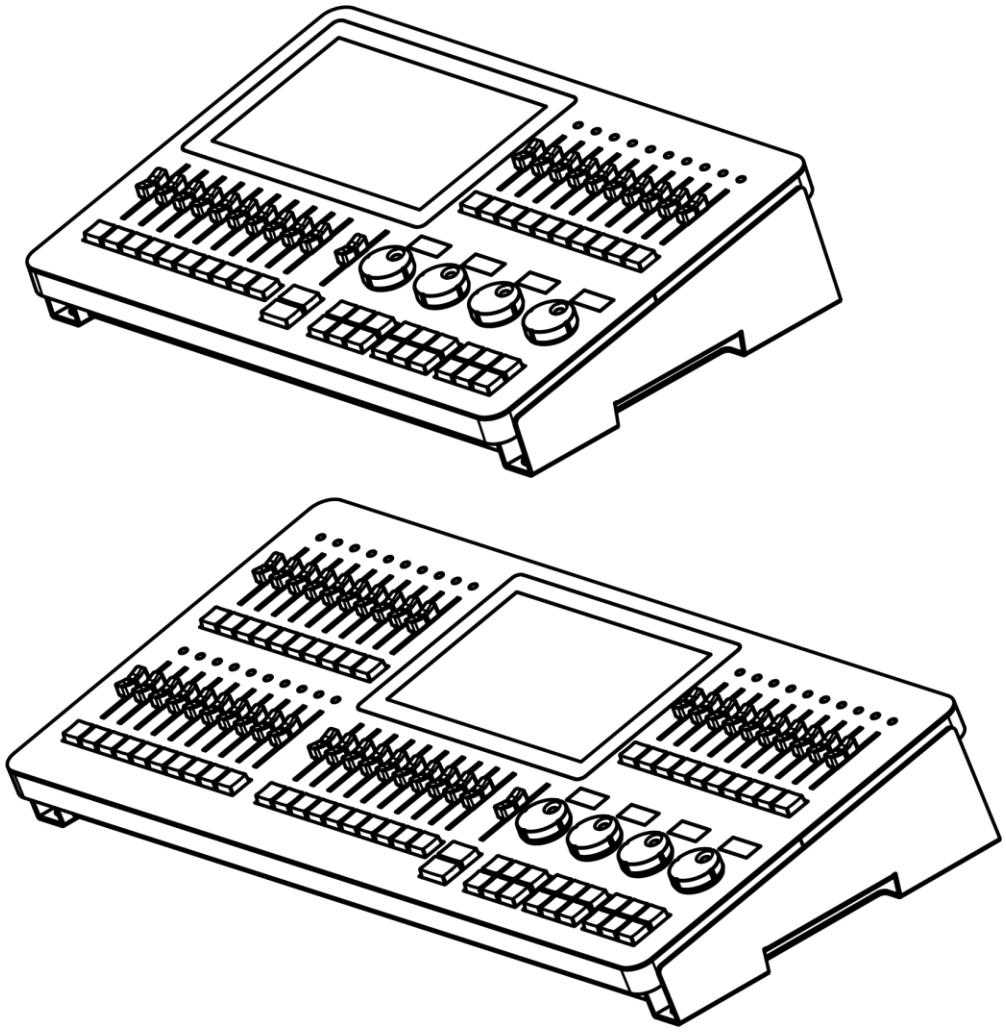
USER MANUAL



ENGLISH

LAMPY 20 / 40 V2.0.6

Product code: 50733 / 50734 / 50735 / 50736

Highlite International B.V. – Vestastraat 2 – 6468 EX – Kerkrade – the Netherlands

Preface

Thank you for purchasing this Showtec product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions.
- Intended and non-intended use of the device.
- Installation and operation of the device.
- Maintenance procedures.
- Troubleshooting.
- Transport, storage and disposal of the device.

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

Design and product specifications are subject to change without prior notice.

For the latest version of this document, please visit our website www.highlite.com or contact us at service@highlite.com.

Highlite International and its authorized service providers are not liable for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss arising from the use of, or inability to use or reliance on the information contained in this document.

1. Table of contents

2. Introduction

2.1. Before Using the Product

Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- Showtec LAMPY 20 or LAMPY 40
- Schuko to Powercon power cable (1,4 m)
- User manual

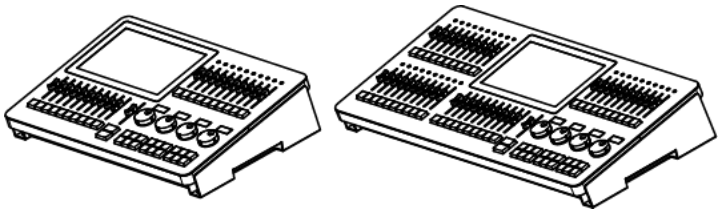


Fig. 01

2.2. Intended Use

This device is intended for professional use as a lighting controller. It is suitable only for indoor installation. This device is not suitable for households and for general lighting.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

2.3. Product Lifespan

This device is not designed for permanent operation. Disconnect the device from the electrical power supply when the device is not in operation. This will reduce the wear and will improve the device's lifespan.

2.4. Text Conventions

Throughout the user manual the following text conventions are used:

- Hard Buttons: All buttons on the Frontpanel are in Typewriter style lettering contained in square brackets, for example: "Press the `[Record]` button"
- Soft Buttons: All buttons in the touchscreen are in bold lettering, for example: "Press the **UP/DOWN** buttons"
- References: References to chapters and parts of the device are in bold lettering, for example: "Refer to **2. Safety**", "turn the **adjustment screw (02)**"
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

2.5. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.

DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

Attention Indicates important information for the correct operation and use of the product.

Important Read and observe the instructions in this document.

Electrical hazard

Hot surface

Eye damage hazard

Provides important information about the disposal of this product.

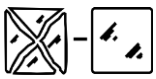
2.6. Symbols on the Information Label

This product is provided with an information label. The information label is located on the backside of the device.

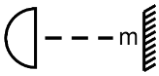
The information label contains the following symbols:

This device is designed for indoor use.

This device shall not be treated as household waste.



Replace any cracked protective shield.



Minimum distance from lighted objects.

Caution: Risk of electric shock. Disconnect input power before opening.
This appliance must be earthed.

3. Safety

Important
Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

3.1. Warnings and Safety Instructions

DANGER
Danger for children

For adult use only. The device must be installed beyond the reach of children.

- Do not leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach. Packaging material is a potential source of danger for children.

DANGER
Electric shock caused by dangerous voltage inside

There are areas within the device where dangerous touch voltage (> 120 V DC) may be present.

- Do not open the device or remove any covers.
- Do not operate the device if the covers or the housing are open. Before operation, check if the housing is firmly closed and all screws are tightly fastened.
- Disconnect the device from electrical power supply before service and maintenance, and when the device is not in use.

DANGER
Electric shock caused by short-circuit

This device falls under IEC protection class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket-outlet with ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not bypass the thermostatic switch or fuses.
- For replacement use fuses of the same type and rating only.
- Do not let the power cable come into contact with other cables. Handle the power cable and all connections with the mains with caution.
- Do not modify, bend, mechanically strain, put pressure on, pull or heat up the power cable.
- Make sure that the power cable is not crimped or damaged. Examine the power cable periodically for any defects.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.

WARNING
Risk of burns due to hot surface

The surface and the inner parts of the device can become very hot during operation.

- Do not touch the device during operation.
- Allow the device to cool down for at least 15 minutes before handling.

WARNING
Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.

WARNING
Possible eye damage caused by high light intensity

Possibly hazardous optical radiation emitted from this device.

- Do not look at the operating light source. May be harmful to the eye.
- Do not look at the light source with optical instruments that may concentrate the light output.
- Make sure that persons are not looking directly into the light source when the device lights up suddenly. This can happen when the device is powered or when it receives DMX signal, or when certain menu items are selected.
- Disconnect power supply before servicing.
- Wear protective goggles if looking into light source during service or maintenance.

Attention
Power supply

- Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.
- Make sure that the cross-sectional area of the extension cords and power cables is sufficient for the required power consumption of the device.

Attention
General safety

- Do not insert objects into the air vents.
- Do not connect the device to a dimmer pack.
- Do not switch the device on and off in short intervals. This decreases the device's life.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Change the lens or the LEDs if they are visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches. Contact your Highlight International dealer for more information, as servicing can be performed only by instructed or skilled persons.
- If the device is dropped or struck, disconnect the device from the electrical power supply immediately.

- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.
- If the device fails to work properly, discontinue the use immediately.

Attention
For professional use only
This device shall be used only for the purposes it is designed for.

This device is designed to be used as a professional stage light effect. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households and for general lighting.
- This device is not designed for permanent operation.
- This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Attention
Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- The safety devices are not damaged.
- There are no deformations on housings, fixations and installation points.
- The lens is not cracked or damaged.
- The power cables are not damaged and do not show any material fatigue.

Attention
Do not expose the device to conditions that exceed the rated IP class conditions.

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

3.2. Requirements for the User

This product may be used by ordinary persons. Maintenance may be carried by ordinary persons. Installation and service shall be carried out only by instructed or skilled persons. Contact your Highlite dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the installation, service and maintenance of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the installation, service and maintenance of this product.

Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

4. Description of the Device

4.1. Front View

The Frontpanel contains all the necessary buttons and faders for operation. The Frontpanel differs a little between both products, however main part of the console Frontpanel is identical between both products.

Here is a quick overview of the LAMPY 20 and LAMPY 40 Frontpanel:

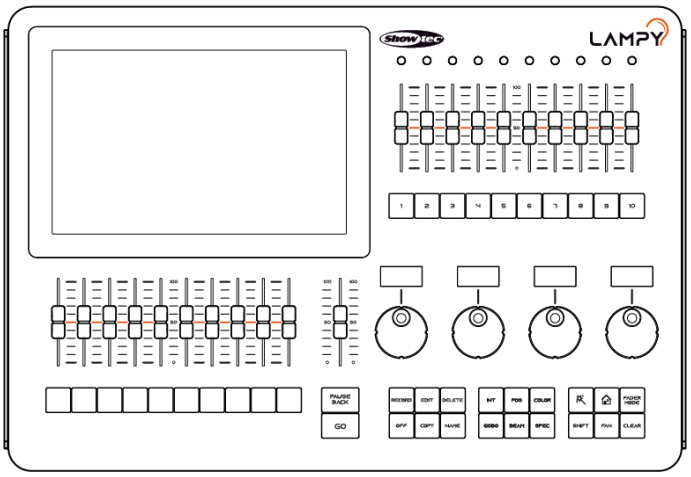


Fig. 1: LAMPY 20 Frontpanel

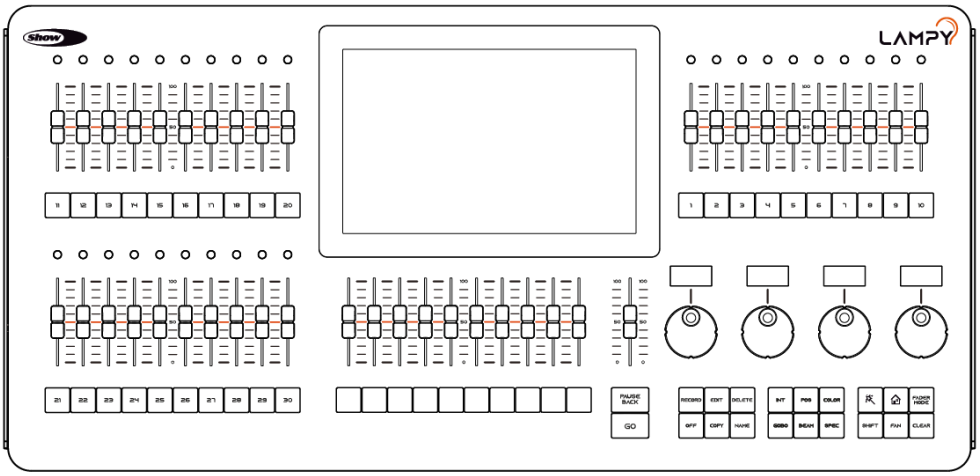


Fig. 2: LAMPY 40 Frontpanel

4.1.1. Multi-Function-Faders (MFF)

The LAMPYs Frontpanel consists of either 10 (LAMPY 20) or 30 (LAMPY 40) Multi-Function-Fader controls, each consisting of a Multicolor LED, Fader and a Button. These may be switched between Fixtures, Groups or Scenes and, depending on the mode offer different options.

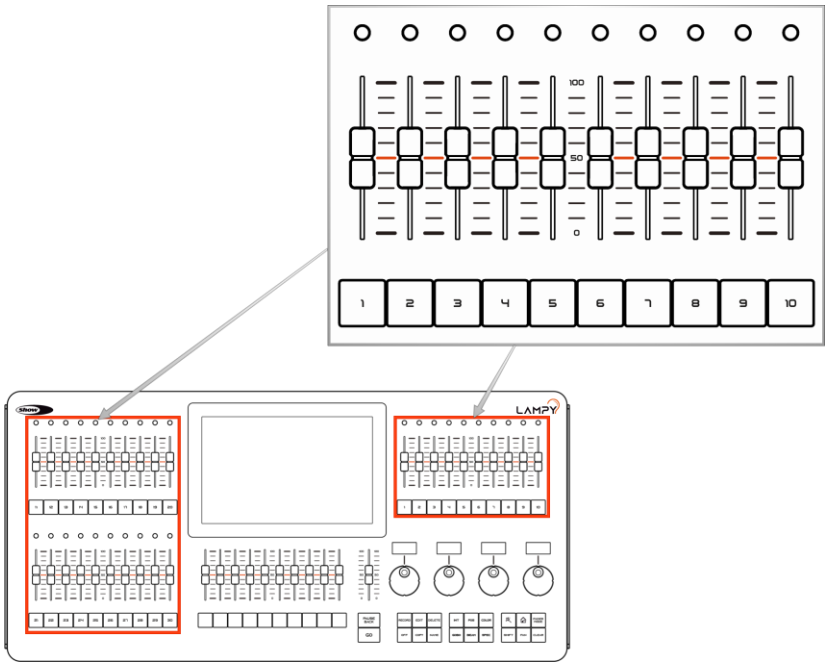


Fig. 3: Multi-Function Faders

4.1.2. Programming Section

This part of the LAMPYs Frontpanel contains all keys needed for programming. Take a few moments to familiarize yourself with the buttons found here. It may seem like a lot to learn, but don't worry. You'll be training your muscle memory over time. Also, all controls for value entry may be found here.

Some of the buttons will provide different modes by pressing repeatedly on them. For example, pressing [Record] repeatedly will cycle through record modes: Record, Merge, Remove. And pressing [Copy] repeatedly will cycle through Copy and Move.

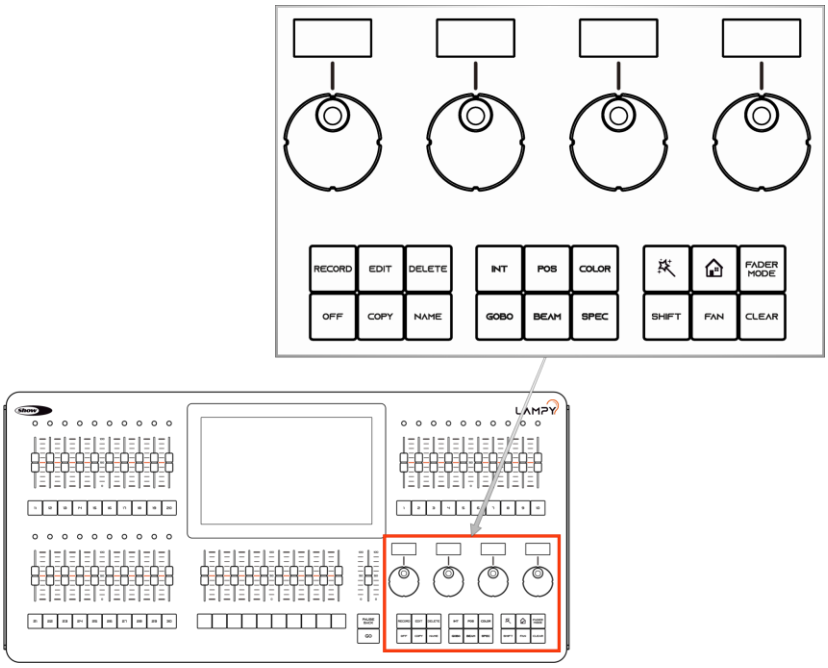


Fig. 4: Programming Section

4.1.3. Playback Faders

The LAMPYs Frontpanel consists of multiple playback fader controls, each consisting of a fader and button found under the fader. These may contain Playbacks containing multiple Cues. These Faders are pageable, and the button function is assignable.

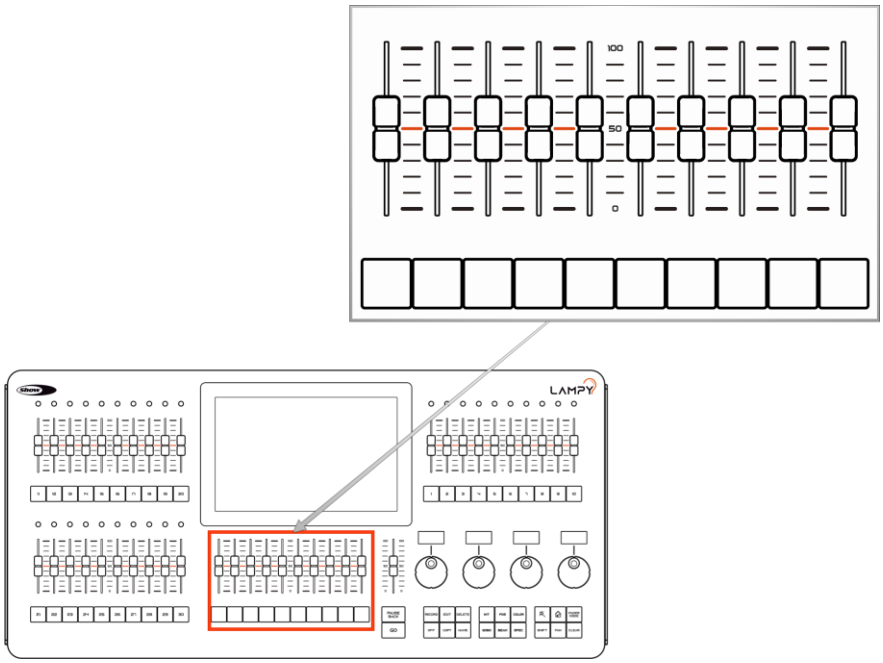


Fig. 5: Playback Faders

4.1.4. Master Playback Fader

The Master Playback fader may be used for more precise control over a selected Playback. It consists of a Go and Pause / Back button and a Fader. The function of the fader may be configured from within the Setup Menu Show Settings Tab.

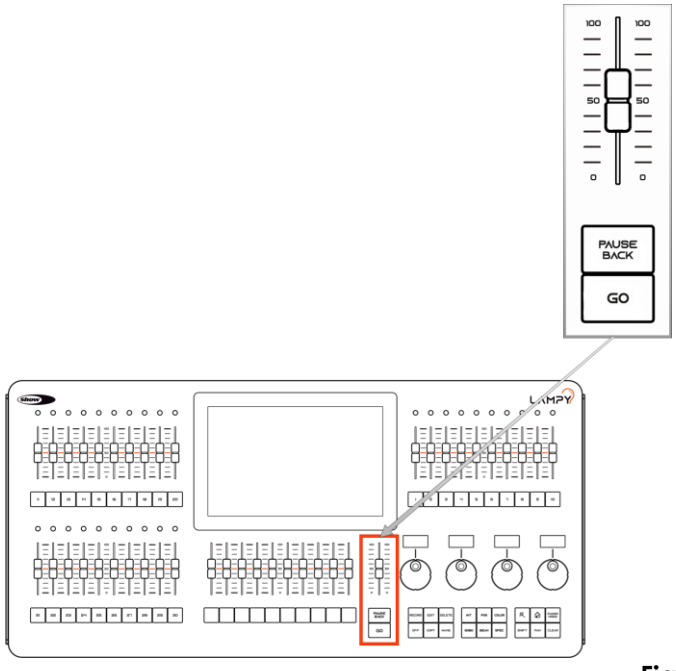


Fig. 6: Master Playback Fader

4.1.5. Touchscreen

The Touchscreen of the LAMPY Console is one of the key elements used for user interaction with the LAMPY. It features an easy and intuitive to use graphical user interface.

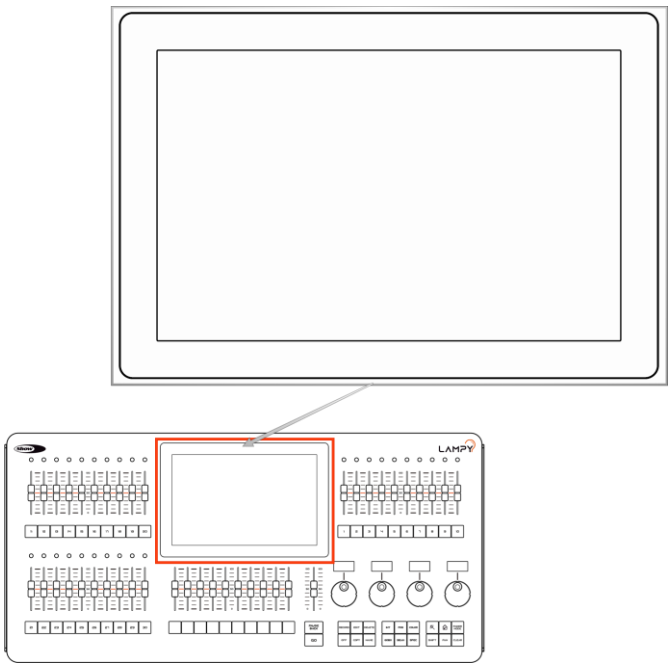


Fig. 7: Touchscreen Display

4.2. Back View

The Back panel of the LAMPY20 and LAMPY40 are identical in terms of connectors.

Please make sure to connect any external Screen before booting up the console. The UI is at a fixed resolution of 1920 x 1080 (Full HD), so please make sure your monitor supports the resolution.

The external screen may also be a touchscreen.

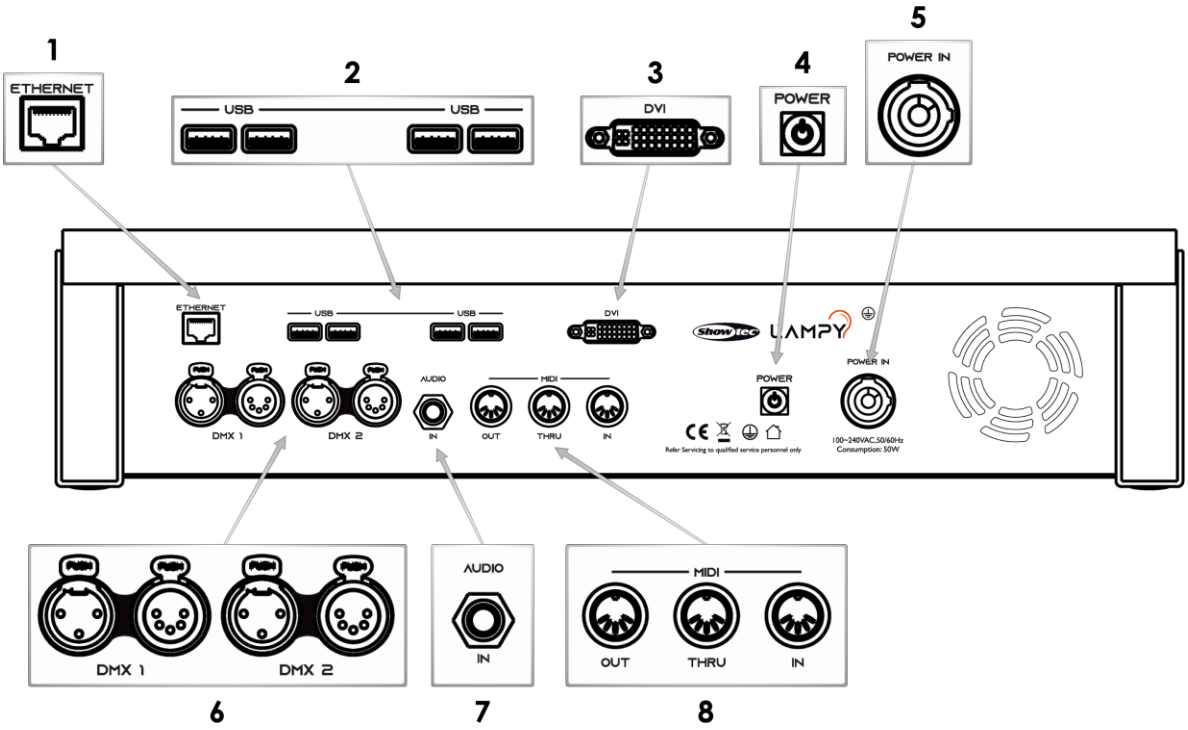


Fig. 8 LAMPY Back panel

1	Ethernet Port	6	DMX Outputs
2	USB 2.0 and 3.0 (blue) Ports	7	Audio Input
3	DVI Port	8	Midi Out / Thru / In
4	Power Button		
5	Power Input (PowerCon)		

4.3. Product Specifications

The LAMPY is a hybrid programmer-based tracking console.

