

Light Rider



Light Rider

user manual

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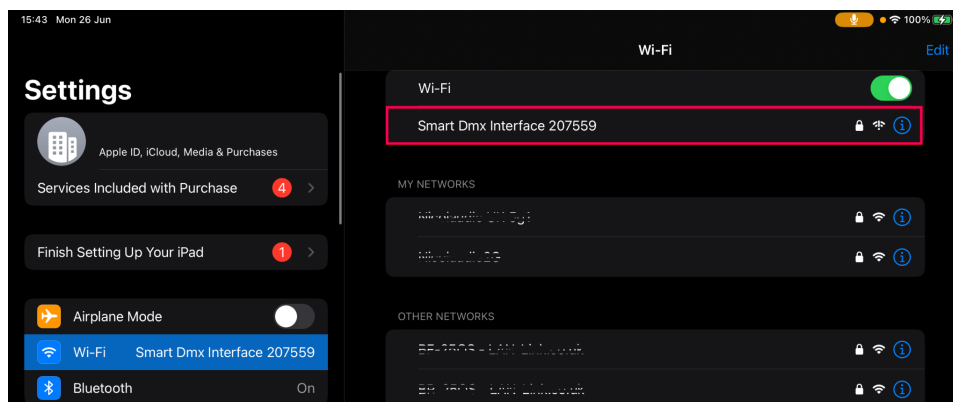
1. Hardware setup

1.1. Connecting to a DMX interface

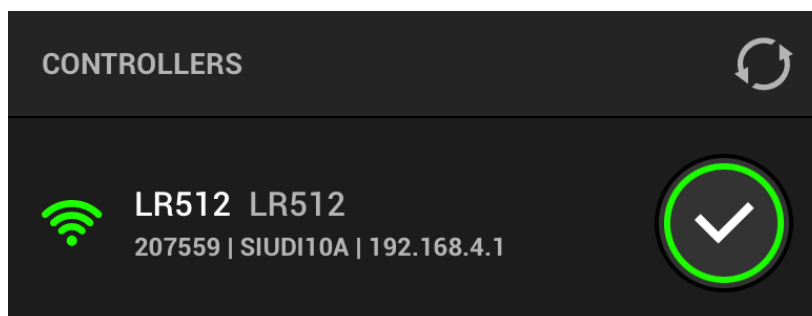
LR512 WiFi DMX interface

Light Rider has been specifically designed to be used with the LR512 WiFi DMX device. By default, you will be able to connect to your device by using the Access Point created when the device is on. Simply plug your interface into a power source, go to the WiFi settings within your tablet, connect to the “**Smart DMX Interface xxxxxx**” network (where the ‘x’s indicate the serial number of the interface). There are two possible passwords that you can use to connect the device:

- Newer Devices (serial numbers ABOVE 180000): **smartdmx0000**
- Older Devices (serial numbers BELOW 180000): **00000000**



The device may take up to 20 seconds to connect. From there you can launch the Light Rider app and log in to your Cloud account (if not already logged in- you will need to create an account if you do not already have one). Once you are signed in, you can go to the Settings screen and connect to the interface by selecting the LR512 in the ‘Controllers’ list on the right side of the screen. If you do not see your device, press the refresh button to the right side of the ‘Controllers’ text. Once connected the device will show as green in the list.



‘Other’ Nicolaudie Group interfaces

Light Rider can also be used with other devices manufactured by the Nicolaudie Group. In most cases, this will require some additional licence purchases and some different processes to set up.

Android options:

- Any SUT (Smart Upgrade Technology) USB DMX interface can be used with Light Rider on Android. You will need to purchase the Light Rider licence if this has not already been acquired. You can connect the device to the tablet using an OTG cable, then select the interface in the ‘Controllers’ list on the Settings screen.
- Any Nicolaudie Group interface that has an Ethernet port (i.e. DVC Gold, DVC GZM, Sunlite EC, Sunlite FC, etc) can be used with Light Rider on Android. Simply connect the device to your network, then connect your tablet to the same network. You should now be able to detect and select the interface in the ‘Controllers’ list on the Settings screen.
- Any Art-Net device can be used with Light Rider on Android. See section 1.1. [‘Connecting to an Art-Net device’](#) for more information. (**Art-Net for Android coming soon**)

iOS options:

- Any Nicolaudie Group interface that has an Ethernet port (i.e. DVC Gold, DVC GZM, Sunlite EC, Sunlite FC, etc) can be used with Light Rider on iOS. Simply connect the device to your network, then connect your tablet to the same network. You should now be able to detect and select the interface in the ‘Controllers’ list on the Settings screen.
- Any Art-Net device can be used with Light Rider on Android. See section 1.1. [‘Connecting to an Art-Net device’](#) for more information.

More information on purchasing licences for your SUT device can be found in section 1.2. [‘Purchasing additional SUT licences’](#).

Connecting to an Art-Net device

Before connecting to an Art-Net device, you will need to ensure that you have the correct licence purchased. This process works slightly differently for Android and iOS versions of Light Rider:

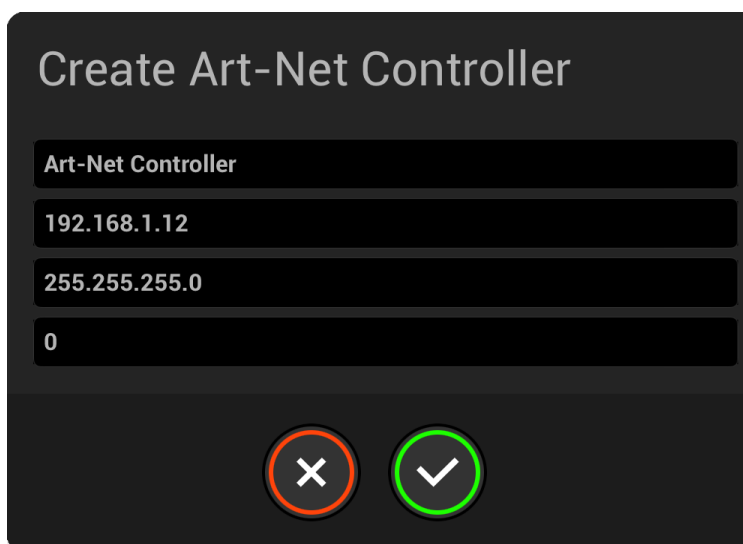
- **Android:** To use Art-Net on Android, you must first have a compatible SUT device with the Art-Net licence purchased. This device will then act as a key to unlock the Art-Net functionality. The device must be connected to the Light Rider app so that the app can read the Art-Net licence, this will unlock the feature and allow you to connect to your Art-Net device. (**Art-Net for Android coming soon**)
- **iOS:** To use Art-Net on iOS, you must purchase the Art-Net licence from within the app itself. This option can be found in the Settings screen. Please note- this is an ‘In-App’ purchase and is made directly with Apple.

More information on Art-Net licences can be found in section 1.1. '[Art-Net licence information](#)'.

To connect to your Art-Net device within the Light Rider app, you must first ensure that the tablet is connected to the same WiFi network as the Art-Net device. Most devices will automatically appear in the 'Controllers' list in the Settings screen. If you do not see your device in the list, you can set one up manually by pressing the '+' button at the bottom of the Controllers list. From here, you will need to input the following information:

- Device Name: The name which will appear in the list. You can enter any name here.
- IP address: Enter the exact IP address of the Art-Net device (this is usually displayed somewhere on the device itself).
- Network Mask: Enter the network mask of the Art-Net device. This is usually a standard value of 255.255.255.0 or 255.0.0.0.
- Art-Net universe: Enter the output port you want to send DMX data from. Please note that Art-Net ports start from 0, rather than 1!

Once an Art-Net device is created, you can select it from the Controllers list as expected.



Create Art-Net Controller

Art-Net Controller

192.168.1.12

255.255.255.0

0

X ✓

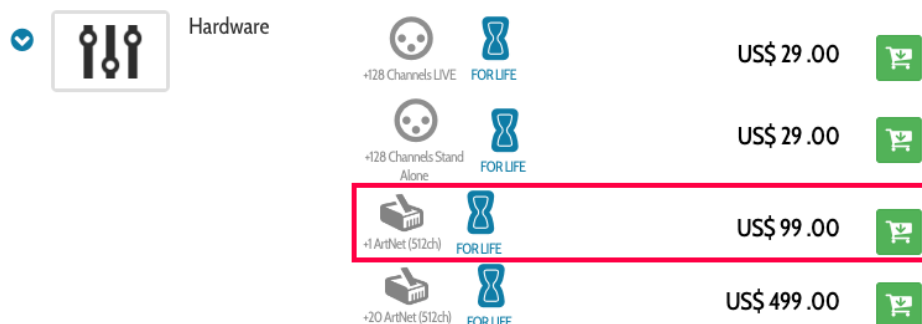
Art-Net licence information

As previously stated, the Art-Net licence is handled differently on Android and iOS tablets. These two licences are completely separate and are not interchangeable or compatible with each other's platforms

Android Art-Net licence (**Art-Net for Android coming soon**):

- The Art-Net licence for Android tablets is managed by the Nicolaudie Group and purchased through the store.dmxsoft.com website. This version of the Art-Net licence is stored inside the DMX Interface.

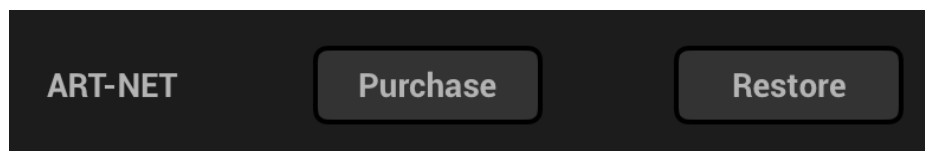
- The Android Art-Net licence can also be used with other compatible software. For example, if you have a Daslight software licence on your device, you can use Art-Net with both Light Rider and Daslight.
- The Android Art-Net licence requires a SUT device (a list can be found on the Light Rider website). This device will need to be connected to the Light Rider app via OTG cable to unlock the feature.



iOS Art-Net licence:

- The Art-Net licence for iPad tablets is controlled by Apple and purchased through the Apple App Store. This version of the Art-Net licence is linked to the user's Apple ID and remains on the iPad for verification.
- You will need to be logged in to your Apple ID and your iCloud account in order for Art-Net to work correctly. If you are logged in to your Apple ID, but not your iCloud, you will be asked to restore the Art-Net licence each time you start Light Rider. If you are not logged in to your Apple ID, you will not be able to use your Art-Net licence.
- The iPad Art-Net licence can only be used with the iOS Light Rider app.
- The iPad Art-Net licence does not require a SUT device

To purchase the Art-Net licence for your iPad, you can go to Settings and press the 'Purchase' button next to the "Art-Net" text. If you have already purchased the licence on a separate iPad, you can restore the purchase by pressing the 'Restore' button immediately right of the Purchase button. You will need to be logged into the same iCloud account for this to work. **Please note-** if you have purchased the Art-Net licence in the 'Light Rider Classic' app and want to restore the purchase within the new 'Light Rider' app- you will need to send a copy of your original Apple receipt to our support team by raising a ticket at store.lightrider.com/support.



1.2. DMX interface configuration

LR512 connection types

The LR512 device can connect to Light Rider over WiFi using two different methods- 'Access Point' and 'Station' mode. It is also possible to have the device set in 'Dual' mode- which means it can use either of these connection methods. The difference between the modes are as follows:

- **Access Point:** The LR512 device becomes detectable as a network. This will allow you to connect to the LR512 within the tablets WiFi settings, allowing the device to be connected to within the Light Rider app. When the tablet is connected to the Access Point, it will not have any internet connection.
- **Station:** The LR512 connects to a local network. Connecting the tablet to the same network will allow the device to be detected within the Light Rider app, allowing you to connect to the device.
- **Dual:** The device can be connected using either Access Point or Station.

