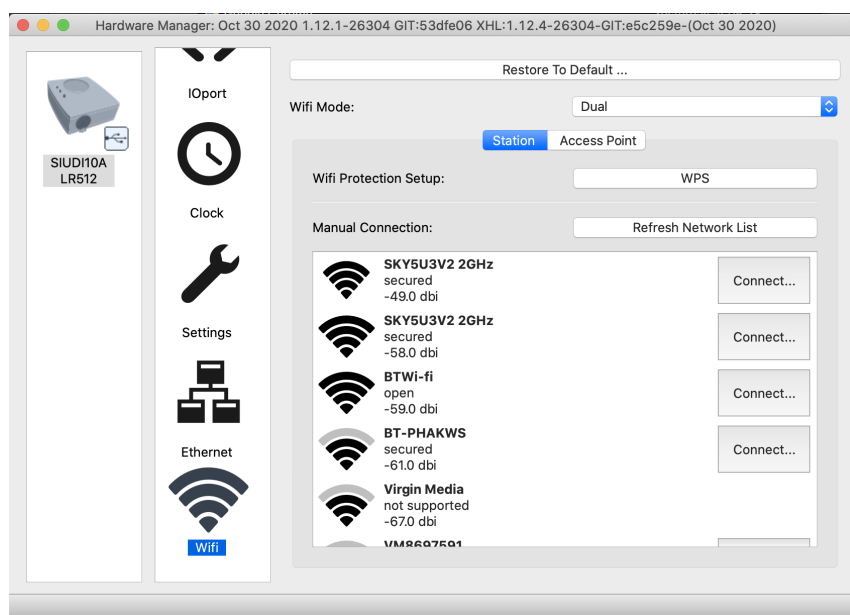
When the Light Rider BeamZ WiFi DMX Device is setup in Access Point, your tablet is connected directly to the Light Rider BeamZ WiFi DMX Device and it does not have an active internet connection.



Light Rider BeamZ WiFi DMX Device Station Mode Setup

1. Download and install Hardware Manager from <https://www.lightrider.com/#download>
2. Connect your Light Rider BeamZ WiFi DMX Device Interface and select it from the list on the left

3. Select 'WiFi' Tab
4. Select "Refresh Network List"
5. Select the WiFi network you want to connect to and click "Connect..."
6. Wait for the Blue LED on your Light Rider BeamZ WiFi DMX Device to flash
7. Close Hardware Manager

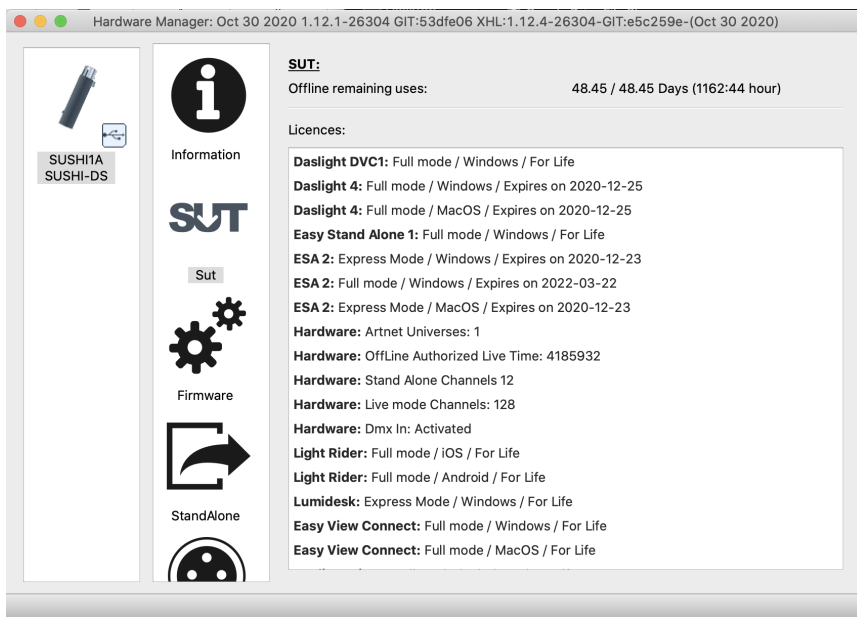


Synchronising SUT Licences

If you have purchased a Light Rider BeamZ app licence, DMX Live channels, DMX In licence, Easy View Connect licence, or Art-Net for Android licence, you may need to synchronise your interface before the licences can be used.

To synchronise your interface:

1. Download and install Hardware Manager from <https://www.lightrider.com/#download>
2. Connect your Light Rider BeamZ WiFi DMX Device Interface and select it from the list on the left
3. Select 'SUT' Tab
4. Wait 30-60 seconds for your licence to appear in the 'Licences' list
5. Once complete, close Hardware Manager



App Setup

Launch the Light Rider BeamZ app on the tablet. Tap the menu on the left and select your interface from the list. Go to the Fixtures screen, select your Brand and Device from the bottom and tap *Add A Fixture*. This is all you need to do to get started. From here you can proceed to the Live page of this manual, or continue reading from here for a more in-depth explanation.

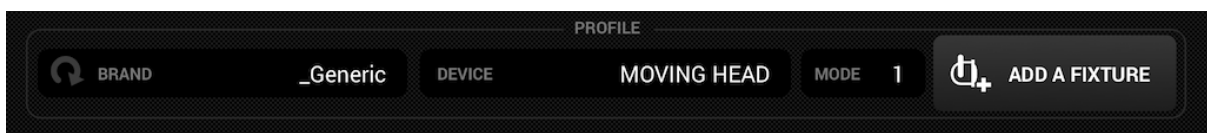
Creating a Project

To create a project, tap the menu button and tap 'Create a Project'. You will have the option to copy the presets and fixtures from the currently open project, or start a fresh project. Tapping the 3 dots next to the project name allows you to rename or delete it.