Hybrid means it may be used to either control conventional or moving light fixtures in the same easy-to-use way.

Being a programmer-based Console, you always have the chance to override the LAMPYs output because the programming interface always has precedence.

"Tracking" as opposed to non-tracking defines that values are kept when changing between cues within one Playback until they are set to a different value.

	LAMPY 20 – 1U	LAMPY 20 – 2U	LAMPY 40 – 1U	LAMPY 40 – 2U
On-board Screen	10.1" Full Color Touchscreen			
External Monitor	1x DVI (Full HD)			
External Monitor Features	Limited	Full	Limited	Full
Playback Faders	10			
Multi-Function Faders	10		30	
Playback Pages	9 + 1 Template Page			
Encoders	4			
DMX Channels	512	1024	512	1024
DMX Universes	1	2	1	2
ArtNet	With Dongle	Yes	With Dongle	Yes
sACN	With Dongle	Yes	With Dongle	Yes
Fixture Views	1	2	1	2
Fixtures	Limited by DMX Channels			
Max. channels per Fixture	120			
Memories	100 Presets per Attribute Group, 100 Fixture-Groups.			
Playbacks	100			
Scenes	10		30	
MIDI In / Through / Out	Yes			
OSC (Open Sound Control)	Yes			
Time Code	Using MIDI-Timecode			
Audio Input	Yes (6.3mm Jack)			
Dongle	Optional	Included	Optional	Included
Input Voltage	100-240V, 60/50Hz			
Power Consumption	75W			
Fuse	Internal Fuse			
Housing	Metal & Flame-retardant plastic			
Dimensions	505 x 345 x 128mm		721 x 345 x 128mm	
Weight	8.8 kg		11.8 kg	

4.4. Optional accessories

	LAMPY 20	LAMPY 40
Dustcover Order code	50738	50739
Flight case Order code	D7332	D7333
LAMPY DNGL Order code	50737 (Only works on the 1-Universe Consoles)	
LAMPY Re-Load4	50744	

4.4.1. Optional Accessories Features

Using the LAMPY Dongle is only supported with the 1 Universe Versions of the Console. The 2 Universe Consoles have the dongle built in already.

The LAMPY Re-Load 4 is a plug-and-play accessory that adds 4 universes on any LAMPY console. It does not unlock Network Output or additional views in the external screen.

The LAMPY DNGL unlocks the following features:

	Without Dongle	With Dongle	Without Dongle and with Reload4	With Dongle and with Reload4
External Monitor Features	Limited	Full	Limited	Full
DMX Universes	1	2	5	6
DMX Channels	512	1024	2560	3072
ArtNet	No	Yes	No	Yes
sACN	No	Yes	No	Yes
Magic Sheet Views	1	2	1	2

5. Installation

5.1. Safety Instructions for Installation

WARNING
Incorrect installation can cause serious injuries and damage of property.

5.2. Installation Site Requirements

- The device can be used only indoors.
- The minimum distance to other objects must be bigger than 0,5 m.
- The maximum ambient temperature ta = 40 °C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.

5.3. Connecting to Power Supply

DANGER
Electric shock caused by short-circuit

The device accepts AC mains power at 100–240 V and 50/60 Hz. Do not supply power at any other voltage or frequency to the device.

This device falls under IEC protection class I. Make sure that the device is always electrically connected to the ground (earth).

Before connecting the device to the socket-outlet:
- Make sure that the power supply matches the input voltage specified on the information label on the device.
- Make sure that the socket-outlet has ground (earth) connection.

Connect the device to the socket-outlet with a power plug. Do not connect the device to a dimmer pack, as this may damage the device.

5.4. Safety Instructions for Operation

Attention
This device must be used only for the purposes it is designed for.

This device is intended for professional use as a Lighting Console. It is suitable only for indoor installation. This device is not suitable for households and for general lighting.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

Attention
Power supply

Before connecting the device to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the device.

6. Basic Concepts

6.1. Priority Concept

The general programming layer, called the "Programmer" always takes precedence over playbacks, unless it is in "Blind"-Programming mode. This may seem a bit strange at first glance, but in fact is very useful since the programmer enables the user to gain additional control over the consoles output at any time.

The console allows multiple different Playbacks and Scenes to be run at the same time. The Output values are determined by the starting order of these Playbacks or Scenes.

The LAMPYs priority concept is outlined here:

Priority	Level	
Highest	6	**Highlight** Button
	5	Grand Master
	4	Group Submasters
	3	Programmer
	2	Playbacks / Scenes
Lowest	1	Default Values (as defined in the Fixture Library)

6.2. Tracking

6.2.1. Basic Idea

When a sequence of cues is programmed, the lighting console can store the information in one of two ways: either it records the settings for all attributes of all the fixtures used in the Playback, or it is only recording the values that have changed. The latter is called tracking and was invented because consoles in the early years had too little memory to store all the information it would have needed to store for the first example given. However, tracking is not outdated and if used with understanding of the concept can help in many cases.

6.2.2. Tracking in a Nutshell

Imagine you come home late at night and it is already dark outside:

You open your apartment's main door (Cue 1) and you switch on the light in the corridor (Cue 2).

You close the door (Cue 3) and go straight into the living room (Cue 4), where you switch on the light as well (Cue 5).

The light in the corridor is still on, and the living room door still open since you did not change the states of these.

Here is a closer look at what happened, and at what would be stored in the cues if we think of this chain of events as a Playback:

Cue	Entrance Door	Corridor Light	Living Room Door	Living Room Light
#1: Entrance	Open			
#2: Light in corridor		On		

Cue	Entrance Door	Corridor Light	Living Room Door	Living Room Light
#3: Close main door	Closed			
#4: Living room door			Open	
#5: Living room light				On

With tracking, the final state at the end of this sequence is:

Closed	On	Open	On

6.2.3. Tracking through Changes

One advantage of tracking is that changes can be 'tracked through' a series of cues. In the example given above, if you did not close the Main Door in Cue 3, the door would still be open until the end of this imaginary Playback.

Tracking can be very useful when you want to make the same change to a series of cues: for example, you might have a series of cues that include a fixture that lights a part of the set in the same way throughout. If you later want to change the intensity of that light, you may change it in the first cue the light appears, and the change will track trough to all the cues until the next change for this attribute of this fixture.

6.2.4. Maintaining Tracking

Sometimes you may need to playback cues out of order – For example in a rehearsal situation where it might be necessary to jump between different scenes or even acts.

The LAMPY Console is taking care of maintaining the tracking state and will always calculate all values as if the Playback was played back in order.

6.3. Fixture Library Basics

The consoles Fixture Library is divided into three parts: A **Factory Library**, a **User Library** and the **Show Library**.

Fixture types may easily be transferred between Libraries using the **Magic Wand** Button from within the **Fixture Library** tab in the **Setup Menu**. If a fixture type is modified within the Show Library and those changes should be available for later show files, you may transfer the fixture from the Show Library to the User Library.

You may select the different libraries in the Fixture Library Tab using the buttons found in the top part of the Fixture Library page.

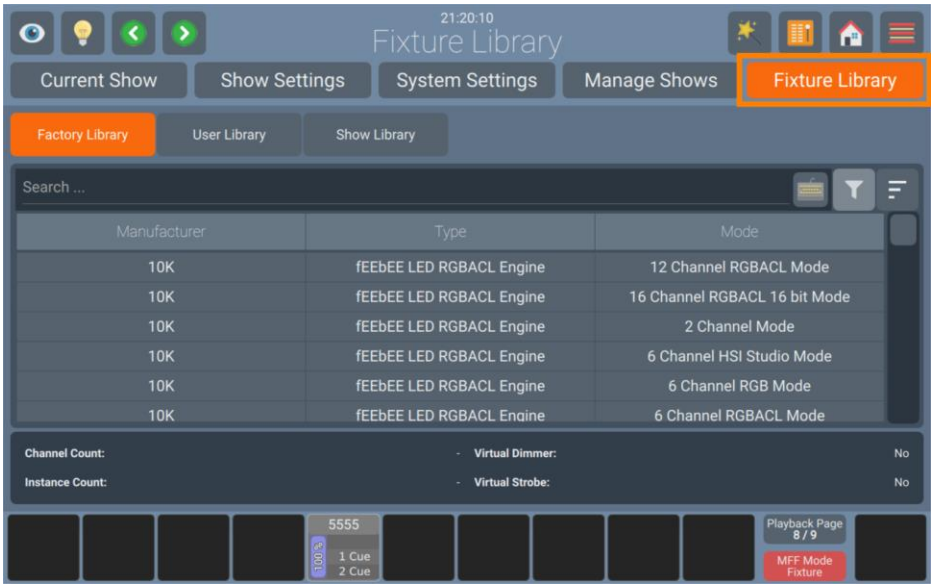


Fig. 9: The Fixture Library Tab

6.3.1. Factory Library

The Factory Library gets replaced with every Software Update. It contains around 20000 Fixtures and is maintained by Atlabase. It is not editable by the user; however, it may be updated separately from the Console OS.

6.3.2. User Library

The User Library is fully editable by the user and is not replaced or deleted during software updates. It is stored on the flash-disk of the console and its fixture types are available to all existing or new shows.

6.3.3. Show Library

The show library resides within the Show file. Before a fixture can be patched, it needs to be added to the Show Library. The Show Library is stored within the Show file and hence will be exported with the Show file if a backup of the Show to a USB Key is made. Fixtures within the Show Library are not available to other Shows. To make the Fixture Types in the Show Library available to other shows, they need to be transferred to the User Library first.

More Information on creating or modifying Fixture Libraries may be found in Section 8.4.5, Fixture Library Tab on Page 77.

7. The User Interface

7.1. The Internal Touchscreen Interface

The console utilizes an easy to use and intuitive graphical user interface (GUI), supporting multi-touch. The following sections explain the basics of finding your way around the GUI, in the internal as well as the external display.

The Screen Layout of the LAMPY Consoles is divided into three different parts: The Top Toolbar, the Content Area, and the Bottom Toolbar.

Fig. 10: The Internal Screen Graphical User Interface

7.1.1. The "Top Toolbar"

The Top Toolbar is also divided into three parts:

The left part shows buttons that control the programming interface.

The center part shows the time, and title of the current screen, or, if applicable the current command including possible options. If the current command is displayed in red, it is invalid or missing information.

The right part shows the main buttons to navigate through the User Interface.

Fig. 11: The Top Toolbar

7.1.1.1. Programmer Buttons

Fig. 12: Programmer Buttons

The Programmer buttons provide the following functions:

	Name	Action	Action holding [Shift] key	Long Press
	Blind	"Hides" the programmer content. Second press will show the content again.		
	Highlight	Sets the selected fixtures to the "Highlight" value defined in the Library. Usually open Dimmer and 100% brightness. Second click will deactivate the function. Very useful for focusing.		
	Previous Fixture	Cycles through full selected fixtures, including all instances, in backwards direction.	Cycles through individual instances.	Selects all fixtures.
	Next Fixture	Cycles through full selected fixtures, including all instances, in forward direction.	Cycles through individual instances.	Even / Odd fixtures will be selected.

7.1.1.2. Window Title / Active Command

The center part shows the title of the current screen, or, if applicable the current command including possible options. If the current command is displayed in red, it is invalid or missing information. Most commands such as Record have additional Options that may be accessed by clicking on the Window Title.

Fig. 13: Window Title

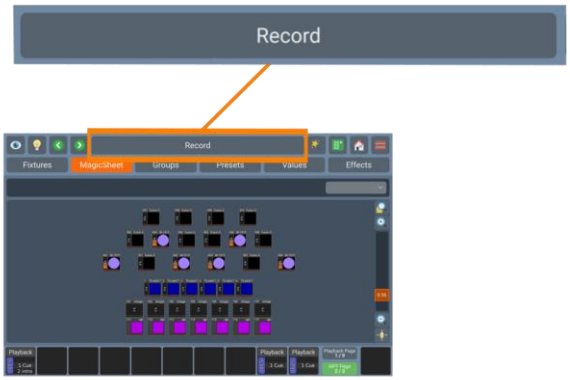


Fig. 14: Active Command

7.1.1.3. Main Navigation Buttons

The main navigation buttons are used to navigate through the different Main Windows of the LAMPY User Interface.

Fig. 15: Navigation Buttons

The Button functions and names are as follows:

	Name	Action
	Magic Wand	Opens a context sensitive dialog called “Action Menu”. Greyed out if not available.
	Virtual Executors	Switches to the Virtual Executor View. If one of the Virtual Masters is active, the Icon will be shown in Orange color. If the Grandmaster or any of the Speed masters is set to 0%, the button will turn red.
	Home	Opens the Home Window to select and program Fixtures, Groups, Presets and set Fixture Values as well as Effects.
	Menu	Opens the Side Menu which gives access to multiple other useful screens, such as the Setup Screen, Patch or DMX Output View. (See Below)

Fig. 16: The Side Menu

7.1.1.4. The “Content Area”

The Content Area is used to display context sensitive windows and dialogs, based on the selection made from the top toolbar, hamburger menu or other user interface elements.

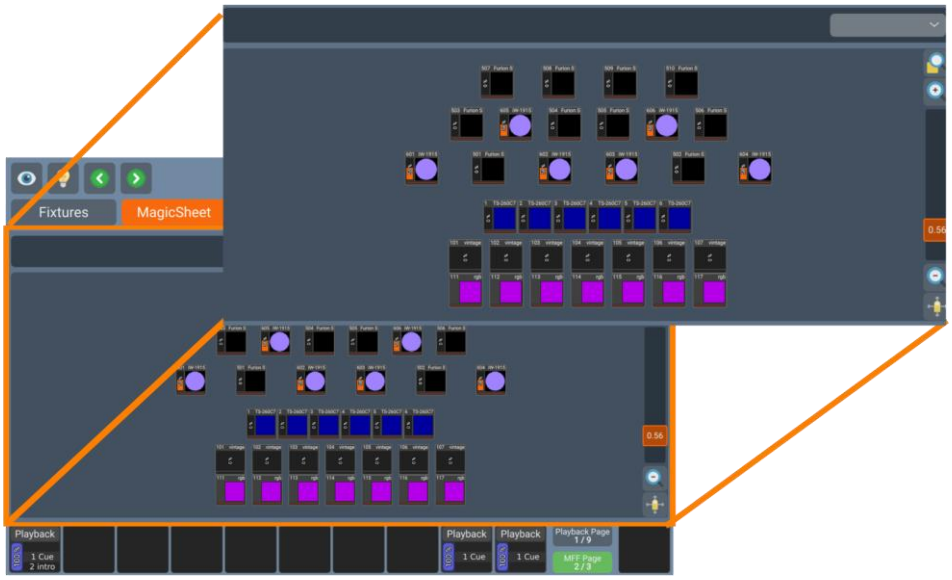


Fig. 17: The Content Area

7.1.2. The “Bottom Toolbar”

The Bottom toolbar is used to show playback fader labels on the left side, Playback Page and Multi-Function-Fader Mode on the right part, and the Master Fader Label on the far-right side.

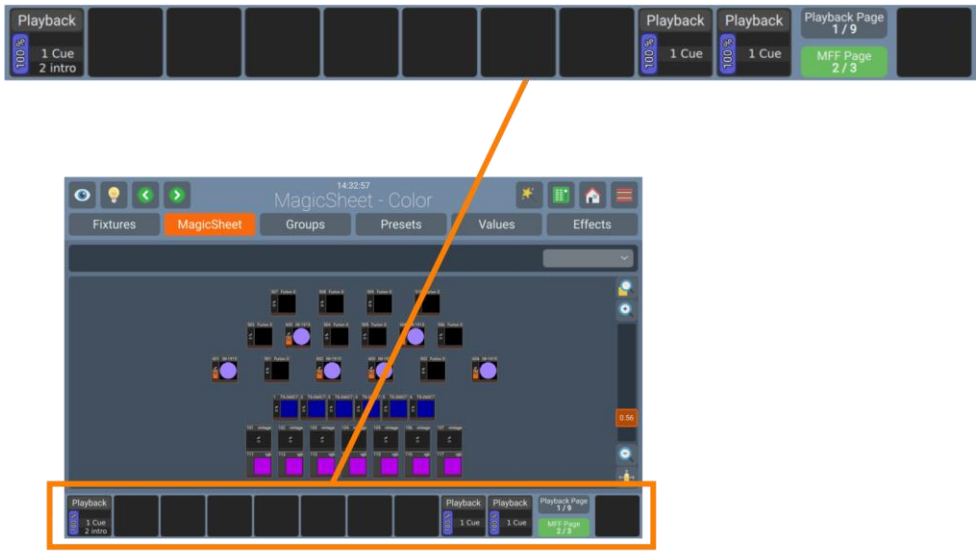


Fig. 18: Bottom Toolbar

For more information regarding to Playback Fader Labels please see section 8.6.1, The Playback-Fader Labels on page 156.

More about the Fader Page selector can be found in section 8.6.3, Playback Fader Pages on page 159

More information about the Multi-Function Faders can be found in Section 8.7, Using the Multi-Function Faders on Page 179

7.2. External Screen

The LAMPY supports one external monitor that may be connected to the DVI Port on the back of the console. Since Lampy 2.0.0, any screen resolution is supported, however a Full HD resolution of 1920 x 1080 is recommended. The LAMPY also supports external screens with touch functionality.

The LAMPY DNGL unlocks more functions in the external screen. Keep in mind that the dongle is already included in the 2 Universe Versions of the console.

7.2.1. External Screen functionality without the LAMPY DNGL

Without the dongle, the external screen always shows the Fixtures View and the Magic Sheet View. Zoom and viewport may be chosen differently than from the internal view.

On the bottom of the screen, you will see fader labels for the Multi-Function Faders, as well as the Fader Mode of these.

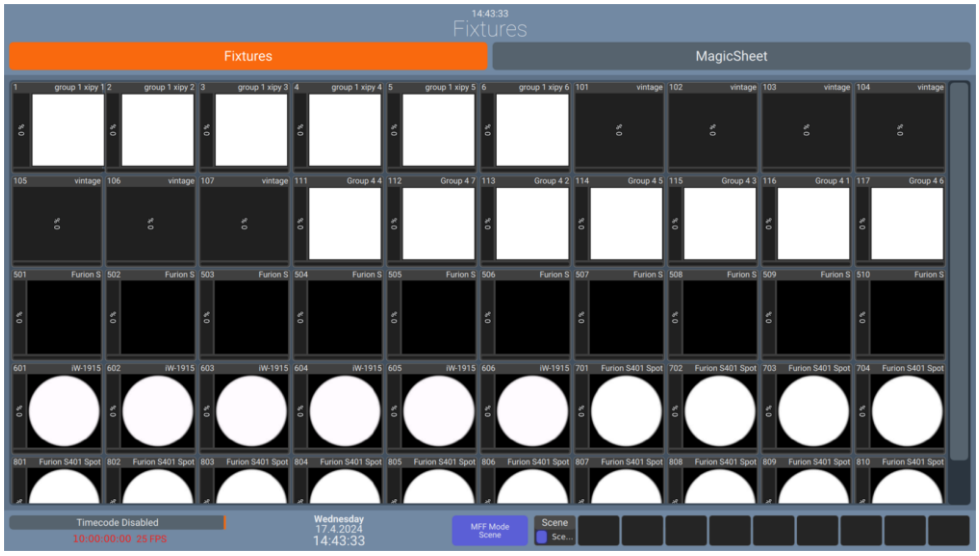


Fig. 19: External Monitor – Fixtures View - No LAMPY DNGL attached

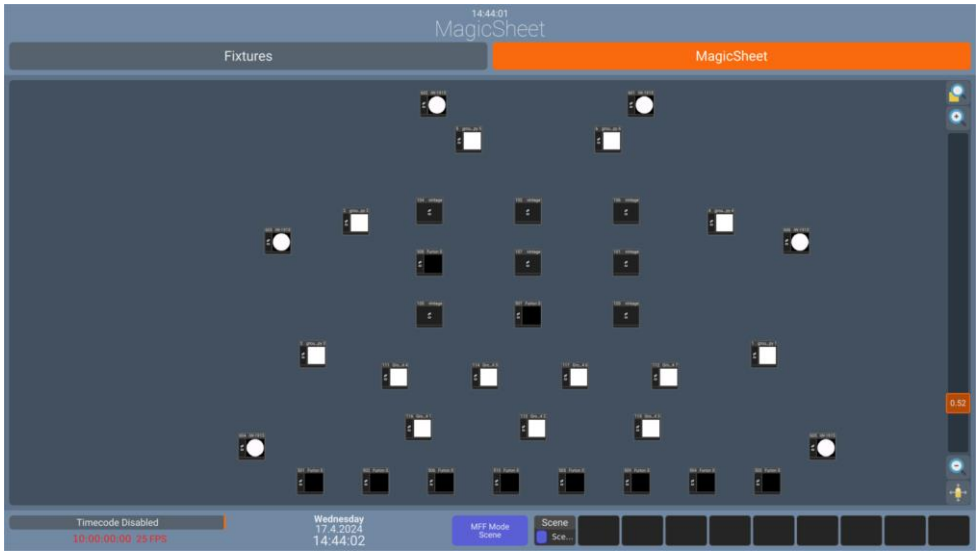


Fig. 20: External Monitor – Magic Sheet View - No LAMPY DNGL attached

7.2.2. External Screen functionality with the LAMPY DNGL

With the dongle attached, the external screen offers a toolbar in the top part of the screen to change between different views as indicated in the screenshot below.

On the bottom of the screen, you will see fader labels for the Multi-Function Faders, as well as the Fader Mode of these.

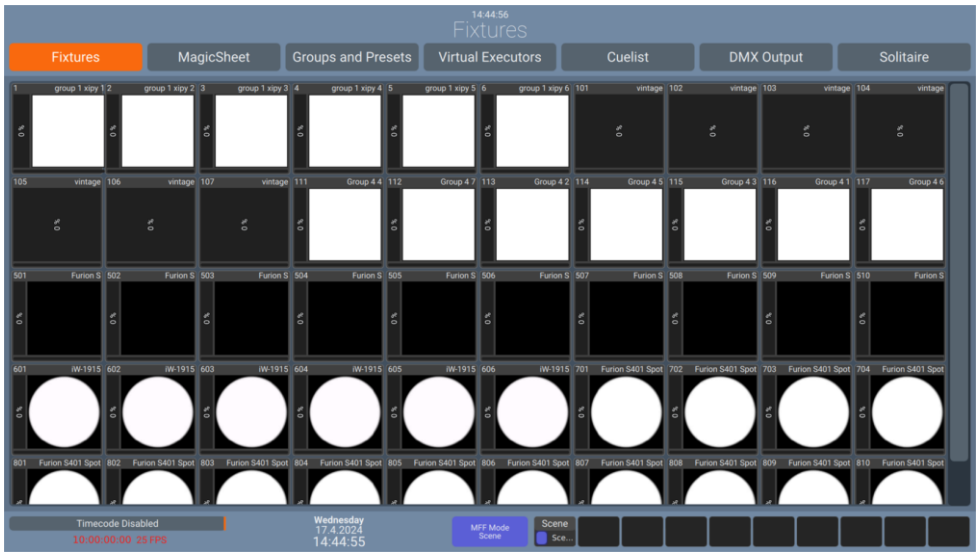


Fig. 21: External Monitor Navigation – LAMPY DNGL attached

7.2.2.1. The Fixtures View

The fixture view is showing the same contents as the Fixture View on the internal screen.