By default, the LR512 will be in Dual mode but it is possible to change to either Access Point or Station mode exclusively using the Hardware Manager tool for Mac and PC. You can download Hardware Manager from our website lightrider.com/#download.

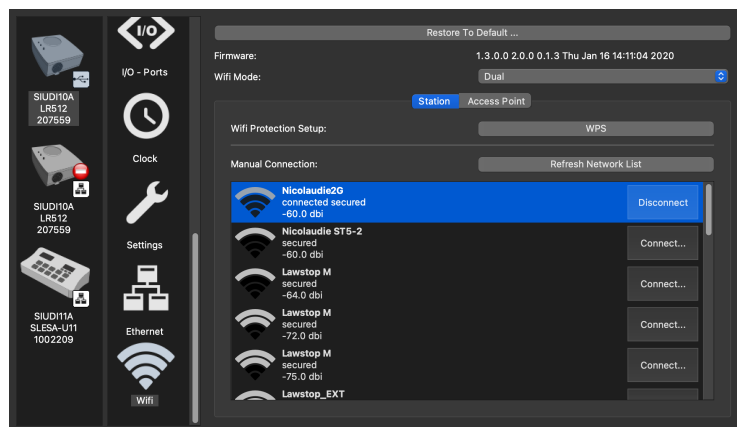
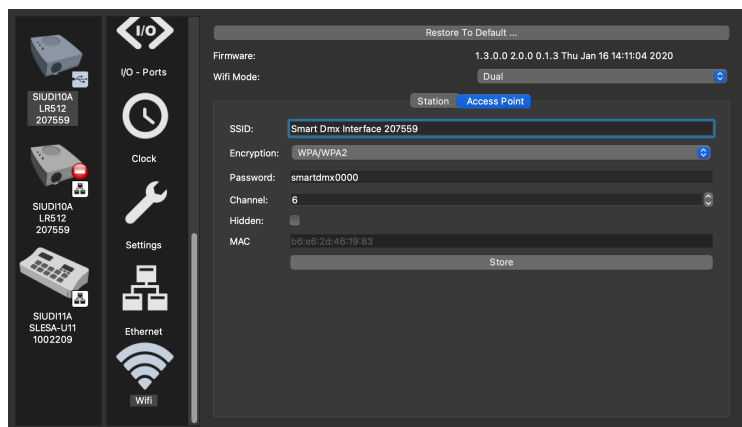
Once you have downloaded and installed Hardware Manager, you can adjust the LR512 settings by completing the following steps:

- Open Hardware Manager.
- Connect your LR512 and select the interface when it appears in the list.
- Select the WiFi tab.

Here you can change the 'WiFi mode' (choose between Access Point, Station, or Dual mode), adjust the specific Access Point settings (network name, password etc.) and connect to an existing network (for use in Station mode).

Hardware Manager can also be used to view information of the device, check the active licences, update the device firmware etc.

Please note- your device can only handle a single connection at any one time, so you will need to disconnect from Light Rider to connect to Hardware Manager and vice versa.



Purchasing additional SUT licences

Purchasing SUT licences for your device can be done simply via our website store.dmxsoft.com. You can do this by completing the following steps:

1. Download the SUT Tool from the links below:
 - a. [SUT Tool for Mac](#).
 - b. [SUT Tool for Windows](#).
2. Open the SUT Tool.
3. Connect your DMX interface to your computer.
4. Go to store.dmxsoft.com and navigate to the 'My Interfaces' tab.
5. (if applicable) Press the 'Register a new interface' button to register your device. There may be a key card required to register the device, this can be found on a plastic card that would have arrived with the device.
6. Select the device from the list on the left of the screen.
7. Scroll the list of available licences and purchase the additional licences you require.
8. The SUT Tool should automatically sync your device. If the licence does not appear functional- you can manually sync the device by following the steps outlined in section 1.2. '[Synchronising SUT licences](#)'.

The screenshot shows the DMXsoft store interface for a specific device, LR512 #207559. On the left, there is a sidebar with a button to '+ Register a new interface' and a device card for LR512 #207559. The main content area displays three available licenses for purchase:

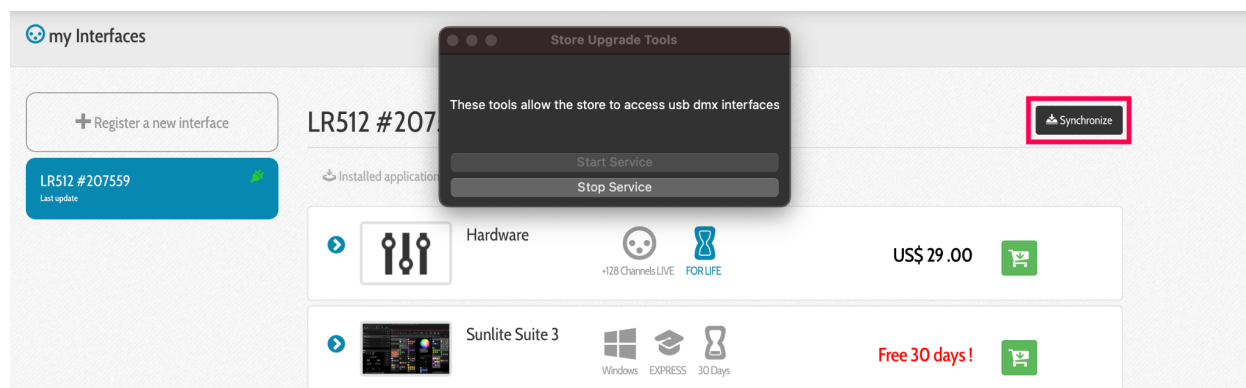
License Name	Price	OS Support	Duration
Hardware	US\$ 29.00	+128 Channels LIVE, FOR LIFE	Forever
Sunlite Suite 3	Free 30 days!	Windows, EXPRESS, 30 Days	30 Days
Easy View Connect	US\$ 17.00	Mac, Windows, FULL, 1 Year	1 Year

Synchronising SUT licences

If you have purchased a licence on your SUT device from store.dmxsoft.com, the SUT Tool should automatically sync your device for you. However, there are times where you may need to synchronise your interface manually before the licences can be used. To do this via store.dmxsoft.com:

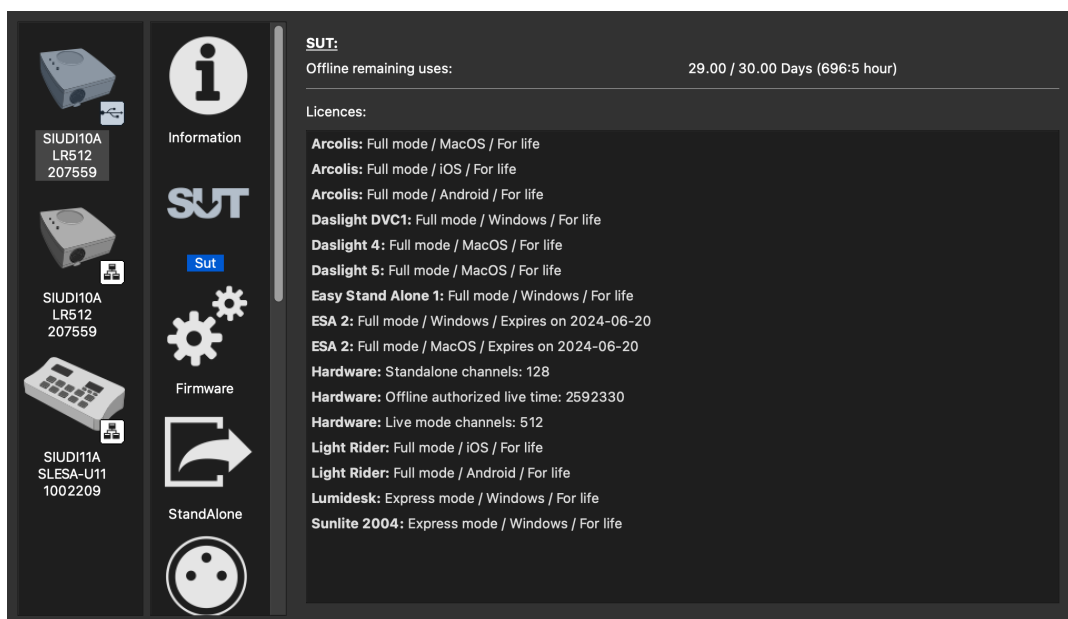
1. Go to store.dmxsoft.com then select the 'My Interfaces' tab.
2. Run the SUT Tool

3. Select your device from the list on the left.
4. Press the 'Synchronise' button on the upper right hand side of the screen.



To do this via Hardware Manager:

1. Download and install Hardware Manager from lightrider.com/#download.
2. Connect your LR512 Interface and select it from the list on the left.
3. Select the SUT tab.
4. Wait 10-15 seconds for your licence to appear in the 'Licences' list.
5. Once complete, close the Hardware Manager.



2. Project setup

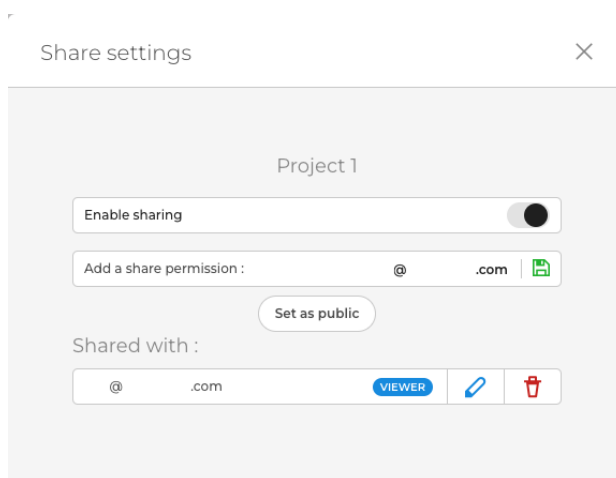
2.1. Managing your projects

Project synchronisation and sharing

Within the Settings screen, you can find/manage all of your project files as well as create new ones. Your projects will automatically be synced from the Cloud account you are logged into. You can log out/log in to the desired Cloud account from the 'Cloud' section of the Settings screen. Directly below this, is the 'My Projects' section, which will display a list of all local project files stored on your tablet. You can press the 'Refresh' button at the top of the list to manually sync the project files (you will need an active internet connection for this to work).

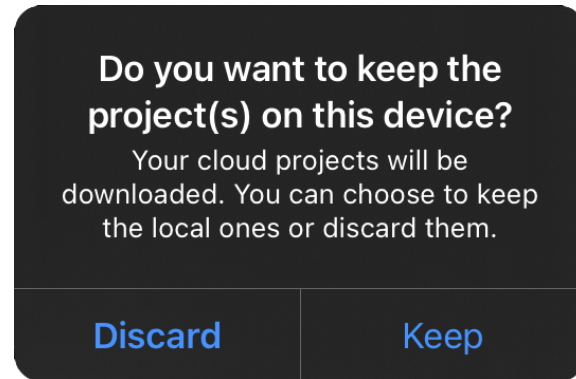
Project files can be shared to other users over the Cloud via the following steps:

- Go to cloud.nicolaudiegroupp.com.
- Open the 'Files' screen.
- Locate and select the desired project file.
- Press the blue 'Share' button, found to the right of the file name.
- Enter the email address of the Cloud account you want to share the file to, then press the green 'Save' button to confirm.
- Press the pencil icon to edit the specific permissions to allow the user you have shared the file to.



