

light **Shark** series.

User Manual

V 1.1

# Introduction

Light**Shark** series is a new concept within the lighting control systems that adapts to the daily needs, offering a powerful, compact and economical solution. Perfect for small shows, nightclubs, school theaters, corporate events and medium-size live shows.

Nowadays, technicians and designers require flexible control solutions that allow to create impressive looks in a short time frame, and which are easy to use for basic users, as well as able to offer the advanced functions that expert users require.

Our Hardware and Software departments have worked hard to offer you a simple, powerful and compact lighting system. From **WORK PRO** we hope it meet all your expectations.

Thank you very much for trusting us.



## Wi-Fi integrated

All LightShark devices have a built-in WiFi access point, so they can be operated from any smartphone, laptop or tablet.



## Powerful & Compact

Thanks to its compact size, LightShark can be carried along with your tablet backpack (LS-Core) or as hand luggage (LS-1). Both devices have the same features.



## Multiplatform

All devices have the LightShark software inside, allowing to be operated from any tablet, PC or smartphone... whatever the Operating System or version. No drivers are required, ¡LightShark is Plug&Play!

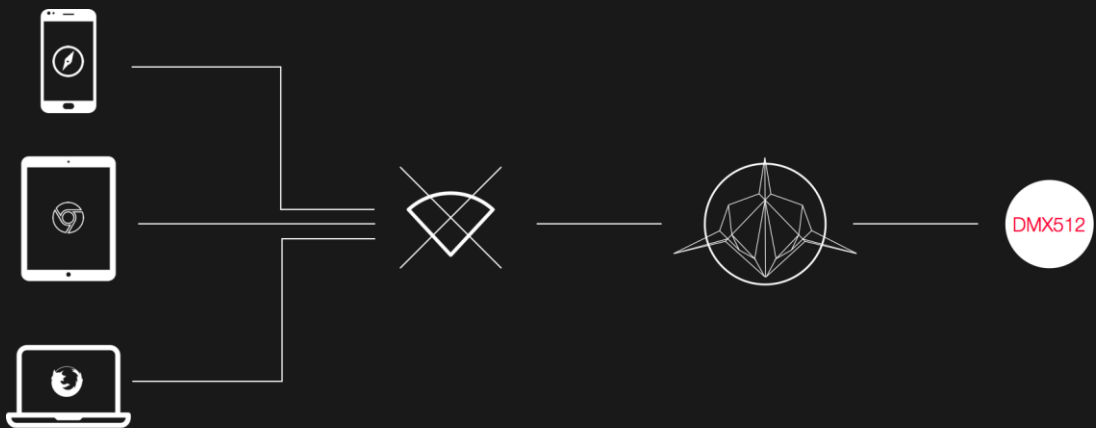


## Web server

To use LightShark you will only need to connect to the WiFi network created by the devices and go to [lightshark.work](http://lightshark.work) on your web browser.

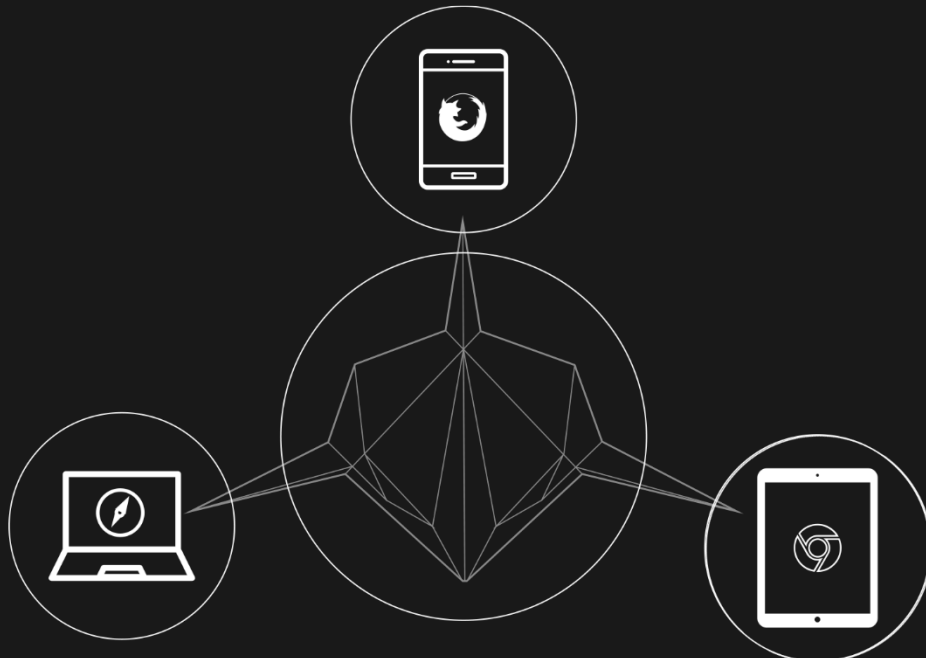


The LightShark software is always running inside the console (LS-Core or LS-1), in the WiFi connection between your device and the console only travels user interface data, never DMX data.



Since in the WiFi connection only travels user interface data, the console continues operating even if the WiFi connection fails. When it is not possible to connect to LightShark via WiFi (interferences, inhibitors...) it can be done using a wired connection through the Ethernet port on the equipment.

light **Shark** series.



It is possible to simultaneously connect up to 3 devices to LightShark, showing different windows on each device. This allows the user to create a multi-screen system.

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# 1. INFORMATION

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This product is approved by the following safety standards: EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013

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**ATTENTION:** Any modification or changes made to this device, unless explicitly approved by Equipson S.A., will invalidate the authorisation of this device.

**NOTE:** This equipment has been tested and found to comply within the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

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## 2. DEVICES

**LightShark series** range comprises two independent devices:

**LS-1** is a new generation of web-based lighting consoles, designed for all types of shows. It provides a simple, powerful and portable multiplatform control system.

**LS-Core** is focused on those technicians who need the features of a complete lighting console reducing the space to the minimum. Thanks to its internal task scheduler it is an excellent solution for fixed installations.

Both devices have the following features:

- 4096 DMX channels.
- ArtNet y sACN output.
- 1200 Cues and 1200 CueList.
- 30 Pages.
- 10 Main Playbacks.
- 20 Wing Playbacks.
- Complete MIDI mapping.
- Fan function.
- Run of multiple CueList simultaneously.
- Fully configurable Executor window.
- Numeric keypad.
- Built-in FX engine.
- Multi-Touch UI.
- With support up to 3 connected devices simultaneously.
- Quick Patching.
- User Palettes.
- FX size and speed control thru submasters.

# LS-1



- 1- Grand Master
- 2- Blackout
- 3- Page selection
- 4- Editor
- 5- Selection buttons
- 6- Go buttons
- 7- Playback Area
- 8- Flash buttons
- 9- Encoders
- 10- Playback control Area
- 11- Selection Area
- 12- FIND-CLEAR-REC function buttons
- 13- Attribute selection
- 14- Information display



- 1- Desk Lamp (5V)
- 2- DMX Out (2 Universes) (3-pin and 5-pin)
- 3- Ethernet port (TCP/IP, ArtNet, sACN)
- 4- USB for data transfer, USB for charging
- 5- WiFi Antenna
- 6- Power Switch
- 7- Power Socket



Dimensions (Width x Height x Depth): 430 x 100 x 330 mm

Weight: 3,7kg

## LS-Core



- 1- USB port for data transfer
- 2- Navigation buttons
- 3- WiFi Antenna
- 4- Information display



- 5- DMX Out (2 Universes) (5-pin)
- 6- Ethernet port (TCP/IP, ArtNet, sACN)
- 7- Power Socket

Dimensions (Width x Height x Depth): 108 x 40 x 142 mm

Weight: 460g

## Connectivity

In order to perform all its functionalities on any computer, tablet and smartphone with a Web Browser, LightShark features an integrated Web Server. You will only have to connect to the WiFi access point of the LS-1 or LS-Core. As an alternative, you can connect via an existing WiFi network or use the Ethernet port of the LS-1 or LS-Core for a wired connection.

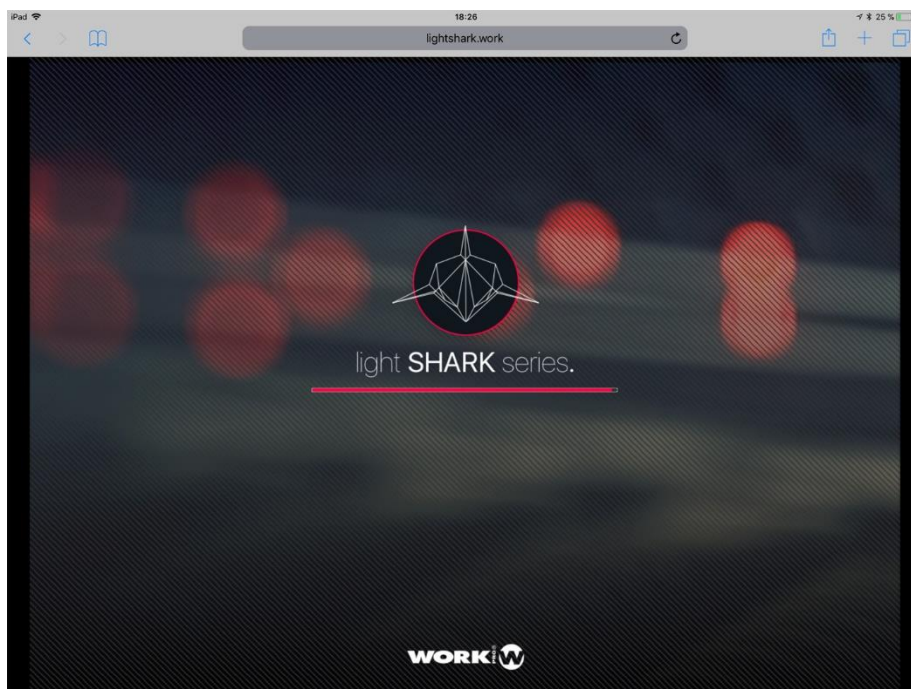
To connect to the WiFi access point of LightShark with your computer, tablet or smartphone:

- 1** Check that the WiFi antenna is properly connected to the LightShark device, plug the external power supply and turn on the device. The LCD display of the device will light up, please wait until the device has started completely.
- 2** Navigate to the WiFi setup on your device (computer, tablet or smartphone) and connect to the “LightShark-xxxx” access point. If this is the first time you connect, the default password is “**sharkjaws**”.





**3** Start the Web Browser of your device and type **lightshark.work** in the URL field, or **192.168.42.1** The LightShark loading screen will appear and you will be redirected to the Palette window.



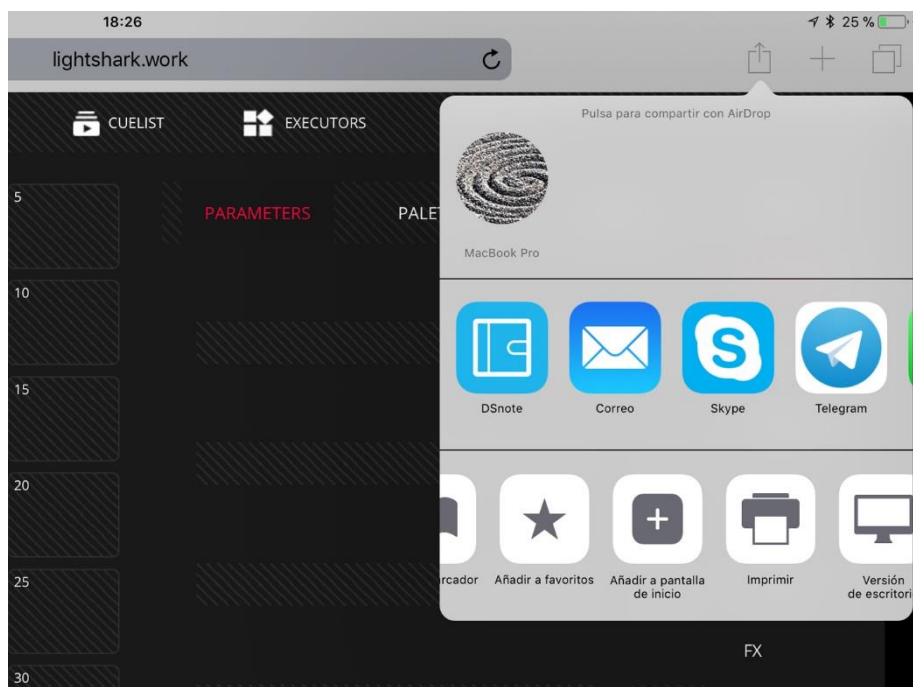
## WARNING

The first time you connect **is important that you change the WiFi password**. Go to the main menu on LightShark (on the top-left side of the screen) and click on the settings icon and select the “NETWORK” tab to proceed with the required changes.