Fig. 22: External Monitor Fixtures View – LAMPY DNGL attached

7.2.2.2. The Magic Sheet View

The Magic Sheet view is showing the same contents as the Magic Sheet on the internal screen. However, all editing functions must be made within the consoles internal touch screen.

Fig. 23: External Monitor Magic Sheet View – LAMPY DNGL attached

7.2.2.3. The Groups and Presets View

The Groups and Presets view is showing both Groups and Presets at the same time. This is a very helpful screen during programming.

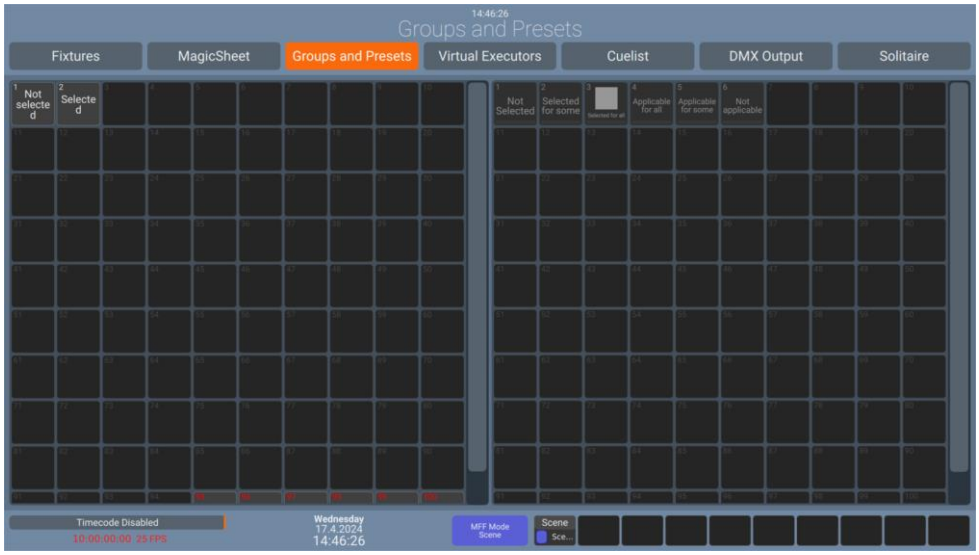


Fig. 24: External Monitor Groups and Presets – LAMPY DNGL attached

7.2.2.4. The Virtual Executor View

The Virtual Executor view is showing the same contents as the Virtual Executor View on the internal screen. This screen is very helpful if running a live, busking show where you do not know what is about to happen.

Fig. 25: External Monitor Virtual Executor – LAMPY DNGL attached

7.2.2.5. The Cuelist View

The Cuelist View is very similar to the Edit Playback Fader window. It will always show the selected Playback. This is a very helpful screen during structured shows.

Fig. 26: External Monitor Cuelist View – LAMPY DNGL attached

7.2.2.6. The DMX Output View

The DMX Output View resembles the internal screen Output View. It is helpful for troubleshooting purposes.

Fig. 27: External Monitor DMX Output View – LAMPY DNGL attached

7.2.2.7. Solitaire Game

Solitaire is a simple game to help you kill some time in case you are always waiting for things to happen.

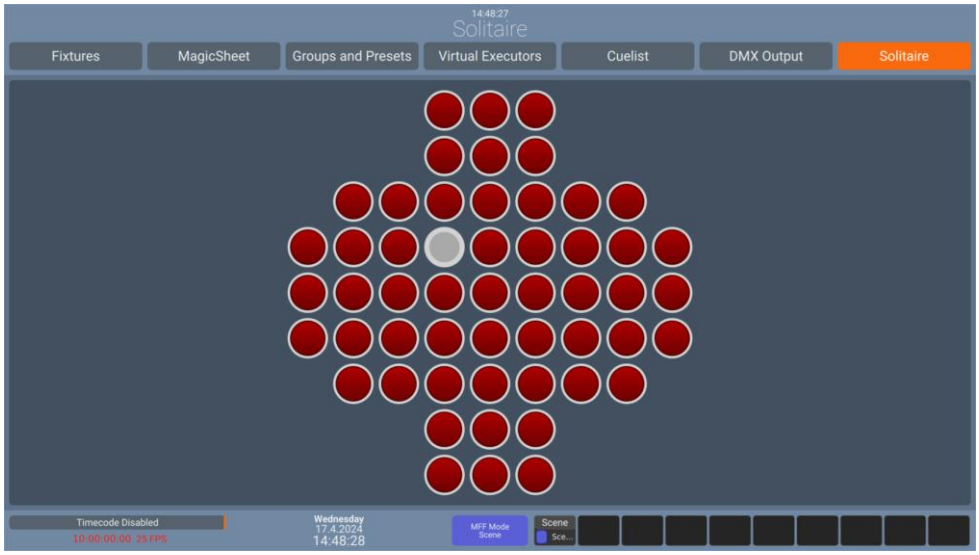


Fig. 28: External Monitor Solitaire Game – LAMPY DNGL attached

8. Operation

8.1. Begin Using the Console

8.1.1. Unpack Console and Accessories

Before you can use the console, unpack it and its accessories from the shipping carton or flight case.

Attention
Before connecting any accessories to the LAMPY Lighting Control Console, the console must be located on a sturdy and flat surface in a dry, dust free environment.

8.1.2. Connect Console to Any Accessories and Power

01) Connect all optional accessories such as USB keyboard, mouse, external (touch)screen, etc. to the console.
02) Connect DMX cables to the console's DMX output ports.
03) If you are using Art Net or sACN for data output (only available with LAMPY DNGL), also connect the network cable to the consoles network port.
04) Use the supplied AC power cable to connect the console to a grounded, AC power source. The console operates on an AC voltage of 100 to 240VAC.
05) Press the power button on the back of the console, next to the Power Input connector.

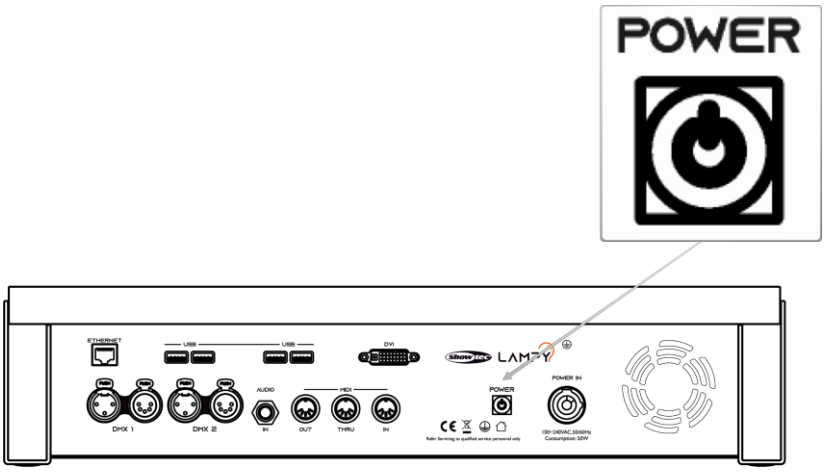


Fig. 29: Power Button

During the boot process a boot screen will be shown.

This boot screen provides maintenance utilities; however, it will continue to automatically boot the Console OS without user intervention.

Once the system is ready to use the initial screen, as shown below will appear. This screen will only appear in 3 case scenarios:

01) Is the first time using the LAMPY and there are no show files saved on the console.
02) There is an error.
03) The console tried to load the last opened Showfile but the Showfile uses a more advanced OS version than the one installed on the console.

From this screen you may either start a new show file or load an existing show from the consoles built-in memory or a USB-Stick.

You may also use the **Shutdown / Reboot** button on the bottom left of the screen.

If is none of the cases listed above, the LAMPY will load the Show File which was opened most recently.

Fig. 30: Initial Screen

8.2. Working with Shows

Show files contain all your show related settings like fixture schedule and patching, input settings, groups, presets, cues, master assignments, etc. Multiple shows may reside on the console and the number of shows is only limited by hard disk memory. However, we advise to regularly backup old shows to a USB key and delete them off the console's memory.

8.2.1. Create a new Show from the Initial Screen

A Show stores all information like Patch, Fixtures, Groups, Presets, Playback Faders, and so on. To start a new show as follows:

01) Within the initial screen, hit the **Create New Show** button.
02) A keyboard dialog to enter the name of the show to be created is opened. You may enter the Name using an attached USB-Keyboard anytime the keyboard dialog is shown.
03) As soon as you hit the enter button a new show with the given name is created.

Note: If you would like to start a new Show file from within a show, please read the steps below.

You may also create a new Show using the Action Dialog within the **Manage Shows** tab in the **Setup Menu.** Find the step by step for it in: 8.4.4.1 Manage Shows Action Dialog on page 75

8.2.2. Loading a Show

Within the initial screen, simply select the show you would like to open from the list and hit the **Open Show** button.

Note: If you would like to open a Show file from within a show, please read the steps below.

You may also load a Show using the Action Dialog within the **Manage Shows** tab in the **Setup Menu.** Find the step by step for it in: 8.4.4.1 Manage Shows Action Dialog on page 75

8.2.3. Saving the Show file

We recommend saving your show occasionally. You may do this from within the Side Menu:

01) Click on the **Menu** button. The Side Menu will open.
02) Click on the **Save** button found on the bottom of the Side Menu, indicated by a floppy disk symbol.

Fig. 31: Side Menu - Quick save Button

8.3. Adding and Patching Fixtures

"Adding and Patching Fixtures" is the process of telling the console what kind of fixtures you are using and assigning DMX-Addresses to them.

If you just started a new Show file or loaded a Show file without fixtures, the console will automatically open the Patch Window. Otherwise, it may be accessed as follows:

01) Open the Side Menu by pressing the side **Menu** Button.
02) Click on the button that reads **Patch**.

Fig. 32: Side Menu – Opening the Patch Window

8.3.1. The Patch Table

The Patch table gives you important overview about used fixtures, the addresses they use, fixture type and so on. Let's have a closer look at the table, pictured below.

Fig. 33: The Patch Table

The following columns are shown (in the order from left to right):

Caption	Description
ID	This column shows the ID of the fixture. This is a unique number which may be used for indicating which fixture is which.
Name	User given Name of the Fixture within the show file
Patch	Indicates the fixtures DMX Address (Universe – Channel)
Channels	Amount of DMX channels this fixture occupies
Invert Pan	Indicates if Pan is inverted
Invert Tilt	Indicates if Tilt Inverted
Manufacturer	This is the Manufacturer of the Fixture Type
Type	This column displays the Fixture Type
Mode	DMX Mode of the Fixture
Instances	Displays the number of instances

8.3.2. The Patch Action Menu

The Patch Action Menu is opened by clicking on the Magic Wand button on the Keyboard or in the top Toolbar. It offers access to most functions used within the Patch Window.

You may select which fixtures changes are applied to by selecting them before opening this screen either in the Patch Table by clicking / dragging, or by using the Fixture or Group Faders or Views.

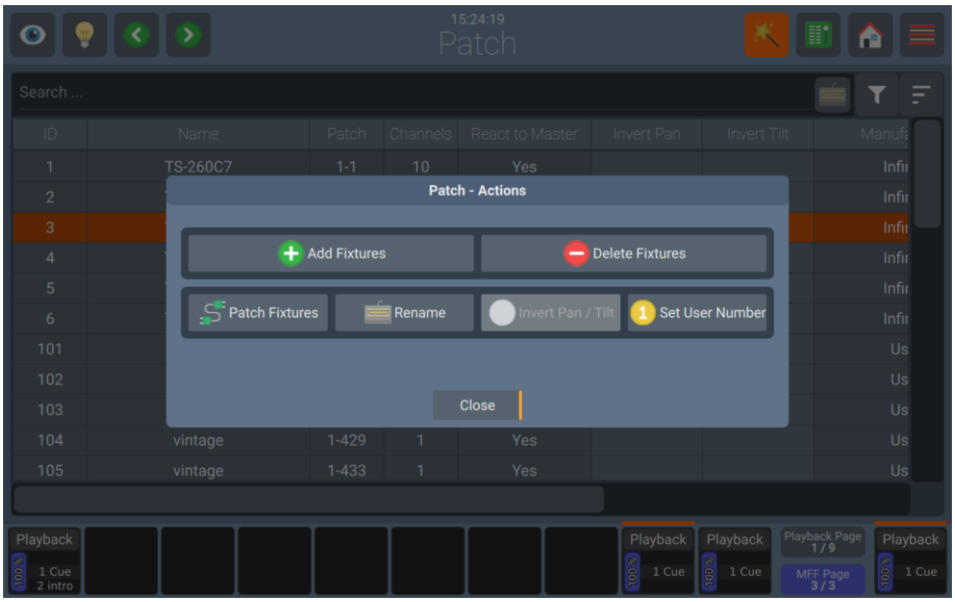


Fig. 34: Patch Action Menu

Button	Function
Add Fixture	Is used to add fixtures to the show file
Delete Fixture	Is used to delete selected fixtures
Patch Fixtures	Is used to change the DMX Address of one or more selected fixtures
Rename	Is used to change the Name of one or more selected fixtures
Invert Pan / Tilt	Is used to invert Pan or Tilt of one or more selected fixtures
Set User Number	Is used to change the ID of one or more selected fixtures

8.3.3. Adding Fixtures to the Show file

01) Open the Action Menu by pressing the **Magic Wand** Button.
02) Click on **Add Fixtures**. A Window as pictured below is shown.

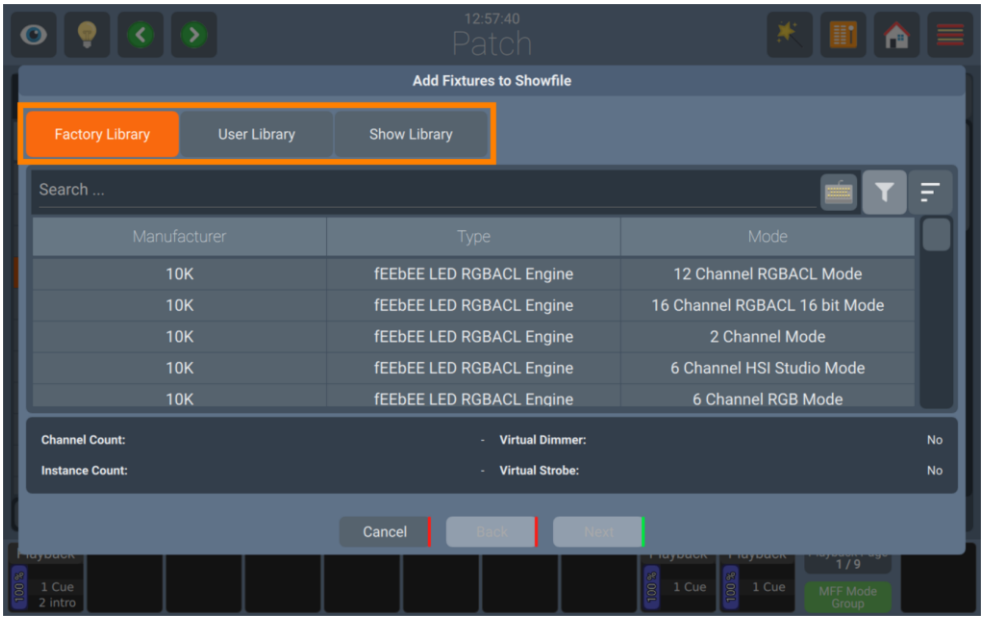


Fig. 35: Add Fixtures – Select Fixture from Show Library

03) To Add a Fixture from the inbuilt Library, select **Factory Library**. If you want to add a user created Library, click on **User Library**. And, if you want to add fixtures from the show library, select **Show Library** the Select-Library Dialog is shown.

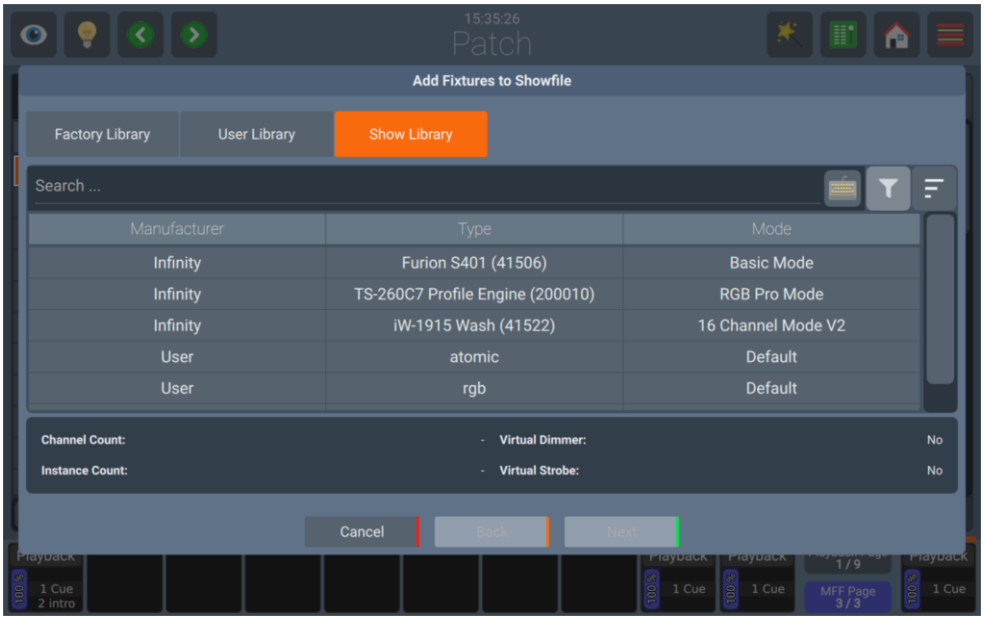


Fig. 36: Add Fixture to Show Library – Select Fixture

04) Select a fixture from the list. Or enter a search text into the search field by typing it on a USB keyboard. You may also open the on-screen keyboard by clicking on the **Keyboard** button next to the text field. The libraries have the Manufacturer, Fixture Type and Mode from the lists for each fixture. You may also use the **Sort** button to arrange the columns in a descending or ascending order.

05) After selecting the Fixture type, click on **Next**. An add Fixtures to Showfile dialog will be shown. This screen offers the possibility to do an **Auto-Patch**, **Manual Patch**, or **No Patch**. You may select **Auto Patch**, which will patch the fixtures automatically onto the selected universe. Select **Manual Patch** to set universe, start address (by either typing it, or by using the **Pencil Button**) and gap between fixtures using the **Block Size** option manually. Or select **No Patch**, which will leave the fixtures without any DMX Assignment.

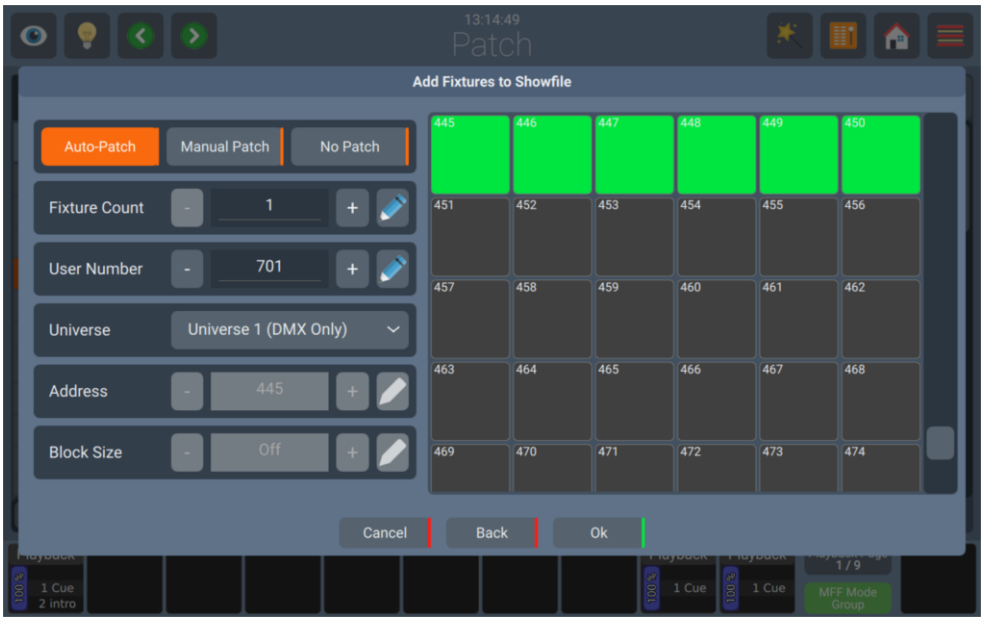


Fig. 37: Add Fixture – Add Fixture Dialog

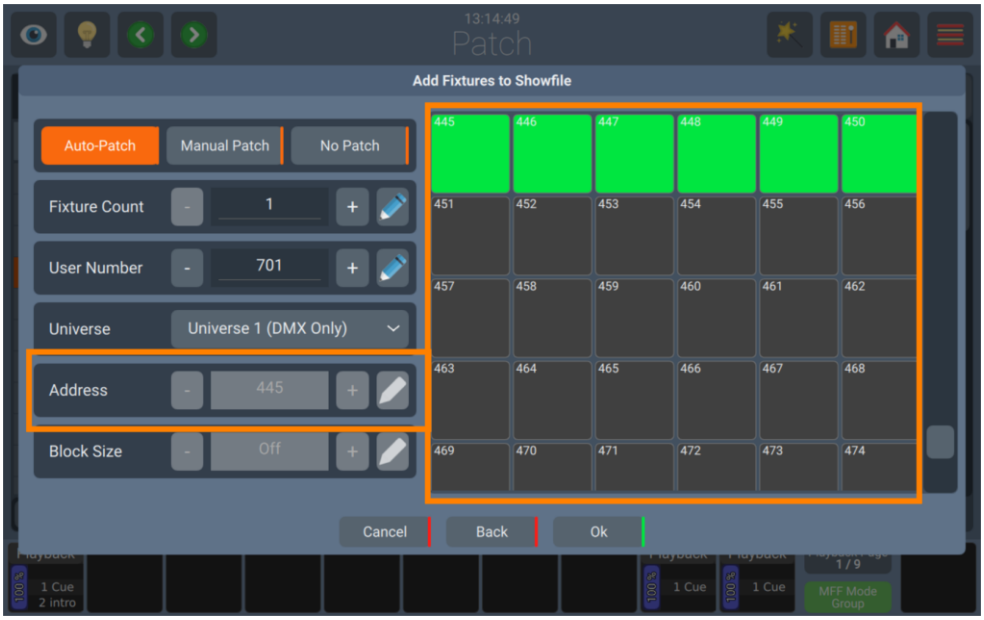


Fig. 38: Add Fixture – Assign Address

06) Regardless the Patch option you selected. You can edit the number of fixtures you would like to add, by typing it, or using the **+** and **–** buttons, or pressing the **Pencil** button**.** A dialog with a keypad will appear. The console will automatically suggest a User Number for the Fixture, which you may also change if you like by pressing the **Pencil** button**.** Click on **Ok** when done.

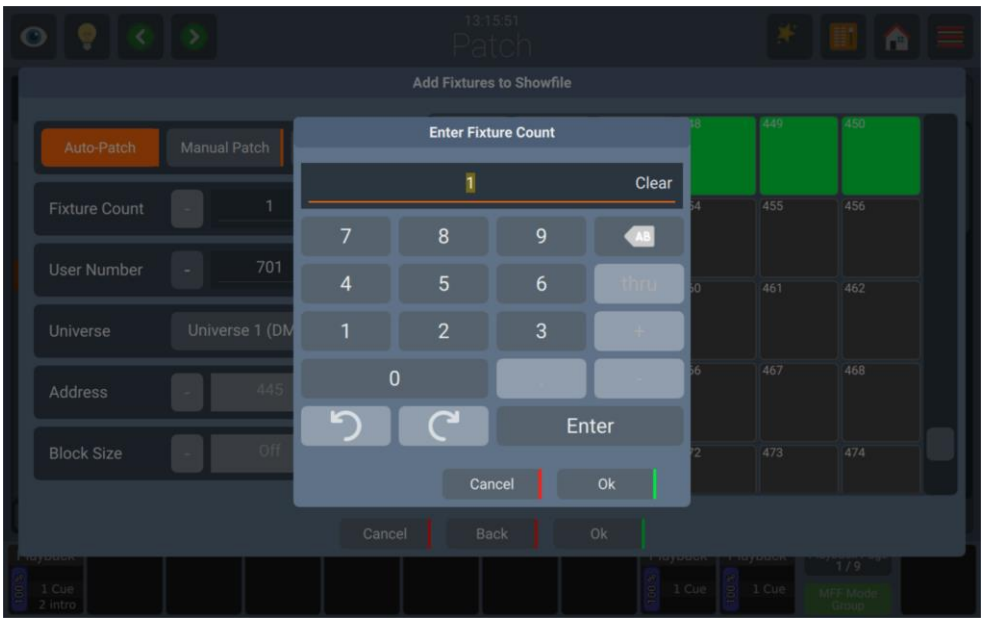


Fig. 39: Add Fixture – Enter Count

07) A confirmation dialog for the number of fixtures patched will appear, click **Ok**. The added fixtures will appear on the patch table. The console will automatically add the patched Fixtures to the Fixtures View and you can eventually lay them out in the Magic Sheet View.