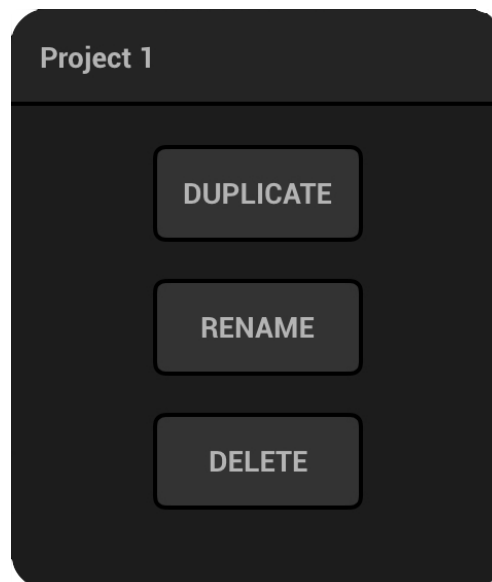
You can also download physical copies of your project files by pressing the blue 'Download' button immediately left of the blue 'Share' button.

If you log in or out of a Cloud account on your tablet, you will be asked whether you want to keep the projects on your device, or discard them. This will decide whether your projects are kept locally (on your tablet) or removed. These files will not be removed from the Cloud, so signing back into an account will allow you to re-sync the project files onto your tablet.



Managing project files locally

To create a new project within the Light Rider app, you can do this by pressing the '+' button at the bottom of the 'Projects' list. Once pressed, you will be prompted to enter a name (this can later be edited). This will open a new and empty project, which will now appear in the list of projects. Pressing the three dots to the right of the project name will allow you to Duplicate, Rename or Delete a project file.



2.2. Fixtures setup

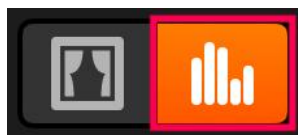
Fixture profiles

Every light used in Light Rider 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 store.lightrider.com/ssl.

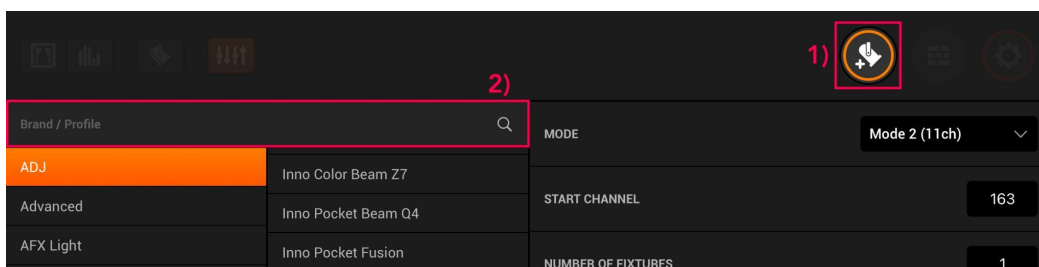
If you have an .ssl2 file that you want to add to the Light Rider program, you can upload the file to your Cloud account within the Profiles section of the cloud.nicolaudiegroupp.com site.

Patching fixtures

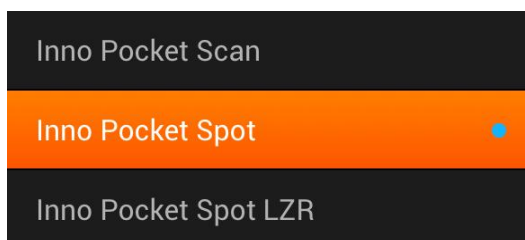
To start adding fixtures to your project, you will first need to navigate to the Fixtures screen which can be found in the top left corner of the app.



From here, you can press the 'Add fixtures' button (1) to open up the fixture patch screen. You can scroll through the brands via the list on the left, then select the specific fixture profile via the list on the right. It is also possible to search for a brand or profile using the search bar (2) at the top.



Viewing the full fixture library will require an active internet connection at first. Once a fixture has been selected however, it will now be cached within the app- making it viewable and patchable even when disconnected from the internet. Any 'cached' fixture will be indicated by a blue dot to the right of the profile name.



To patch a selected fixture into your project, you must first decide the 'Mode', 'Start channel', and 'Number of fixtures' from the options on the right side of the screen. By default, the 'Start channel' will be set to the next available address (Light Rider will not allow you to patch a fixture to an address that is already assigned to another fixture). It is important that whatever options you set are matched by the fixtures that you are trying to control. For example, patching a fixture into Mode 1 (10 channels) but having the physical fixture set to Mode 2 (15 channels) will cause issues as the channels will be misaligned. It is also essential to have the same start channel set both within Light Rider and on your physical fixtures for the exact same reason.

The screenshot shows a configuration screen with three main settings:

- MODE:** A dropdown menu set to "Mode 2 (11ch)".
- START CHANNEL:** A numeric input field set to "163".
- NUMBER OF FIXTURES:** A numeric input field set to "1".

Below these settings, the text "Add 1 : Inno Pocket Spot" is displayed, followed by a large circular button with a "+" sign.

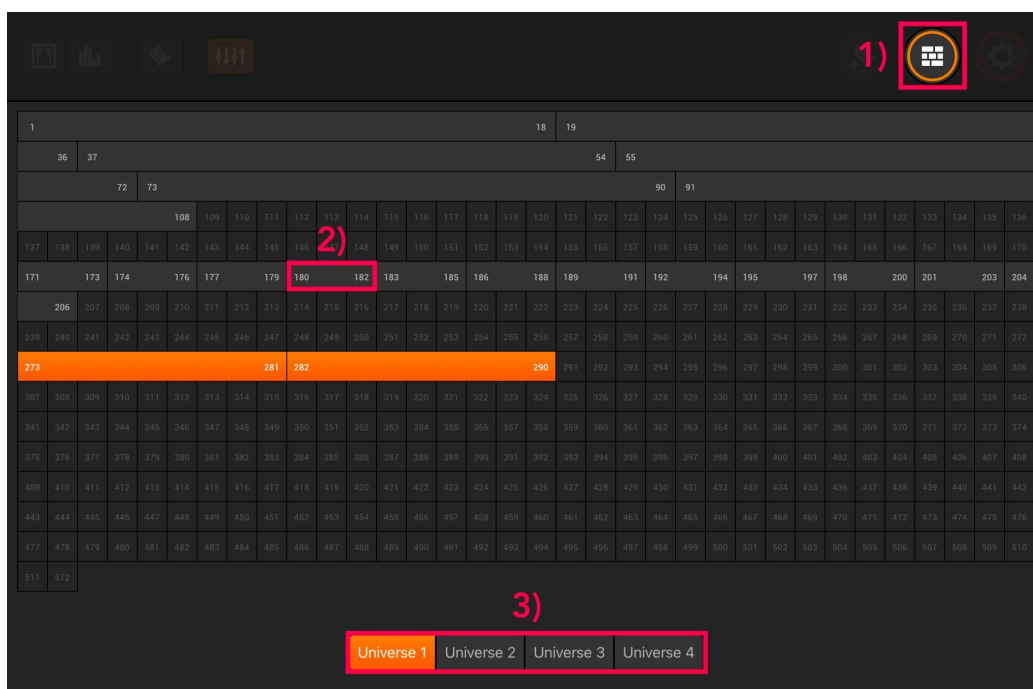
Once you have the settings all decided correctly- you can press the 'Add fixtures' button again to return to the Fixtures screen. You will now see the fixture(s) you have patched in the list on the left, as well as the Universe/Start channel on the right of the fixture name (i.e. Universe 1, Start channel 28 will appear as '28'. Universe 2, Start channel 43 will appear as 2: 43).

You can delete fixture(s) by selecting the desired fixture(s), then swiping the fixture left. This will then prompt an 'Are you sure?' message, pressing 'Yes' will delete the selected fixtures. It is also possible to select all fixtures of the same kind by enabling the 'Group select' button above the patch list, which can be used to quickly select multiple fixtures.

17	RGB	G1	139
18	RGB	G1	142
19	MOVING HEAD	G1	73
20	MOVING HEAD	G1	91
Delete Selected Fixtures			

Addressing your fixtures

Each DMX fixture is assigned a unique number so that Light Rider knows which fixture to send the correct channel information to. Addressing a fixture can be done when patching the fixture initially, but it is also possible to rearrange the addressing by opening the 'Patch grid' window (1). Here you will see a list of all patched fixtures on a grid which demonstrates their Start and End addresses (2). You can now select all the fixtures that you want to re-address, then drag and drop them to the new desired address. If you want to move a fixture(s) to a different DMX universe- you can do so by dragging the fixture(s) over the desired Universe (found at the bottom of the screen (3)), then once the universe display has been updated- drop the fixture(s) at the desired address.



Fixture index

All effects within Light Rider are applied in the exact order that the fixtures appear in the list, this is referred to as an 'index' or 'order'. For example if you have a Knight Rider Colour effect chasing between fixtures, the effect will start at fixture 1 and end at the last fixture in the list. To change the order of a fixture, first you must select the fixture, then press and hold and drag it to a different position in the list. Don't worry - this will not affect the DMX address of the fixture! The index number will appear immediately right of the fixture profile name in the patch list.

Is it also possible to change the fixture index using the 2D view window, see 2.2 '[Arranging fixtures in the 2D view](#)' for more information on this.

01	MOVING HEAD	G1	1
02	MOVING HEAD	G1	19
03	RGB	G1	171
04	RGB	G1	174
05	Scanner	G1	316
06	RGB	G1	177
07	RGB	G1	180

Arranging fixtures in the 2D view

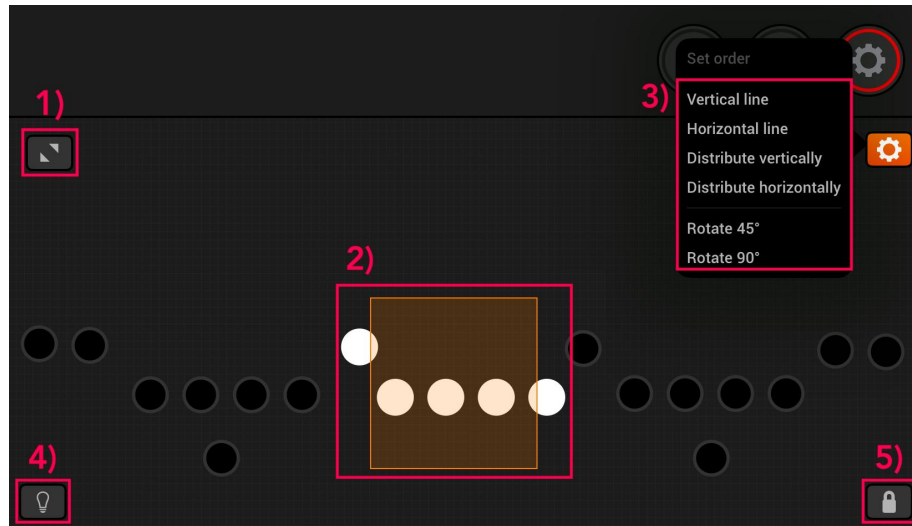
The 2D view window to the left of the fixture patch list can be used to arrange your fixtures in a 2D space, as a reference tool for your light show. You can zoom in and out of the window by pinching or spreading two fingers on the window. You can also move the view point by dragging the screen with two fingers. Alternatively, you can press the 'Auto Zoom' button (1) in the top left corner to automatically fit all fixtures into the view and centre them accordingly.

To arrange a fixture's 2D position, you must first select it. This can be done one by one, selecting each point in the 2D window (or from the patch list on the left) or you can select multiple fixtures by pressing and dragging an empty section of the grid to use the multi-selection tool (2).