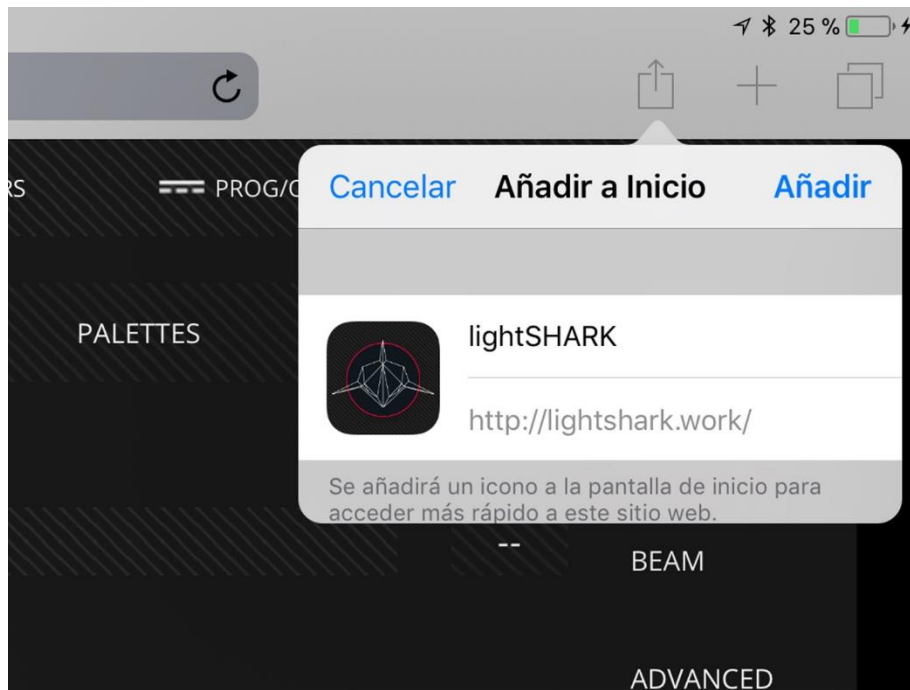
## NOTE

LightShark can run in full screen, hiding the navigation bar of the Web Browser, and it can be launched as any other app.

**1** Once connected to LightShark, press the Share button and the option “Add to Home Screen”.



2 Press “Add”.

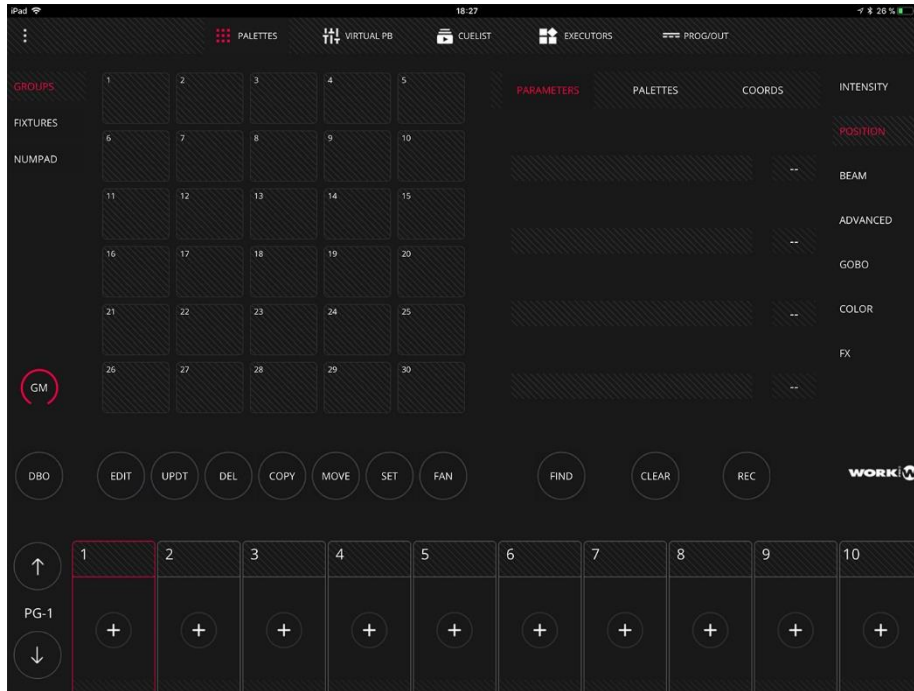


3 A LightShark icon will appear in the Home screen, so you can directly access to LightShark without having to open the Web Browser.



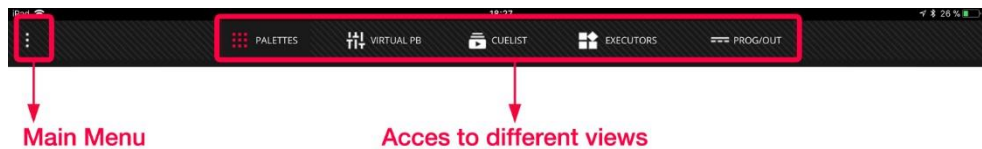


4 Now LightShark will open in full screen mode.



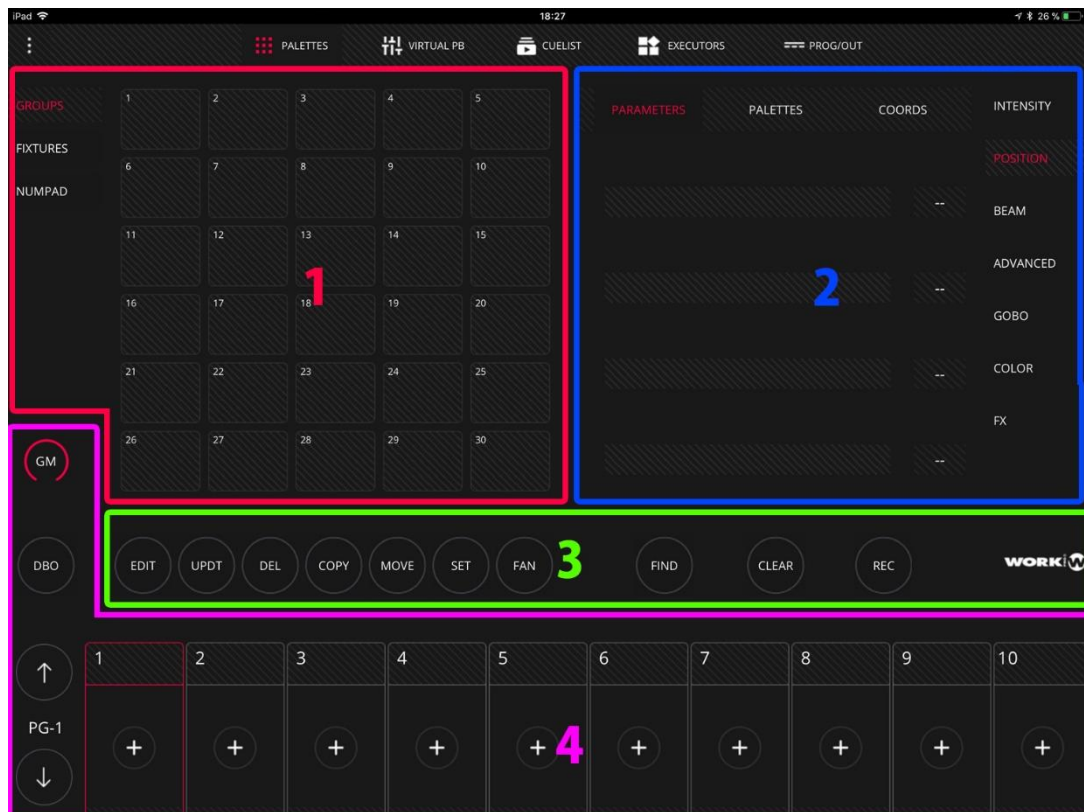
## 3. USER INTERFACE

LightShark has a simple but complete User Interface. It is possible to control all the device parameters, to record scenes and to run the shows. The interface consists of 5 different views and a main menu access:



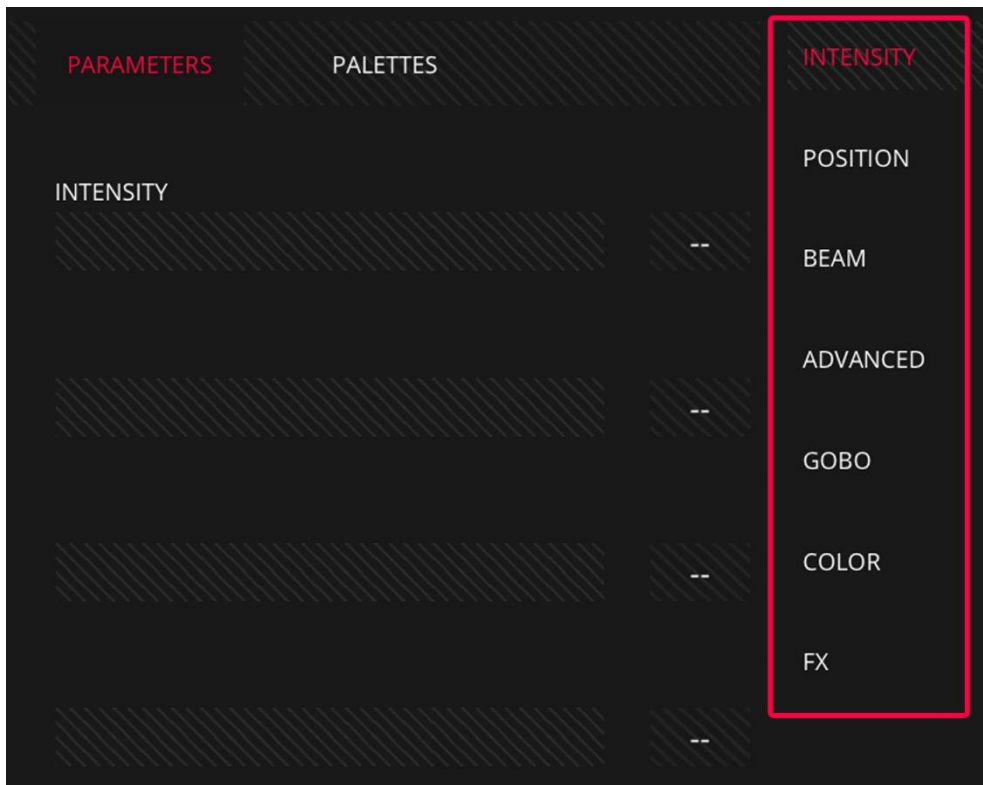
### Palettes

It is LightShark's main view. From this window the user can select and control the fixtures, and also record scenes or edit elements. The Palette Window is divided into three sections:

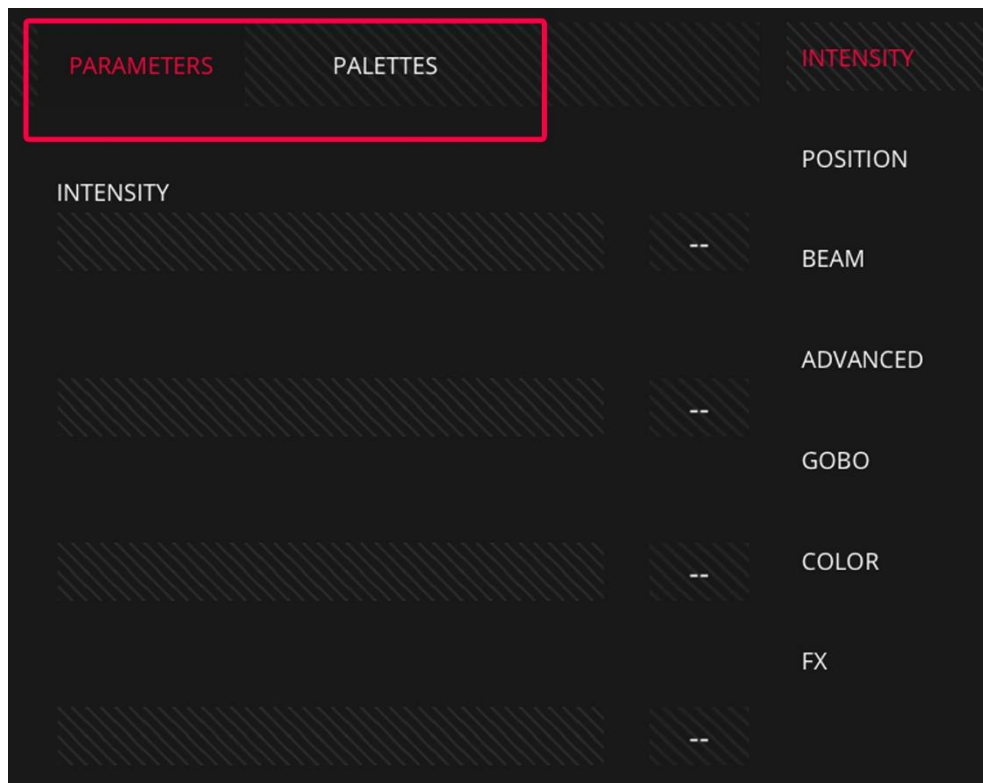


**1- Fixture Selection Area**, where the user can select the desired fixtures through Groups, the numeric keypad or individually.