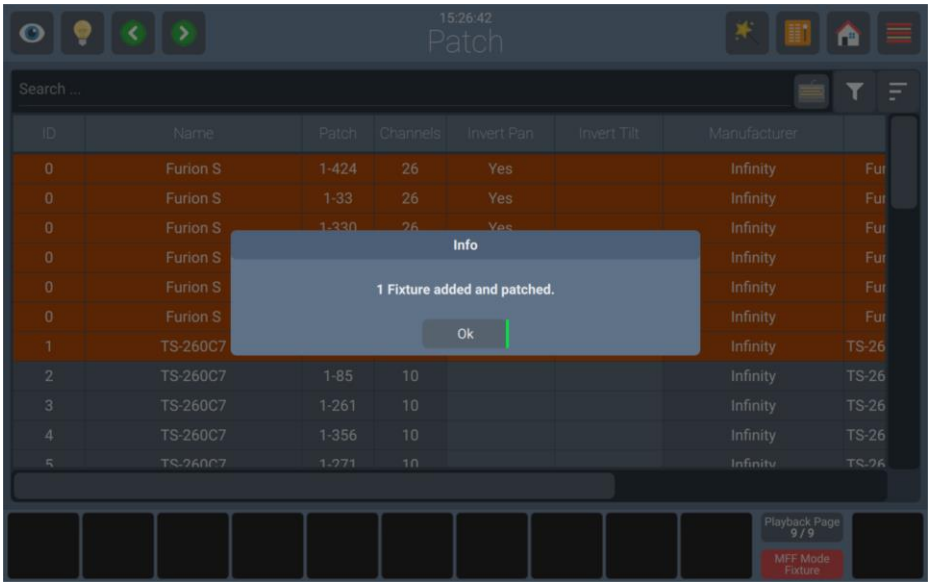


Fig. 40: Add Fixtures - Success

More information about laying out fixtures in the Magic Sheet View can be found here: 8.5.2.8 - Arranging Existing Elements on page 104

8.3.4. Deleting Fixtures from the Show file

01) Select the fixtures you wish to delete in either the Patch Window or by any of the other methods.
02) Open the Action Menu by pressing the **Magic Wand** button.
03) Click on **Delete Fixtures**. A window asking you to confirm the action will be shown. click on **Yes, delete!** To continue. Or click on **Cancel** to abort.
04) When deleting fixtures, a confirmation dialog will be shown. Click on **Ok** to close it.

8.3.5. Changing the Patch of existing Fixtures

01) Select the fixtures you wish to change the address of, in either the Patch Window or by any of the other methods.
02) Open the Action Menu by pressing the **Magic Wand** button.
03) Click on **Patch Fixtures**. The following Window will be shown.

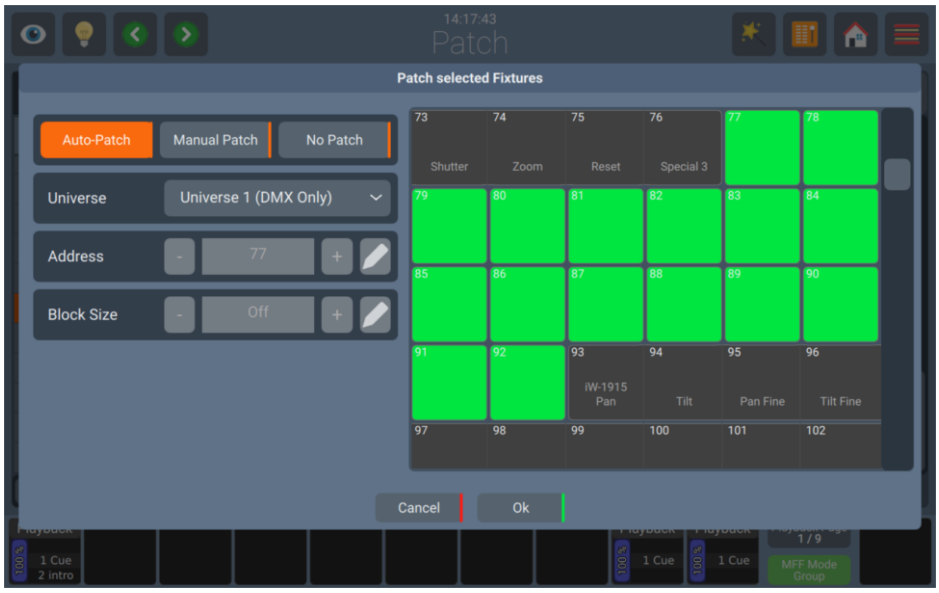


Fig. 41: Change Patch Dialog

04) You may select **No Patch**, which will leave the fixtures without any DMX Assignment, you may select **Manual Patch** to set Universe, start address (by either typing it, or by using the **Pencil** button) and gap between fixtures using the **Block Size** option manually. Or select **Auto Patch**, which will patch the fixtures automatically onto the selected universe.
05) Click on **Ok** when done.

8.3.6. Changing the Name of existing Fixtures

01) Select the fixtures you wish to change the name of in either the Patch Window or by any of the other methods.
02) Open the Action Menu by pressing the **Magic Wand** Button.
03) Click on **Rename**. An On-Screen Keyboard will be shown.
04) Type the new Name of the Fixture using the On-Screen-Keyboard or using an USB-Keyboard.
05) Click on **Ok** to rename the selected fixtures.

Note: When changing the name of a Fixture with multiple instances will automatically rename all its instances.

Fig. 42: Change Fixture Name Keyboard

8.3.7. Invert Pan or Tilt for existing Fixtures

01) Select the fixtures you wish to change the Pan / Tilt Invert of in either the Patch Window or by any of the other methods.
02) Open the Action Menu by pressing the **Magic Wand** button.
03) Click on **Invert Pan / Tilt**. The following window will be shown.
04) Set the new values for Pan and Tilt Invert by selecting them from the Drop-down menus.
05) Click on **Ok** to accept the changes.

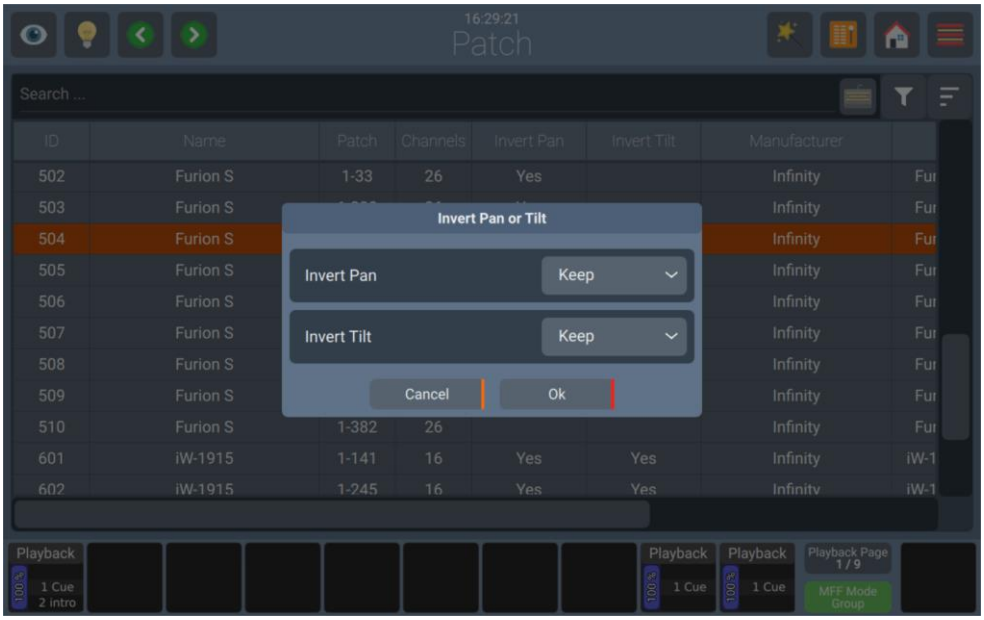


Fig. 43: Invert Pan / Tilt Dialog

8.3.8. Change User ID for existing Fixtures.

01) Select the fixtures you wish to change User ID of in either the Patch Window or by any of the other methods.
02) Open the Action Menu by pressing the **Magic Wand** button.
03) Click on **Set User Number**. The following window will be shown.
04) Set the new values for the User Number of the Fixture.
05) Click on **Ok** to accept the changes.

Note: When changing the user ID of a Fixture with multiple instances will automatically enumerate all its instances.

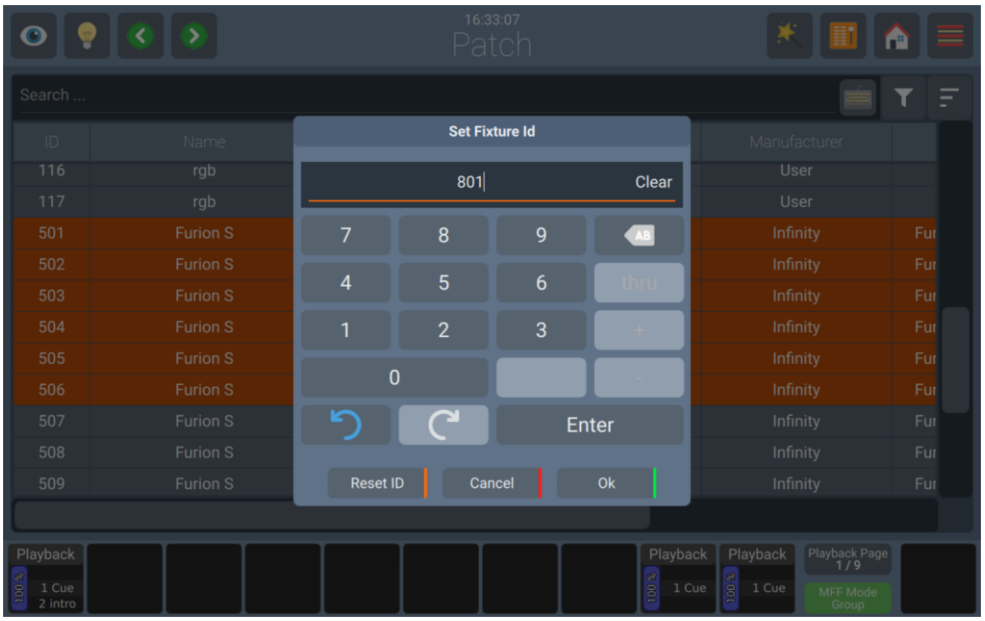


Fig. 44: Change User Number Dialog

8.4. The Setup Menu

The Setup Menu is the place where all system and show wide settings are made. This includes, for example setting the IP Address of the console or editing the fixture library or managing shows.

When no Show file is open, you can only adjust system-wide settings.

Opening the Setup Menu from within a Show

01) Open the Side Menu by pressing the **Menu** button.
02) Click on the button that shows a cog-icon as a symbol. We'll refer to this button as "**Setup**" button.

Fig. 45: Side Menu – Opening the Setup Window

8.4.1. Current Show Tab

The Current Show tab displays statistics about the current show. It also offers the option to save your show, save it to a different file and to export the current show to USB.

Note: The Current Show Tab is only shown if you have opened the Setup Menu from within a Show file.

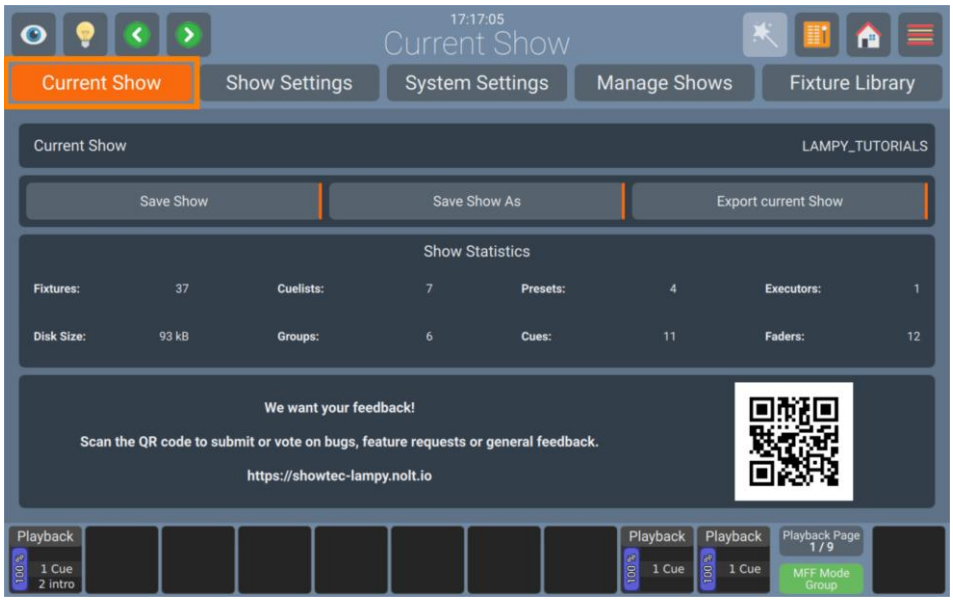


Fig. 46: The Current Show Tab

8.4.1.1. Saving the Show file

You may easily save your show from within the Current Show tab of the Setup Menu by clicking on the **Save Show** button.

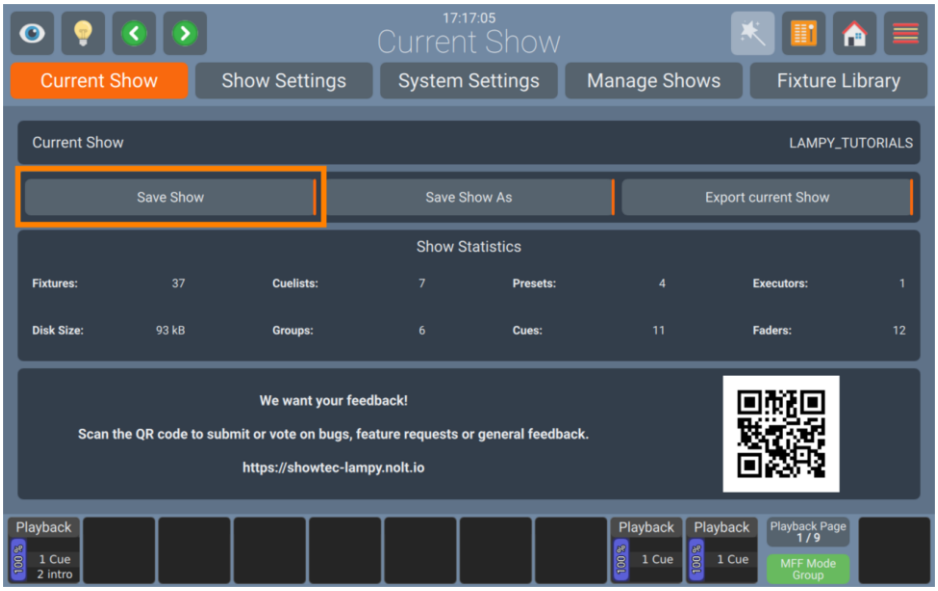


Fig. 47: Current Show – Save Show

8.4.1.2. Saving the Show file under a new Name

We recommend to periodically save your show file as a new file.

01) To do so, open the **Current Show** Tab from within the Setup Menu.
02) Click on **Save Show As**. An on-screen keyboard will be shown. Enter the new Show file name and press **Ok** to complete the process.

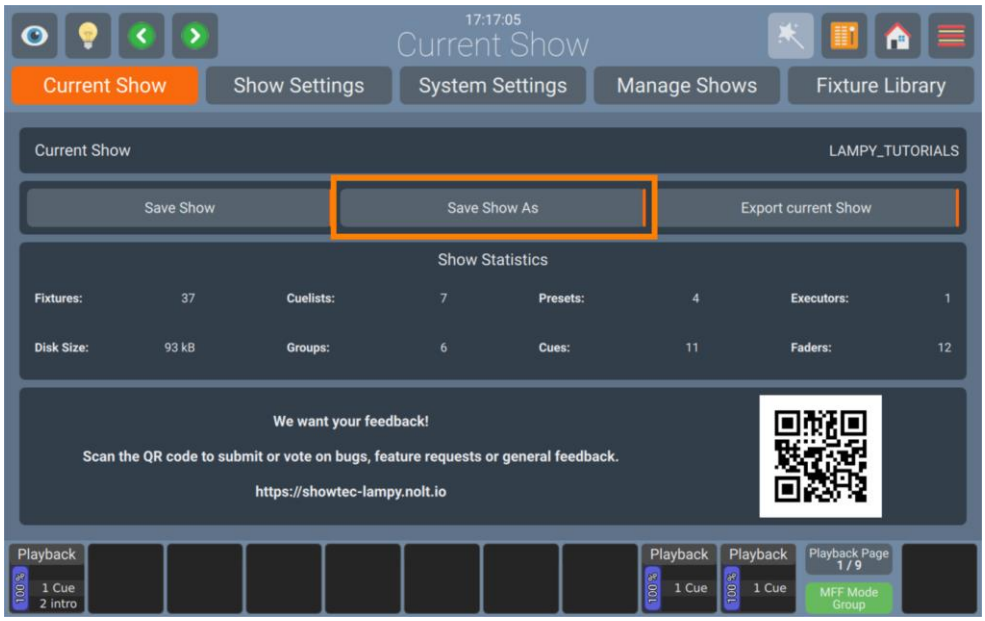


Fig. 48: Current Show – Save Show As

8.4.1.3. Export the Show file to USB

It is useful to periodically save a copy of the Show File to a USB Stick.

01) To do so, first plug the USB Stick into one of the consoles USB Ports.
02) Open the **Current Show** Tab from within the Setup Menu.
03) Click on **Export current Show**. A window that guides you through the process will open.

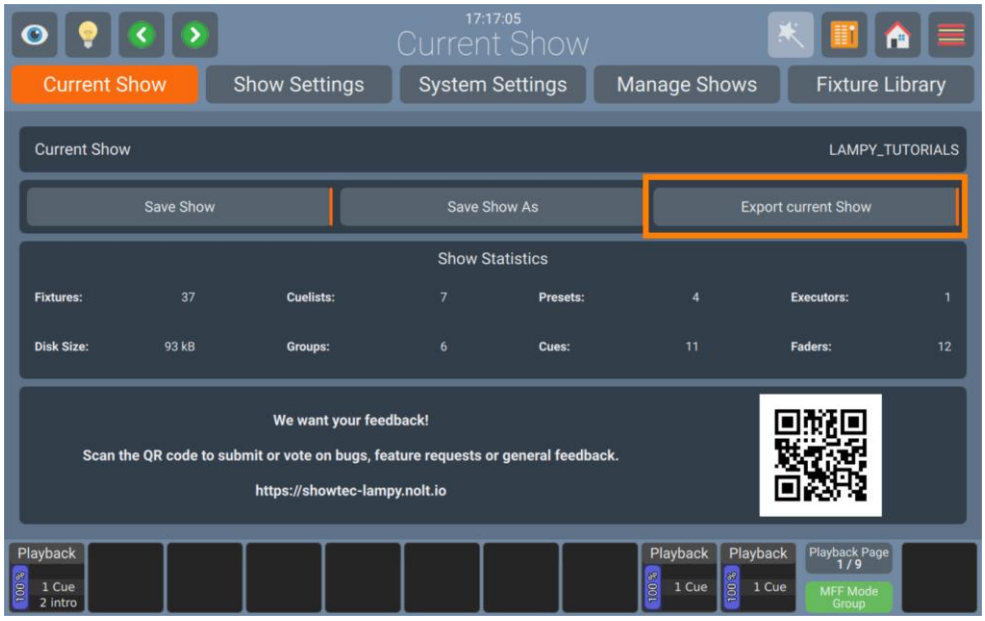


Fig. 49: Current Show – Export Show

8.4.2. Show Settings Tab

The Show Settings tab contains all show-wide settings for the current show such as the UI Settings, Autosave, Desklock and configuration of In- and Outputs of the console.

The Show Settings tab consists of eight different pages.

Note: The Show Settings Tab is only shown if you have opened the Setup Menu from within a Show file.

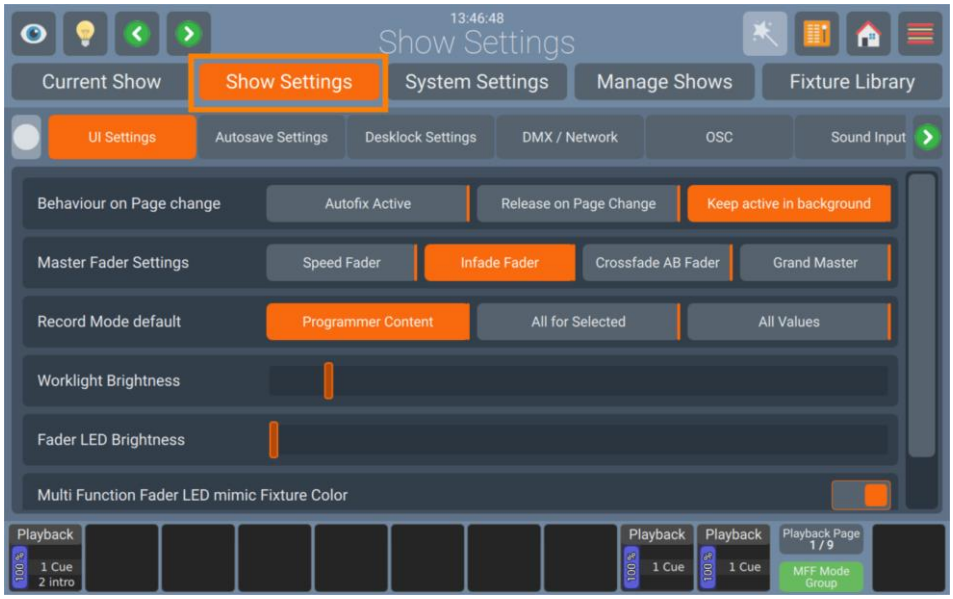


Fig. 50: The Show Settings Tab

8.4.2.1. UI Settings

Behavior on page change

The behavior on Page change settings allows to specify what should happen if you change the active Playback Page. The following table outlines the different Settings and what they do:

Button	Function
Autofix Active	Autofix is a convenience function that is used to carry over running playbacks to the new Playback Page. The "old" playback will be overlaying other playbacks on the new page until it is switched off.
Release on Page Change	With this entry selected, the console will automatically release all playbacks on the old fader page when the active page is changed. Playbacks assigned to the template page will not be released.
Keep Active in Background	When this option is selected the playbacks will be kept running "in the background".