It is also possible to set all selected fixtures into a vertical or horizontal line using the '2D view settings' tool. You can also distribute the selected fixtures vertically or horizontally using the relevant options. Any multi-beam fixture (i.e. an LED bar or matrix) can be rotated in 45° or 90° increments using the relevant 'rotate' options. (3)

If you want to light up a specific fixture from the 2D view window, you can do this by selecting the fixture(s), then pressing the 'Beam On' button (4) from the bottom left corner of the window. This can be very helpful for quickly identifying particular fixtures if there is a problem to solve with your setup.

To lock the 2D view, simply press the 'Lock' (5) button in the bottom right corner of the window. The lock button will appear orange all the while the 2D view is locked. To unlock the 2D view, simply press the button again.

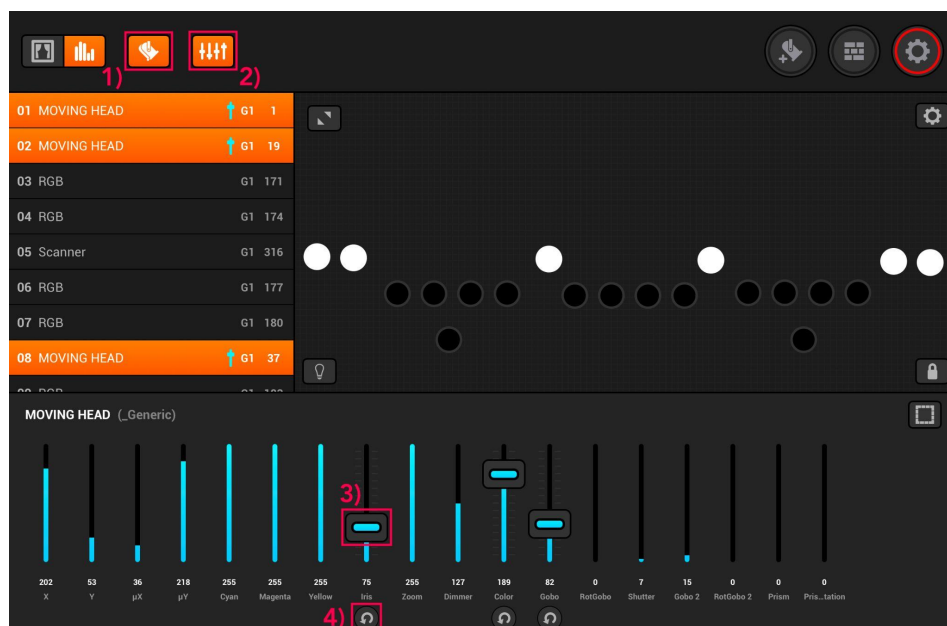


Controlling fixtures using faders

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

- Select a fixture (or group of the same fixture, using the 'Group select' button (1)) by tapping it in the list.
- Enable the 'Faders' button (2) at the top of the patch list.
- Tap the fader you want to control, a slider control will now appear (3).
- Drag the fader up and down to change the value.
- To reset the fader back to automatic mode, tap the reset icon at the bottom of the fader (4).

Controlling a fixture via the faders window is known as a 'Manual Override'. When a fixture has a manual override present, it will be visible by the blue fader symbol found immediately left of the fixture address.



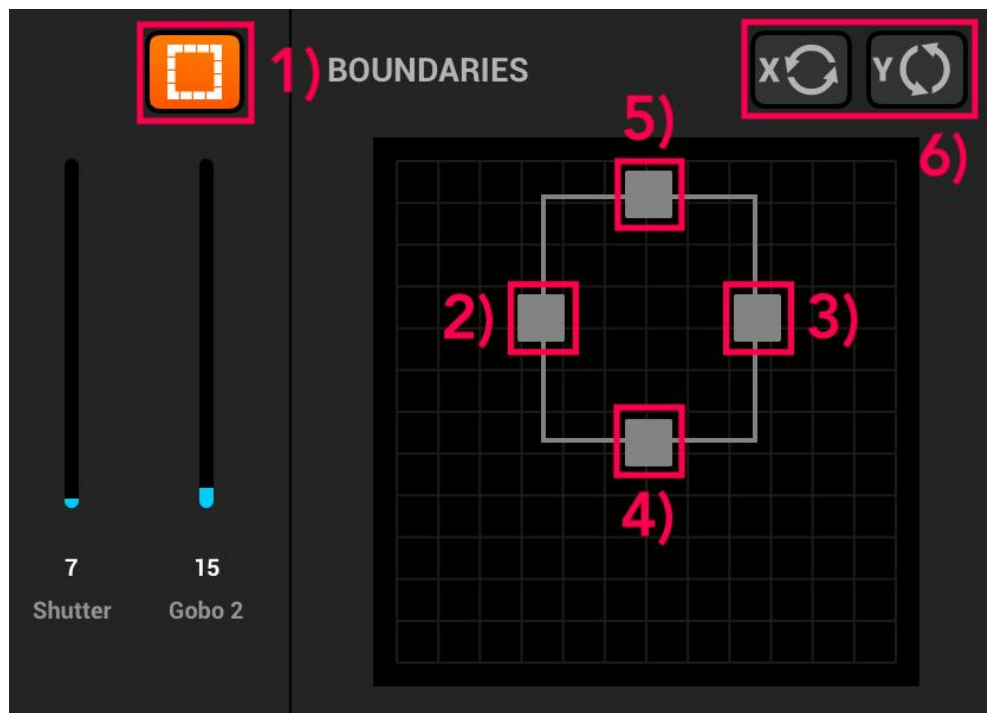
Setting pan/tilt limitations

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 Riders effects to look good, it's best that they only pan no more than 180 degrees
- Depending on how a light is rigged, the centre point is not always in the centre 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. Select a fixture (or group of the same fixture, using the 'Group select' button) by tapping it in the list.
2. Tap the limitations button (1).
3. Tap the left square and drag to limit the pan minimum value (2).
4. Tap the right square and drag to limit the pan maximum value (3).
5. Tap the bottom square and drag to limit the tilt minimum value (4).
6. Tap the top square and drag to limit the tilt maximum value (5).
7. Tap anywhere within the limitation square and drag to reposition the centre point.
8. (optional) Tap the Invert Pan or Invert Tilt buttons (6) to invert the Min/Max values. The squares will appear orange when inverted.
9. 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.
10. Repeat the above steps for each of your light groups, then repeat with single fixture selections if some fixtures are off-centre.



3. Live control

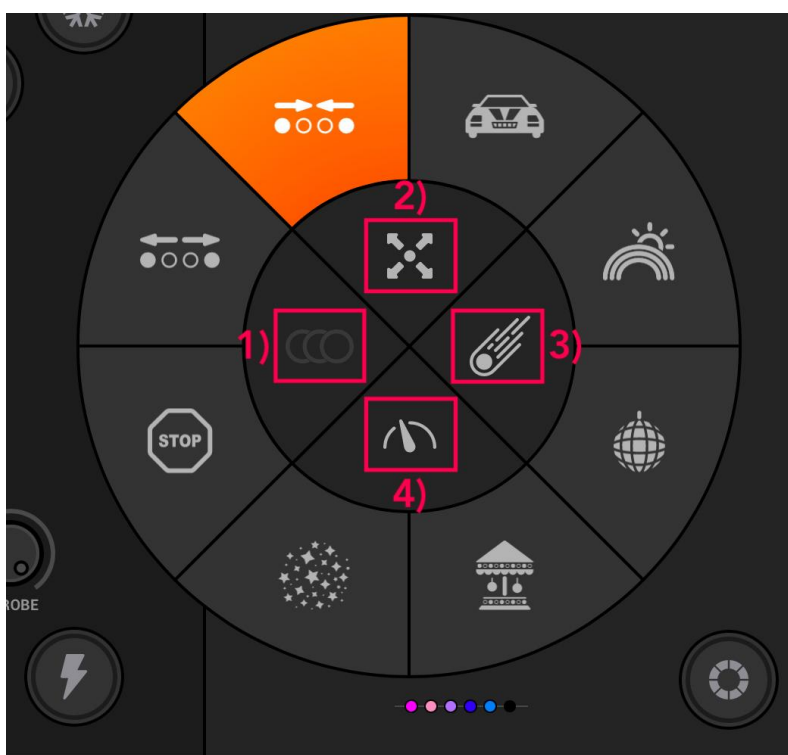
3.1. Colours

The colour effects are situated on the right side of the console. 8 effects are available and will be applied to all RGB, Amber, White, UV, and CMY colour mixing lights. Lights with fixed colour wheels may also be used with the colour effects, but they will not mix in the same way as colour mixing fixtures. More information on this can be found in section 3.1. [‘Selecting your colours’](#).

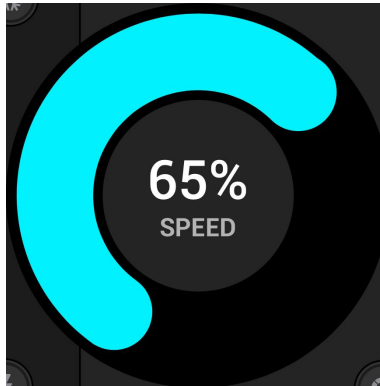
Choosing an effect

To choose between the 8 possible effects, simply tap on the desired effect and it will run immediately. Be sure that the fixtures are in the correct order/index, otherwise the effect may not run in the correct order (see 2.2. [‘Fixture index’](#) for more information). Once you have selected an effect, you can control the following settings by tapping one of the 4 buttons in the centre of the effect wheel:

1. **Phase:** Adds a delay to the effect from one fixture to the next. Increasing the value increases the delay.
2. **Size:** Increases the size of the colour segments. For example- at a low value a Knight Rider effect will only illuminate a small amount of beams together in the chaser, but with a high value more beams will illuminate together in the chaser.
3. **Fade:** Sets the amount of fade between colour changes.
4. **Speed:** Sets the speed of the effect.



The available options will depend on the selected effect. Tap once on a control, then drag the blue bar to adjust the value from 0% - 100%. You can then tap anywhere other than the blue bar to close the window.

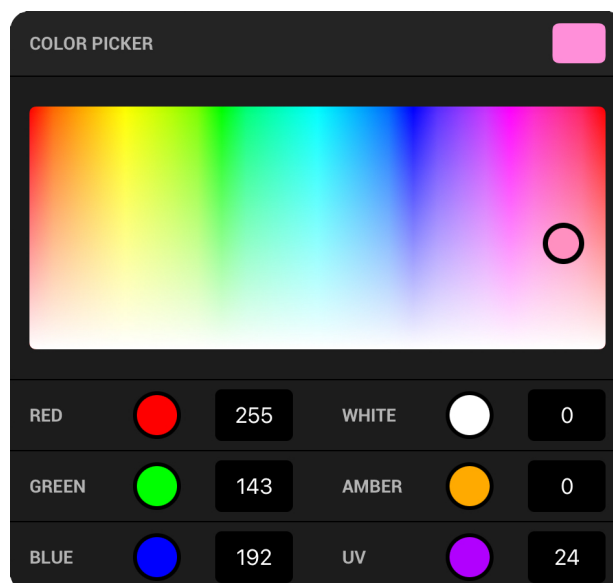


Selecting your colours

Light Rider can store up to 20 colours in the project 'palette'. This can be accessed by pressing the 'Colour Selection' button in the top right of the Colours section.