2- **Attribute Control Area**, which is divided into 7 sections. Depending on the kind of fixture and the type of attribute it will display different information:



By default each section has a view by parameters and a view of palettes:



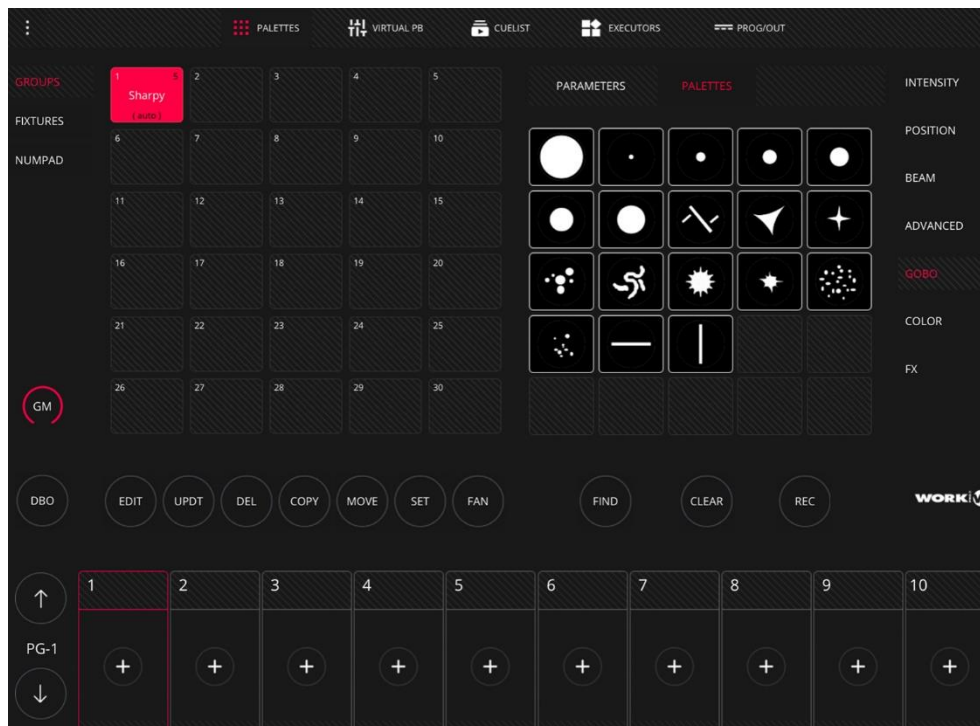
On the parameters view the user will find all the attributes for the selected type. The attributes are automatically shown in groups of 4. In case the selected section has for example 7 “BEAM” channels, you may access to the next 3 attributes by scrolling down.



LS-1 users may interact with the interface using the encoders and buttons, so each LS-1 encoder controls one of the attributes displayed (the top parameter is controlled by the first encoder on the left, and so on).

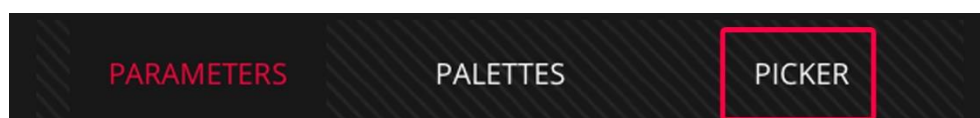
The information shown in this area is also shown on the LCD integrated screen of the LS-1. It is possible to move between attributes using the physical attribute buttons on the console, or scrolling on the interface.

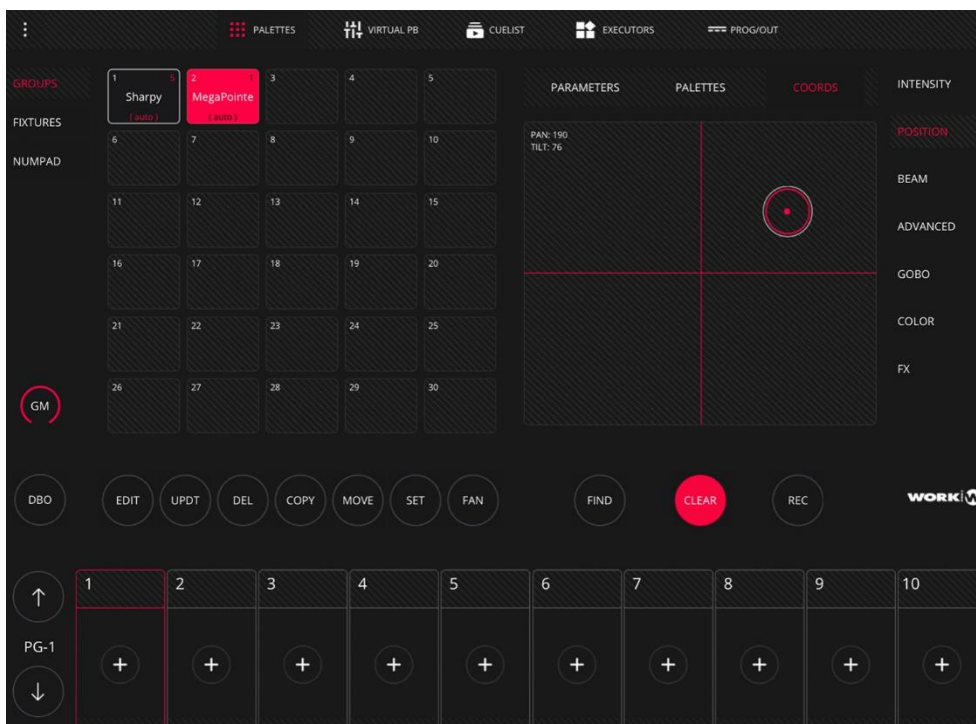
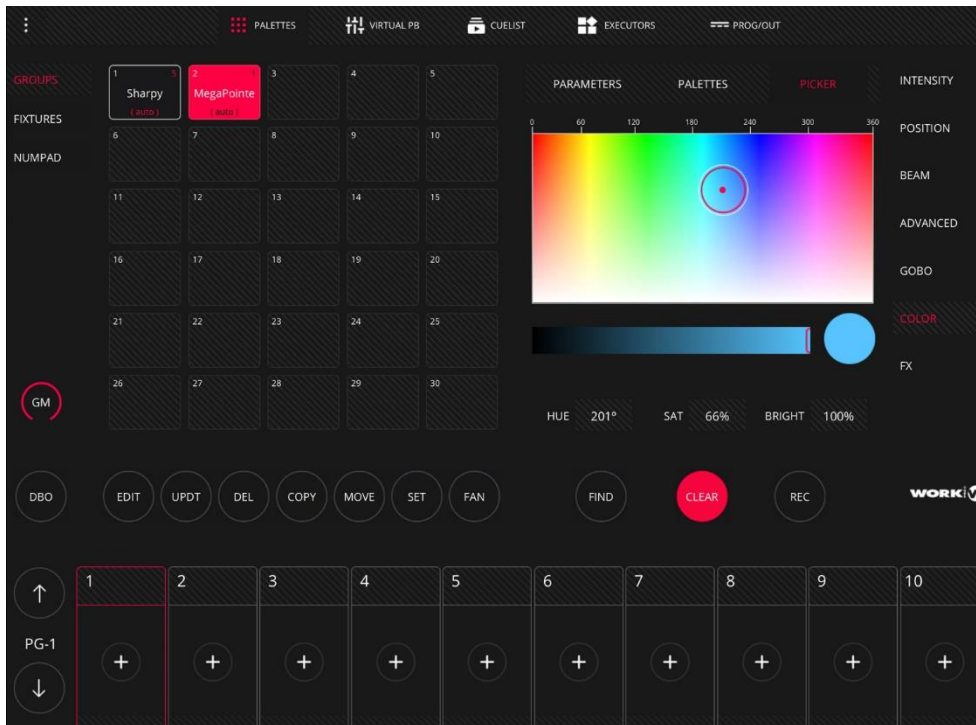
Each attribute has its own palettes. Some boxes will show the palettes defined by the libraries. On the remaining boxes the user may record his own palettes.



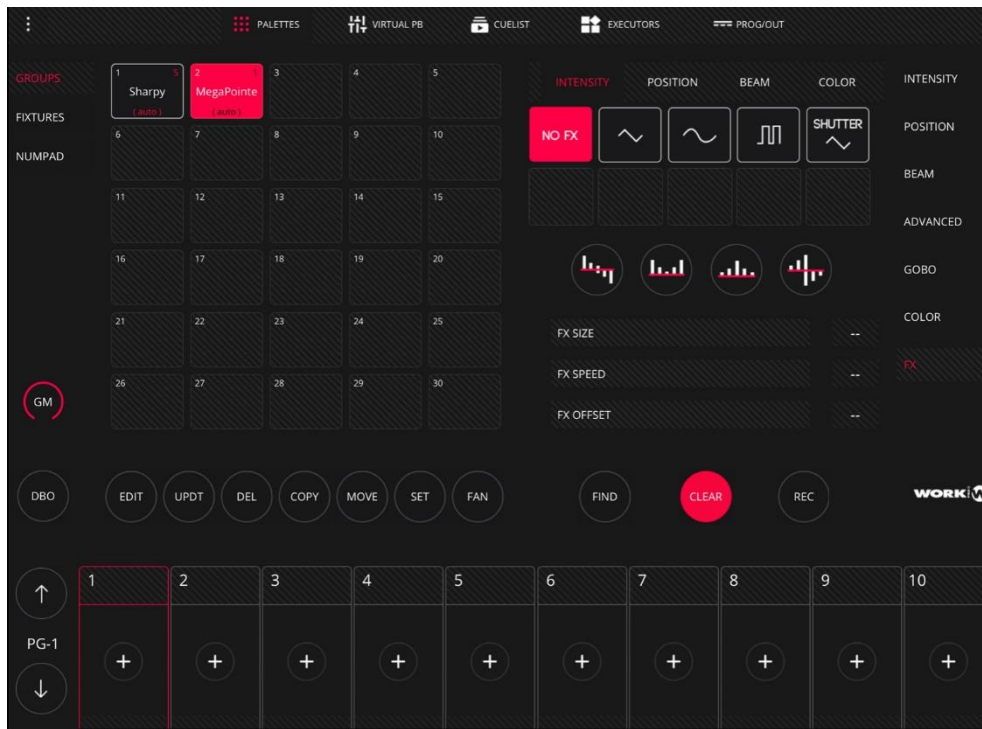
Lightshark shows up to 25 palettes simultaneously. To access more palettes you may scroll vertically or on the parameter window.

In the Position and Colour attributes, it is possible to see a third view as well as “PARAMETERS” and “PALETTES”. The Colour Picker (colour) view and the coords (Position) view.

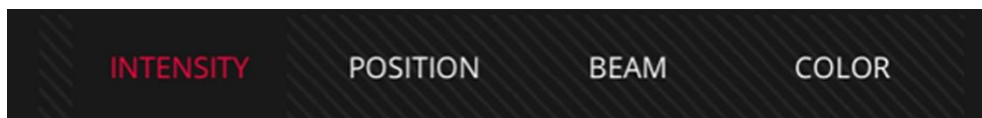




LightShark includes an internal FX generator, so it is possible to add an effect to one or several fixtures.



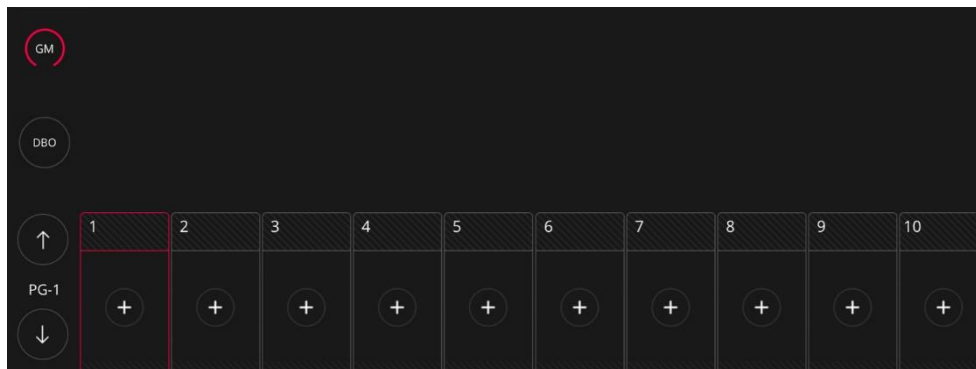
LightShark arranges the effects into 4 categories: **Position**, **Colour**, **Beam** and **Intensity**. Each category may have up to 9 different effects.