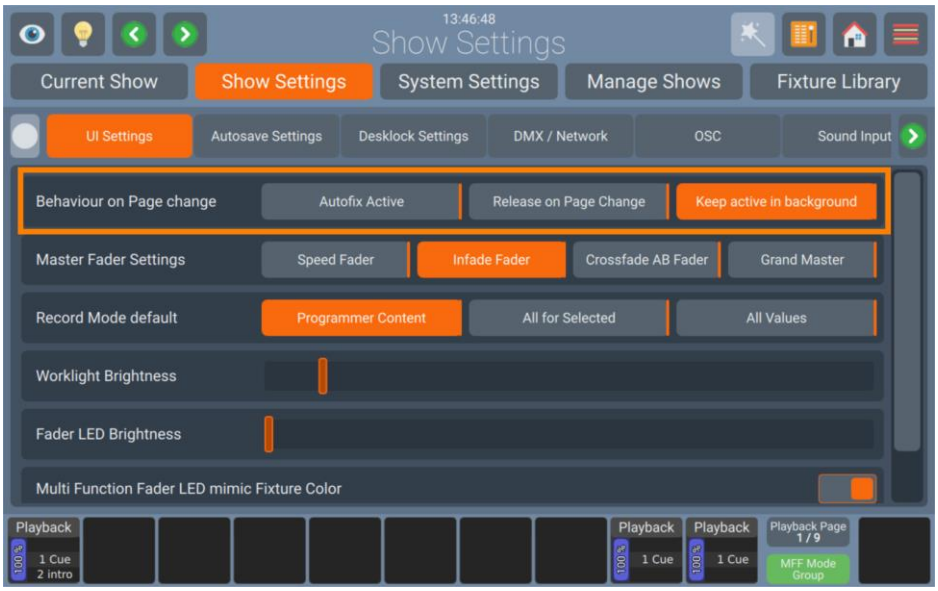


Fig. 51: Show Settings – Playback Page Change Settings

Master Fader Settings

The Master Fader Settings specifies the behavior of the Master Playback Fader. The following table outlines the different Settings and what they do:

Button	Function
Speed Fader	The Master Fader will act as a Speed Fader for the selected Playback, altering all timings of the assigned Playback, whereas 100% is the speed as programmed – and everything below is slowed down relatively.
Infade Fader	The Master Fader will continually crossfade the output of all parameters that are set to "Fade" within the library.
Crossfade AB Fader	With this option the Master Fader can be used to crossfade from Cue to Cue in a Playback, a very common setting when controlling a theatric play.
Grand Master	The Master fader will act as a master dimmer fader for all fixtures patched on the console.

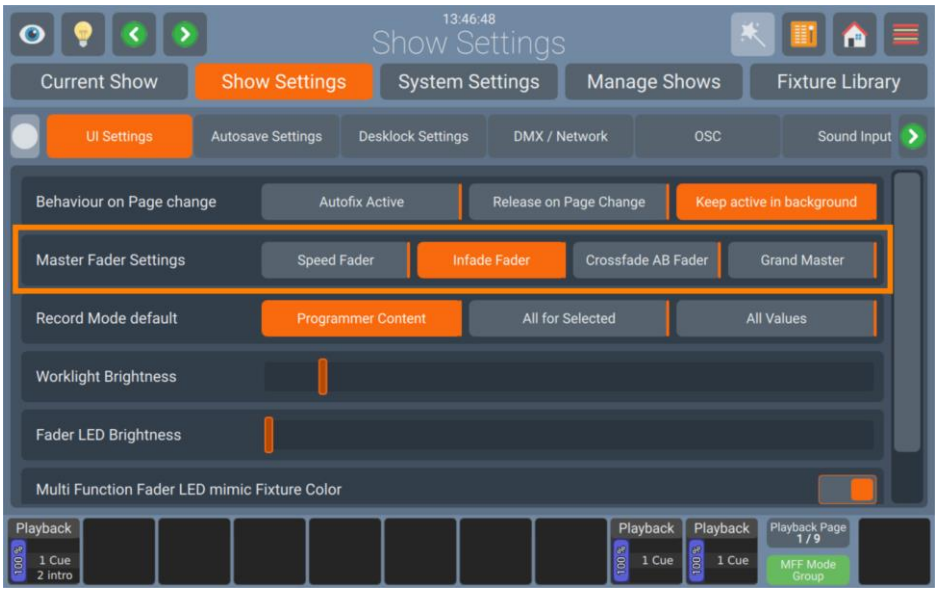


Fig. 52: Show Settings – Master Fader Settings

Record Mode default.

Define the default for the values that should be recorded by the console when recording items. You can choose between the following record modes:

Button	Function
Programmer Content	Will record all parameters that are touched.
All for Selected	Will record all parameters of the selected fixtures, no matter if they are touched or not.
All Values	Will record every parameter for every fixture on the console.

When recording, you may also click on the Command in the title bar to change this value for this record action.

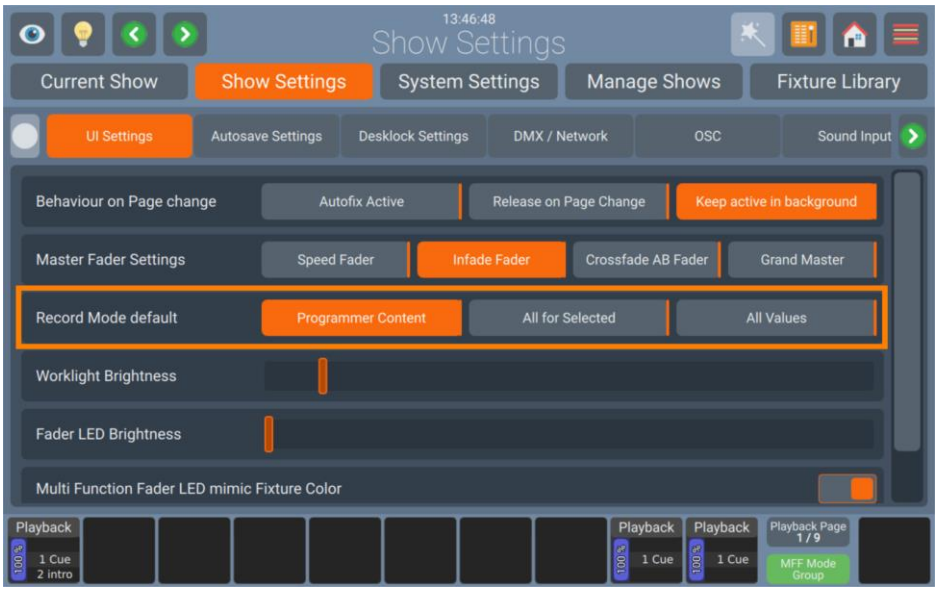


Fig. 53: Show Settings – Record Mode default

Work light brightness

The Work light is the LED strip in front of the console, which may be used to light up running orders or other documents. It can also be useful to light up an USB-Keyboard.

To adjust the brightness, please do as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** Tab.
03) Select the **UI Settings** page and scroll down to **Worklight Brightness.**
04) Adjust the **On-Screen Slider** to your liking.

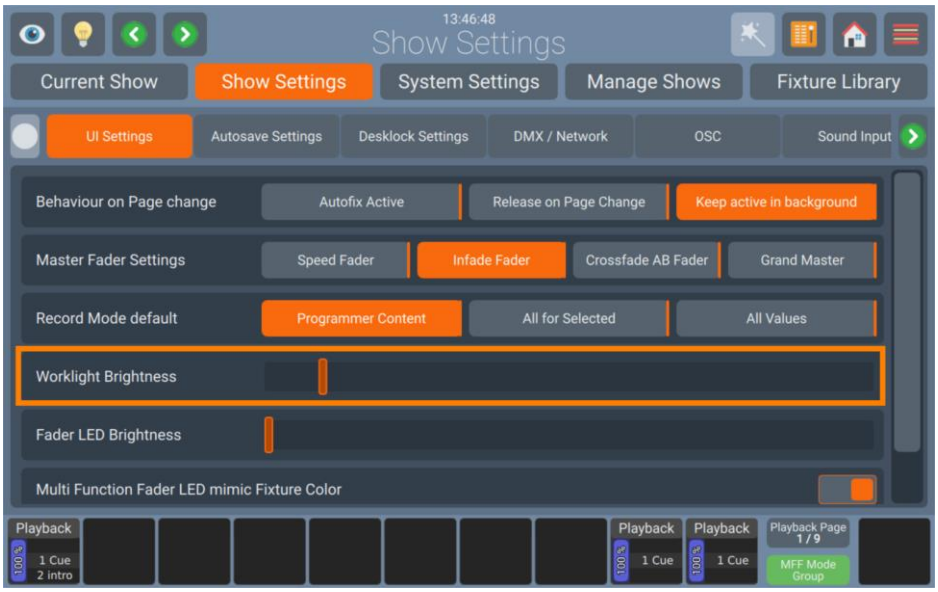


Fig. 54: Show Settings – Work light Brightness

Fader LED brightness

The Fader LEDs may also be adjusted in brightness.

To adjust the brightness, please do as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** Tab.
03) Select the **UI Settings** page and scroll down to **Fader LED Brightness.**
04) Adjust the **On-Screen Slider** to your liking.

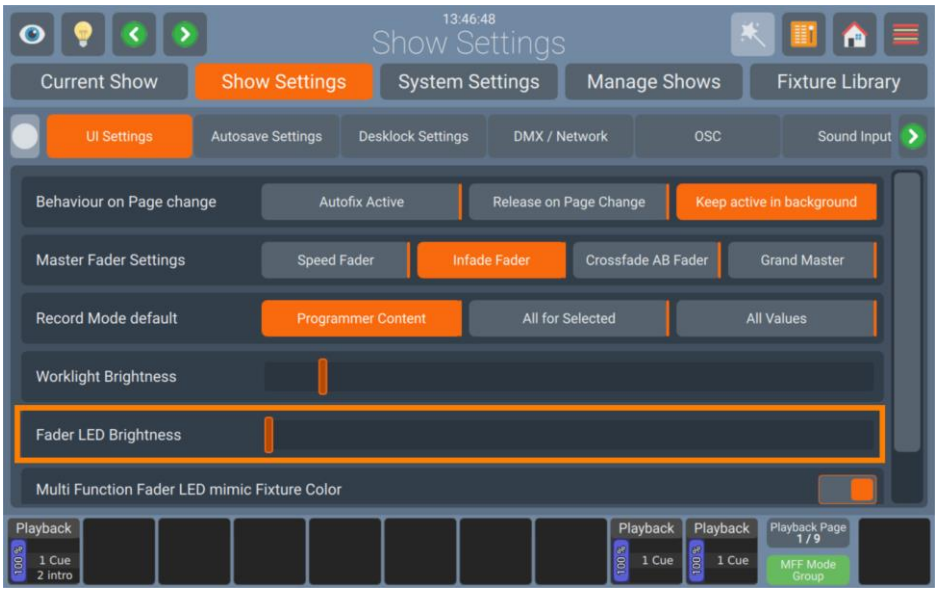


Fig. 55: Show Settings – Maximum Fader LED Brightness

Multi-Function-Fader LED Mimic Fixture Color

The Multi-Function-Fader LEDs can either just indicate the current Multi-Function Fader Mode and selection – or in Fixture mode indicate the current fixture color. By default, the LEDs always light up in the color of the selected Fader Mode.

Please note that this setting only affects the LEDs behavior when the Multi-Function Faders are set to Fixture Mode.

To change the behavior of the LEDs:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** Tab.
03) Select the **UI Settings** page and scroll down to **Multi-Function Fader LEDs mimic Fixture Color.**
04) Toggle the **On-Screen Switch** to turn Fixture Color indication on or off.

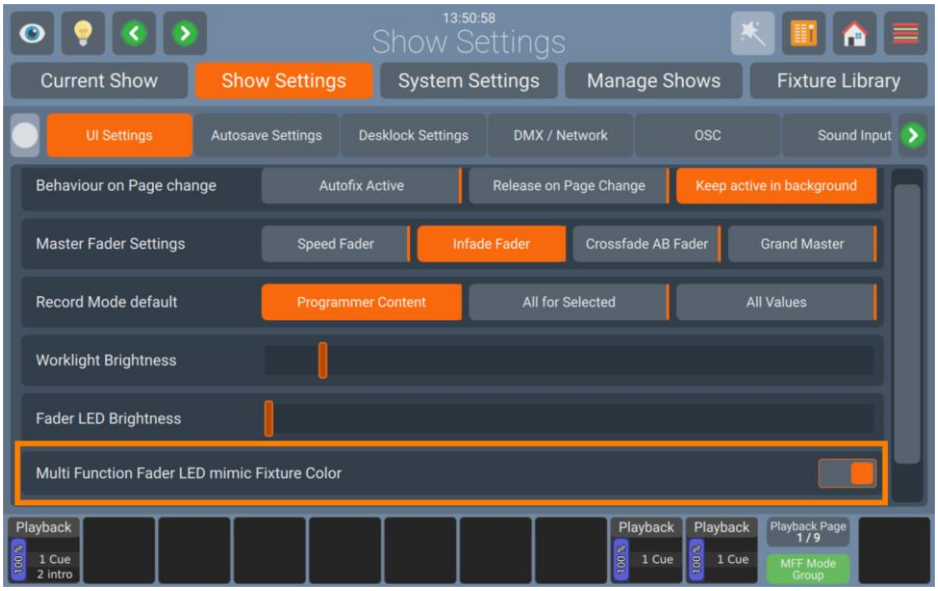


Fig. 56: Show Settings – MFF Mimic Fixture Color

Enable Template Page

The Template page can be disabled temporarily. This will show underlaying playbacks on any given page and allow the user to record Items to faders which would otherwise be occupied by a template page fader.

To enable or disable template page:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** Tab.
03) Select the **UI Settings** page and scroll down to **Enable template page.**
04) Toggle the **On-Screen Switch** to enable or disable the template page.

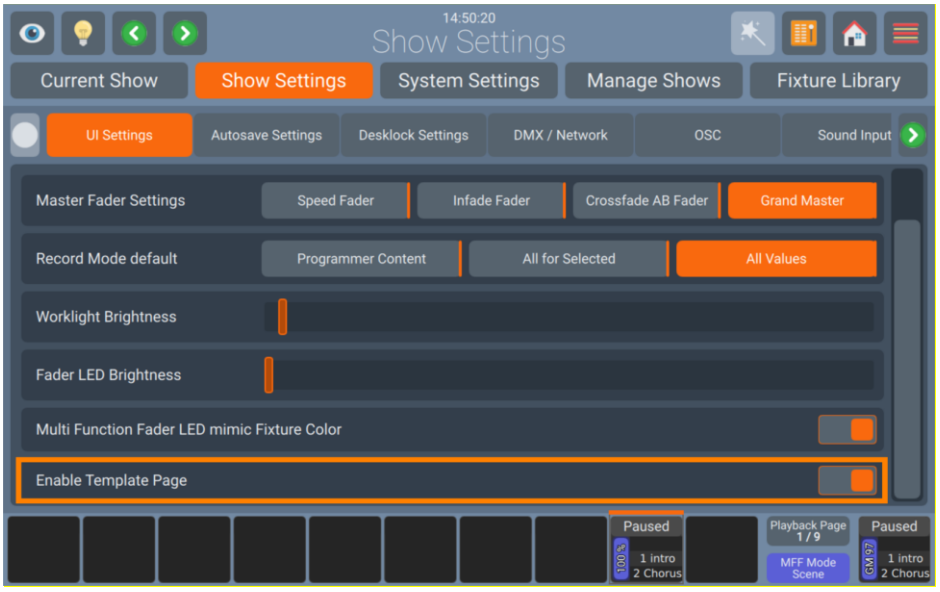


Fig. 57: Show Settings – Enable template page

8.4.2.2. Autosave settings

LAMPY automatically saves your show file every 10 minutes. If desired, you may disable this Autosave functionality and change the time interval to automatically save your show.

If you would like to turn Autosave on/off. Or change the time interval, please do as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** Tab.
03) Select the **Autosave Settings** page.
04) Toggle the **On-Screen switch** to either turn Autosave on or off.
05) If desired, change the interval time to execute the autosave function.

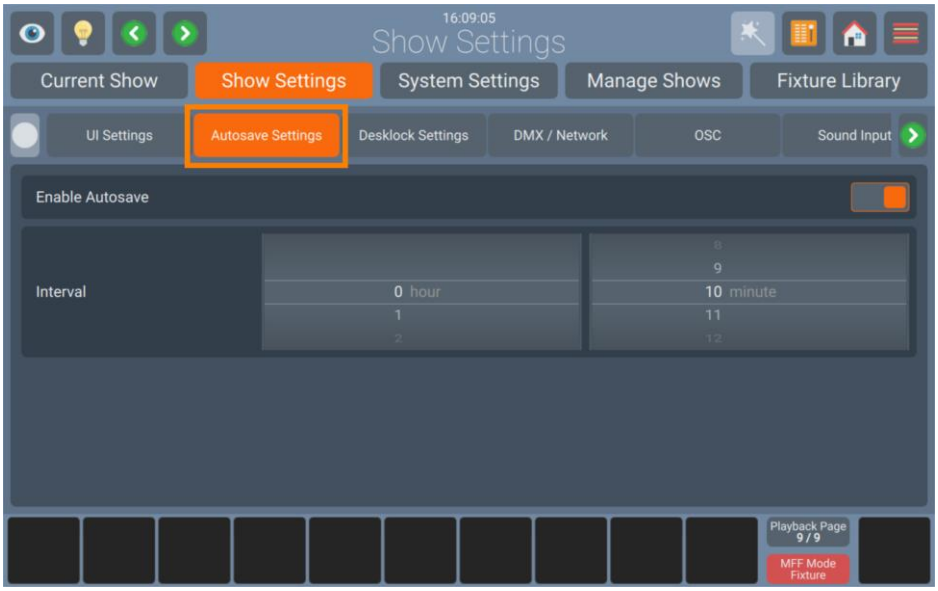


Fig. 58: Show Settings – Autosave

8.4.2.3. Desklock Settings

Lock desk on Auto-Start

You can set the LAMPY to lock the desk when is been reboot while a show has been played.

To enable this feature, please do as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** Tab.
03) Go to **Desklock** Settings page.
04) Toggle the **On-Screen switch** to either turn Lock desk on Auto-Start on or off.

Change Desk lock Pin

The LAMPY gives you the option to lock your desk and allow only authorized persons to access and unlock the console. It is stored in the show file, you will need to set it for each show separately.

To learn how to lock the console, please see section 8.11, Locking the Console on page 204

To change the default PIN Code, please do as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** tab.
03) Go to **Desklock** settings page.
04) Scroll down to **Change Desk lock Pin.**
05) Enter your old PIN code into the **Current PIN** text field (only if you previously changed the PIN).
06) Enter the new PIN in the **New PIN** and **Confirm New PIN** text-fields.
07) Click on **Change PIN**.

The Default PIN is 0000 (four times zero). If you set but forgot the PIN Code, please contact Showtec Support for the Master PIN which may also be used to change the PIN to a new code.

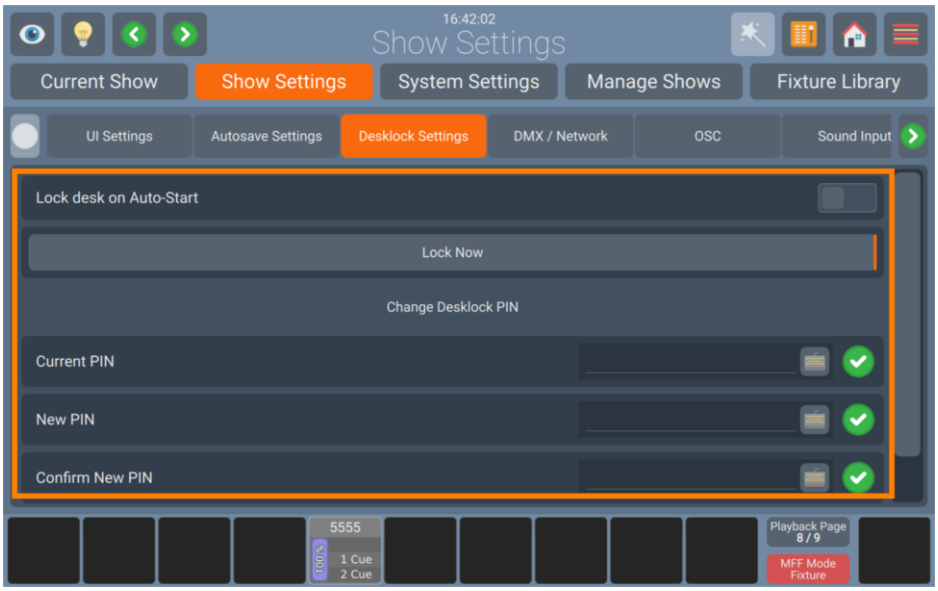


Fig. 59: Show Settings – Desk lock PIN

8.4.2.4. DMX / Network

Art Net and sACN are two popular protocols to transmit DMX Data via Ethernet. LAMPY supports both protocols and enables you to configure both independently.

Note: You need a LAMPY DNGL, which may be either purchased separately or comes factory installed in the 2 Universe Versions of the console.

You may enable or disable DMX Output via network protocols as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** Tab.
03) Scroll down to **Output Settings.**
04) Set the **On-Screen switches** for Art Net or sACN to on or off.

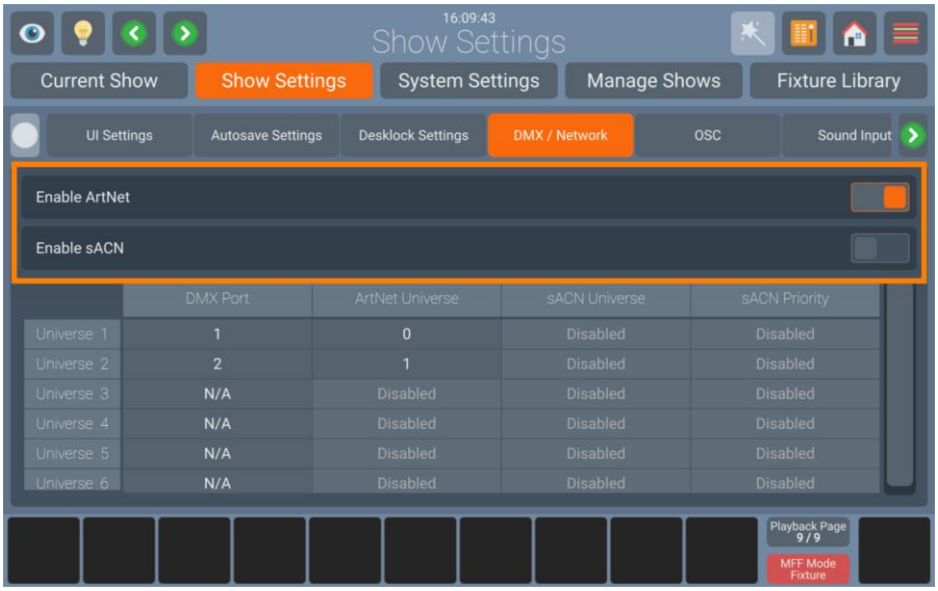


Fig. 60: Show Settings – DMX Output Configuration

Setting Art Net or sACN Universe and Priority

If you wish to change the Art Net and / or sACN Mapping, please double or long-click in the corresponding cell of the DMX Output Mapping Table.

A dialog will open asking you to input a new Universe or Priority Number. Press **Enter** when done.

The DMX Mapping Table Indicates which ArtNet / sACN Universes are currently being output depending on Universe unlock/ Dongle Status.

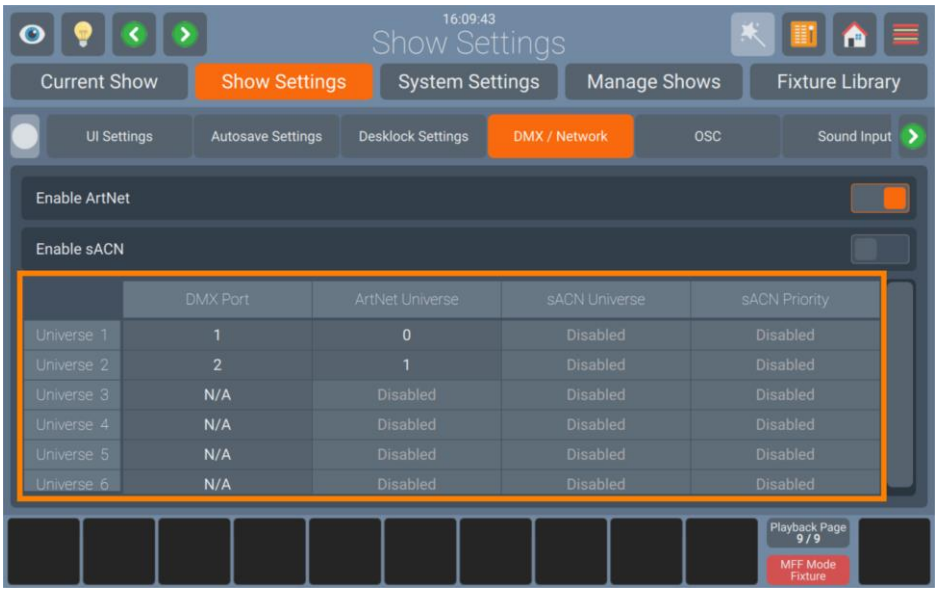


Fig. 61: Show Settings – DMX Mapping Table

8.4.2.5. OSC

Enable Open Sound Control (OSC) Input

In case you would like to remote control your LAMPY console using an OSC Remote (such as TouchOSC for Android or iOS), you need to enable the OSC Input.