Adding Fixtures

You need to add some fixtures to your project before anything will happen. Head over to the fixtures screen by tapping the menu button and then 'Fixtures'. To add a fixture:

1. Tap the 'Brand' button at the bottom of the screen and select the brand
2. Select a device. Notice each device has a colored dot to the right:
 - a. Red means the device must be downloaded from the cloud. An internet connection is required for this!
 - b. Green means you have the device on your tablet already
 - c. Yellow means you have the device on your tablet, however an updated version is available on the cloud
3. Select a 'Mode'. Some fixtures have different operation modes which take up different amounts of channels. Be sure you have the same mode selected on your fixture. You'll need to check your fixtures manual for this as each fixture is different
4. Tap 'Add A Fixture'

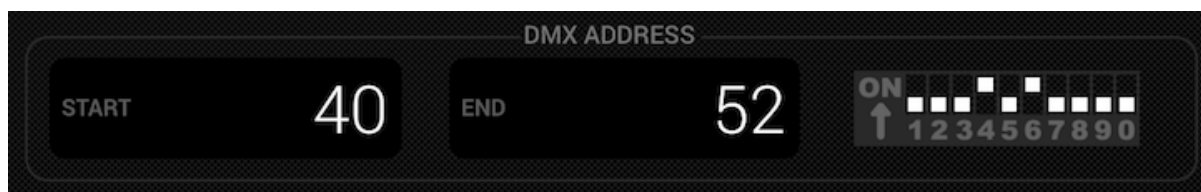


Addressing your Fixtures

Each DMX fixture is assigned a unique number so that Light Rider BeamZ knows which fixture to send the correct information to. To address a fixture:

1. Tap the fixture in the list and look at the Start address number
2. Use the digital display on the actual fixture to set the same number. Refer to the fixture manufacturers manual on how to do this. Some fixtures use DIP switches instead of a digital display. The correct DIP switches are shown on the right.

3. If you have already set up your fixture and it's not practical to change the DMX address, this can be changed by tapping the Start Address number. Note that the end address is fixed because the number of channels a fixture uses is fixed.



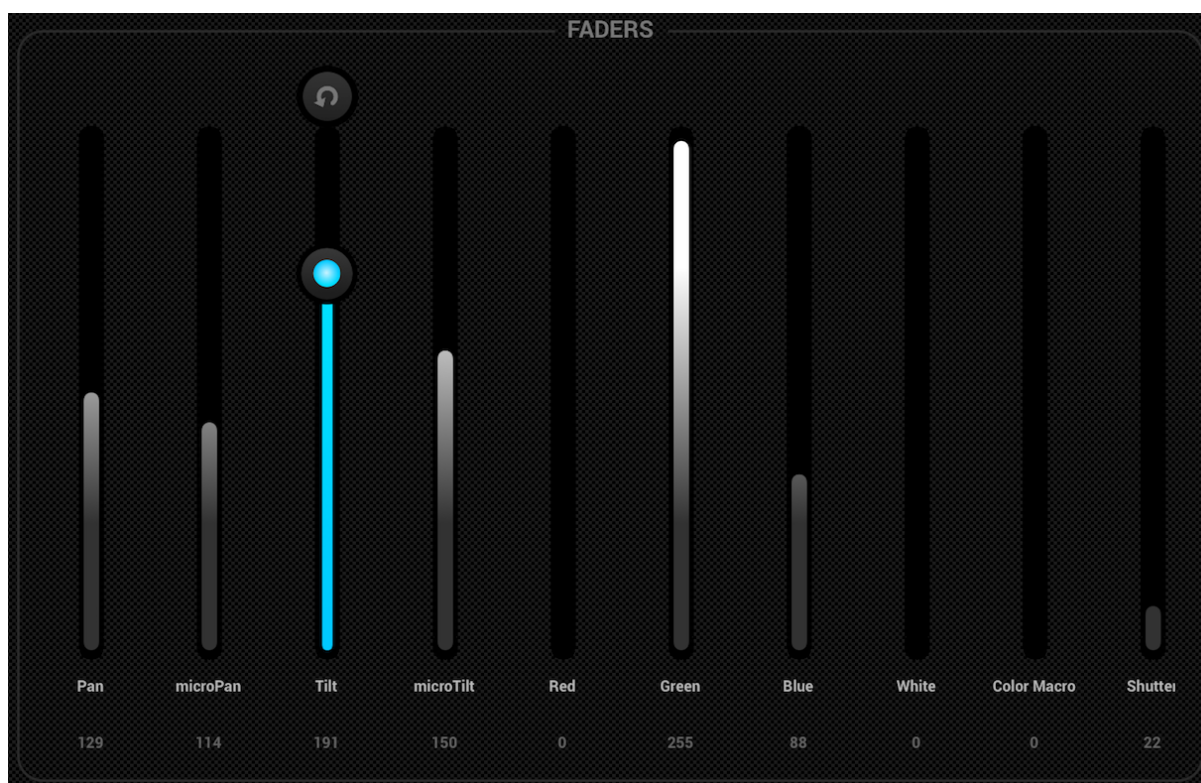
Changing the order of fixtures

All effects are applied in the order the fixtures appear in the list. For example if you have the Light Rider BeamZ color effect chasing between fixtures, it will start at fixture 1 and end at the last fixture in the list. To change the order of fixtures, tap and hold a fixture and drag it to a different position in the list. Don't worry - this will not affect the DMX address of the fixture!