**3-Editor Area**, which allows the user to perform editing and recording functions.



**4-Playback Area**, which allows the user to play the show, run the Cuelist and control the output level.



The GrandMaster is minimised by default, just press on the button to extend it and show the fader. Pressing again, it will minimise again.

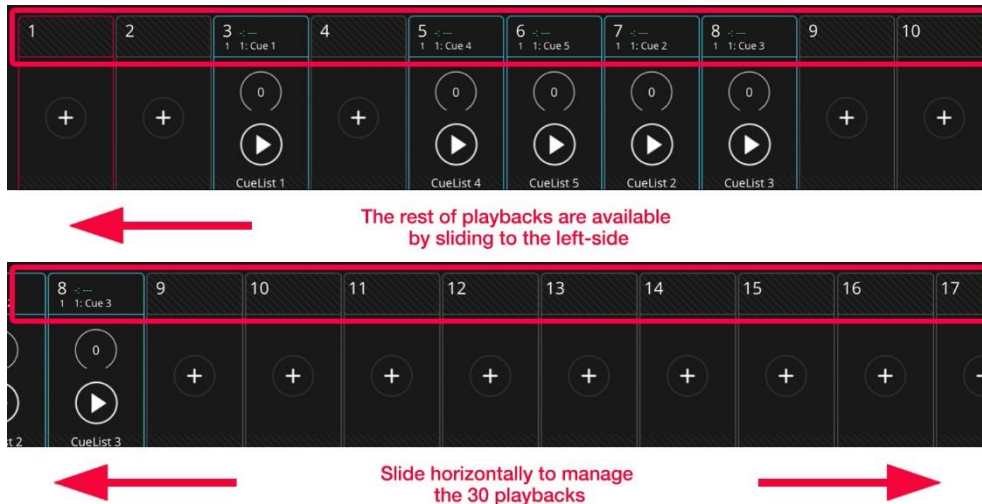


It is possible to add a specific level to the GrandMaster pressing for 2 seconds the value field.

Through Playbacks, LightShark allows to play all the stored information in the show. LightShark holds up to 30 Playbacks per page. The main 10 Playbacks are next to the UI of the software, while the other 20 are displayed when sliding with the finger horizontally on the Playbacks area.

These 20 Playbacks, accessible through the sliding movement (or from the “Virtual Playbacks” view) behave as Wings.





LighShark allows to control the Playbacks using:

**Keyboard:** a Playback can be mapped to a key on the keyboard.

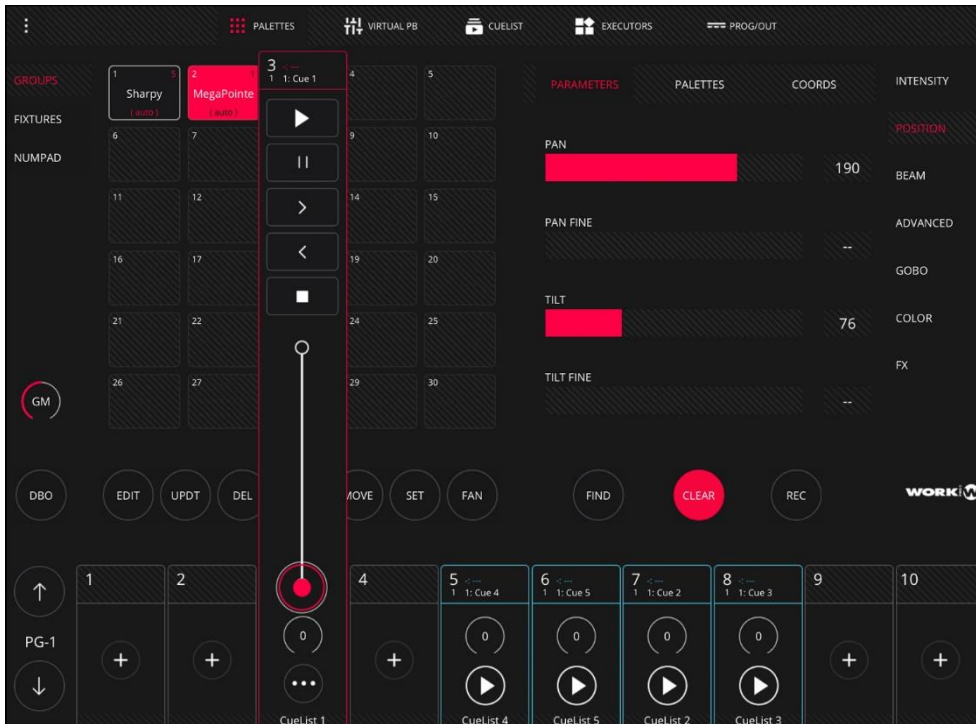
**MIDI:** in order to execute or adjust the level, any part (Fader, Encoder, Key) can be mapped from a Playback to a MIDI controller.

The control area is configured to control the first 10 Playbacks, no matter which of the 3 Playback blocks is selected. This means that even when sliding the finger to access the 11-20 groups of Playbacks, the control will still work on the first 10 Playbacks.

Playbacks are always minimized. If you want to access all the control functions of the Playback, you may press on the fader level intensity indicator to maximize it.



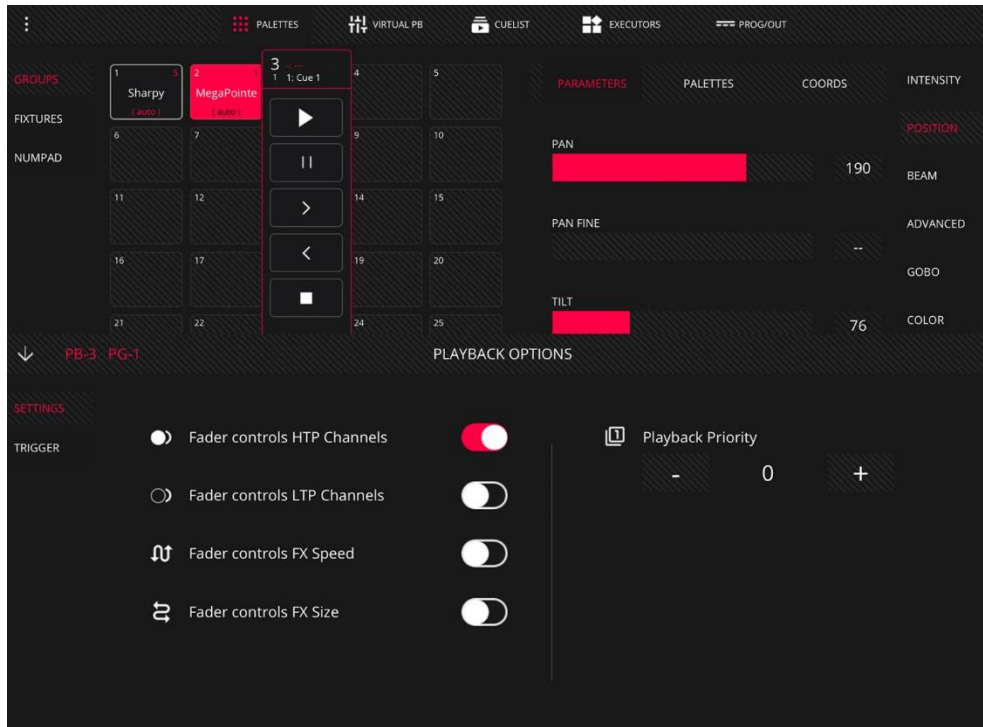
When maximizing the Playback, all the elements on zones 1, 2 and 3 are blocked. To be able to access them again, the Playback must be minimized.



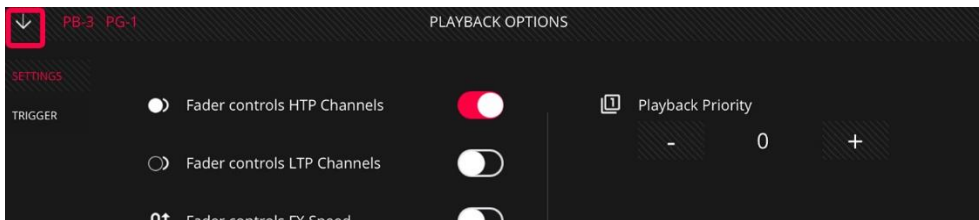
By holding down the value field for 2 seconds, you may give the Playback an specific value.

It is possible to configure some options that determine how the Playback and the elements that form it work. The Playback priority, the way it reproduces, the control functions of the FX,... can be established.



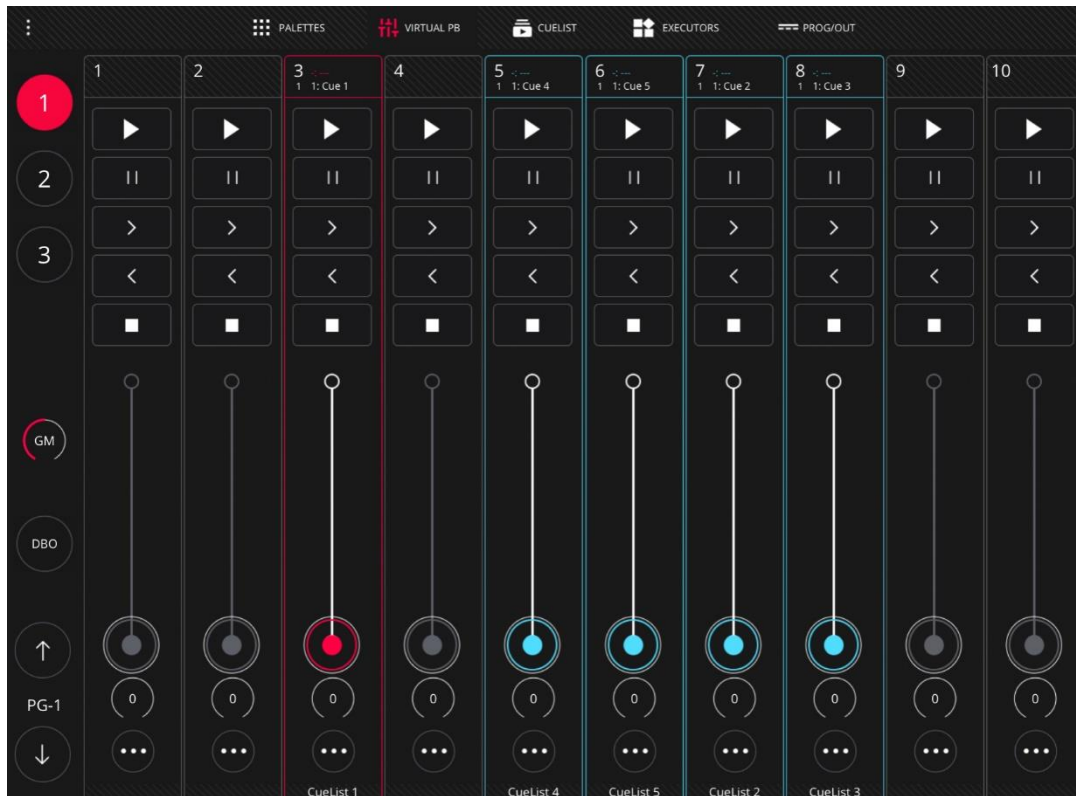


To hide the Playback Options menu, you may press the top-left arrow on the panel.



## Virtual Playback

From the “Virtual Playback” view the user may access the Playbacks. This can be very helpful when using the LS-Core or when a physical control device is not available.



The LightShark interface is multi-touch, so several Playbacks may be simultaneously controlled from a tablet or any other device with this technology. Using the keys the user may directly access the desired Wing without having to scroll.