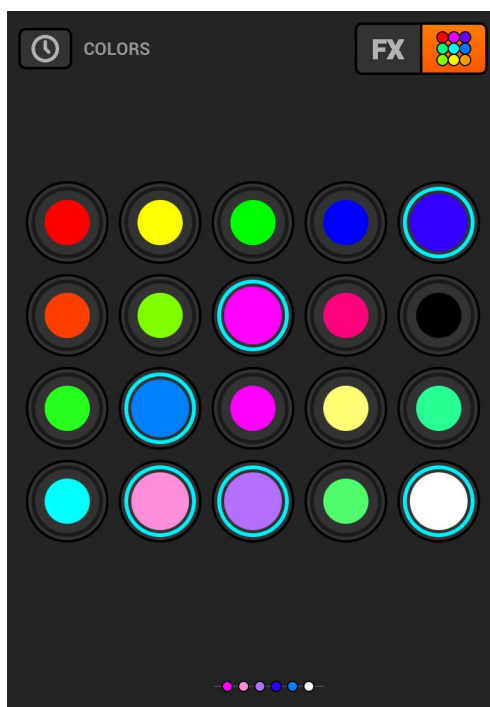


By default, there will be 20 template colours for you to choose from, but each colour can be manually changed by pressing and holding the desired colour. This will bring up the 'Colour Picker' window. Here you set the desired colour by dragging the dot around the colour selection tool, or you can adjust each colour channel value manually with the options below. When adjusting the White, Amber or UV channels- the dot will not move around the colour selection tool as it would when adjusting the Red, Green and Blue values. However, the expected colour output will be visible in the top right corner of the Colour Picker window for your reference.



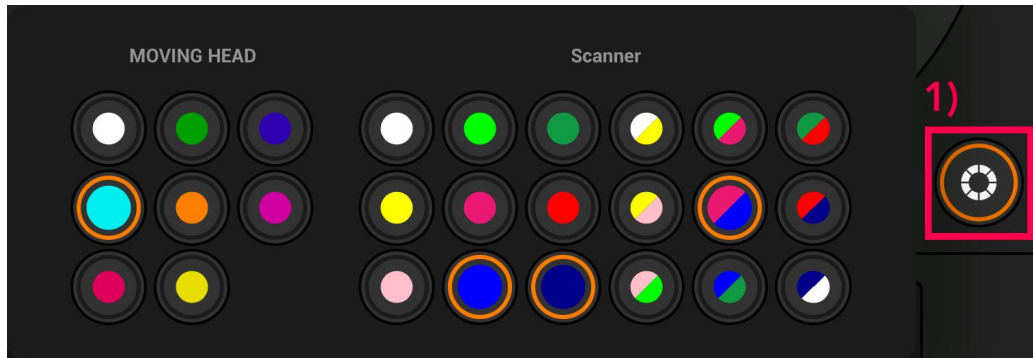
To save any changes made to a colour, simply click anywhere outside of the Colour Picker window to return back to the main screen. Please note that any changes to a colour will affect all other presets using the same colour. This is because Light Rider can store up to 20 colours per project.

To select the colours you want to use in your effect, you can tap each colour individually from the colour palette. Up to 6 colours can be chosen for an effect. To deselect a colour, simply tap it once more to remove it from the effect. Please note that the order in which colours are selected will directly affect the order in which the colours play in the effect. For example: if you use an Out-to-In effect, then choose Red, then Green, then Blue. The effect will display the Red chaser first, then the Green chaser, then the Blue chaser in that exact order. This exact order will appear at the bottom of the colour selection window.



Fixtures that use a fixed Colour Wheel channel can be controlled using the colour palette, however they may not show the exact colour if they do not have that colour on their Colour Wheel. For example- if you select an orange colour from the colour palette, but your fixture does not have an orange colour in it's Colour Wheel- it will select the closest available colour (this may be red or yellow for example). It is possible to select specific static colours for your Colour Wheel fixtures, this can be done using the 'Static Colours' button (1) at the bottom right of the Colours window. Pressing this will show all Colour Wheel fixtures in the project, along with all of the possible Colour Wheel options available. You can select up to 6 static colours per fixture type, you can deselect a colour by tapping it a second time. Selecting multiple colours will affect each fixture of the same type in order of which colours you select, and will affect the fixtures in accordance with the fixture index. For example: If you have 4 Colour Wheel fixtures and you select the white static colour, then the

orange static colour, you will see the 1st fixture in the index show white, then the 2nd will show orange, the 3rd will show white, and the 4th will show orange.



3.2. Moves

Move effects are available to the left side of the console. Similar to the Colour FX, there are 8 different effects to choose from and these will affect all moving fixtures that use pan and/or tilt channels. It is always best to ensure that your fixture limitations are set before working with Move FX, since this can drastically improve the outcome of your effects (see 2.2. [‘Setting pan/tilt limitations’](#) for more information).

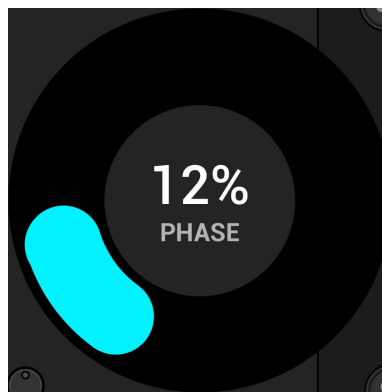
Choosing an effect

As with the Colour FX, you can choose between the 8 possible effects by simply tapping on the desired effect. Be sure that the fixtures are in the correct order/index, otherwise the effect may not run in the correct order (see 2.2. [‘Fixture index’](#) for more information). Once you have selected an effect, you can control the following settings by tapping one of the 4 buttons in the centre of the effect wheel:

1. **Phase:** Adds a delay to the effect from one fixture to the next. Increasing the value increases the delay.
2. **Size:** Increases the size of the movement. For example- at a low value a Circle movement will move in a very small radius, but at a high value it will move in a much larger radius.
3. **Fade:** Sets the amount of fade between position changes.
4. **Speed:** Sets the speed of the effect.



The available options will depend on the selected effect. Tap once on a control, then drag the blue bar to adjust the value from 0% - 100%. You can then tap anywhere other than the blue bar to close the window.

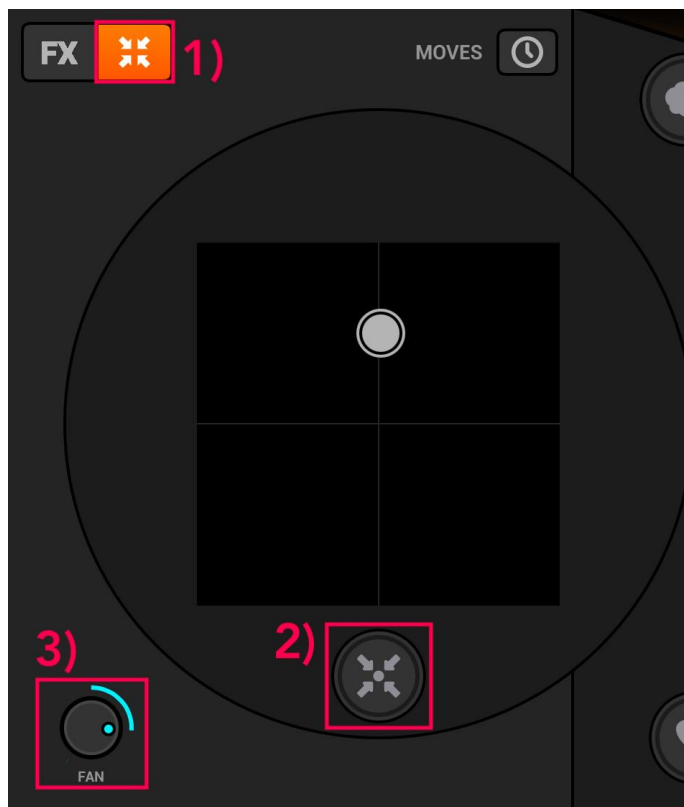


Centre position and fan

The centre position of your moving fixtures will of course be mostly determined by the fixture limitations, however there are instances where you may want to move an effect around the room live. To do this, you can tap the 'Centre Point' button (1) in the top left of the Moves section. In this

screen you can drag the dot around the XY grid to adjust the centre point of your moving fixtures. To reset the centre point, you can press the 'Centre' button (2) found immediately below the grid.

It is also possible to adjust the fan value of your moving fixtures so that they spread their beams relative to their fixture index. You can tap the 'Fan' dial (3) to activate the dial. The dial will turn blue when active to indicate that it is on and the fan value will take effect. When the dial is pointing straight up (0%), there will be no fan effect. When the dial is all the way right (100%), there will be a maximum outward fan effect. When the dial is all the way left (-100%), there will be a maximum inward fan effect. You can tap the dial again to turn it off.

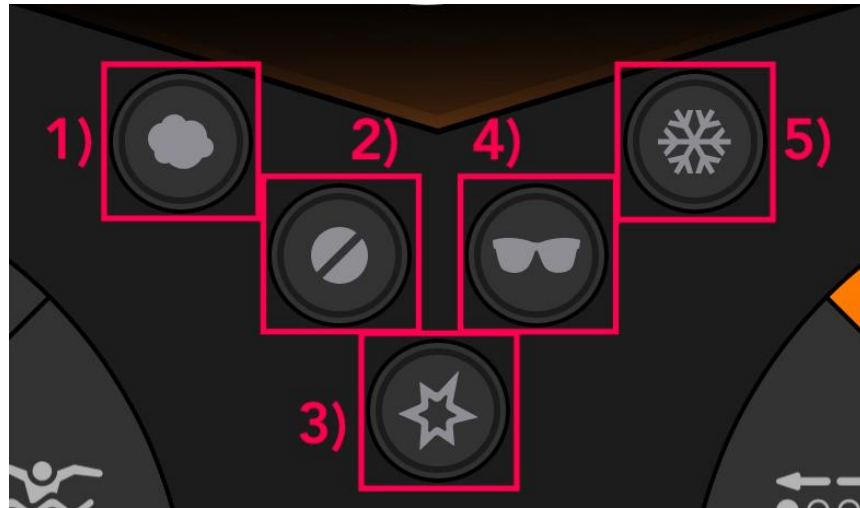


3.3. Flash FX

There are 5 flash effects in the top centre of the console which are activated when pressed. This allows you to create quick bursts of effects. If you want to latch the effects on, this can be done by pressing and holding a flash effect, dragging outside the button and releasing. The following effects are available in Light Rider:

- 1) **Smoke:** Activates any smoke machines you have patched in your project.
- 2) **Blackout:** Switches off all lights
- 3) **WOW!:** Creates a build-up of strobing effects that are synchronised with the BPM.

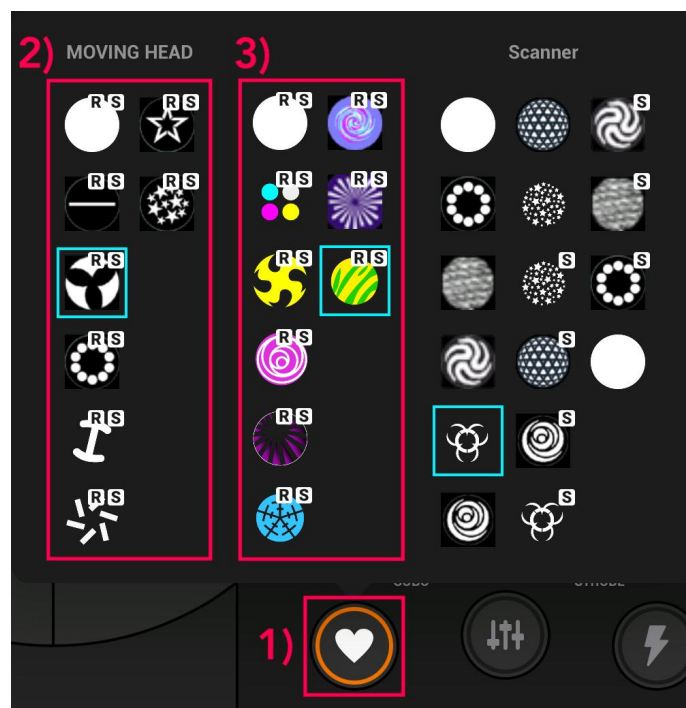
- 4) **Blinder:** Turns all lights to full power and white.
- 5) **Freeze:** Pauses the show, freezing the current levels being output.