Controlling with the Faders

Light Rider BeamZ has been designed to control the fixture automatically, however you can manually override the value of a fixtures channel. To do this:

1. Select a fixture by tapping it in the list
2. Tap the fader you want to control. The fader will turn blue
3. Drag the fader up and down to change the value
4. To reset the fader back to automatic mode, tap the reset icon at the top of the fader



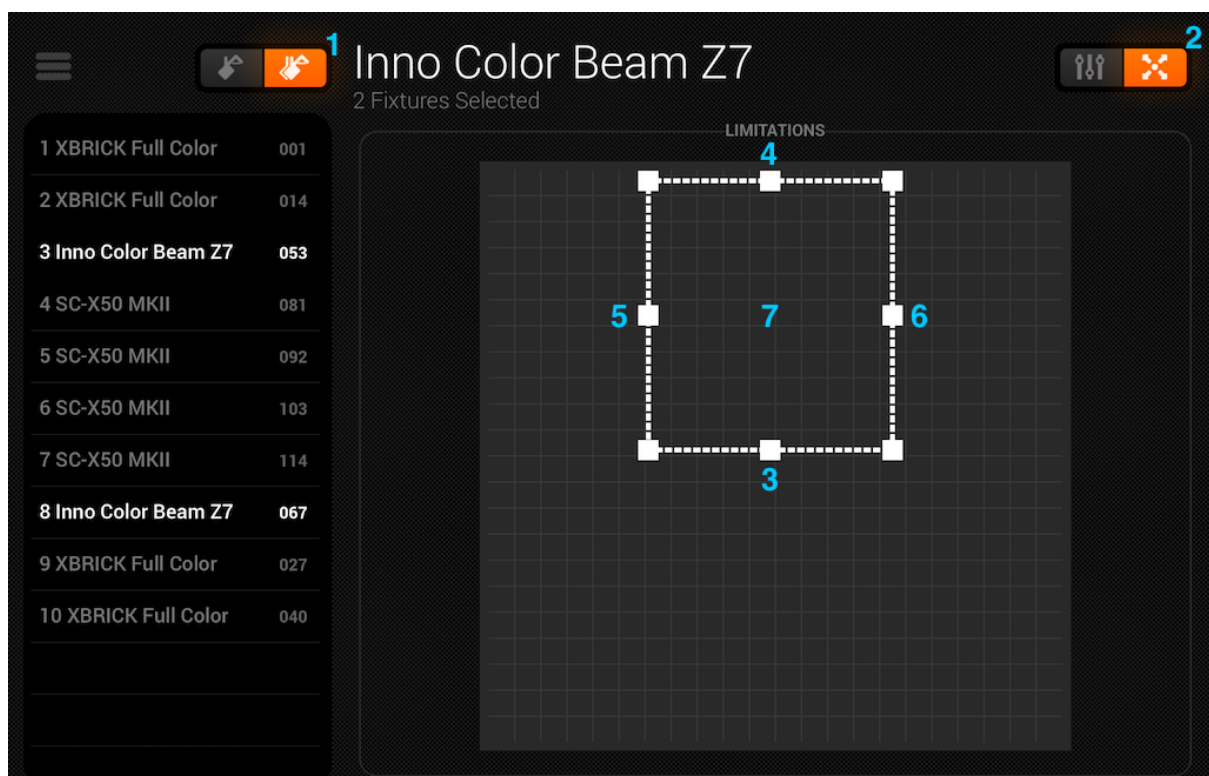
Setting Pan/Tilt Limitations

The limitations grid allows you to limit and invert the pan and tilt values of a fixture or group of fixtures. There are several reasons why this is important:

- Moving Head lights can typically pan 360-600 degrees. For Light Rider BeamZ effects to look good, it's best that they only pan no more than 180 degrees
- Depending on how a light is rigged, the center point is not always in the center of the stage/dancefloor
- The pan or tilt is sometimes inverted, meaning that the beam won't move in the correct direction compared with the other lights in the project

Setting the limitations for your fixtures only takes a minute and can transform your light show from an un-coordinated collection of random beam movements to something which looks sleek and professional. To set up the limitations:

1. Tap the fixture group button to the top right of the fixtures list
2. Tap the limitations button
3. Tap bottom center square and move until your lights are pointing at the floor
4. Tap the top center square and move until your lights are pointing at the ceiling
5. Tap the left center square and move until your lights are pointing to the left
6. Tap the right center square and move until your light are pointing to the right
7. Tap the middle of the square and move left/right until your lights are centered
8. For a Moving Head, the limitations square normally looks like in the image below. For Scanners, limitations are not normally required due to the physical limitations of the mirror. Repeat the above steps for each of your light groups, then repeat with single fixture selections if some fixtures are off-center.



Live

The live screen is your controller. It's where all lighting effects are triggered. Moves on the left, Colors on the right and flash effects in the middle. Change the Fan/Speed/Size/Shift/Fade of the selected effect by tapping in the center of the effect wheel. Pick your colors by tapping the color wheel in the bottom right. Touch and hold one of the 50 preset buttons to store, like with a car stereo. Sync with the music by tapping the square button next to MOVES and COLORS. Tapping it once will sync with the BPM, a second tap will sync with the pulse using the tablet's microphone. Read on for further information!

Colors

The color effects are situated to the right of the console. 8 effects are available and will be applied to all RGB/RGBW or CMY color mixing lights. Lights with fixed colors may also be used with the color effects, but they will not mix in the same way as color mixing fixtures.