The Playbacks may have 3 stages:

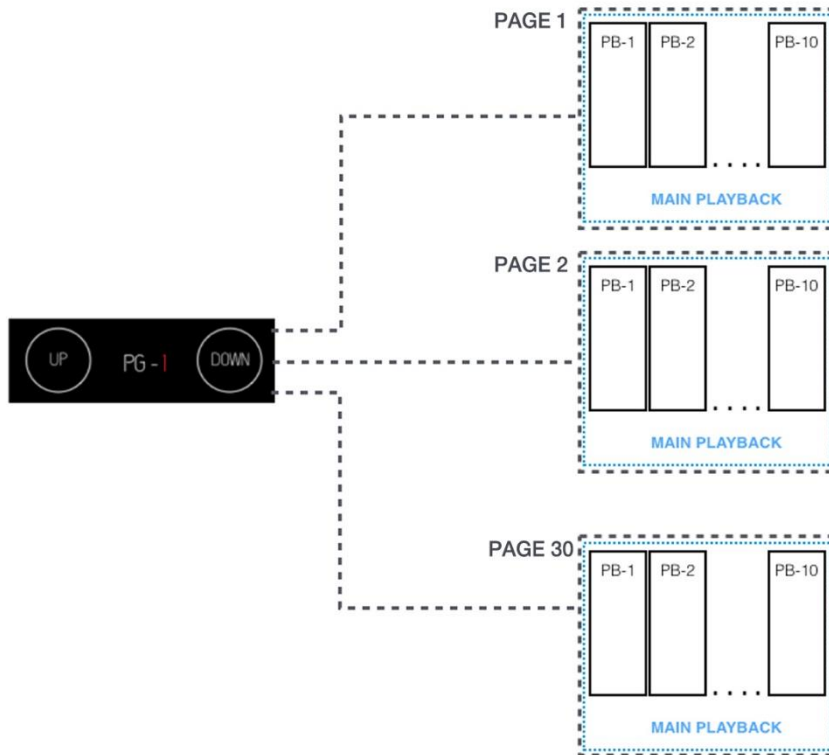
**Empty:** when no Cuelist is assigned, it shows in Grey. This is how all the Playbacks are when starting a show from the very beginning.

**Used:** when a Cuelist is assigned, it shows in Blue.

**Selected:** when it is selected, it shows in Red.

The pages allow the user to predefine some Cuelist presetting using the Playbacks, so they can be quickly loaded at any time.

LightShark supports up to 30 Playback pages, allowing physical and virtual faders to have different functions and behaviours depending on the page they are located. Usually a page per song is used.



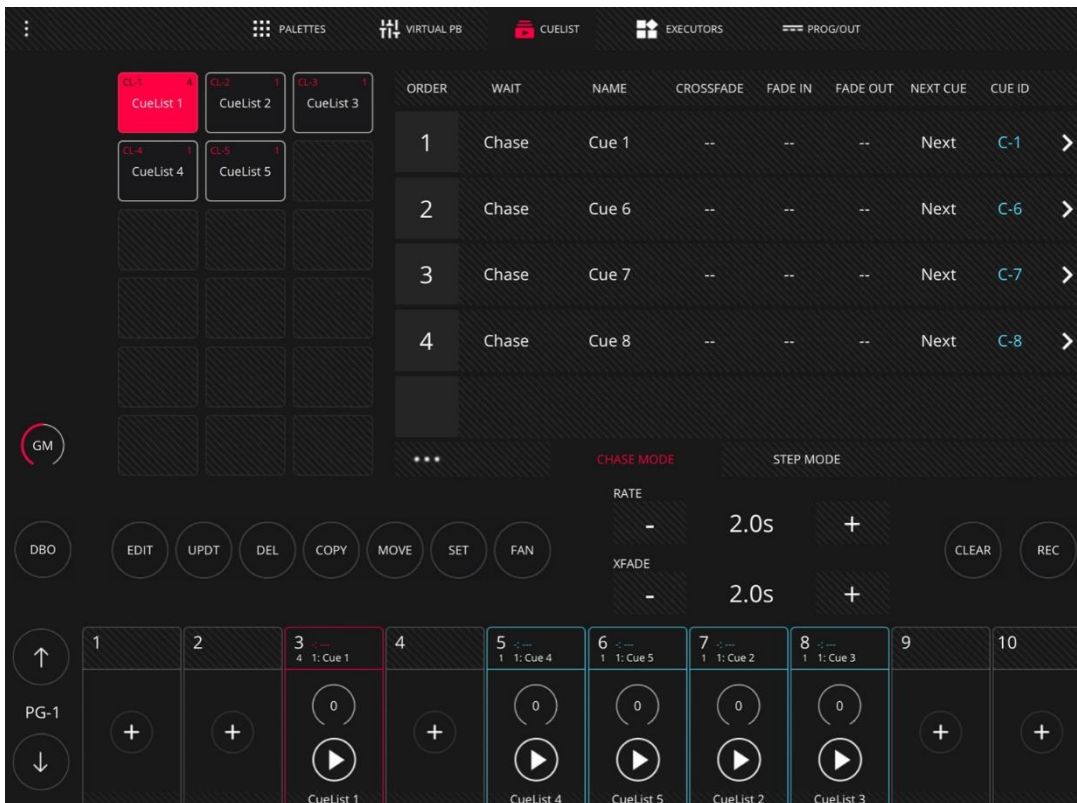
Using the UP and DOWN keys you may navigate through the pages. The tag showing the actual page is located between the keys.

## Cuelist

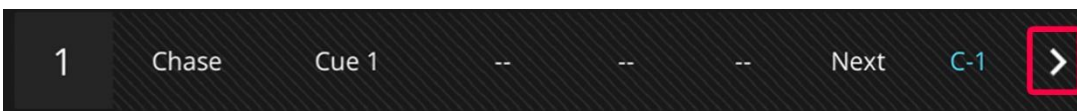
LightShark has a Cue and Cuelist storage where the user may navigate through all the Cues and Cuelist stored (additional information ahead). From the Playbacks is possible to directly access the associated Cuelist double clicking on the Playback information field.



Pressing on the information field the CUES Window appear, showing the Cuelist associated to that Playback:



At the left-side the user may find all the Cuelist in the show. Selecting a Cuelist will show the information that it includes (Cues, times,...). Pressing on the left-side arrow, it is possible to see the information that this particular Cue includes.



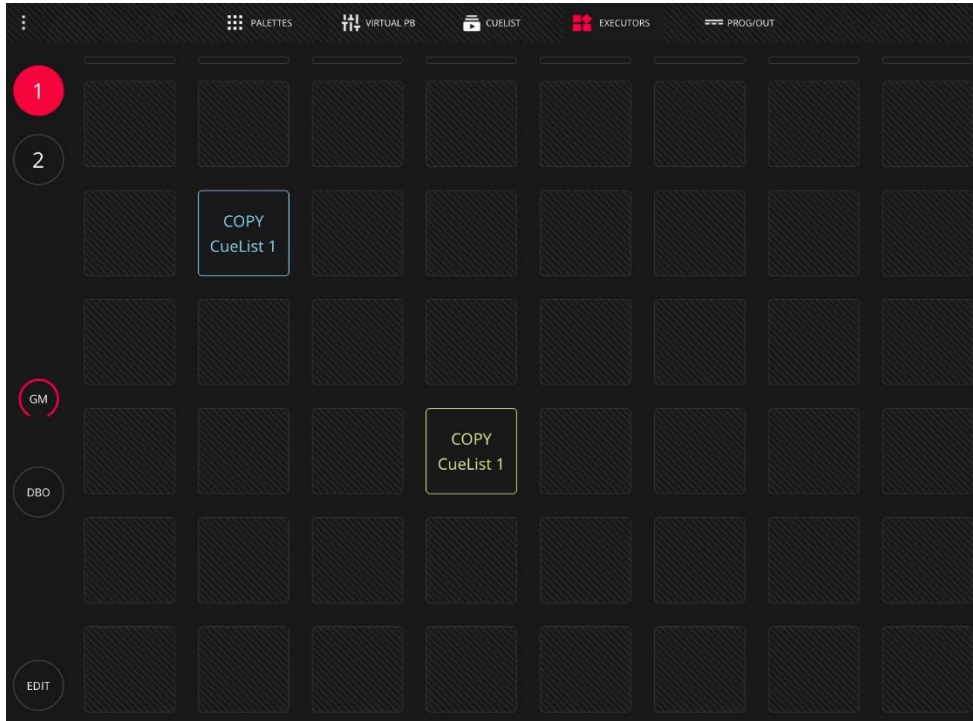
When accessing the information of the Cue, LightShark will show the values that were recorded.

Cue 9 C-9	COLOR	SHUTTER	INTENSITY	GOBO	PRISM	PRISMROT	FX	FROST	FOCUS	→
1 Sharpy	0	255	255	0	0	0	0	0	128	
2 Sharpy	0	255	255	0	0	0	0	0	128	
3 Sharpy	0	255	255	0	0	0	0	0	128	
4 Sharpy	0	255	255	0	0	0	0	0	128	
5 Sharpy	0	255	255	0	0	0	0	0	128	

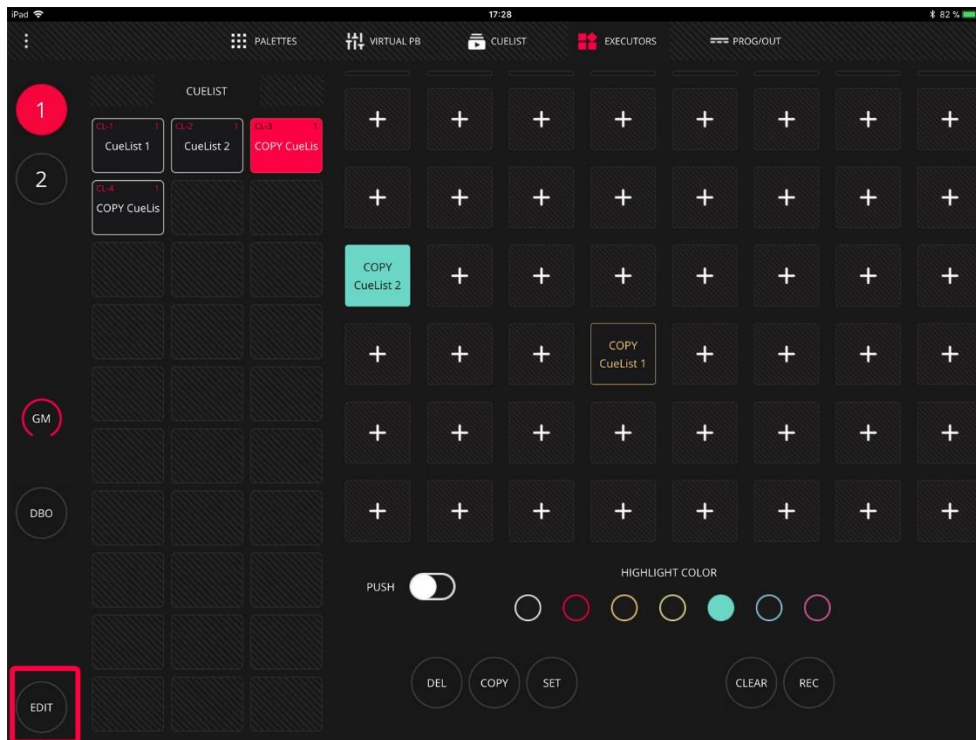
To return to the Cuelist press again the arrow on the left-side.

## Executors

The “Execute” Window is a user-configurable special window, in which the Cuelists may be added and their behaviour configured.



To configure the Execute window press the “EDIT” key.





## Prog/Out

From this window it is possible to see the programmer information.

PROGRAM	RED	REDF	GREEN	GREENF	BLUE	BLUEF	WHITE	WHITEF	SHUTTER
1 AledaWK20	255	0	255	0	255	0	255	0	255
2 AledaWK20	255	0	255	0	255	0	255	0	255
3 AledaWK20	255	0	255	0	255	0	255	0	255
4 AledaWK20	255	0	255	0	255	0	255	0	255
5 AledaWK20	255	0	255	0	255	0	255	0	255
6 AledaWK20	255	0	255	0	255	0	255	0	255
7 AledaWK20	255	0	255	0	255	0	255	0	255
8 AledaWK20	255	0	255	0	255	0	255	0	255
9 AledaWK20	255	0	255	0	255	0	255	0	255
10 AledaWK20	255	0	255	0	255	0	255	0	255
26 AlphQWO800	--	--	--	--	--	--	--	--	255
27 AlphQWO800	--	--	--	--	--	--	--	--	255
28 AlphQWO800	--	--	--	--	--	--	--	--	255

The devices will be sorted according to the inclusion order. The information shown in this window will be the information added to the Cue at that very moment.

## 4. CREATING AND SAVING SHOWS

LighShark includes a file manager to load, copy, save, delete and rename files.

### Creating a new show

To create a new show from scratch, please access the LightShark menu from the icon on the top-right and press “NEW”.