The console shows the necessary port numbers for OSC in the OSC Group Box after activation. You can also see incoming messages and the number of connected clients.
The QR Code on the right brings you directly to the TouchOSC Website.

The LAMPY OSC Protocol specification may be found here: 9.1, Open Sound Control on page 205.

To enable or disable OSC, please do the following:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** tab.
03) Go to **OSC** page.
04) Toggle the **On-Screen switch** to either turn OSC on or off.

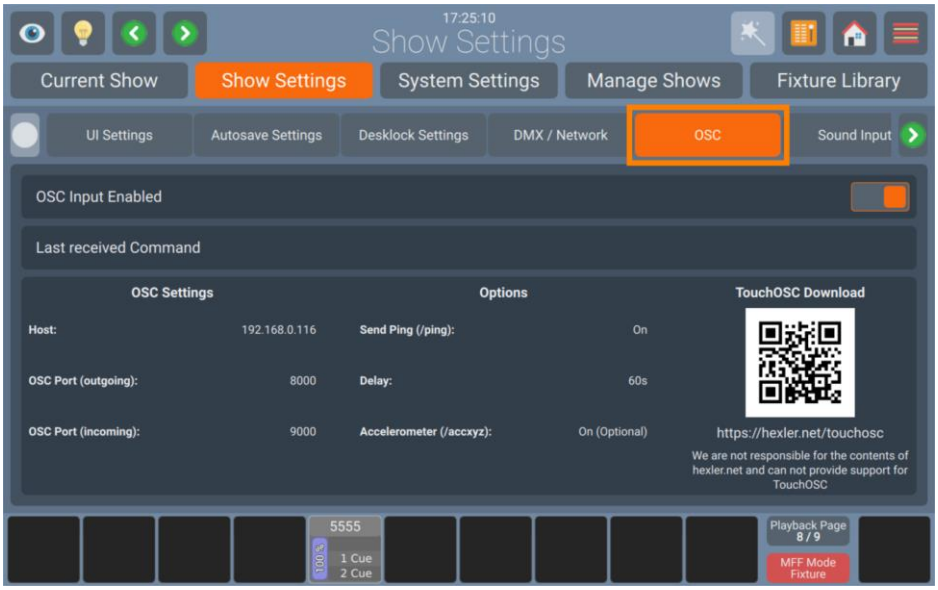


Fig. 62: Show Settings – Open Sound Control (OSC)

8.4.2.6. Enable and configure the Sound Input

You may use any LINE level audio source to trigger cues and chases using the LAMPY.

The sound input is analyzed in Bass, Mid and High levels which are individually configurable in their individual levels.

You may configure the sound input threshold as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** tab.
03) Click on **Sound Input.**
04) Make sure the Sound Input **On-Screen switch** is set to enable. Sound Inputs can be activated/deactivated independently for Bass, Mid and High.
05) Connect your Audio Signal to the 6.3mm Jack on the Rear of the Console. For best results use a symmetric signal.
06) Play back Audio from your Audio source at the intended volume.

Adjust the **Bass**, **Mid** and **High** Sliders. The orange lines in the Input settings indicate the level the sound signal must reach to be triggered (top line) and the sound signal must fall below (bottom line) to be able to be triggered again.

Fig. 63: Show Settings – Sound Input

8.4.2.7. MIDI

Enabling the MIDI Input

You may remote control the LAMPY Console from any MIDI Device that allows to configure its MIDI Output. Once MIDI Input is enabled, the console will display any incoming MIDI Messages in the Status text field within the MIDI Group Box.

MIDI Input does not need to be enabled in order to use the Timecode Input.

To learn more about the LAMPYs MIDI Protocol, please read section 9.2, MIDI Input on Page 210

You may enable or disable the MIDI input as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** tab.
03) Go to **MIDI** page.
04) Set the MIDI **On-Screen switch** to on or off.

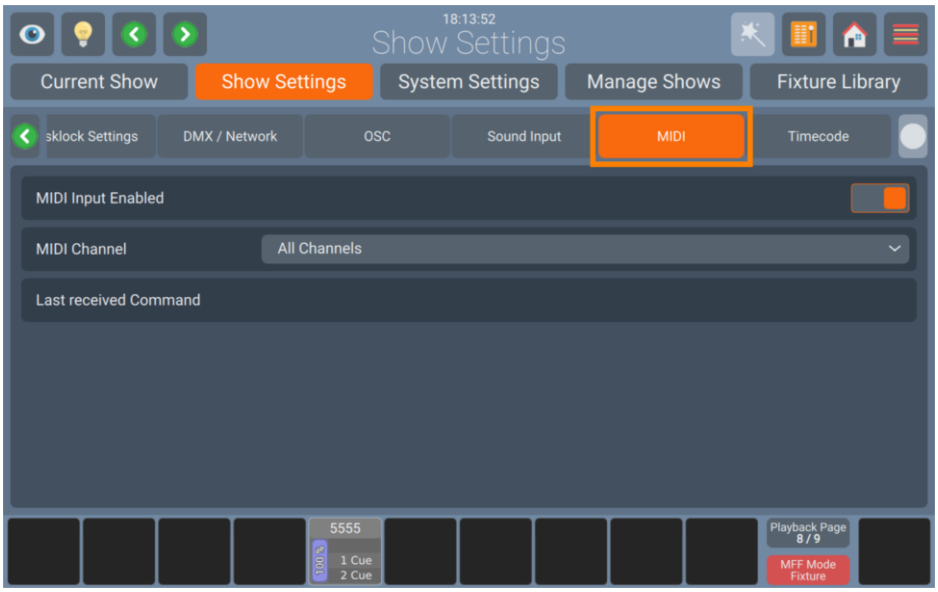


Fig. 64: Show Settings – MIDI Input

Setting the MIDI Channel

You may set the MIDI Channel by selecting it from the Drop-Down Menu shown.

8.4.2.8. Timecode

LAMPYs ability to synchronize Playbacks to an incoming Timecode signal may be used to keep your lighting and audio show in sync.

For now, timecode is only supported via MIDI. The LAMPY automatically recognizes the framerate of your incoming timecode signal and displays the current timecode status within the Timecode Input Group Box. No further settings are required.

You may enable or disable the timecode input as follows:

01) Open the **Setup Menu.**
02) Change to the **Show Settings** tab.
03) Click on **Timecode.**
04) Set the Timecode **On-Screen switch** to on or off.

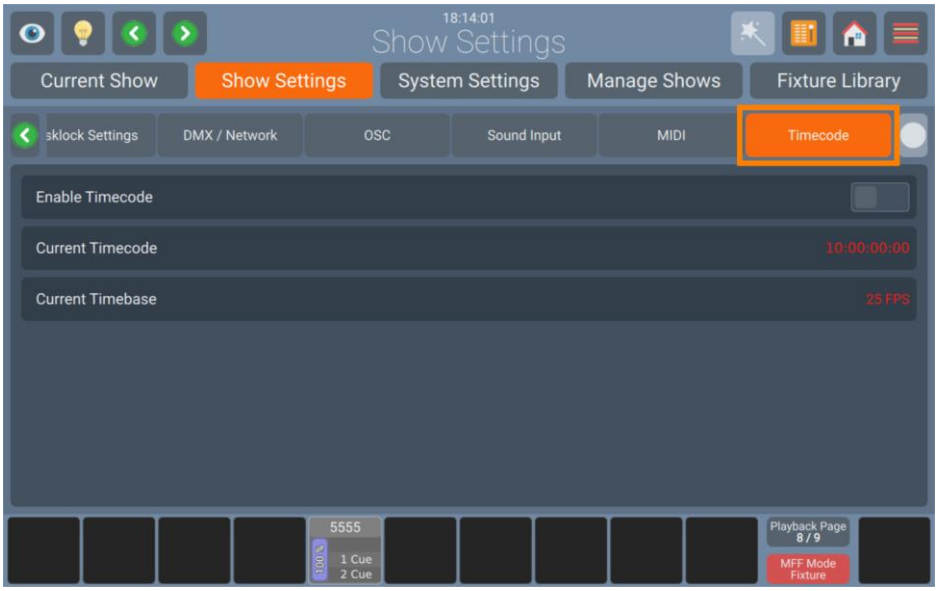


Fig. 65: Show Settings – Timecode Input

8.4.3. System Settings Tab

The System Settings tab contains all system-wide settings for the console, such as Keyboard Layout, Date or Time, Network Settings and more.

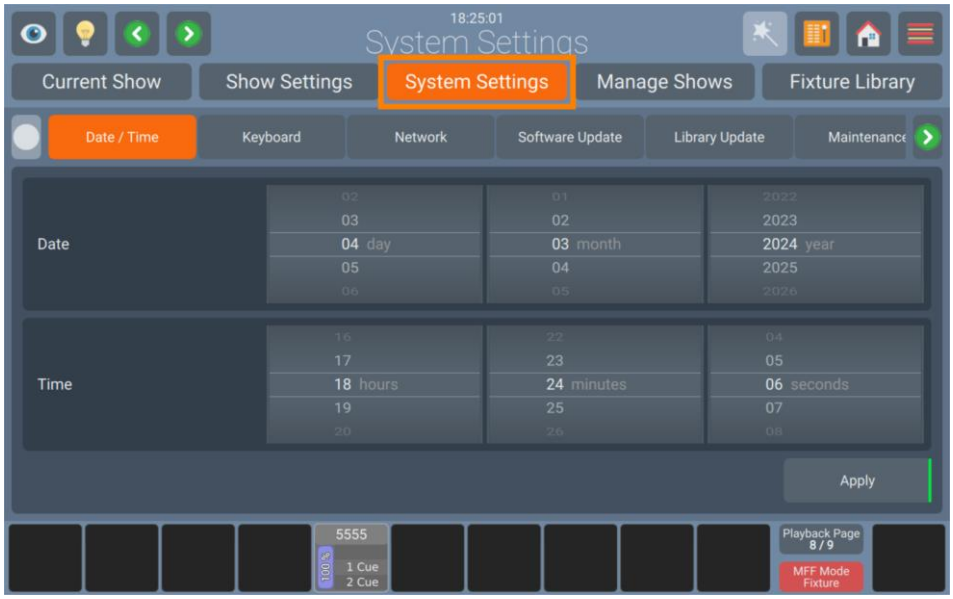


Fig. 66: The System Settings Tab

8.4.3.1. Date and Time

Please follow these steps to set the consoles Date and Time:

01) Open the **Setup Menu.**
02) Change to the **System Settings** tab.
03) Click on **Date / Time.**
04) Select the appropriate Date and Time.
05) Click on **Apply** when done.

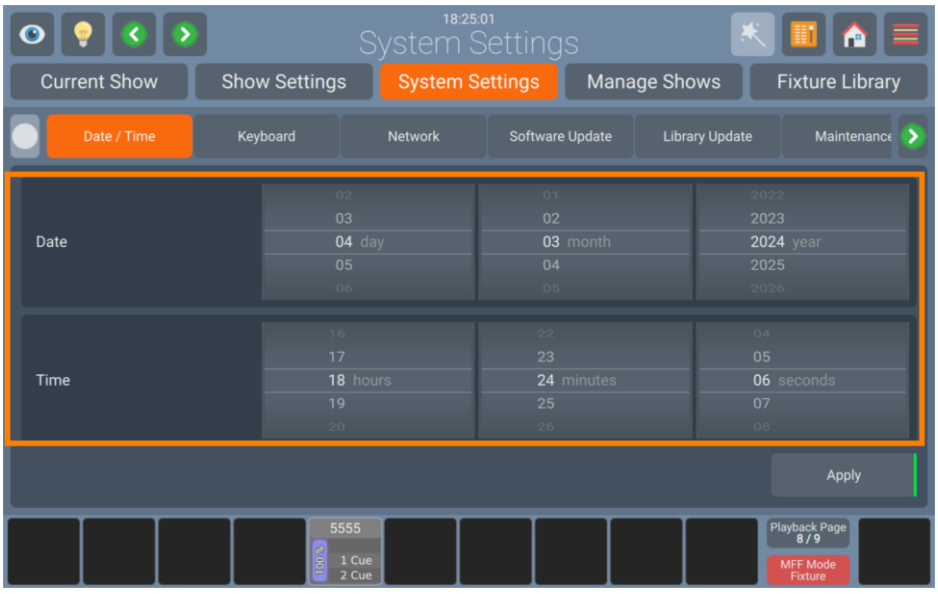


Fig. 67: System Settings – Set Date / Time

8.4.3.2. Keyboard

LAMPY offers the possibility to setup the Keyboard Layout of the external USB Keyboard, and of the virtual keyboard.

Note: The Keyboard Layout Setting does not affect the On-Screen Keyboard and vice versa.

Please follow these steps to do so:

01) Open the **Setup Menu.**
02) Change to the **System Settings** tab.
03) Click on **Keyboard.**
04) Select the appropriate Keyboard Layout from the **List** to change the USB keyboard layout.
05) Select the desired Virtual Keyboard Layout from the **drop-down menu.**
06) Type to test layout your changes on the text field.

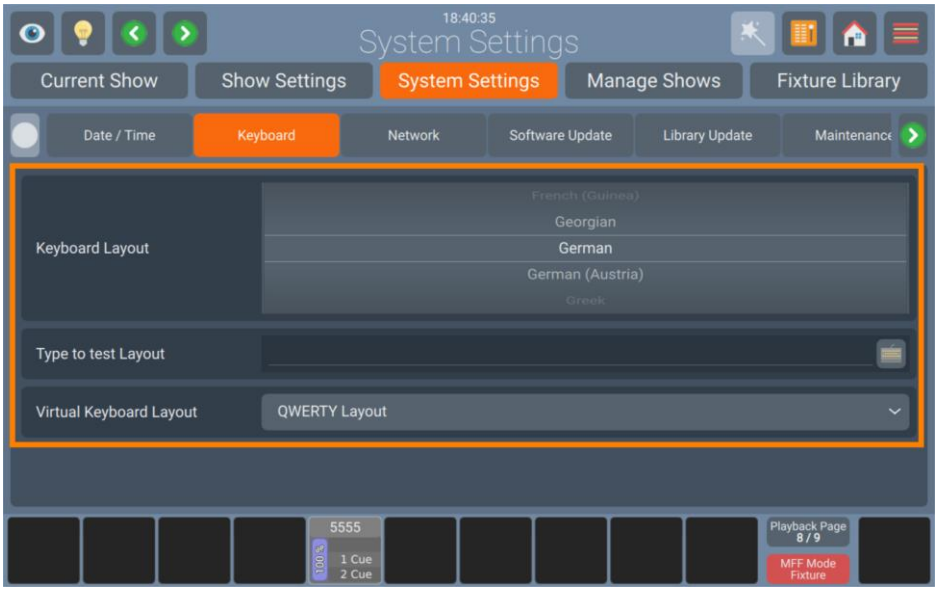


Fig. 68: System Settings – Set Keyboard Layout

8.4.3.3. Network

Please follow these steps to set up the consoles network interface:

01) Open the **Setup Menu.**
02) Change to the **System Settings** tab.
03) Click on **Network.**

Fig. 69: System Settings - Network Settings

Dynamic Configuration

For a dynamic IP Address using a DHCP Server (Most Routers have a DHCP Server built in. Please refer to your device Documentation) turn on the **DHCP enabled** on-screen **switch**.

Static Configuration

For a static IP turn off the **DHCP enabled** on-screen **switch** and enter at least IP Address and Subnet Mask on the text field.

You only need to enter a Gateway / DNS Server should you wish to access the internet for online Library or Software Updates.

8.4.3.4. Software

In this page you will be able to check the software version currently installed, Update the OS and read the Release Notes of the Installed Software Version.

You can Update the Console OS via USB or Online.

Note: The Software update process reboots the console at the end. The show file will automatically be saved.

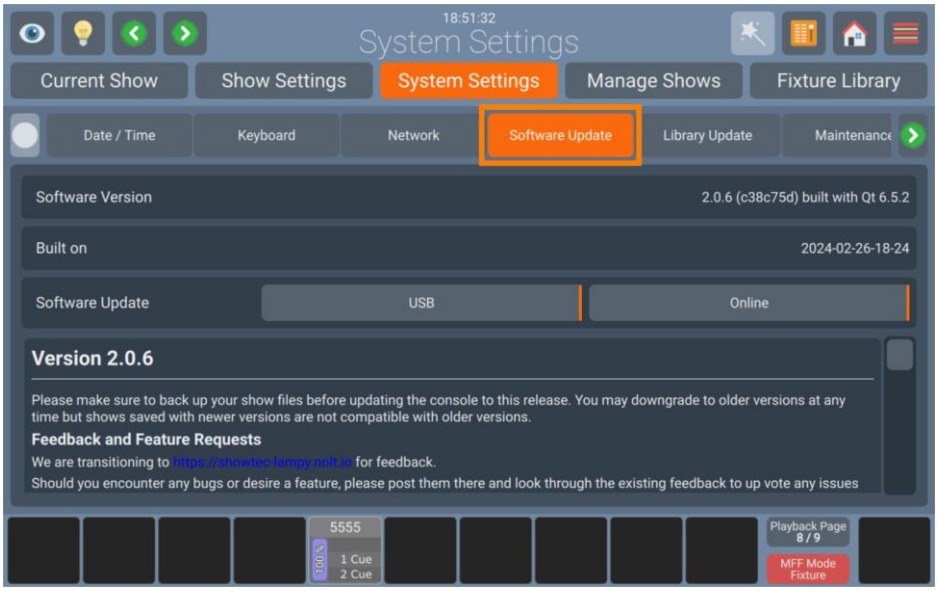


Fig. 70: System Settings – Operating System

Updating the LAMPY using USB:

01) Download the latest Software Version from the Highlite Website. Make sure your show is saved.
02) Make sure the file ending is **.ssu**. If the Update is delivered in zip format, unzip it first.
03) Copy the .ssu file to the showtec/software_update folder on an USB Stick.
04) Open the **Setup Menu.**
05) Change to the **System Settings** Tab.
06) Click on **Software Update.**
07) Click on **USB**.
08) A wizard will walk you through the update process. The console will restart automatically after the update is completed successfully.

Updating the LAMPY using the Online Update functionality:

01) Make sure the console is connected to the Internet and your show is saved.
02) Open the **Setup Menu.**
03) Change to the **System Settings** Tab.
04) Click on **Software Update.**
05) Click on **Online**.
06) A wizard will walk you through the update process. The console will restart automatically after the update is completed successfully.

8.4.3.5. Library Update

There are two ways to Update the Factory Fixture Library. Via USB or Online.

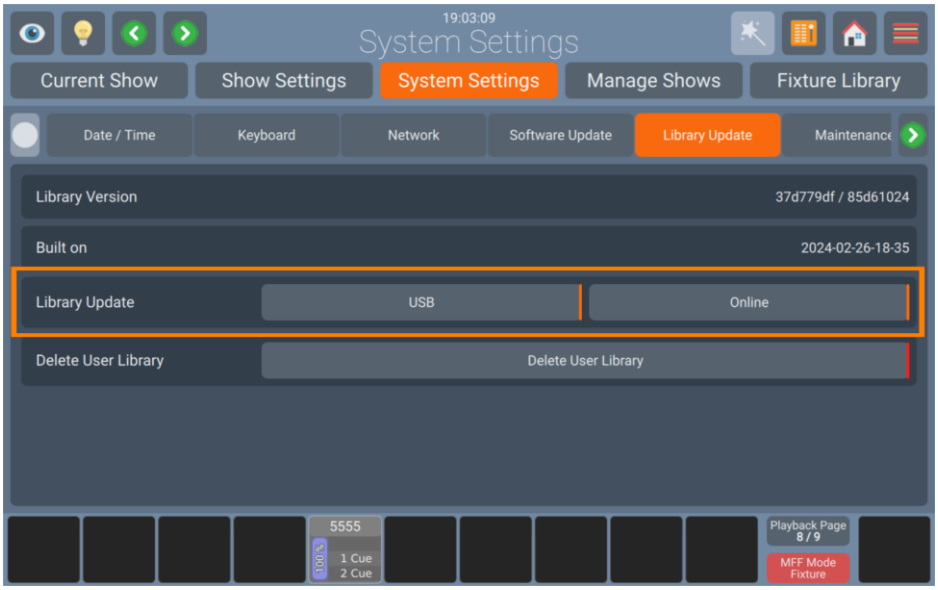


Fig. 71: System Settings – Factory Fixture Library

Updating the Library using USB:

01) Download the latest Library Version from the Highlite Website.
02) Make sure the file ending is **.faclib**. If the Update is delivered in zip format, unzip it first.
03) Copy the .faclib file to the showtec/factory_library folder on an USB Stick.
04) Open the **Setup Menu.**
05) Change to the **System Settings** tab.
06) Click on **Library Update.**
07) Click on **USB.**
08) A wizard will walk you through the update process. The console reboots automatically after the update is completed.

Updating the Library using the Online Update functionality:

01) Make sure the console is connected to the Internet.
02) Open the **Setup Menu.**
03) Change to the **System Settings** tab.
04) Click on **Library Update.**
05) Click on **Online.**
06) A wizard will walk you through the update process. The console reboots automatically after the update is completed.

Deleting the User Library:

01) Open Setup Menu.
02) Change to the **System Settings** tab.
03) Click on **Library Update.**
04) Click on **Delete User Library.**
05) A confirmation dialog will appear. Click **Yes, Delete!** To confirm. The console reboots automatically after the update is completed.

8.4.3.6. Maintenance

Testing the Frontpanel Hardware

If you ever have the feeling buttons, faders or encoders are not responding properly, or that a LED may be broken, it could be worth testing the Frontpanel for proper function. To do so:

01) Open the **Setup Menu.**
02) Change to the **System Settings** tab.
03) Click on **Maintenance.**
04) Click on **Frontpanel Test.**
05) Test the front panel hardware. All button presses, encoder and fader movements will be shown in the window. The LEDs on the frontpanel will cycle through multiple colors.

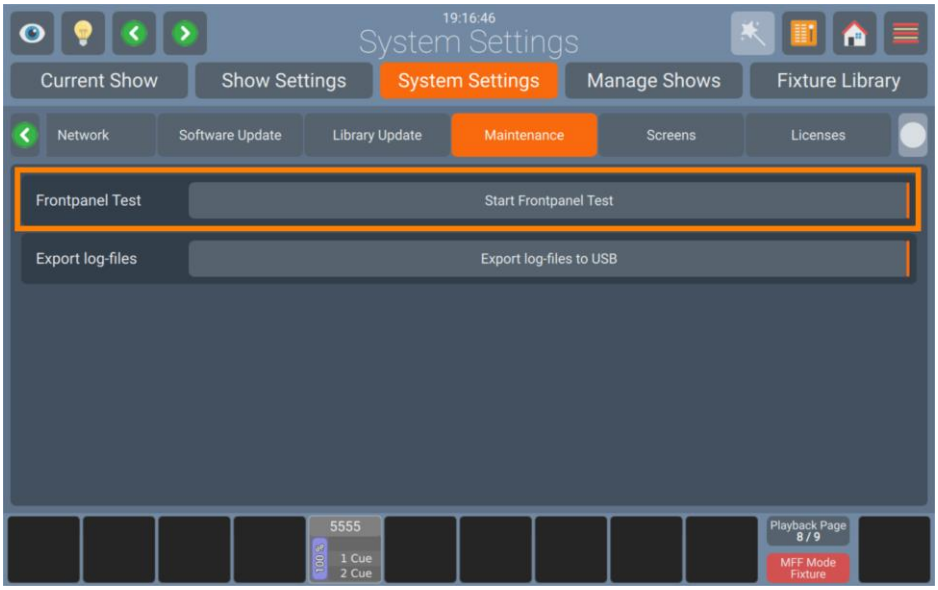


Fig. 72: System Settings – Frontpanel Test Button

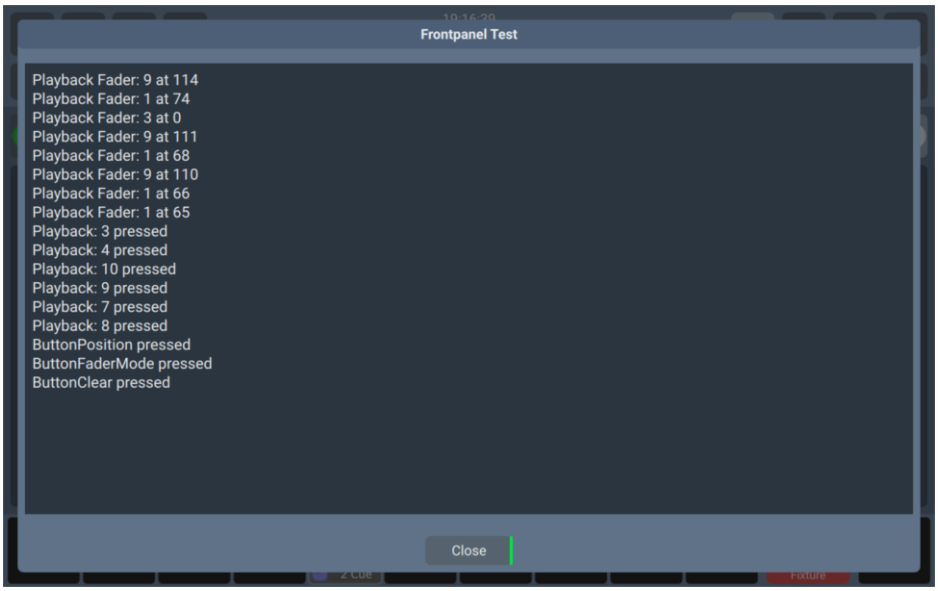


Fig. 73: System Settings – Frontpanel Test Dialog

Exporting Log Files

Log files can be used to identify errors in the show file, in libraries or other parts of the software. It contains useful information. To export the log files:

01) Open the Setup Menu.
02) Change to the **System Settings** Tab.
03) Click on **Maintenance**
04) Click on **Export Log-files to USB** button.