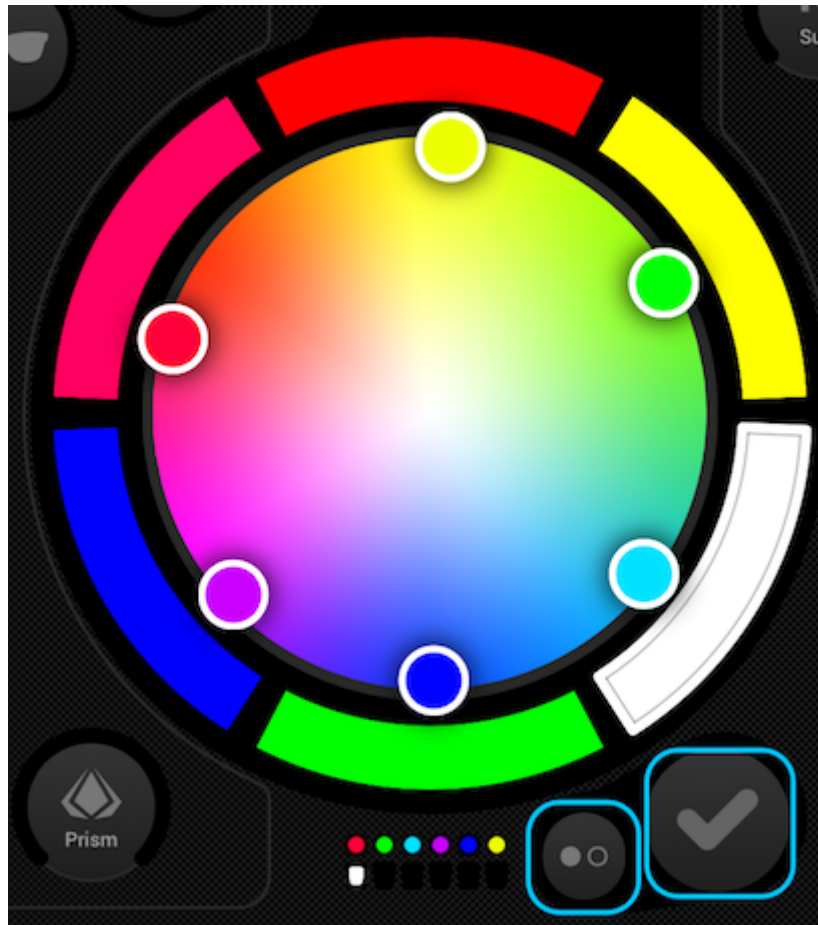
Choosing an Effect

Tap one of the 8 segments to play an effect across your lights. Be sure that the fixtures are in the correct order otherwise the effects might look a little bit strange ([more info on this here](#)). Once an effect has been chosen, you can change the Fade, Speed, Shift and Size by tapping the 4 buttons in the center. The available options depend on the selected effect. Normally the default settings are best but have a play. Shift is particularly fun.

Setting a color

To set which colors will be used in the effects, tap the color wheel at the bottom right. The color wheel is used to set the colors for the effects, and the segments around the color wheel are used to override the effect and recall static colors on all fixtures with fixed color wheels. Tap in an empty space in the color wheel to add a color. Drag a color point outside the color wheel to remove it. Up to 6 colors can be selected in the color wheel + 6 static colors with the segments. These are displayed below the color wheel.

Static colors are always fixed and are spread across lights with fixed color wheels. You can change the pattern by tapping the button to the left of the color wheel button. This pattern button is also used with color mixing fixtures in the STOP effect.



Moves

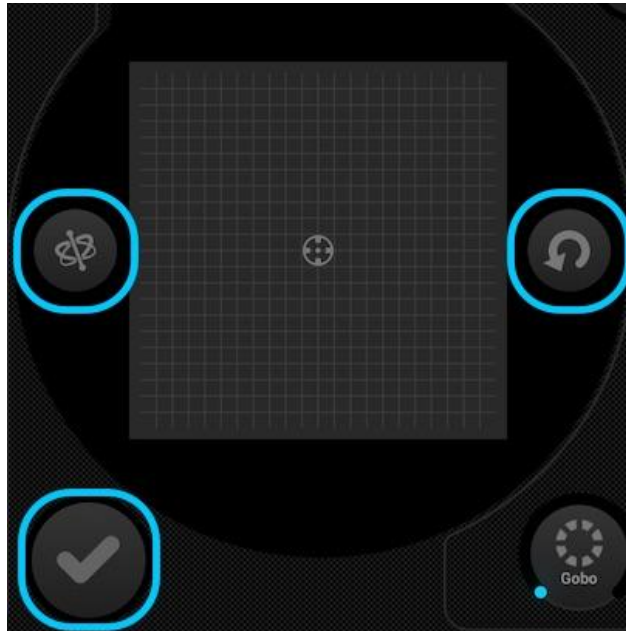
Move effects are available to the left of the console. I would really recommend setting the limitations first, especially if you have Moving Head fixtures. It's really easy to do and only takes a minute. [Further information on this here](#). Move effects are applied to any fixture which has Pan and Tilt channels.

Choosing an Effect

As with the color effects, the move effects are triggered by tapping the 8 segment buttons. Each move effect can be adjusted using the 4 options in the center - Fan, Speed, Size and Shift.

Setting the Center Position

The center position of an effect should be set using the limitations, however sometimes it's fun to move an effect around the room live. To do this, tap the center button to the bottom left of the moves area. Drag the point around the grid to adjust the center point of the effect. Tapping the reset button on the right puts the center point back in the center of the grid. The button on the left enables the giro which allows you to control the center point by moving the iPad (not available on Android, sorry!).



Flash FX

The 5 flash effects are in the center of the console and are only active when pressed. This allows you to create quick bursts of effects. If you want to latch the effects on, this can be done by touching a flash effect, dragging outside the button and releasing. The following effects are available from left to right:

- Smoke - activates a smoke machine
- Blackout - switches off all lights
- WOW! - creates a build-up of strobing effects synchronized with the BPM
- Blinder - directs a powerful bright light to the front
- Freeze - pauses the show, freezing the current levels being output



Special FX

The special effects allow control of Iris, Zoom, Gobo and Prism (if your fixtures support this functionality). Tap the dial to enable the effect or select a gobo, then drag around the dial to control the selected effect- e.g. gobo rotation speed, Iris level etc... By default these dials are rotary, but if you would prefer to control these in a linear fashion by moving up and down, this can be set in the Light Rider BeamZ settings which is accessible from the iPad settings on iPad, or the menu on Android.



Strobe

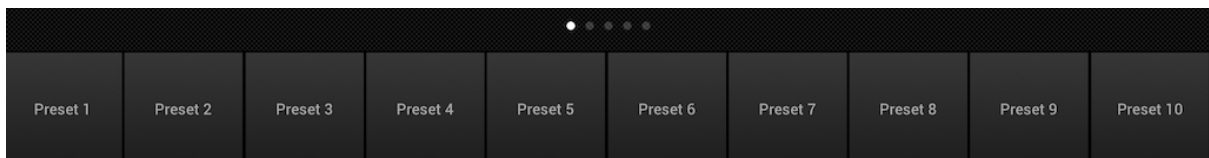
Tapping the strobe button will flash the lights at different speeds depending on the value of the slider.