### Loading an existing show

To load an existing show:

- 1 Access the LightShark menu through the icon on the top-right and press “LOAD”.
- 2 LightShark will open the file manager where all the stored files on the console can be found. “Double click” on the show you want to execute.

### Saving a show

To save a show at any time:

- 1 Access the LightShark menu through the icon on the top-right and press “SAVE”.
- 2 LightShark will show a keyboard on the display to enter the show name. If you want to overwrite a file, simply press “OK”.

### Exporting a show

It is possible to share LightShark libraries between consoles:

- 1 Access the LightShark menu through the icon on the top-left, press “File Manager” and select the top tab “Shows”.
- 2 Select the show you want to export and press “Export”. LightShark will copy the show file in the USB external memory.

## 5. ADDING FIXTURES TO A SHOW

LightShark assigns an ID to each of the patched fixtures, allowing them to be selected through the keyboard. In addition, it gives them a name, so they can also be easily found.

LightShark allows all kind of fixtures to be treated the same way. This is possible because the information is saved in a generic way, not on specific DMX values. So if the user has created a Cue with a particular colour, LightShark can apply this information to any other fixture (which obviously has that attribute) and get a similar colour, no matter that the colour attributes on the different fixtures are located on different channels.

LightShark includes its own fixture library and a selection of generic libraries for those devices of common use (dimmers, fog machines, Led Pars,...). There can be found in the “Generic” folder. The libraries created by the user are saved in the “User” folder.

### Adding fixtures to the show

- 1** Access the LightShark menu through the icon on the top-left, press the patch key and select the top tab “Add Fixtures”.
- 2** Select a manufacturer, a model and a fixture mode. As you may see, the manufacturers and fixture models are in alphabetical order, making easier the access and the search.
- 3** Enter the number of fixtures you want to add and press “Patch”. The fixtures will be added from the first DMX channel available on.

### Advanced patch

- 1** Access the LightShark menu through the icon on the top-left, press the patch key and select the top tab “Add Fixtures”.
- 2** Select a manufacturer, a model and a fixture mode. As you may see, the manufacturers and fixture models are in alphabetical order, making easier the access and the search.
- 3** Enter the number of fixtures you want to add and activate “Advanced” to add the fixtures on an exppecific address:

LightShark shows the universe number selected in the field “Universe”. If you want to add the fixtures to another universe, please use the + and - keys to select the correct one. Holding down the numeric field, the on-

screen keyboard will be displayed, where you can directly enter the universe number.

Through the “Start Channel” field the user may adjust the address of the starting DMX channel where the fixture (or fixture group) will be added. Please note that the channel can be adjusted either using the + and - keys, or through the keyboard holding down on the number field.

The “Offset” field may be used to define the number of empty channels between each fixture. Please note that the channel can be adjusted either using the + and - keys, or through the keyboard holding down on the number field.

## Modifying the address on an already patched fixture

Once the fixtures are added to the patch, their addresses can still be changed:

- 1 Access the LightShark menu through the icon on the top-left, press the patch key and select the top tab “Patched”.
- 2 Select the fixture whose address you want to change.
- 3 Press the “REPATCH” key. On the side menu a panel will prompt where the user may write the new DMX address.
- 4 Adjust the new address of the fixture and press the “PATCH” key.

## Removing a fixture from the Patch

It is possible to remove fixtures added to the patch:

- 1 Access the LightShark menu through the icon on the top-left, press the patch key and select the top tab “Patched”.
- 2 Press the “DELETE” key.
- 3 Select the fixture you want to remove.

## Inverting Pan and Tilt

It is possible to invert the Pan movement for the Tilt one:

- 1 Access the LightShark menu through the icon on the top-left, press the patch key and select the top tab “Patched”.
- 2 Press the “P” or “T” key if you want to invert the Pan or Tilt. In some situations, you might need to press the “S” key to swap the Pan for the Tilt.

## Updating the libraries

Every LightShark update automatically includes the latest library version. If the user wants to update the libraries without updating LightShark, the library file can be downloaded from the LS-Cloud, and it can be copied into a USB memory stick. Then, from LightShark, follow these steps:

- 1** Access the LightShark menu through the icon on the top-left, press the “File manager” key and select the “USB” top tab.
- 2** Select the library files and press the “Import” key. LightShark will ask if you want to replace the fixture library. Press “OK”.

When updating the library, all the manufacturers folders will be replaced by the new version. All except the “User” folder, which will remain the same.

## Copying libraries between consoles

It is possible to copy LightShark libraries between consoles:

- 1** Access the LightShark menu through the icon on the top-left, press the “File manager” key and select the “Brands” top tab.
- 2** Select the manufacturer with the libraries you want to export and press the “Export” key. LightShark will copy the manufacturer’s folder with all its fixtures, icons and resources into the external USB memory stick.
- 3** Connect the USB memory stick into the console in which you want to import the libraries and access the LightShark menu through the icon on the top-left. Press the “File manager” key and select the “USB” top tab.
- 4** Select the library files and press the “Import” key. LightShark will ask if you want to replace the fixture library. Press “OK”.

## 6. FIXTURE SELECTION

### Fixture selection

LightShark assigns an ID to each of the patched fixtures, so it can be selected in 3 different ways:

**1-Group Window:** LightShark will automatically create Auto-Groups for each of the fixtures added to the patch. This way the user will find the different fixture types grouped by model. Auto-Groups cannot be deleted. The user may also create customized groups.

**2-Fixture Window:** all the fixtures added to the show are shown in this window. Each selection box includes 3 fields:

Fixture description tag

DMX address

Fixture ID

**3-Numeric Keypad:** it is possible to select the fixtures using the numeric keypad. This is the syntax:

-Select fixtures from 1 to 8:

**1 THRU 8 OK**

-Select fixtures 1 and 8:

**1 + 8 OK**

-Select fixtures from 1 to 5 and 8:

**1 THRU 5 + 8 OK**

-Select fixtures from 1 to 5 except 3:

**1 THRU 5 - 3 OK**

-Select fixtures from 1 to 3 and from 6 to 8:

**1 THRU 3 + 6 THRU 8 OK**

## Creating fixture groups

LightShark allows to create fixture groups:

- 1 Select the heads you wish to group in the Fixture window.
- 2 Press the “REC” key and select an empty box on the Group window.

## Renaming fixture groups

In order to identify the groups easily, LightShark allows the user to give a name to the fixture groups. The groups may be renamed in 2 different ways:

- A** Press the “SET” key and select the fixture group you want to rename. LightShark will prompt the keyboard on the screen.
- B** Select the fixture group you want to rename and hold down the box for 2 seconds. LightShark will prompt the keyboard on the screen.

## Removing fixture groups

Fixture groups created by the user can be removed. Press the “DEL” key and select the fixture groups you want to delete. Please note that it is not possible to remove the Auto-Groups.

## Moving fixture groups

LightShark allows the fixture groups to be moved within the window:

- 1 Select the fixture group you want to move in the Group windows.
- 2 Press the “MOVE” key and select an empty box within the Group window.

## 7. RECORDING SCENES

The programmer stores all the information of the show and LightShark uses this information when recording Playbacks, Palettes, Groups... A fixture is included in the programmer when any attribute is modified. The programmer has priority on Playbacks, Cues, Cuelist and Channels.

The “CLEAR” key will light up when there is information inside the programmer. Press the “CLEAR” key to delete all that information, and all the LTP Channels will be removed from the programmer and the HTP Channels will return to zero. In the main menu, it is possible to choose the behaviour of the “CLEAR” key between all the channels to return to zero, or to the default value defined in the library.

The “FIND” key activates all the default parameters defined in the library for the fixtures that are selected.

The Programmer window allows the user to see what is in the programmer and how it is configured. It is possible to access the programmer window through the window tap.

### Cuelist

The Cuelists are used to manage the Cue sequences, ordering the Cues and managing the options on how they are played. A Cuelist may have either a single Cue or a whole list of Cues.

A Cuelist is automatically generated when the user records a Cue into a Playback. LightShark adds that Cuelist to the list of Cuelist stored in the Cues window.

If the Playback has already a Cuelist stored, the new Cue will be added at the end of that Cuelist.

The Cuelist has a Cue ID (Cue identification) and a text field for each of the Cues, so every step may be tagged. When the Cuelist is played, the Playback screen will show the Cue ID and the text field, this way the user may track the actual Cue during the show.

### Recording a Cuelist

#### 1-Recording on an empty Playback

- 1°-Select a fixture (or group of fixtures).
- 2°-Modify at least one of its parameters (or press “FIND” to activate all the parameters).
- 3°-Press the “RECORD” key (it will light up).



4°-Select an empty Playback where the Cue is going to be stored. LightShark will assign to it the next available Cuelist ID, generating a new Cue, with the next available Cue ID.

5°-Press "CLEAR" to empty the programmer.

6°-To confirm that everything has been successfully recorded, activate the Playback.

## 2-Recording on a Playback which already has some information in it

1°-Select a fixture (or group of fixtures).

2°-Modify at least one of its parameters (or press "FIND" to activate all the parameters).

3°-Press the "RECORD" key (it will light up).

4°-Select the desired Playback. The Cue will be stored at the end of the Cuelist with the next Cue ID available from the main list.

5°-Repeat steps 1 to 4 as many times as necessary.

6°-Press "CLEAR" to empty the programmer.

7°-To confirm that everything has been successfully recorded, activate the Playback.

## Modifying Cues

The EDIT command can be used to load the information of a Cue into the programmer. Once the changes are done, press UPDATE to save them in the original Cue.

### Erase a Cue

When the user needs to erase a Cue that is already recorded:

1°-Go to the Cuelist window and select the Cuelist that includes the desired Cue.

2°-Press DEL and then tap on the ID number of the Cue to erase.

### Copy a Cue

It is possible to copy a Cue from one Cuelist to another:

1°-Go to the Cuelist window and select the Cuelist that includes the desired Cue.

2°-Press COPY and select the final Cuelist.

## 8. USING FX

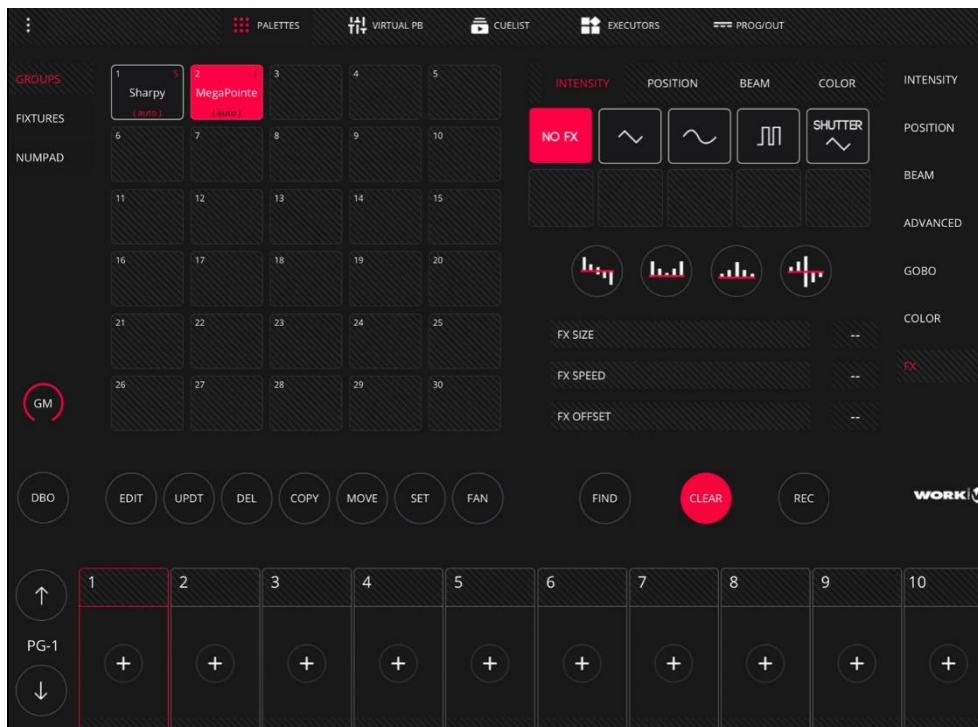
LightShark includes an internal effect generator. The FXs may be directly applied to a fixture or group of fixtures, it is not necessary to create several Cues to create an effect. The FXs can be modified live, adjusting the speed and size of the FX to the rate of the show.

LightShark includes a wide internal FX library (circles, squares, pan, tilt, zigzag,...). Beam, Colour and Intensity effects are also included.

The use of FX allows to record whole shows in only a few minutes.

It is possible to add an effect to one or several fixtures, or even to a group or several groups of fixtures. To add a FX the user must select one or several fixtures, and from the FX window, select one of the effects included in LightShark.