3.4. Special controls

Gobo control

The 'Gobo Select' button (1) can be used to control the Gobos on your fixtures. When you press the Gobo Select button, a window will appear with all the relevant fixtures name at the top, and the selectable Gobo options for each will be displayed below. If a fixture has multiple Gobo Wheels, all possible options will appear under the same fixture name (2 & 3), but slightly spaced out into different columns for each Gobo Wheel. You can select one Gobo option per Gobo Wheel (for example, you can select a Gobo option on each Gobo Wheel if a fixture has 2 Gobo Wheels, but if a fixture only has 1 Gobo Wheel- you can only select one Gobo).



You may notice that some Gobo options have an 'R' or 'S' symbol next to them. This is referring to Gobos that can 'Rotate' and 'Shake'.

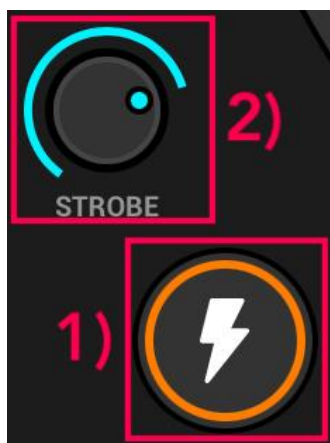


Above the Gobo Select button, there is a dial which by default is set to control the Gobo Rotation. If your fixture has a separate channel for controlling the rotation of your Gobos- this dial can be used to control the rotation speed. You can tap the dial to activate the rotation, and you can drag the dial up or down to adjust the value. If you do not see a Gobo Rotation dial above the Gobo Select button, this can be changed by pressing and holding the dial (see 3.4. [Other dials](#) for more information).



Strobe control

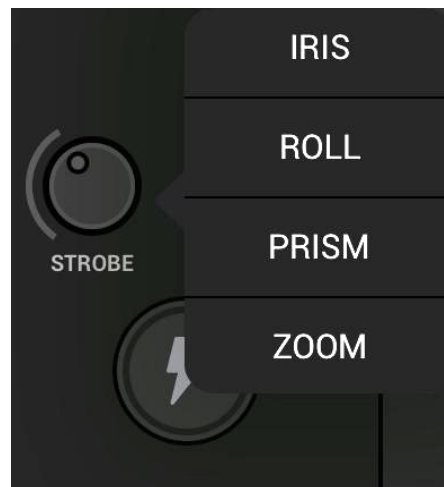
You can activate the strobe function by pressing the 'Strobe' button (1). This function, like the Flash FX will be active when held, then deactivated when released. It can also be latched to 'on' by pressing and holding the button, dragging outside of the button's perimeter, and releasing. The strobe speed can be adjusted using the 'Strobe Speed' dial (2), which by default is located immediately above the Strobe button. You can adjust the strobe speed value by dragging the dial up or down. It is also possible to latch the Strobe to 'on' by tapping the Strobe Speed dial. If you do not see a Strobe Speed dial above the Strobe button, this can be changed by pressing and holding the dial (see 3.4. [Other dials](#) for more information).



Other dials

The two dials found at the bottom of the console on either side of the Main Dimmer, which by default control 'Gobo Rotation' and 'Strobe Speed', can be changed to control a number of other potential features. By pressing and holding one of these dials, you can choose to change the dial to one of the following features:

- Iris.
- Roll.
- Prism.
- Zoom.



You can then control these features by pressing the dial to activate it, and dragging the dial up or down to adjust the value. If your fixture(s) do not use the specific feature you have selected (i.e. if you have no fixtures with an adjustable Iris)- this dial will take no effect.

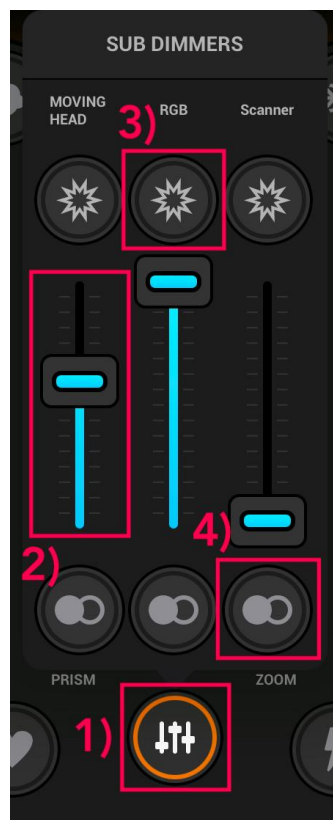
Changing from one feature to another will not reset or alter any previously adjusted dials. For example: If you have a 'Prism' set to on and at maximum rotation, then change the dial to display 'Zoom'- the Prism will continue to be on and at maximum rotation until it is manually turned off again.

3.5. Dimmers

In the centre of the console, you can control the 'Main Dimmer'. Dragging this fader will allow you to adjust the overall intensity of all fixtures at once (providing that the fixture itself has dimming capabilities).

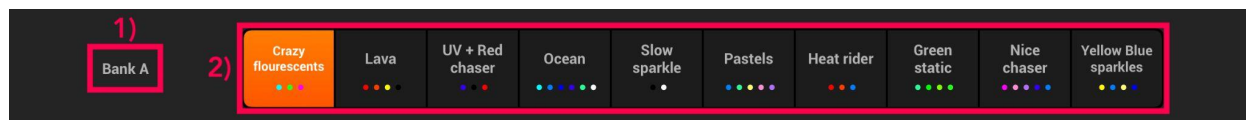


It is also possible to control the intensity of individual fixture groups based on the type of fixture using the Sub Dimmers. You can access the 'Sub Dimmers' view by pressing the button directly below the Main Dimmer (1). Here, all fixtures of the same type will appear left to right along with their own Sub Dimmer (2), 'Flash' (3), and 'Solo' (4) buttons. You can set the respective dimmer values of each fixture group by dragging the dimmers, or you can flash a group(s) to a white light using the Flash button, or solo (blackout all groups except for the selected ones) a group(s) using the Solo button.

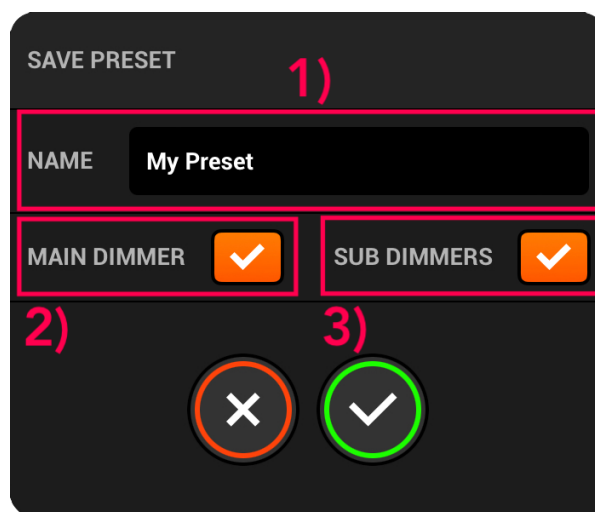


3.6. Presets

Once you have a sequence that you want to keep, you can save it to the 'Presets' bar for quick recall. There are 6 potential 'Banks' of Presets (a - f) and each Bank (1) holds 10 Preset slots (2). Along the bottom bar of the console, you will see the displayed Bank (left) followed by the 10 Preset slots in the Bank. To view the next/previous Bank, you can swipe left or right anywhere on the bottom section of the console. It is also possible to set a custom name for your Bank by pressing and holding the current Bank name (1).



To save a Preset- you can simply press and hold the desired slot you want to save the Preset to. This will then allow you to set a custom name for the preset (1), and whether you want to include the Main Dimmer (2) or Sub Dimmer (3) values within the Preset. If you enable the Main and Sub Dimmers options when saving the Preset- this means that the current value set on the dimmers will be saved into the Preset, and will be recalled whenever the Preset is triggered. Disabling the Main and Sub Dimmers options when saving the Preset will mean that the value set on the dimmers will not be saved into the Preset, and the value will not be recalled. To confirm the save, press the green tick or to cancel, press the red cross.



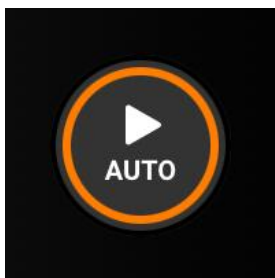
Saving a Preset will store all of the following settings, which will later be recalled when triggering the Preset:

- Manual overrides.
- Move effect.

- Centre point.
- Fan value.
- Colour effect.
- Colour(s) selected, including Static Colours.
- Phase, Size, Fade and Speed values.
- Sync settings.
- Gobo information.
- Strobe settings (including if the Strobe is latched 'on').
- Dial settings.
- Main Dimmer value (optional).
- Sub Dimmers values (optional).

When you trigger a Preset, then make changes- the Preset will appear in a slightly desaturated/darker shade of orange at the bottom of the console. This is to indicate that changes have been made, as a reminder to save any changes you want to be made permanent (currently Android only).

You can set your Presets to cycle automatically by pressing the 'Auto' button. While this is active, one Preset will jump to the next every 60 seconds. The Auto mode will only cycle Presets within the current bank (for example: when you get to Preset 10 in a Bank, the next Preset to play will be Preset 1 of the same Bank).



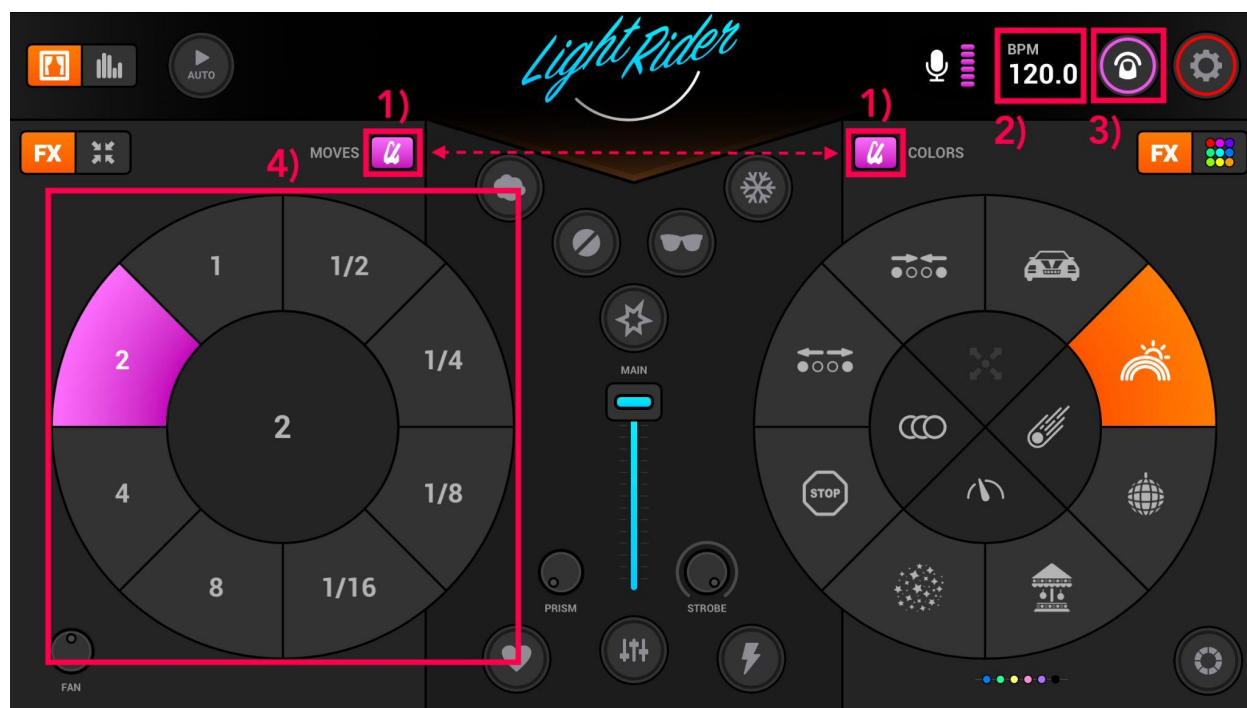
3.7. Synchronising effects

By default, the Move and Colour effects will be set to 'Time' mode. This means that the effect will run without any particular synchronisation to audio, or BPM. Setting the speed can be controlled by the Speed parameter in the centre of both effect wheels from 0% - 100%. It is also possible to have your effects run using synchronisation options to create a more unified light and sound show.