Dimmer

The slider on the right controls the brightness of all lights. You can control the brightness of each fixture type, and flash the lights by tapping the Subs button.

Presets

The presets allow you to store a snapshot of your current show. There are 50 presets in total with 10 visible at a time. Swipe left/right to jump to the previous/next bank. To store a preset, touch and hold it for 1 second, like with a car stereo! Choose a name for your preset and tap 'Save Preset'. Any manual channel values set on the fixtures screen will also be saved.



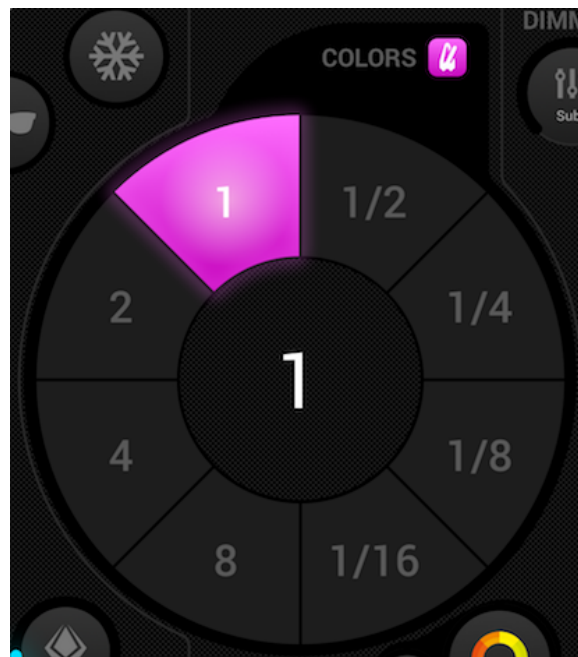
Sync

Each effect has been designed to sync with the music, either with a BPM (beats per minute) to create a consistent beat-matched effect, or via the music pulse where the effects pause when the music stops.

- Tap the square button next to Moves or Colors to sync the respective effects with the BPM, a metronome icon will appear.
- Tap a second time to sync with the pulse, a microphone icon will appear.
- Tap again to stop the sync, a clock icon will appear.

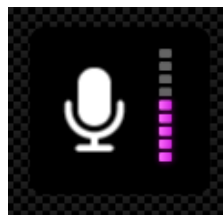


When in BPM sync mode, the speed control of the effects will change from a slider to a selector allowing you to choose the beat division. For example, if you have the disco effect selected, the 1x will change the color on each beat, the 2x will change the color every 2 beats, and the 1/2x will change the color twice for each beat.



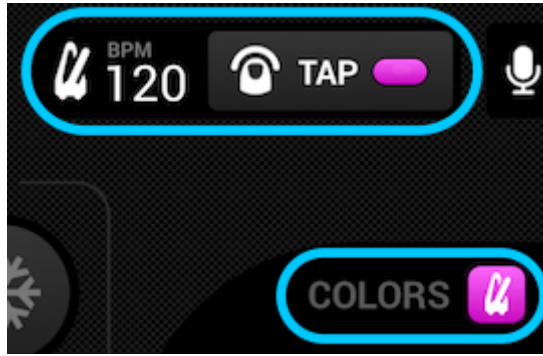
Pulse

Music pulse sync works like the built-in effects which often come with your lights. It uses the microphone of the tablet to listen to the music. When the volume level jumps over a threshold, the effect will jump to the next section. The threshold is calculated automatically depending on the volume level.



BPM - TAP

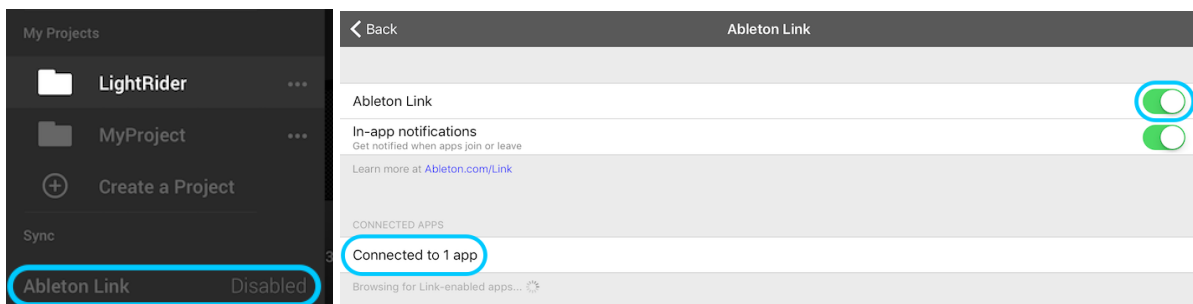
Be sure the Color or Move effects are in BPM mode with the metronome icon visible, then tap the BPM with the TAP button at least 3 times.



BPM - Ableton Link (iPad only)

Light Rider BeamZ can sync with over 100 different apps and software using Ableton Link. This is the most accurate way to sync your lights with the music. Setting up Ableton Link is really easy!

1. Be sure Light Rider BeamZ and the Ableton Link device are on the same network.
2. Open your Ableton Link compatible software and enable LINK (refer to the software/app user manual).
3. Open the Light Rider BeamZ menu and tap 'Ableton Link' (at the bottom).
4. Tap 'Ableton Link'.



When Ableton Link is enabled, you will see 'LINK' written in the top right. Note that although the BPM written is rounded to the closest number, the BPM we use for processing is much more accurate!