Once a FX is selected it is possible to modify its parameters (speed, size, spread...) using the virtual sliders available on the screen (or through the encoders in the LS-1).



It is possible to add several effects to a fixture (or group of fixtures) applied to different attributes. For example, the user may add a Pan effect and also add an Intensity effect and a Colour-change effect.

LightShark groups the effects in 4 categories: Position, Colour, Beam and Intensity. Each category may have up to 9 effects max.

**FX SIZE:** it is the range in which the parameter may change. This is described on the appropriate terms for that parameter only, for example degrees for the position parameters, or slots for the colour parameters.

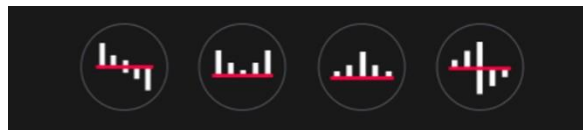
It may be modified using the sliders on the screen. When a Size effect is added, its default will be 50%.

**FX SPEED:** it may be modified using the sliders on the screen. To keep the synchronisation between the characteristics on a effect, the speed of the effect must be controlled.

Adjusting the speed of an effect increases or reduces the number of cycles completed per minute.

**OFFSET:** Defines the beginning and end for each effect and determines how it is played back over all the heads, in order to be stepped.

It is possible to have 4 kinds of shapes using the shortcut keys.

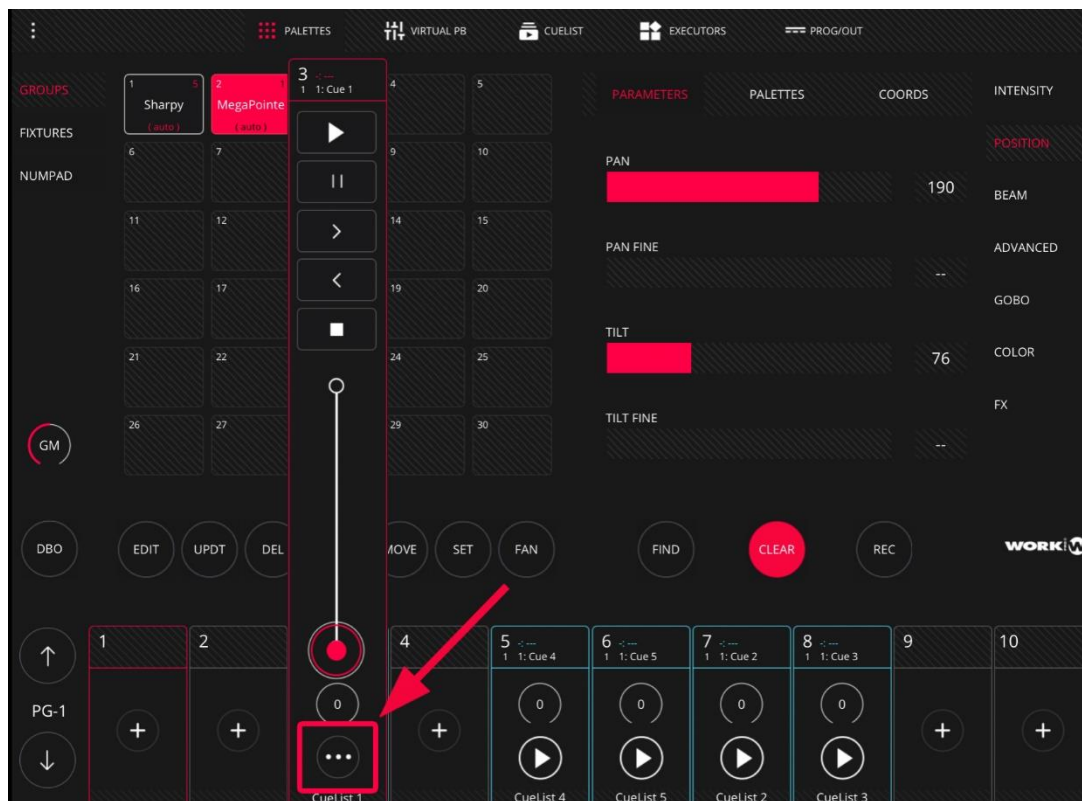


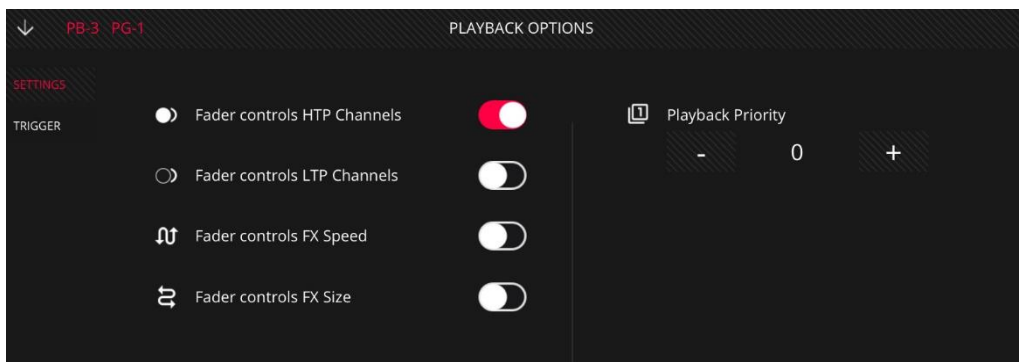
## 9. SCENE PLAYBACK

The Cuelists may be configured to be played as a Chase (they are automatically played) or as a simple list of Cues. The main difference is that as a Chase, each of the Cue times are determined by the speed of the whole Chase. When a Cueslist is configured as a Cue Step, the times of each Cue are individually determined with their own delay and fade times.

### Playback options

To play a Cuelist you only need to rise the fader on the Playback. LightShark is configured to start running the Cuelist using the fader. This may be modified using the Playback Option Menu.





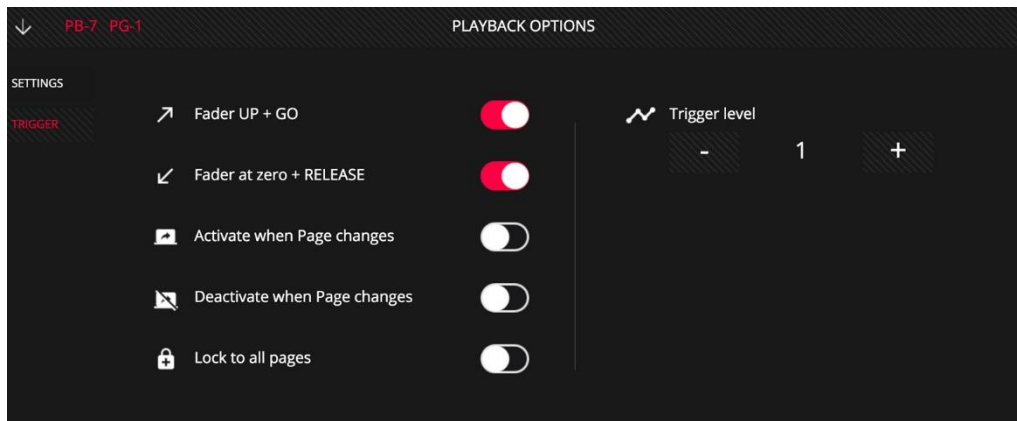
**Fader Controls HTP Channels:** when this function is activated, the Playback fader controls the level of all the HTP channels proportionally from 0% to 100%. This is the default option.

**Fader Controls LTP Channels:** when this function is activated, the Playback fader controls the level of all LTP channels in the actual Cue of the Cuelist. This is the default option.

**Fader Controls FX Speed:** when this function is activated, the Playback fader may be used to control the FX speed. When the fader is at 100%, the FX speed is the same that was recorded in the Cue. Lowering the fader the speed is reduced until it reaches 0, when the fader is completely down.

**Fader Controls FX Size:** when this function is activated, the Playback fader may be used to control the FX size. When the fader is at 100% the FX size is the same that was recorded in the Cue. Lowering the fader the size is reduced until it reaches 0, when the fader is completely down.

**Playback Priority:** the Playbacks are played according to the latest action, which determines the value of the parameter of the fixture. The user may modify this performance using different priority levels.



**Fader UP+GO:** when the fader exceeds the limit defined in the “trigger level” field, the Playback is activated and the Cuelist associated is played. If this option is deactivated the fader will not activate the Cuelist.

**Fader at Zero + Release:** when the value of the fader is lower than the limit defined in the “trigger level” field, the Playback is released. If this option is deactivated the fader will not release the Cuelist.

**Activate when Page Changes:** if this option is set, the Playback is activated when the page is changed to the one that it is assigned to. If there is already a Cuelist activated in that Playback, when turning the page to the one where that option is set, the Playback will not be activated. Not unless the “*Deactivate when page changes*” option is activated in the previous Playback.

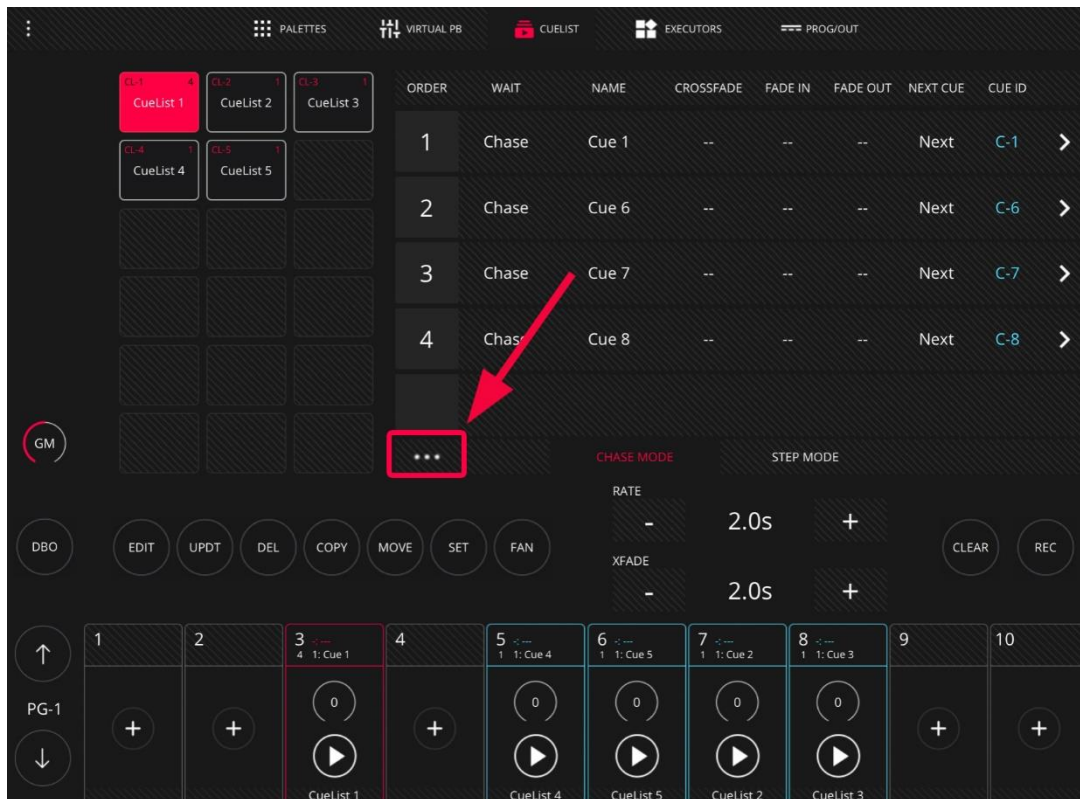
**Deactivate when Page Changes:** when this option is activated, the Playback is released when the page is changed to any other page.

**Lock to all Pages:** when this option is activated, the selected Playback will show up in all 30 pages of Playbacks.

**Trigger Level:** this field defines the exact value of the fader in which the Playback is activated or deactivated.

## Cuelist options

It is possible to configure the way a Cuelist works from the option menu of the Cuelist.