BPM

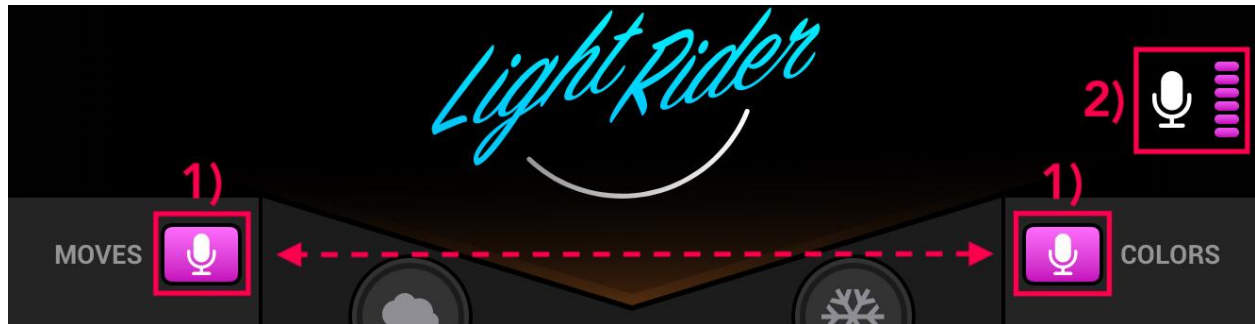
By selecting the 'Sync Option' button (1) once, you will now see a metronome symbol replace the original clock symbol. This indicates that BPM mode is now enabled and your effect will be synchronised to the BPM value (2) indicated in the top right corner of the console. The BPM can be set internally by tapping the 'Tap Tempo' button (3), or externally via Ableton Link (see 3.7. [Ableton Link](#) for more information). When your effect is in BPM mode, you will notice that the effect Speed function has changed from 0% - 100% to beat divisions instead (4). These options are directly related to the set BPM. For example: If you have a Disco colour effect and select a speed of "1", the colour will change 1 time each beat. If you set the speed to "4", the colour will change every 4 beats. If you set a value of "1/2", the colour will change every 1/2 of a beat (two colour changes per beat).



Pulse

By tapping the Sync Option button a second time, you will now see a microphone symbol (1) replace the metronome symbol. This indicates that Pulse mode is now enabled. This option works very similar to the built in 'sound-to-light' functions found within some fixtures. In this mode, the effect will run exactly the same as the default Time mode (using the speed value set within the Speed control), but every time an audio peak is detected- the effect will jump to the next section. For example: If you have a Disco colour effect set to a speed of 50%, the effect will run according to the speed set- but the lights will jump to the next colour on each audio peak detected. If the effect speed is set to 0%, the effect will be nearly static until an audio peak is detected- then the colour will jump to the next one. The input threshold will be calculated automatically depending on

the microphone volume level, the audio input signal can be visualised in the top right corner of the console (2). The audio input source will be set to whatever the tablet's current setting is, meaning it is possible to use an audio input source other than the tablet's in-built microphone by connecting an external mic to the tablet.

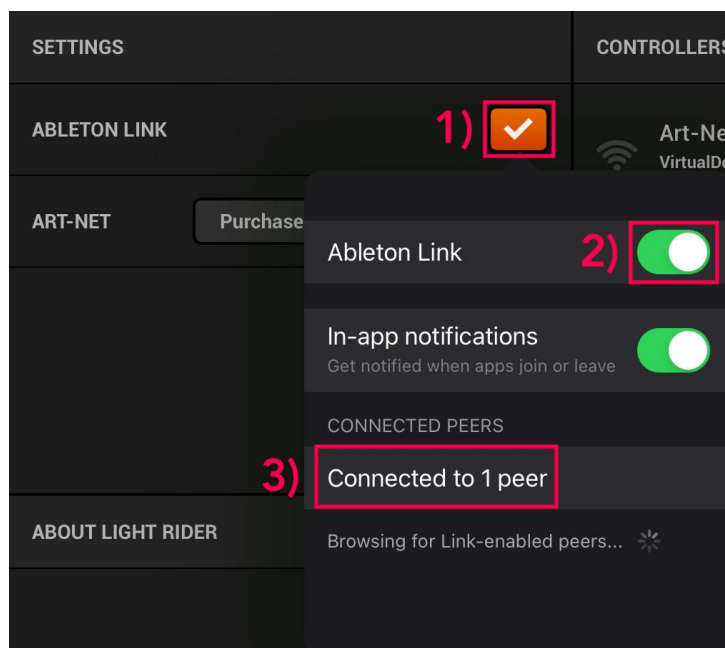


Ableton Link

The most accurate way to sync your lights with music is using Ableton Link. This feature will allow accurate synchronisation with over 100 different apps/software programs (i.e. Traktor, VirtualDJ, Rekordbox etc). To set up Ableton Link:

1. Be sure that your tablet running Light Rider is connected to the same network that your Ableton Link device is connected to.
2. Open the Settings tab in Light Rider.
3. Select the Ableton Link button (1), then enable the Ableton Link toggle (2).
4. The Ableton Link device should automatically become selected, this will be reflected by the "Connected to 1 peer" text (3).

Now, you will see the project tempo update automatically with any tempo changes made by your Ableton Link device.



3.8. MIDI control

It is possible to control Light Rider via MIDI over USB. This is a bonus feature and so custom mappings are currently not possible. Instead, all functions come pre-mapped to match the APC Mini mk1. Some MIDI controllers will allow you to modify the commands that it sends, so it is worth consulting the user manual of your MIDI controller if you want to optimise your MIDI control of Light Rider.

To control Light Rider using MIDI on an iOS tablet- you will need a Lightning to USB adapter, or a USB A to C adapter. To control Light Rider using MIDI on an Android tablet, you will need an OTG cable or USB A to C adapter.

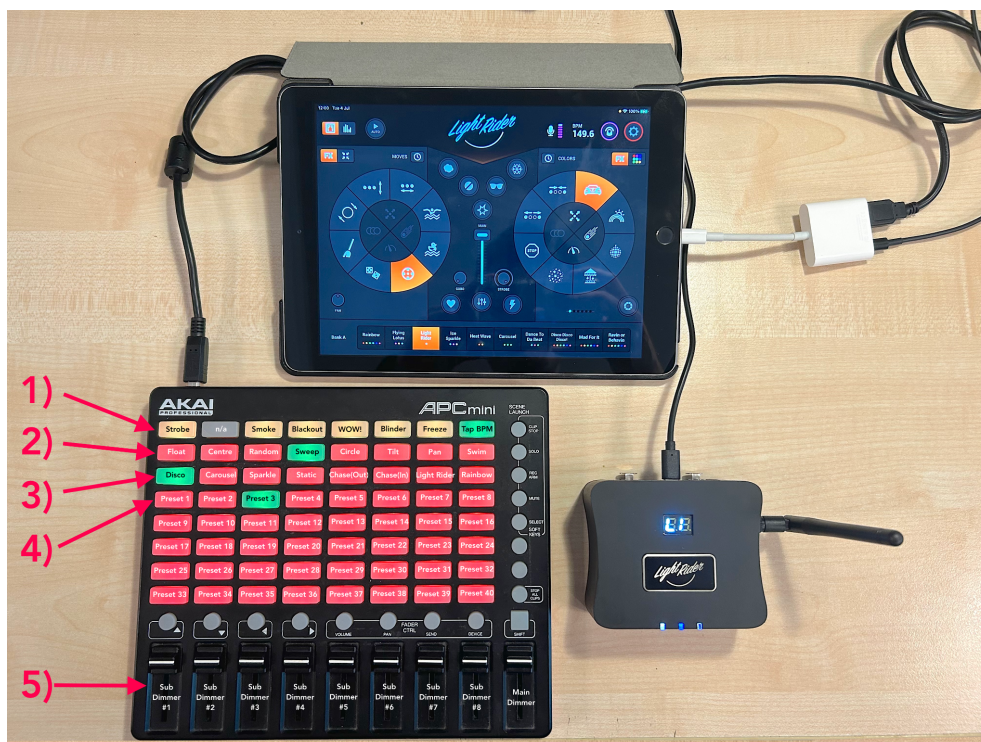
The fixed MIDI mappings for Light Rider are as follows:

- **Color FX 1-8:** Note 40-47
- **Move FX 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 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

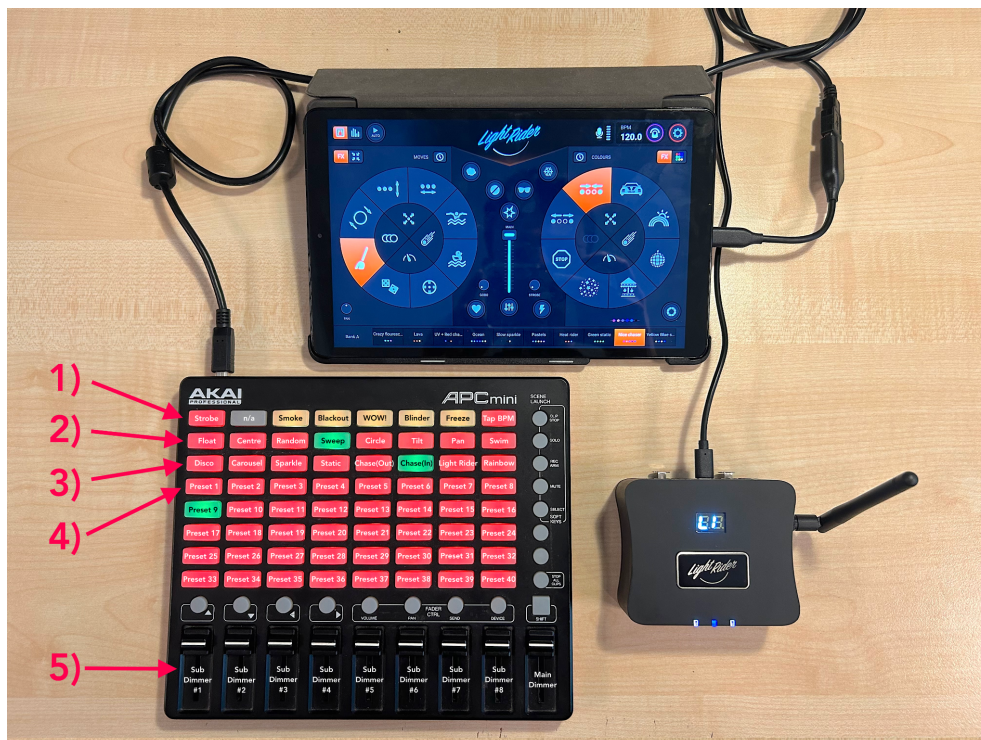
iOS tablet MIDI setup:

- Flash FX & Strobe (1)
- Move FX (2)
- Colour FX (3)
- Presets (4)
- Dimmers (5)



Android tablet MIDI setup:

- Flash FX & Strobe (1)
- Move FX (2)
- Colour FX (3)
- Presets (4)
- Dimmers (5)



4. 3D visualiser

Light Rider is compatible with the Easy View 2 visualisation software, which will allow you to visualise your light show without needing to connect all your fixtures manually! This is a very useful reference tool for programming your light show quickly and easily.