MIDI

The effect buttons, preset buttons, flash buttons and sub master dimmers can be controlled by MIDI. This is a bonus feature and custom mappings are not currently possible. We've fixed the mappings to match the Akai APC Mini, but if you have a different controller such as an Elation or Behringer controller, you can normally modify the commands the controller sends (refer to the respective user manuals for further info). To control Light Rider BeamZ via MIDI, you'll need a Lightning to USB adapter for Apple, or an OTG adapter for Android.

The MIDI mappings are as follows:

Color Effects 1-8 : Note 40-47

Move Effects 1-8 : Note 48-55

Presets 1-8 : Note 39-32

Presets 9-16 : Note 31-24

Presets 17-24 : Note 23-16

Presets 25-32 : Note 15-8

Presets 33-40 : Note 7-0

Sub master dimmers 1-8 : CC 48-55

Sub flash buttons 1-8: Note 64-71

Master dimmer : CC 56

Strobe button : Note 56

Flash buttons 1-5 : Note 58-62

TAP button : Note 63

MIDI Setup Examples:

Apple MIDI Setup Example:



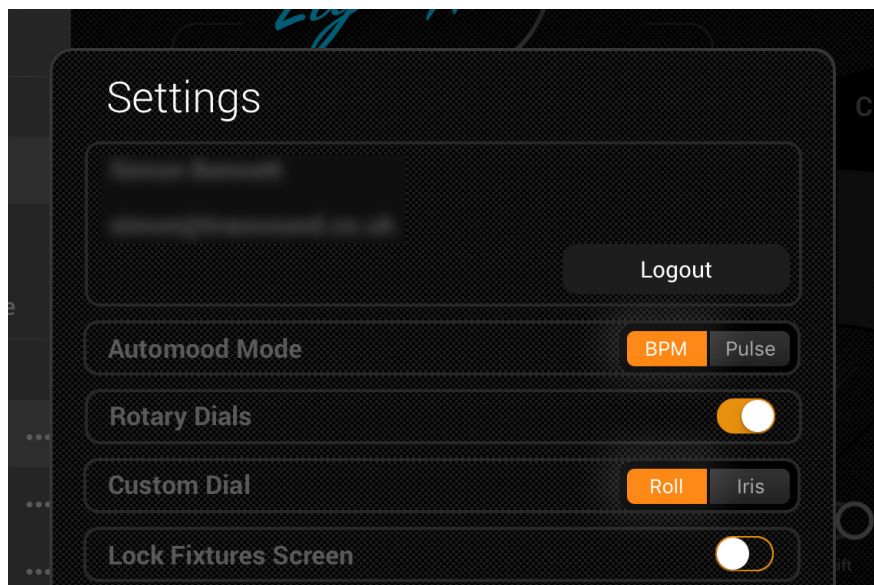
Android MIDI Setup Example:



Other Settings

The settings screen can be accessed from the Light Rider BeamZ menu..

- LightingSoft Cloud details - The name and e-mail address of the LightingSoft Cloud account is displayed here. LightingSoft Cloud allows you to synchronise data with other apps and devices. In future this will include fixture profiles, projects and in-app purchases
- Automood Mode - Determines if an effect is synchronised to the BPM or pulse when Automood is activated
- Rotary Dials - Dials will be controlled by moving in a circle instead of up and down
- Custom Dial (iPad only) - Allows for the dial in the middle to control the size of an iris or the speed of a roller barrel
- Lock Fixtures Screen - Locks the possibility to add/remove/change the order of fixtures. This can be useful if Light Rider BeamZ is being used in a bar or installation



Easy View - 3D Visualiser

Light Rider BeamZ has a 3D visualiser available as an optional add-on, which should make setting up your projects even easier than before. Easy View is a real-time 3D visualiser, allowing you to see your lights and effects whilst programming them in the Light Rider BeamZ app.

Checklist

To allow the Light Rider BeamZ app to work with the Easy View software, you need a few bits of hardware to enable operation.

- Tablet with the Light Rider BeamZ app installed (Android or iPad).
- Light Rider BeamZ compatible DMX interface, such as the Light Rider BeamZ WiFi DMX Device.
- Male - Male XLR Gender Changer (from all good music stores).
- Another SUT compatible DMX interface for use with the 3D Visualiser software, such as the Sushi-DS BeamZ Edition.
- DMX-In licence (from store.DMXsoft.com).
- Easy View Connect licence (from store.DMXsoft.com).
- Easy View Connect software (from LightRider.com/#download).
- Computer capable of running Easy View Connect (3D Visualiser) (Windows PC or Apple Mac).



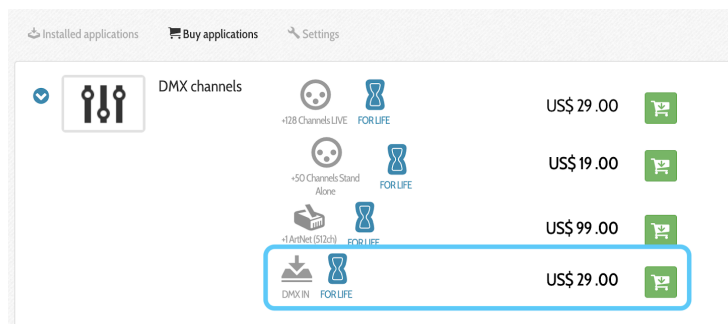
Hardware Setup

In order to allow the Light Rider BeamZ app to connect to Easy View, you need to do the following:

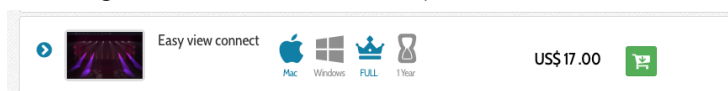
- Connect the tablet to the Light Rider BeamZ WiFi DMX Device interface via WiFi or OTG (Android only).
- Launch the Light Rider BeamZ app and select the interface from the device list.
- Plug the XLR gender changer into the correct XLR port.
- Connect the other SUT compatible DMX Interface to the computer via USB. (NOTE: This is NOT the interface which you will use with the Light Rider BeamZ app. This is the other interface which you will use with 3D Visualiser, such as the Sushi-DS.)
- Visit store.dmxsoft.com and register your SUT interface (example: Sushi-DS BeamZ Edition).