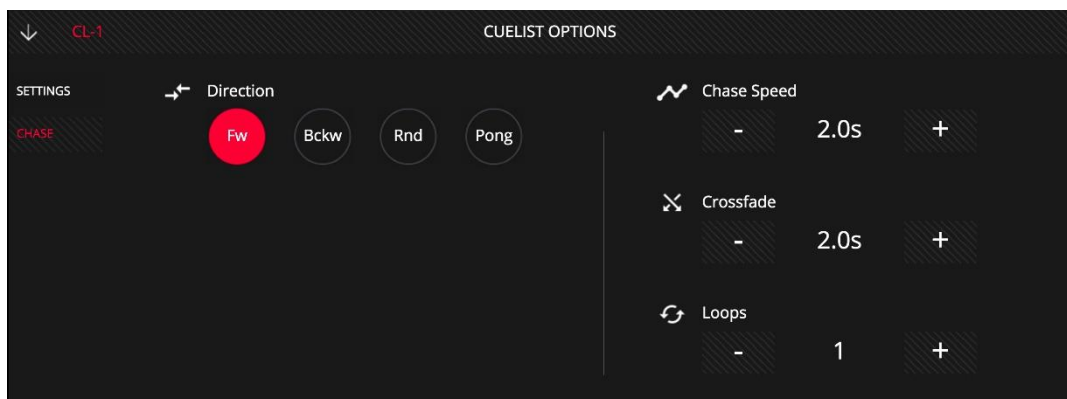


**Deactivate after last Cue:** when this option is activated, the Cuelist will automatically release after the last step in the Cuelist.

**Deactivate resets to first Cue:** when this option is activated, the Cuelist associated to the Playback will always begin at the first step when is activated. When this function is deactivated and the user activates the Cuelist, it will begin at the last step of the Cuelist before releasing.

**Halt last Cue:** when this option is activated, the Cuelist will stop at the last step. If the option is deactivated, the Cuelist will return to the first step once the last one is executed.

**Block FX from other Playbacks:** when this option is activated, any channel controlled by this Playback will block the FX on those channels from other Playbacks.



**Block FX from other Playbacks:** It is possible to choose between 4 options:

Up: going from the first Cue to the Last in order.

Down: going from the last Cue to the first in order.

Random: going through all the Cues randomly.

Pong: going from the first Cue to the Last in order, and then, going back from last Cue to the first in order.

**Chase Speed:** It is possible to set the default Chase time for that particular Cuelist.

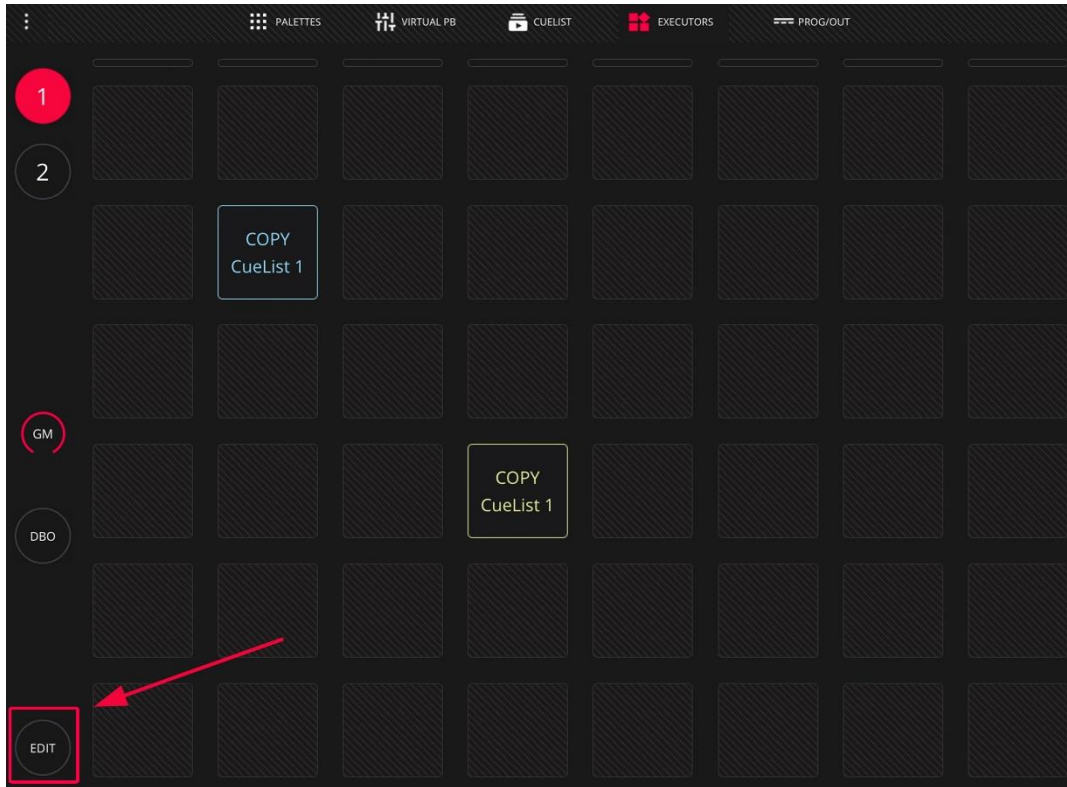
**CrossFade:** It is possible to set the default CrossFade for that particular Cuelist.

**Loops:** It is possible to set how many times will the Chase be executed before releasing. By default it is 0, which indicates it will reproduce infinitely.

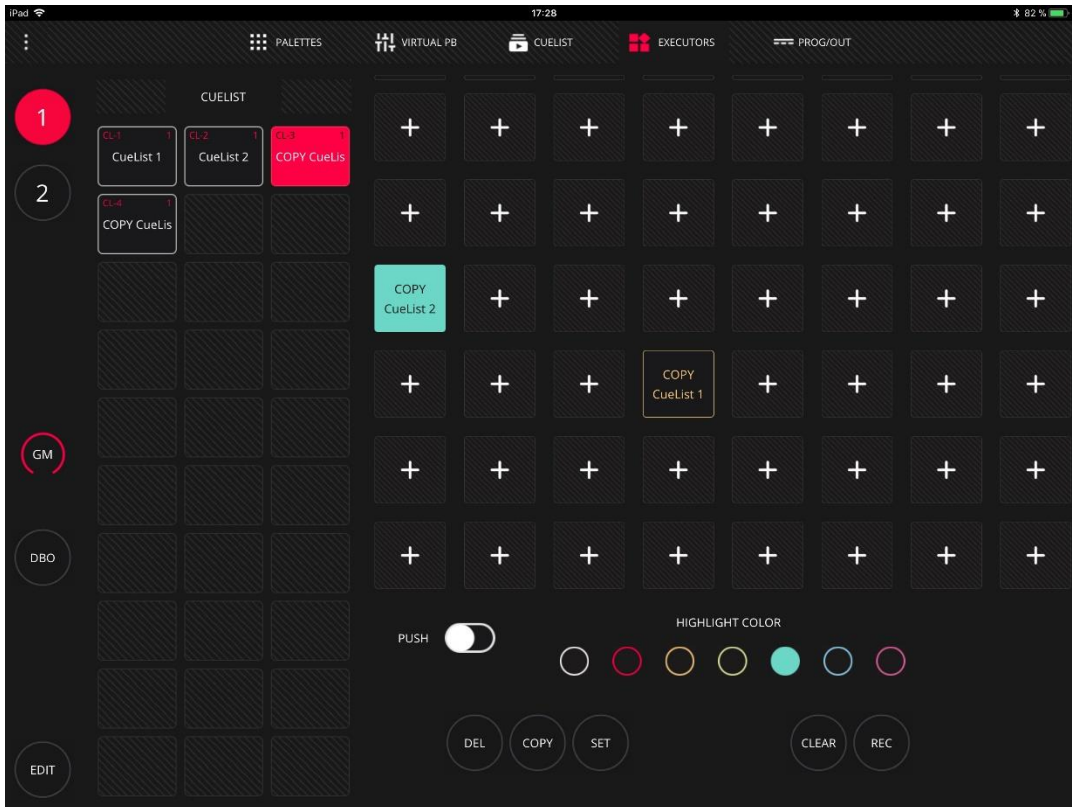


# 10.USE OF EXECUTORS

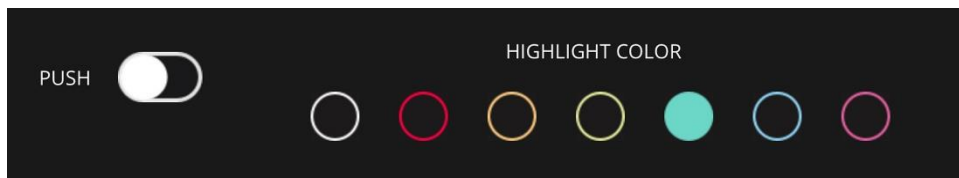
From the Execute window the user can configure a custom layout to trigger the Cuelists. To add or remove Cuelists from the Execute window press the “Edit” button.



The Execute window is composed of a grid of 8x8 buttons. Each of the 8 vertical columns can trigger one single Cuelist at the same time, so when selecting a Cuelist from the same column, it deselects the previous one.

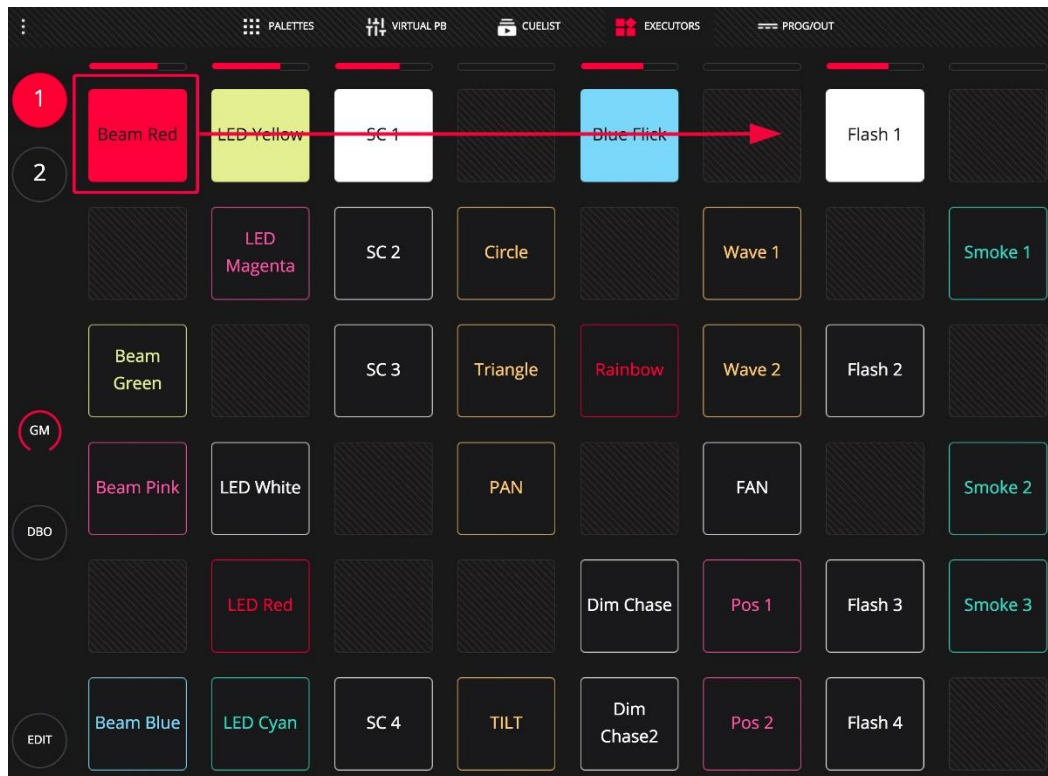


The user can modify the color of each of the buttons in the grid, so it is possible to visually appreciate each of the buttons and assign them a color depending on its characteristics.



It is possible to configure each button as “Push” or as “Toggle”, being able to adjust the button behaviour according to whether we want to run a Cuelist or activate a Flash.

It is possible to activate all the Cuelist of all the columns at the same time by sliding the finger horizontally.



## Add Cuelist

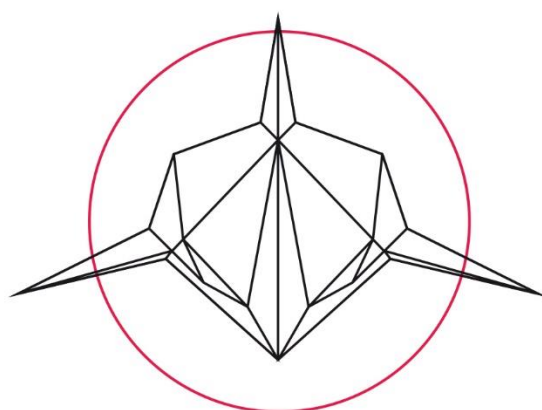
The Cuelist can be copied to the execute Window following these steps:

- 1 Press the “Edit” key in the Execute Window.
- 2 On the left-side, select the Cuelist you want to add and press the “COPY” key. Then select an empty box.
- 3 Press the “Set” key and then select the box you just created to rename it.

## Empty a box

The Cuelist can be removed from the Execute Window in the following way::

- 1 In the Execute window press the “Edit” key.
- 2 Press the “DEL” key and then select the box you want to empty.



light **Shark** series.

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