Note: Log files are deleted when rebooting and shutting down the console. Make sure to export log files directly after an abnormality occurred.

8.4.3.7. Screens

Whitin the **Screens** page, you may see the resolution of the internal and any external screen connected. You may as well calibrate them.

Calibrate Internal Screen

Should the internal touchscreen become misaligned and not properly follow your clicks, you may need to calibrate it. In this case the following steps need to be taken:

01) Open the **Setup Menu.**
02) Change to the **System Settings** Tab.
03) Click on **Maintenance.**
04) Click on **Calibrate Internal Screen.**
05) A wizard will walk you through the calibration process.

Alternatively, you can use the [Shift]+ [Magic Wand] buttons on the Frontpanel and keep them pressed for two seconds to start the calibration process.

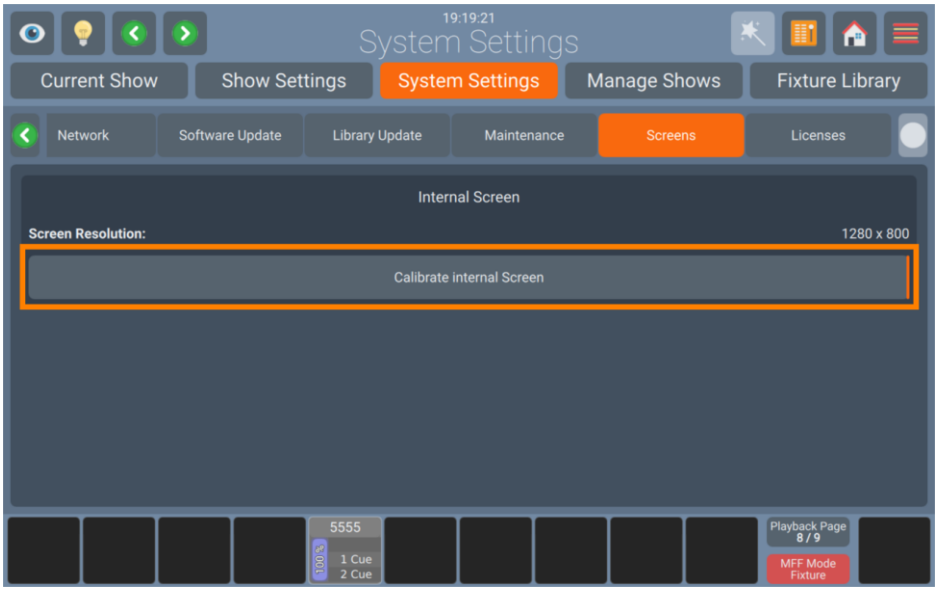


Fig. 74: System Settings – Calibrate Internal Touchscreen

Calibrating the External Touch Screen

After connecting a secondary touchscreen, it is usually misaligned and does not properly follow your clicks. In this case you will need to calibrate it. To do that, the following steps need to be taken:

01) Open the **Setup Menu.**
02) Change to the **System Settings** Tab.
03) Click on **Maintenance.**
04) Click on **Calibrate External Screen 1.**
05) A wizard will walk you through the calibration process.

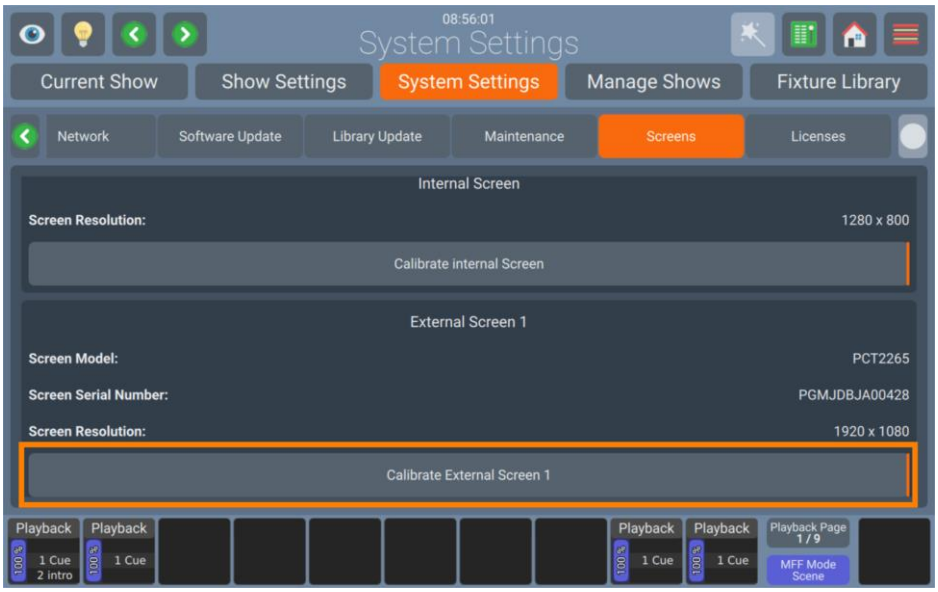


Fig. 75: System Settings – Calibrate External Touchscreen

8.4.4. Manage Shows Tab

The Manage Shows Tab may be used to Import, Export or Delete Shows. Additionally, it may be used as a shortcut to open existing shows. It can be accessed from within the Setup Menu.

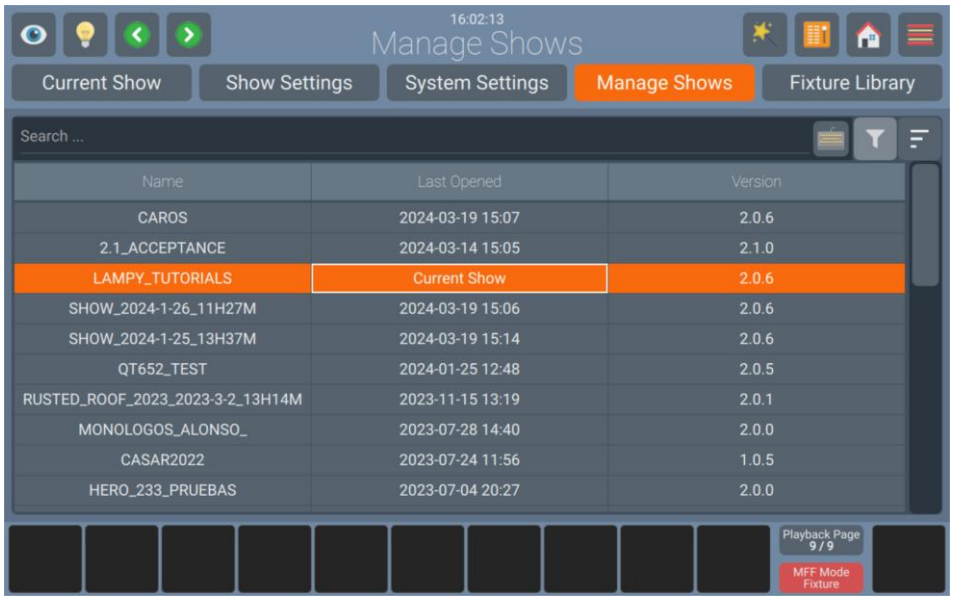


Fig. 76: The Manage Shows Tab

8.4.4.1. Manage Shows Action Dialog

The Manage Shows Action Dialog provides all functionality to work with the Manage Shows tab. It may be opened by pushing the **Magic Wand** Button from within the Manage Shows tab. Some of the actions are only available if only one show is selected within the Manage Shows Table.

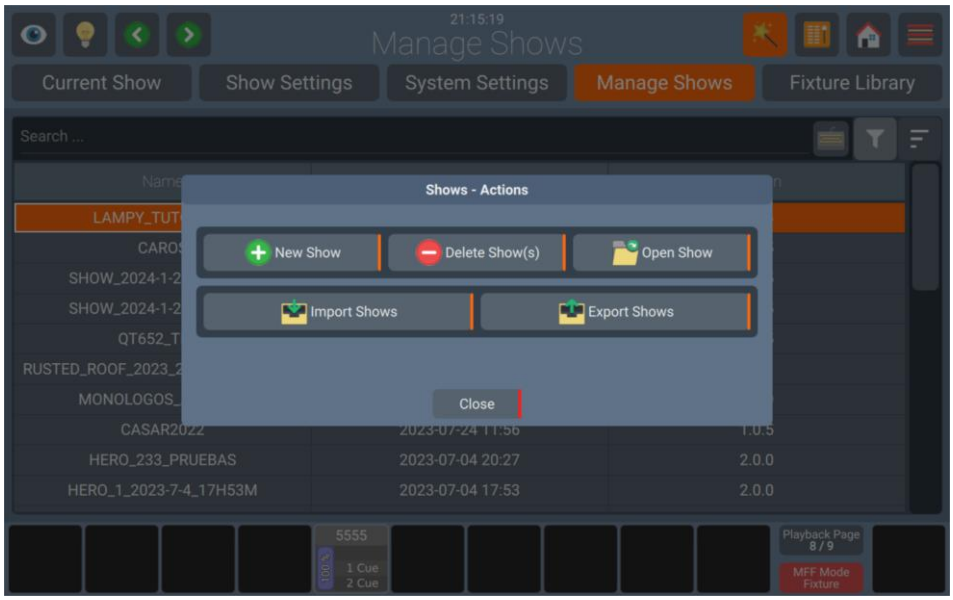


Fig. 77: Manage Shows - Action Dialog

Button	Function
New Show	Is used to start a new Show file.
Delete Show	Is used to delete selected Show files.
Open Show	Is used to open the selected Show file.
Import Shows	Is used to import Shows from USB.
Export Shows	Is used to export Shows to USB.

Starting a new Show

To start a new show from within the Manage Shows tab, open the Action Dialog by clicking on the **Magic Wand** Button.

Select **New Show** from the Action Dialog.

Deleting one or multiple Shows

Should you wish to delete one or more shows from the console memory, proceed as follows:

01) Select one or more shows from within the Manage Shows tab.
02) Open the Action Dialog by pressing the **Magic Wand** Button.
03) Select **Delete Show(s)** from the Action Dialog.

Opening a Show

Should you wish to open a show from within the Manage Shows Tab, proceed as follows:

01) Select one show from within the Manage Shows tab list of shows.
02) Open the Action Dialog by pressing the **Magic Wand** Button.
03) Select **Open Show** from the Action Dialog.

Importing one or more Shows from USB

Should you wish to import one or more shows from a USB Stick, proceed as follows:

01) Make sure the show files are within the showtec/shows folder on your USB Stick.
02) Open the Action Dialog from within the Manage Shows Tab by pressing the **Magic Wand** Button.
03) Select **Import Shows** from the Action Dialog.
04) A wizard will guide you through the import process.

Exporting one or more Shows to USB

Should you wish to export one or more shows from within the Manage Shows Tab, proceed as follows:

01) Select one or more shows from within the Manage Shows tab.
02) Open the Action Dialog by pressing the **Magic Wand** Button.
03) Select **Export Shows** from the Action Dialog.
04) A wizard will guide you through the export process.

8.4.5. Fixture Library Tab

The Fixture Library Tab may be used to Create, Edit, Import, Export or Delete Fixtures. It can be accessed from within the Setup Menu.

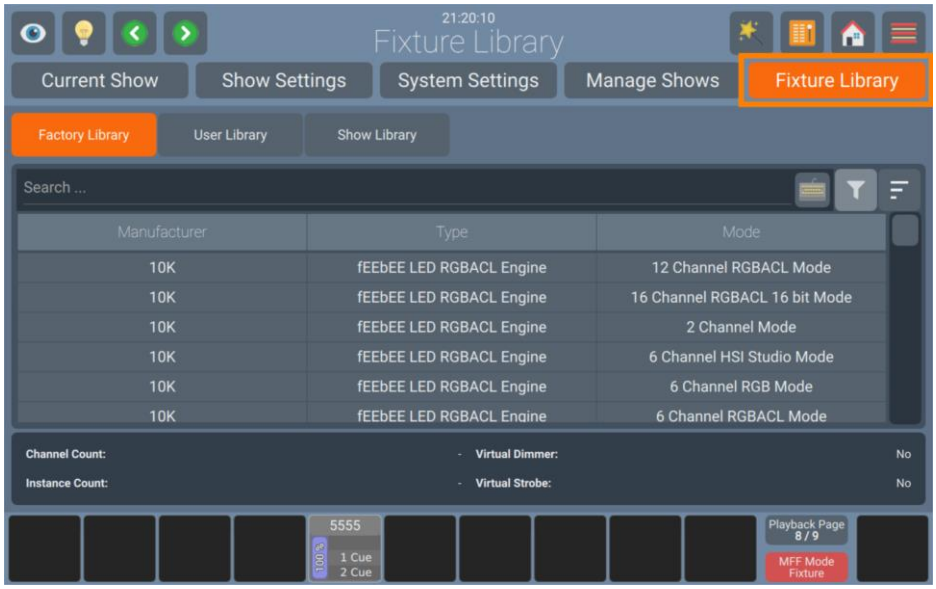


Fig. 78: The Fixture Library Tab

The Fixture Library Tab consists of 3 different Library types used in the console. These are the Factory Library, User Library and Show Library.

In short, the Factory Library is shipped with the console OS and may be updated by USB or Internet. It is read-only. The User Library contains user created and modified fixtures and is available to all shows on the console. The Show Library is unique for each show and contains the fixture types used in the show file.

To learn more about the different Library types, please see Section 6.3, Fixture Library Basics on page 22.

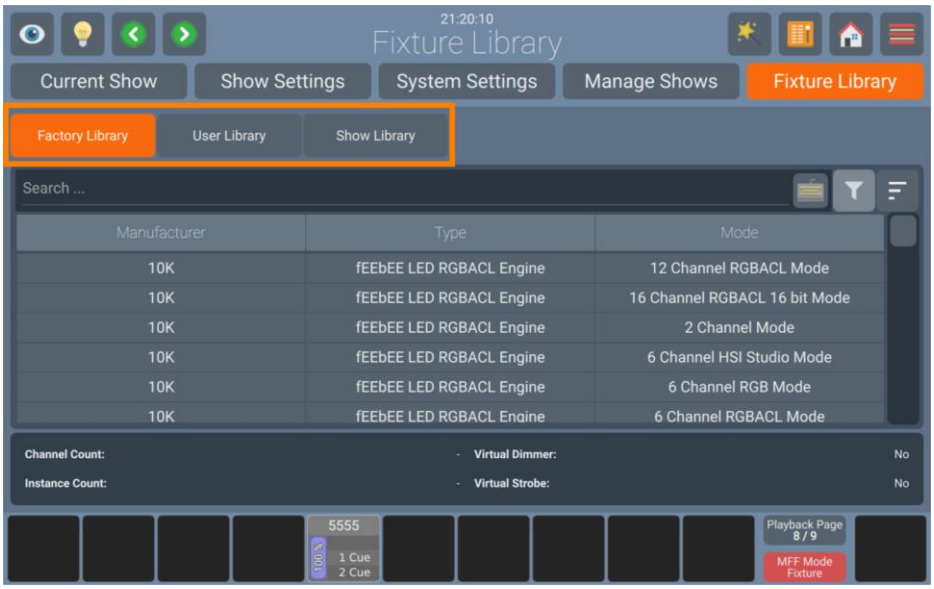


Fig. 79: The Fixture Library Types

8.4.5.1. Fixture Library Action Dialog

The Fixture Library Action Dialog provides all functionality to work with the Fixture Library tab.

It may be opened by pushing the **Magic Wand** Button from within the Fixture Library tab. Many of the actions are only available if a Fixture Library is selected within the Fixture Library Table.

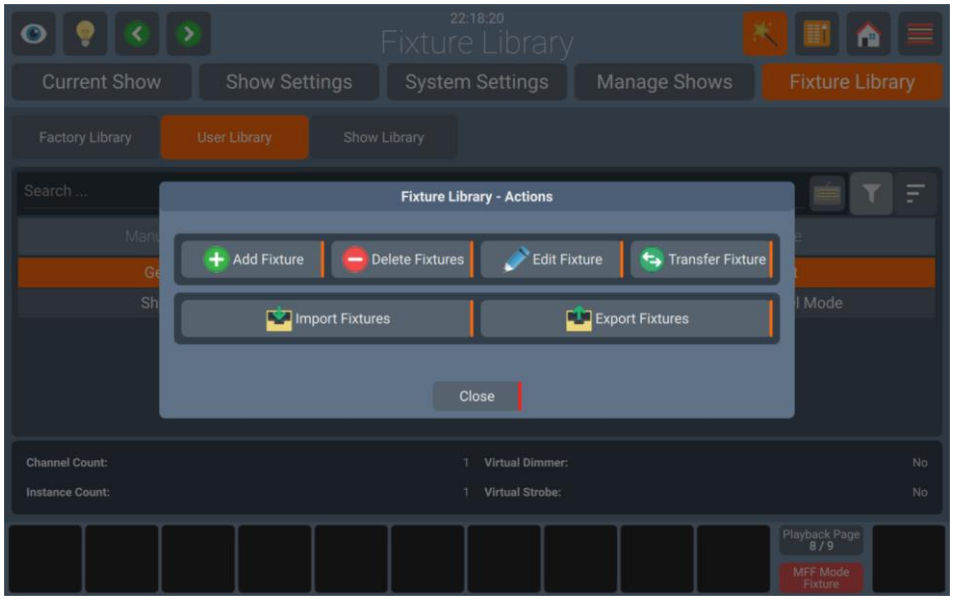


Fig. 80: Fixture Library - Action Dialog

Button	Function
Add Fixture	Is used to create a new Fixture Library (Only in User / Show Library)
Delete Fixture	Is used to delete selected Fixtures (Only in User / Show Library)
Edit Fixture	Is used to edit the selected Fixture Library (Only in User / Show Library)
Transfer Fixture	Is used to copy the selected Fixture Library between Library categories (Only to User / Show Library)
Import Fixtures	Is used to import Fixtures from USB (Only to User / Show Library)
Export Fixtures	Is used to export Fixtures to USB (From all Library Types)

Adding a new Fixture Type

01) To add a new fixture to the **User** or **Show Library**, first select the Library type from the **Fixture Library** Tab in the **Setup Menu**.
02) Open the Action Dialog by pressing the **Magic Wand** Button.
03) Click on **Add Fixture.**
04) Enter the Manufacturer Name, Fixture Type and Mode.
05) Enter the amount of DMX Channels this fixture has.
06) Click on **Ok.**
07) The Library Editor will be shown allowing you to assign functions to the channels and more.

Fig. 81: Fixture Library – Add Fixture to User Library

Deleting a Fixture Type

01) To delete a fixture type, head to the **Fixture Library** Tab within the **Setup Menu.**
02) Select the fixture type you would like to delete.
03) Open the Fixture Library Action dialog using the **Magic Wand** Button.
04) Click on **Delete Fixture**.
05) A Dialog asking for confirmation is shown. If you are sure, click on **Yes**.

Editing / Modifying a Fixture Type

01) To edit or modify a fixture type, head to the **Fixture Library** Tab within the **Setup Menu**.
02) Select the fixture type you would like to edit from the **User Library** or **Show Library**. Please note that the factory library is read-only. If you would like to edit a fixture from the factory library, you first need to transfer it to the user library. See then step by step to transfer (copying) a Fixture between Libraries below.
03) Open the Fixture Library Action dialog using the **Magic Wand** Button.
04) Click on **Edit Fixture**.
05) The Library Editor will be shown allowing you to assign functions to the channels and more.

Note: If you edit a fixture type in the User Library and are using the same fixture type in your Show, changes made in the User Library are not automatically carried over to the fixture type within the Show Library.

Transferring (Copying) a Fixture Type between Libraries

Sometimes the need to transfer fixtures between the different library types may arise. To do so, please follow these steps:

01) To transfer a fixture type, head to the **Fixture Library** Tab within the **Setup Menu**.
02) Select the fixture type you would like to transfer.
03) Open the Fixture Library Action dialog using the **Magic Wand** button.
04) Click on **Transfer Fixture**.
05) A window will be shown asking you for the destination library type.

Importing Fixture Types from USB

01) To import a fixture library from USB, head to the **Fixture Library** Tab within the **Setup Menu**.
02) Select the Library Type (**User Library** or **Show Library**).
03) Make sure the fixture library file is in the showtec/library folder on your USB Key.
04) Open the Fixture Library Action dialog using the **Magic Wand** Button.
05) Click on **Import Fixtures**.
06) A window will be shown asking you for the library file on your USB Stick.
07) Click on **Import**.

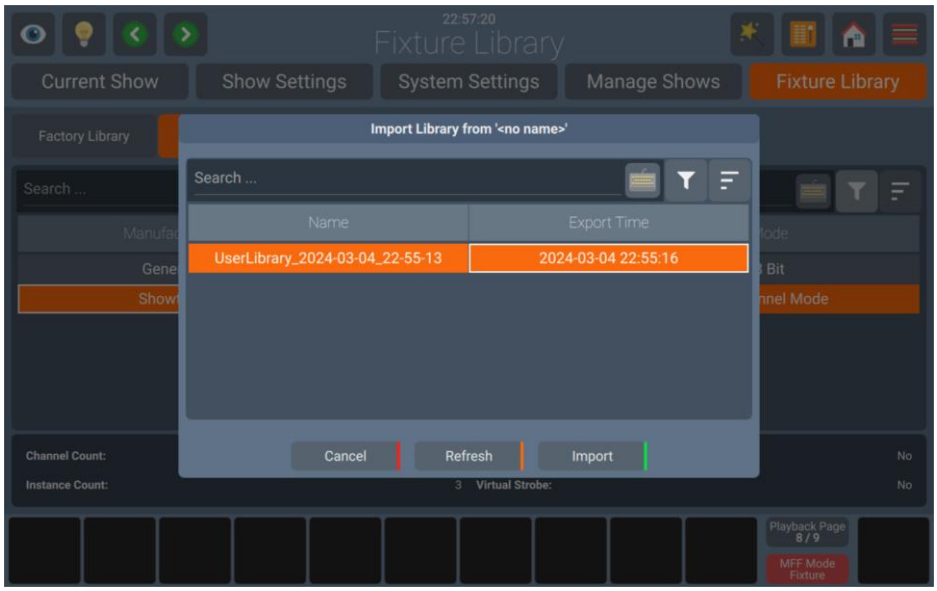


Fig. 82: Import Fixture Library – Select Library File

Exporting Fixture Types to USB

01) To export a fixture library to USB, head to the **Fixture Library** Tab within the **Setup Menu.**
02) Select the Library Type (**Factory Library**, **User Library** or **Show Library**).
03) Select the fixtures you want to export.
04) Open the Fixture Library Action dialog using the **Magic Wand** button.
05) Click on **Export Fixtures.**
06) A keyboard will appear to enter a name for the file.
07) Click on **Ok.**

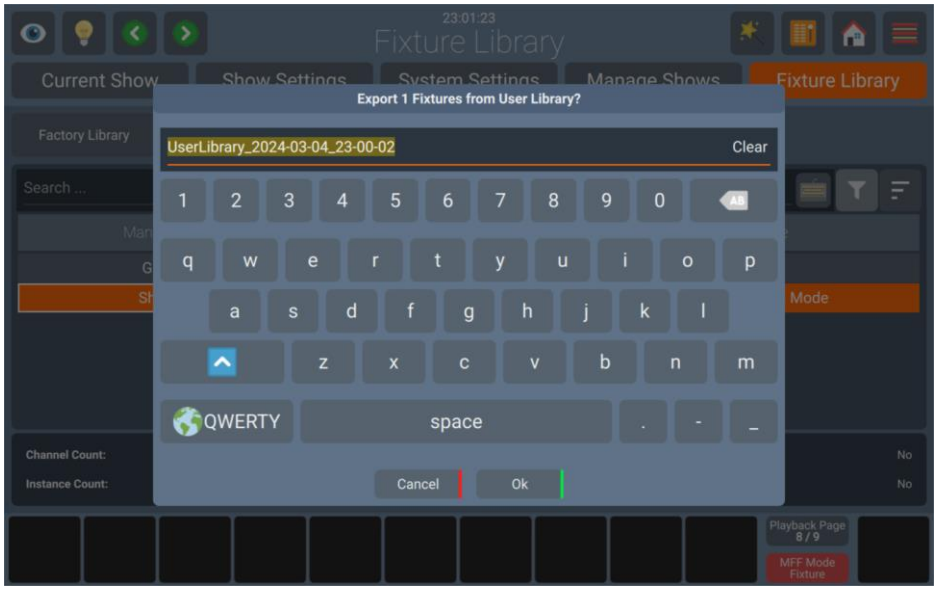


Fig. 83: Export Fixture Library – Export File Name

8.4.5.2. The Library Editor

This section explains the Library Editor which is used throughout the library creation or edit process.