- Once registered, select “My Interfaces” from the top of the page.
- Select the SUT interface which you want to use with the 3D Visualiser software, this cannot be the same interface you use with the Light Rider BeamZ app.
- Purchase the “DMX In” licence (located under DMX channels).



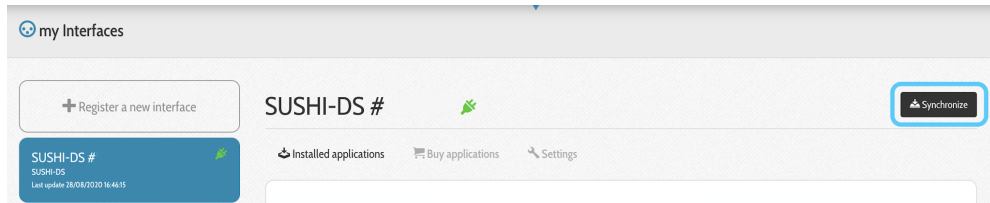
- Purchase the Easy View Connect licence (located at the bottom of the page).



- Note: some interfaces come with a limited amount of DMX channels. For example, if your interface has 128 channels but you wish to use 512 channels, you will also need to upgrade the DMX Live Channels.
- Activate the ‘SUT Tool’ located at the bottom right of the screen (if not already running).



- Synchronise your DMX interface following the licence purchase/activation.



- Connect the DMX interface to your Light Rider BeamZ WiFi DMX Device using the XLR gender changer.

Software Setup

In order to use Easy View, you need a computer (Windows or Mac) with the following specification:

Minimum:

Windows 7 or higher, or MAC OSx 10.11 or higher. 1 Ghz speed processor. 2 Gb Memory (RAM). 1280*768 pixel screen. OpenGL 3.1 (for 3D). *NOTE: we have had several reports of the Intel HD Graphics 3000 adapter not properly working with OpenGL 3.1*.

Recommended:

Windows 7 or higher, or MAC OSx 10.14 or higher. 2 Ghz speed processor. Dual core, 4 Gb Memory (RAM). Video card with 1Gb video memory. 1920*1080 pixel screen. OpenGL 3.1 (for 3D).

Install:

Locate and download the Easy View Connect software for your system.

Easy View Connect PC:

<https://storage.googleapis.com/nicolaudie-eu-software/Release/EasyViewConnectBeta.exe>

Easy View Connect Mac:

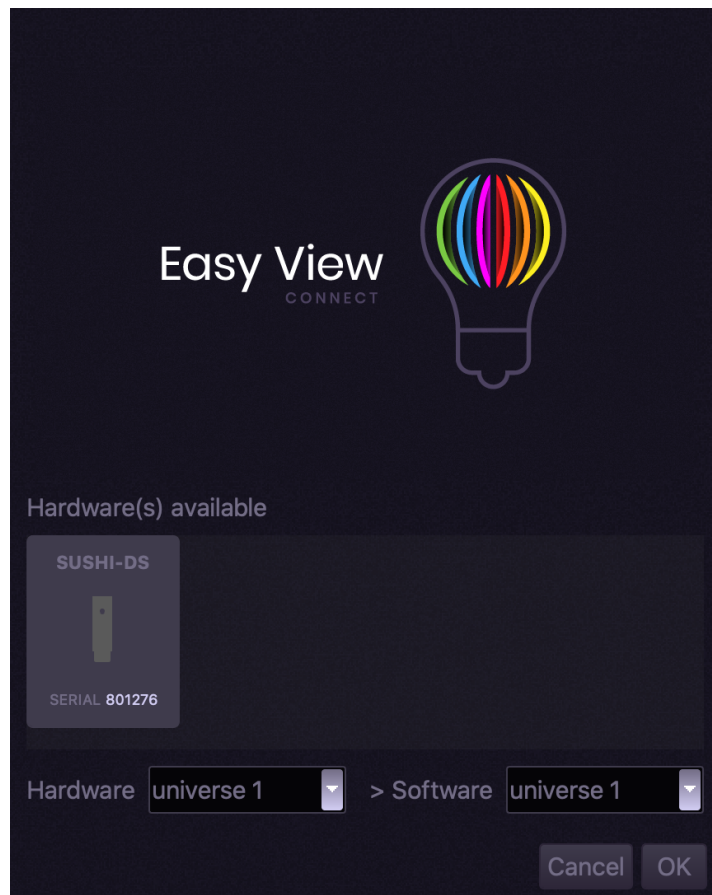
<https://storage.googleapis.com/nicolaudie-eu-software/Release/EasyViewConnectBeta.dmg>

Open the downloaded setup DMG (Mac) or EXE (PC) and follow the wizard to install the software.

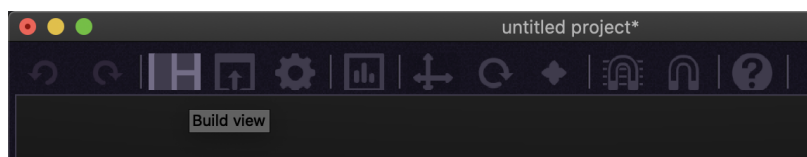
3D Visualiser Configuration

How to patch your fixtures in Light Rider BeamZ and Easy View:

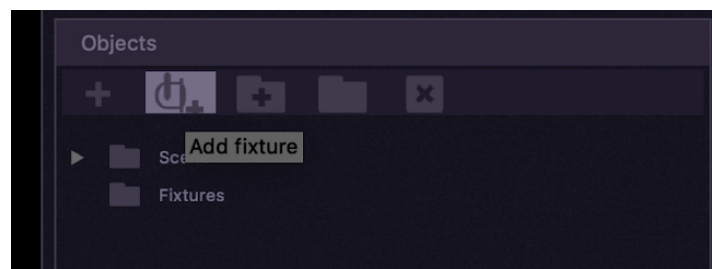
- Patch desired light fixtures in Light Rider BeamZ app.
- Open Easy View Connect Software.
- Select your DMX device from the device list.
- Select Hardware: Universe 1 and Software: Universe 1.