4.1. Requirements

Checklist

In order to set up the 3D visualiser with Light Rider, you will need to have the required hardwares, licences, and software. Below is a full checklist for all that you need to set this up:

- Tablet with Light Rider installed.
- Computer capable of running Easy View Connect (minimum operating system: MacOS 10.15 or Windows 7 64-bit)
- Light Rider compatible DMX interface (i.e. LR512 or an Art-Net device).
- Male to Male XLR gender changer and generic XLR cable.
- A second Nicolaudie Group DMX USB interface (i.e. SUSHI-Z1 from store.dmxsoft.com/catalog).
- The following licences purchased on the **second** Nicolaudie Group DMX USB interface (these can be purchased from store.dmxsoft.com. See section 1.2. '[Purchasing additional SUT licences](#)' for more information on how to do this):
 - DMX Input licence (found in the Hardware section).
 - Easy View Connect licence.
- Easy View Connect software (download links below):
 - [Mac Easy View Connect download link](#)
 - [Windows Easy View Connect download link](#)

4.2. Setup

Hardware setup

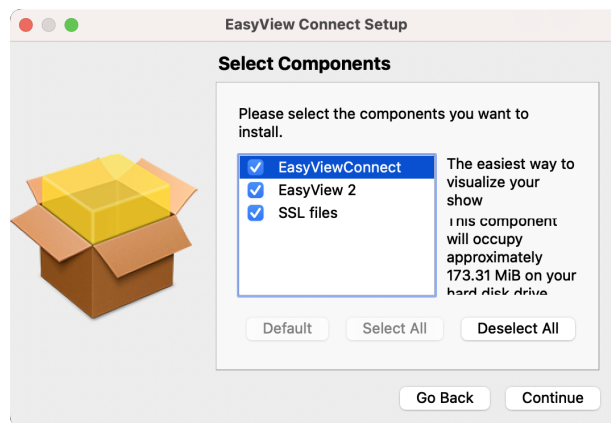
In order to connect your Light Rider app to Easy View Connect, you will need to complete the following steps:

1. Connect the tablet to the LR512 interface via WiFi or OTG cable (Android only). Or 'other' compatible interfaces such as Art-Net devices.
2. Launch the Light Rider app and connect to the interface from the device list.
3. Plug the XLR gender changer into the correct XLR port.
4. Connect the second SUT compatible DMX Interface to the computer via USB. (NOTE: This is **NOT** the interface which you will use with the Light Rider app. This is the interface that will connect to the 3D Visualiser tool. For example: the Sushi-Z1 interface).
5. Ensure that the relevant licences have been purchased and synchronised (see section 1.2. ['Purchasing additional SUT licences'](#) and ['Synchronising SUT licences'](#) for more information).
6. Ensure that the Hardware Manager and SUT Tool are closed.
7. Using the XLR cable and gender changer- connect the second DMX interface to the one you are connected to the Light Rider app with.

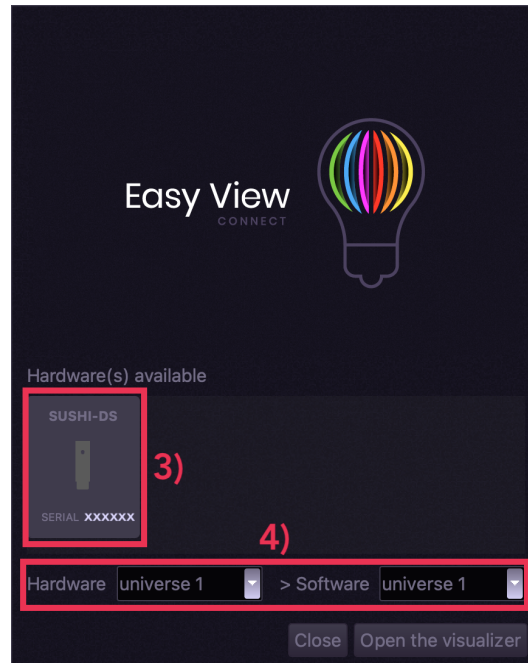
Software setup

Once the steps have been completed from the 4.1. ['Hardware setup'](#) section- you can proceed to setup the Easy View Connect software. This can be done via the following steps:

1. Download and install the Easy View Connect software via the following links:
 - a. [Mac Easy View Connect download link](#)
 - b. [Windows Easy View Connect download link](#)

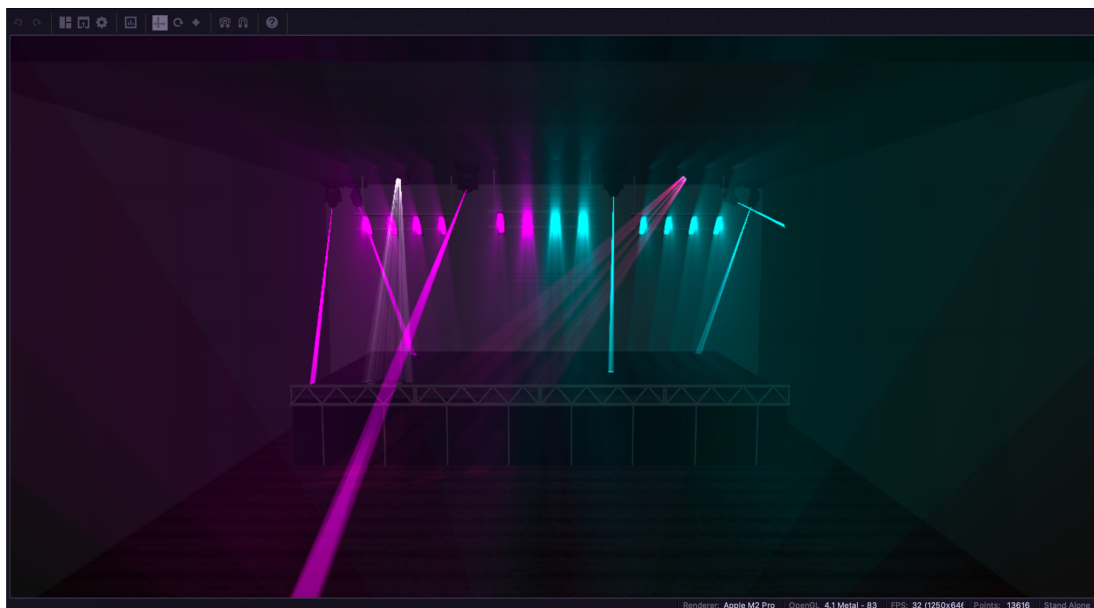


2. Run the 'Easy View Connect' program.
3. You should see your SUT device connected via USB appear in the 'Hardware(s) available' list- if so, select it.
4. Set the desired Hardware and Software universe settings. Usually this is simply 'Universe 1' for both options.
5. Select 'Open the visualiser' to launch the visualiser.



4.3. Navigating the 3D visualiser

The full user manual for Easy View 2 can be accessed by clicking [here](#), or from the download section of the [lightrider.com](#) website. The full user manual will go into much more detail about all of the functions possible within Easy View, however the following information will give you the basic information you need to start setting up your light show!



3D visualiser configuration

You will need to manually patch in the fixtures to Easy View so that they match your Light Rider project. This can be done via the following steps:

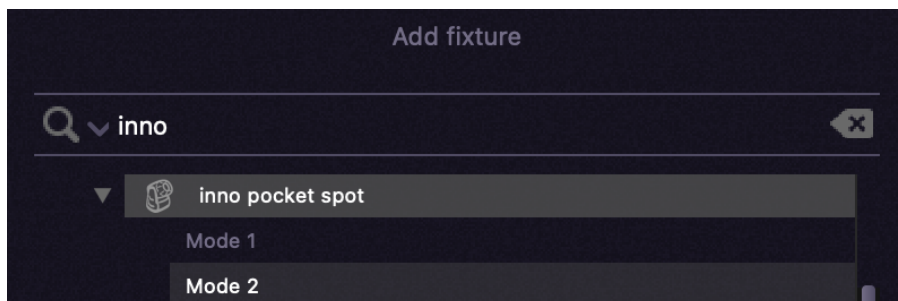
- 1) Select the 'Build view' button from the toolbar.



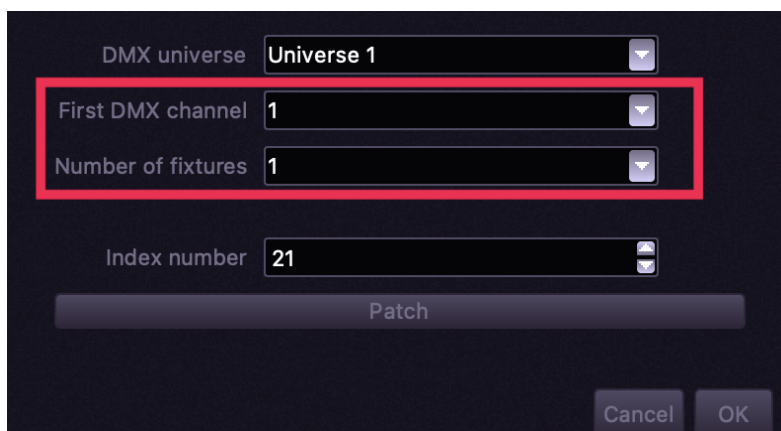
- 2) Select the 'Add fixtures' button from the Objects tab.



- 3) Locate the desired fixture, then select it.
- 4) Select the relevant Mode (as set within the Light Rider app)



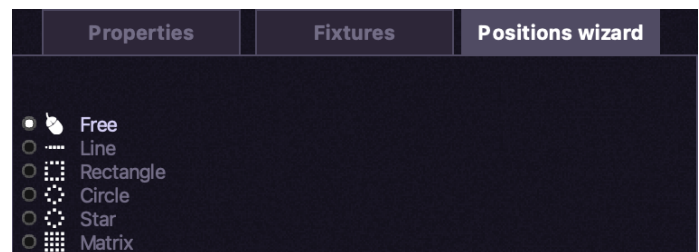
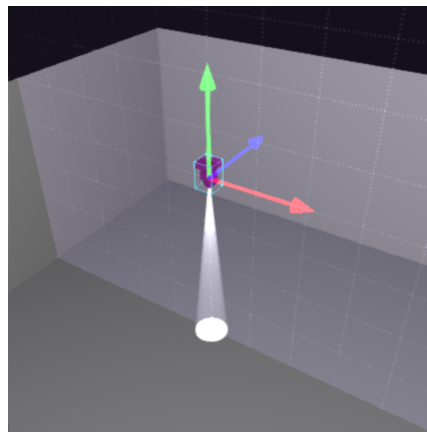
- 5) Select the first DMX channel, the number of fixtures you want to add, then press the 'Patch' button to add them to the project.



- 6) Repeat this process until you have the full list of fixtures within your Easy View project as you have in your Light Rider project.

Once you have some fixtures patched into your Easy View project- you can manually adjust their position, size and rotation. This can be done via any of the following methods:

- Manually dragging the Red/Blue/Green options. This will allow you to move, rotate or scale the fixtures on the relevant axis.
- Type in the desired values within the 'Properties' section of Build view.
- Use the Positions Wizard to align/reposition/rotate a group of fixtures into particular shapes



You can save/open an Easy View project within the 'File' drop down menu.