- Select the 'Build' icon.

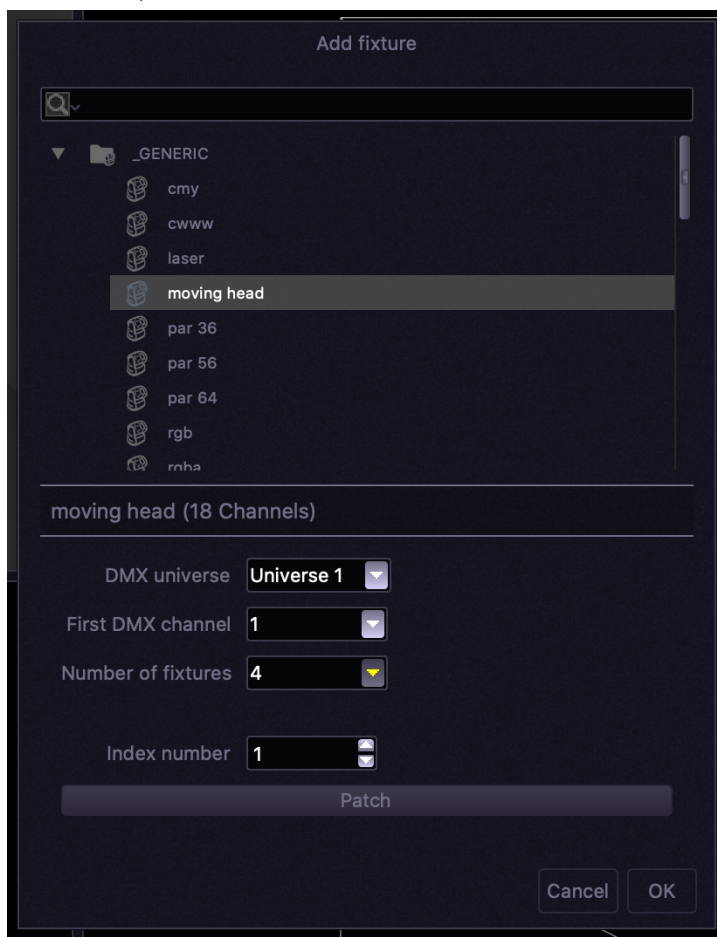


- Select the 'Add Fixtures' icon.

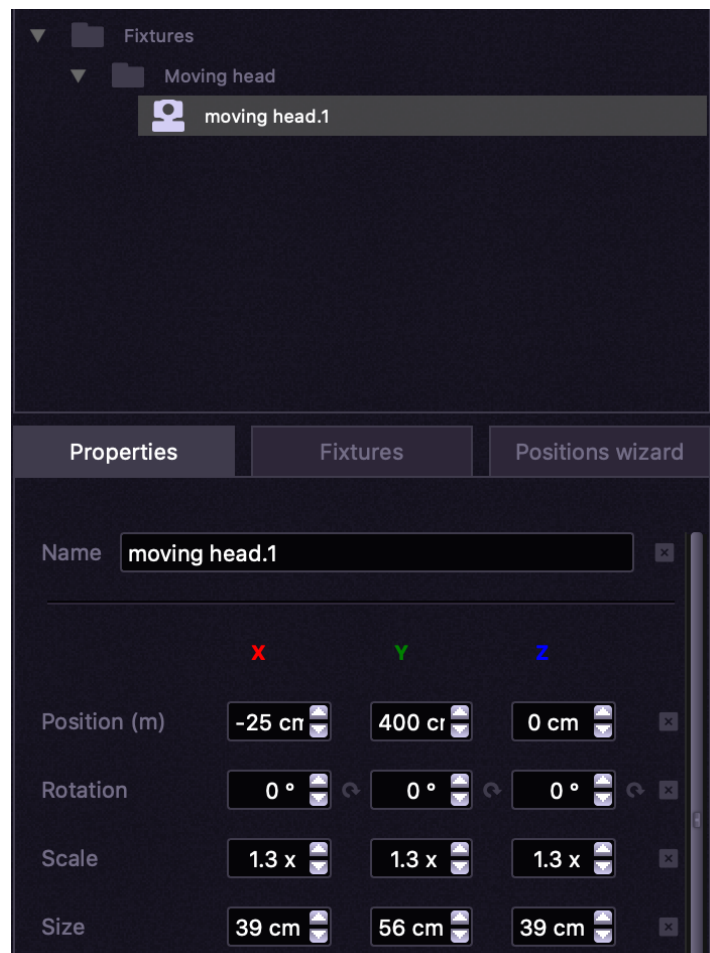


- Select the fixture from the library,
- Ensure the exact same SSL2 Fixture profile is used (name and channel mode).
- Ensure they are patched in the same DMX address order.
- Once the patch parameters are set, select 'Patch'.

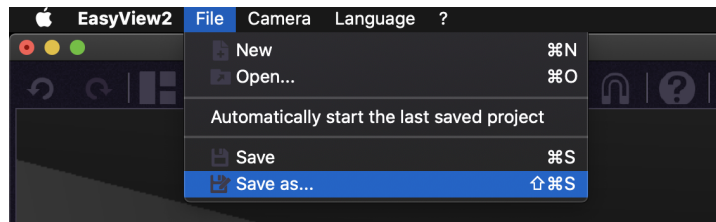
- Once all fixtures are patched, select 'OK'.



- Use the properties section to adjust the size and position of each fixture.



- Save the 3D show file via 'File' > 'Save As'.



- You can also open an existing 3D show file via 'File' > 'Open'.

You should now be able to select the live effects in the Light Rider BeamZ app, and the 3D Visualuser should be responding.