The Library Editor consists of three different pages, which we will explain in this section: Fixture Type, Modules and Instances.

The **Modules** tab will always be displayed first. To switch to the other pages, select the desired tab on the top of the dialogue.

Fig. 84: Fixtures Library – Library editor

General Information about Fixture Libraries

Since version 2.0 fixture types are broken down into modules and instances.

Each module contains a given number of channels which are mapped to the actual functions of the fixture. A fixture must contain at least one module but can contain many modules.

An instance then references to a module and defines instance user number and start address of each module within the fixture. A fixture must contain at least one instance but can contain many instances. Additionally, instances may overlap with each other.

Each instance has a unique user number, name and DMX Start but references the same module. This way you only need to create, ie. 1 pixel module with three channels (ie. RGB) for a 10 pixel, 30 channel fixture and create 10 instances which are using this module.

Fixture Type Tab

The Fixture Type tab contains text fields to enter the Fixture Manufacturer, Type (Fixture Name), Mode, Author, and Description.

The Manufacturer, Type and Mode cannot be changed if the fixture is inside the Show Library.

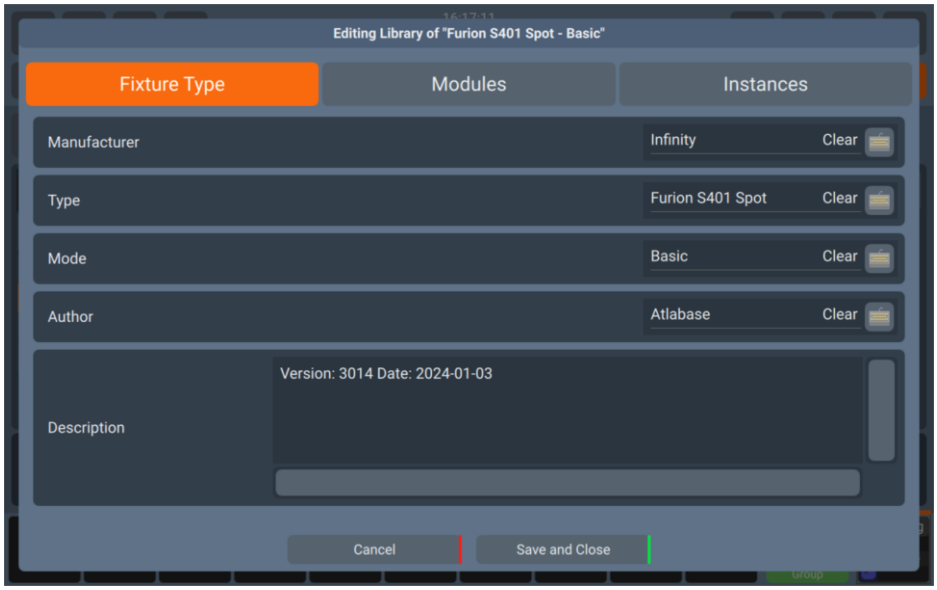


Fig. 85: Fixtures Library Editor – Fixture Type Tab

Modules Tab

The Modules Tab is the module editor, the first row of buttons contains the **Add Module**, **Rename Module** and **Delete Module** option. The second row of buttons is used to append or insert new channels, clear a channel's mapping or to delete a channel completely. And if the attributes are present on the fixture, you will be able to use the buttons for **Color Mixing** (RGBxxxx) or add a **Virtual Dimmer** or a **Virtual Strobe** to the Fixture.

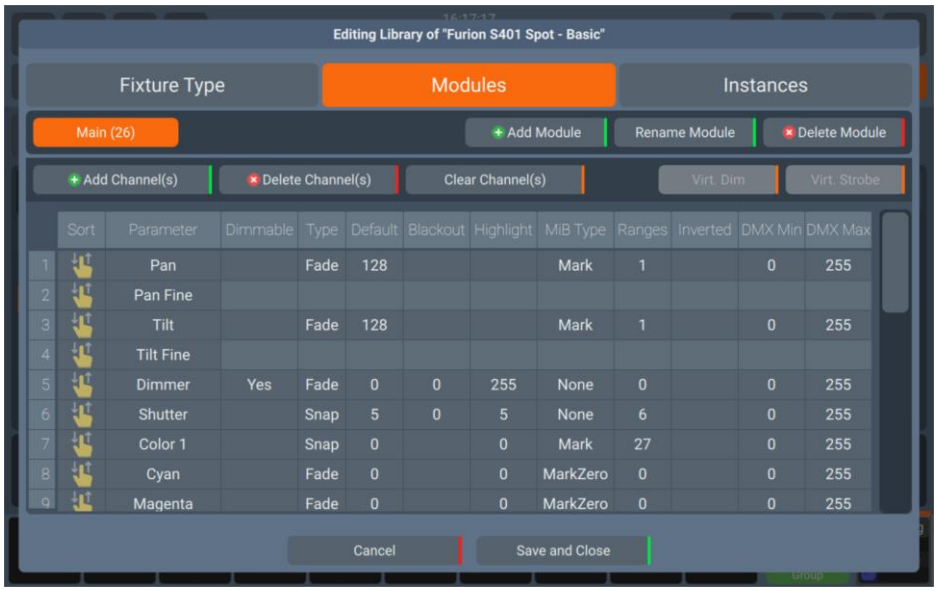


Fig. 86: Fixtures Library Editor – Modules Tab

Adding a Module

You may add a new module by clicking on the **Add Module** button from within the Modules tab.

Specify the name and channel count (of the individual part of the fixture) in the dialog and add a description if you like.

If for example you would like to create a module for RGB pixels, the channel count would most likely be 3 channels.

After you are done entering the details you can either click on **Add and Add More** to keep adding modules to the fixture type, or you may click on **Add and Edit Module** to add the module and directly start editing the channels of the module.

Renaming a Module

You may edit a module's name by selecting it from the list and clicking on the **Rename Module** button from within the Modules tab.

Deleting a Module

You may delete a module by selecting it from the list and clicking on the **Delete Module** button from within the Modules tab.

Defining Color Space

The **Color Mixing** button will appear within the Modules Tab if the fixture has an additive color mixing system. By clicking on it, the Edit Color Mixing System dialog will open, and you may define color spaces or edit color spaces of existing fixtures. By double tapping on each cell, you can change the coordinates

for CIE x, CIE Y and Luminous Flux for each emitter. Luminous Flux can be provided in any units if they match across all channels.

By setting the luminosity of all emitters to 1 -thus equalizing their output- seamlessly transitions back to the conventional fixture color management. Notably, this mirrors the default configuration for fixtures lacking specific light source data in the library. This approach should also be used by Fixtures that are run in a factory calibrated mode.

On the right side of the Edit Color Mixing System dialog, you may preview the color space, defined by the provided coordinates.

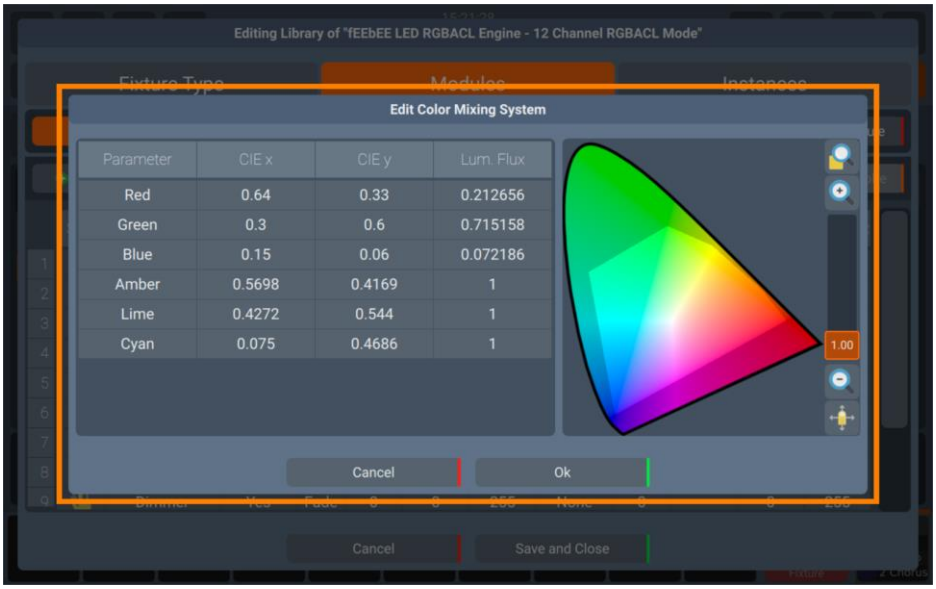


Fig. 87: Edit Fixture Library – Modules Tab – Edit Color Mixing System

Adding a Virtual Strobe

Fixtures equipped with a single dimmer channel (virtual or non-virtual) but lacking a shutter channel, can now incorporate a virtual strobe. This addition empowers users with the capability to engage synchronized strobing or opt for random strobe effects.

Adding a Virtual Dimmer

By enabling the virtual dimmer, you may add dimmer functionality to the fixtures that do not have a dedicated dimmer function but use a color mixing system (RGBxxxx, CMY, HIS or CIE).

The Channel List

Whitin the Module Tab you will find the Channel List, with a table used to alter the mapping of the DMX Channels to Attributes is shown.

Select the cell with the value you would like to change. Double tap the cell and enter the desired value in the popup.

Column	Function
Vertical Header	Indicates the DMX Channel number, which may not be changed. You may add or delete channels using the Menu Bars **Add Channel(s)** or **Delete Channel(s)** button.
Sort	Is used to re-arrange the channel layout, for example to change channel 1 to channel 6 without losing any settings.
Parameter	Is used to select the attribute of this channel. For more information see the section below where Parameter Selection is explained.
Dimmable	Defines if this channel should react to Dimmer Faders or the Grand Master fader.
Type	If set to **Fade**, this parameter will crossfade, if set to **Snap** it will snap when changing values as opposed to a smooth crossfade. This is particularly useful for parameters like Color or Gobo Wheels.
Default	Defines the default value that will be output to a fixture if no playback containing this attribute is active.
Blackout	Defines the value that will be output when the Grand Master fader is at 0 percent or when blackout is active.
Highlight	Defines which value will be output when the "Highlight" function is active in the programmer. Usually this would be "100% brightness, white, etc.".
MiB Type	Defines how a fixture attribute behaves with the Move in Black functionality. If set to **None** the channel will not be pre-positioned, **Mark** means this attribute will fade to the new value, **MarkZero** means this attribute will snap to the new value.
Ranges	Ranges define the mapping of DMX Values of a channel to specific functions of this channel. They may be used to also show a symbol for Gobos or a Color for a certain range of DMX values inside this channel and are used to define, for example, the pan and tilt range. Furthermore, you may caption the different ranges. Names of the Ranges will be shown in programmer, and in the "Select Range" PopUp that opens when you push on an encoder or encoder label. More info can be found in the "Edit Ranges" section below.
Inverted	Will invert the DMX Output for this channel. This defines if the DMX Values of this parameter will be inverted. Ie. Value 100 in the programmer will be output as value 156. Default, Highlight and Blackout values still need to be entered in "Non-Inverted" form.
DMX Min	May be used to hard limit the minimum value of this DMX Channel
DMX Max	May be used to hard limit the maximum value of this DMX Channel

Edit Parameter Dialog

The **Edit Parameter Dialog** is used to select the Parameter mapped to a channel after double or right clicking within a parameter cell.

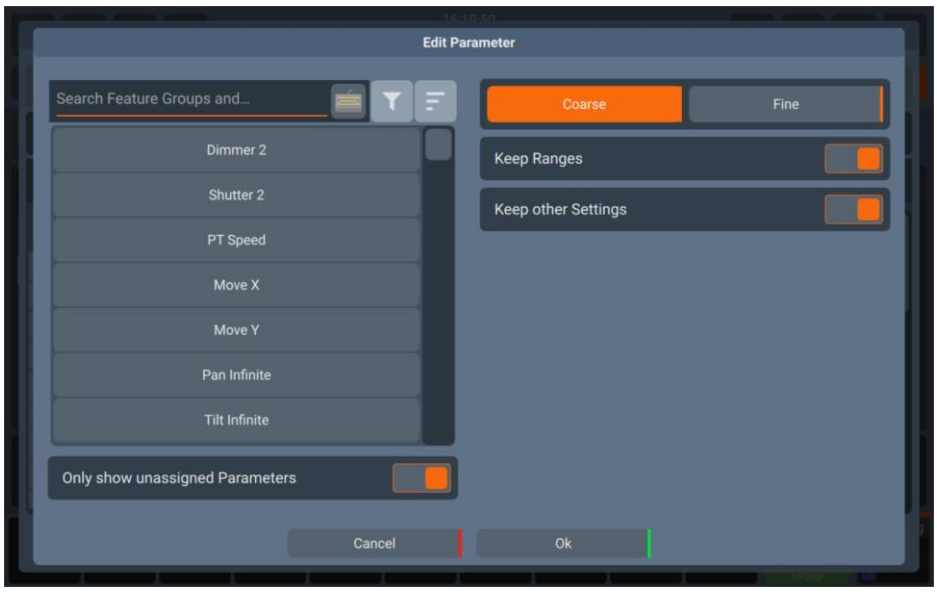


Fig. 88: Edit Fixture Library – Select Parameter

It shows a list of available parameters on the left-hand side. This list may be filtered by entering the search string into the Filter Text field in the top part of the screen. You may further define the search by filtering by attribute groups.

Additionally, you may select to **only show unassigned Parameters**, using the toggle button for it. If this option is not on, you will see all parameters, even if they have already been added to a fixture type.

The **Coarse** and **Fine** buttons may be used to toggle between the assignment of a coarse or a fine channel.

When changing an existing parameter to a different parameter you have the option to keep the existing ranges or overwrite them by using the **Keep Ranges** toggle button. Also, **Keep Other Settings** toggle button, allows you to keep the values assigned to Dimmable, Type, Default, Blackout, Highlight, MiB Type, Inverted and DMX Max and DMX Min.

Edit Ranges Dialog

The **Edit Ranges** Dialog is used to specify how a Channels functions are mapped to the corresponding DMX Values, enabling you to show the name or even icons for a specific range of values within the Programmer and the Select Range popup that opens when you push on an encoder.

It is opened by double clicking in the Ranges cell for the appropriate parameter.

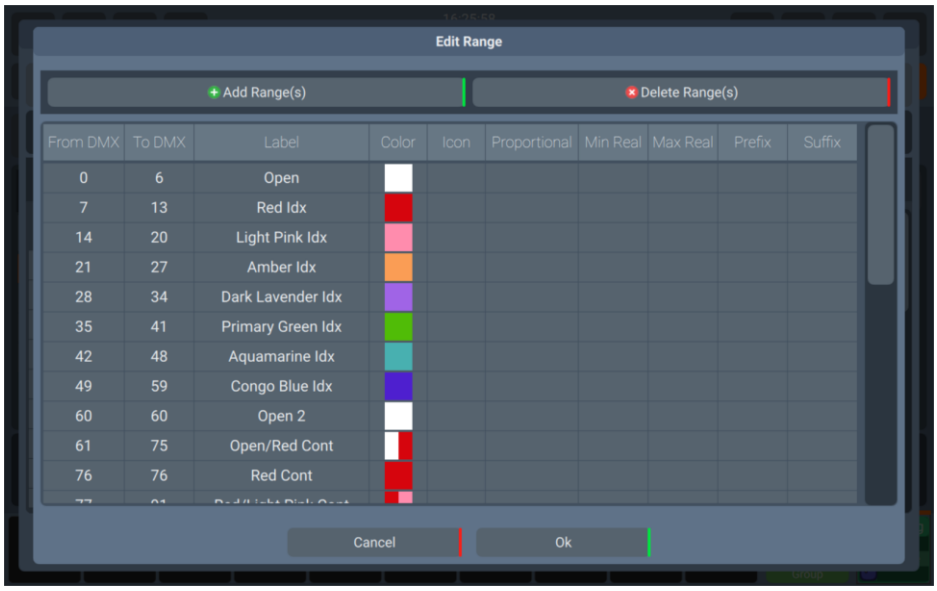


Fig. 89: Edit Fixture Library – Range Editor

Adding Ranges

To add a single Range to the list, click on the **Add Range(s)** button. A new screen will be shown allowing you to specify information about this range. You may as well add multiple Ranges to the list by clicking on **Multiple by Count** or **Multiple by Step Size** button, in the same window. The console will show a preview of the new ranges on the right side of the screen. If any new ranges are conflicting with existing ranges, these will be highlighted in red.

Fig. 90: Edit Fixture Library – Adding Ranges

Should you wish to delete one or multiple entries from the list, simply select it and click on the **Delete Range(s)** button.

Editing Ranges

To edit an already existing Range, simply double click on an entry in the table.

Single Range

A range which indicates a certain function on a channel.

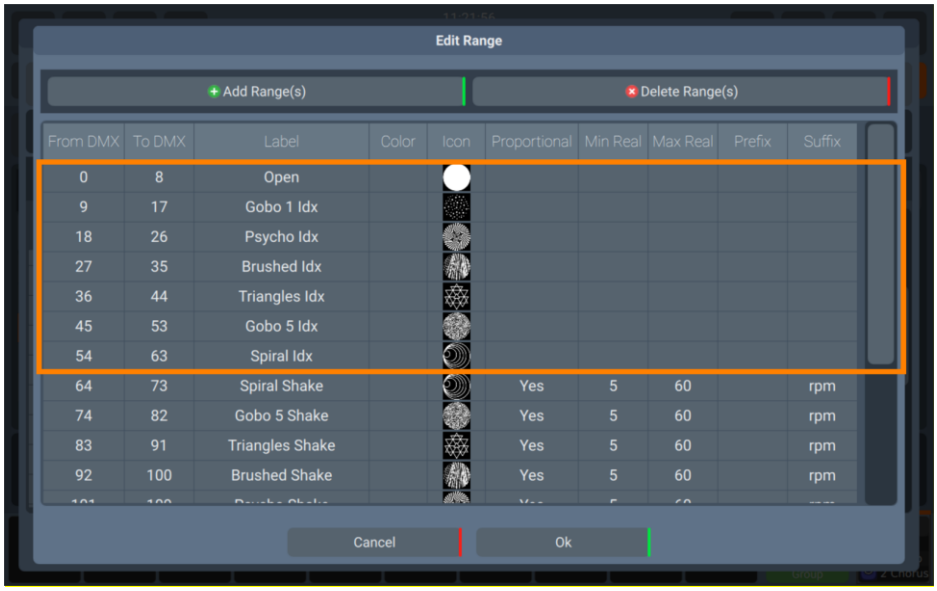


Fig. 91: Edit Fixture Library – Edit Ranges – Proportional Ranges

The ranges displayed in the screenshot are taken from a fixture's gobo channel. It indicates that, for example, Gobo 1 idx function starts at a DMX value of 9 and ends at a value of 17, and this range has an icon.

Proportional Range

A range which indicates a certain function that has a range of values (such as pan tilt or strobe) on a channel.

By double tapping on the Proportional cell, in the Edit Ranges dialog, you will be able to set it to Yes. In the screenshot below (taken from a Fixture with a Strobe channel), we can see that this range spans across DMX value 16 to DMX value 255 (the whole channel) and the name of the Range is Strobe 1.0-10.0 Hz.

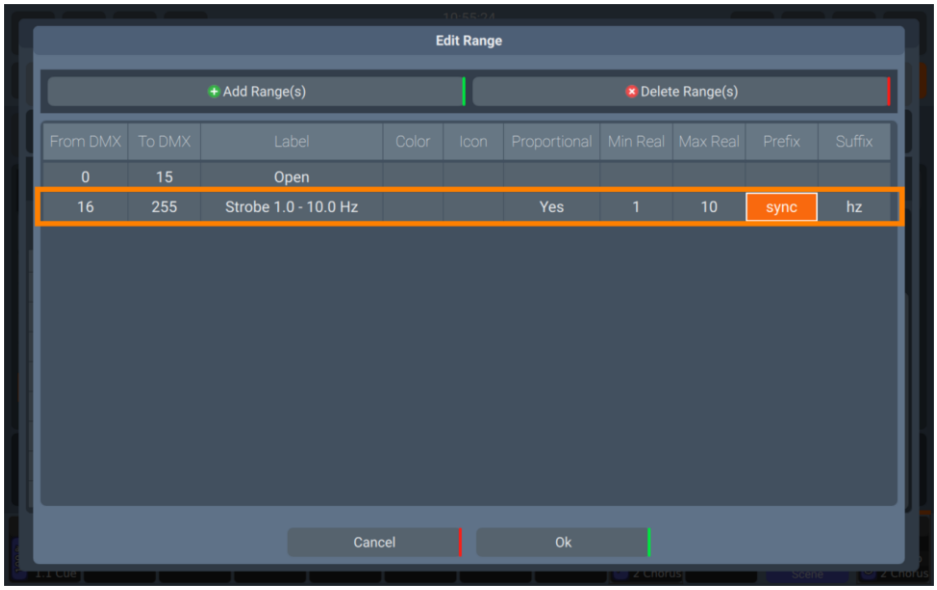


Fig. 92: Edit Fixture Library – Edit Ranges – Proportional Ranges

.
On the right side of the screenshot, next to Proportional, Min Real and Max Real, Prefix and Suffix cells are shown.

The **Min Real** and **Max Real** equal the read-out in the programmer or output table for the Min and Max DMX Value respectively. When the channel is at value 16, the readout will be 1, when the channel is at 255 (100%), then the readout will be 10. Any other values in between would be calculated accordingly.

The **Prefix** is shown before the actual value, the **Suffix** is shown after the value. For example, in a strobe channel the prefix could indicate the type of strobe (usually SYNC or RND) whereas the suffix indicates "Hz" for the frequency.

Mixing Single and Proportional Ranges on one channel

It is possible and can be very helpful to combine these different range types when building a fixture library. A strobe channel is a good example for this – you may have "Open" and "Closed" ranges which span multiple dmx values. In between you may have a linear, proportional range starting at 1 Hz and ending at 10 Hz.

Instances Tab

On the Instances tab you can see the list of instances, and by doing double tap on each cell you can edit or define the Instance User Number (The part on the right side of the "." of the fixture number), a Name, a Description, the DMX Start of this instance in relation to the whole fixture, and the Module itself.

The **Add Instance(s)** button may be used to add one or more instances.

The **Delete Instance(S)** button may be used to delete one or more instances after selecting it from the list.

The bottom side shows a preview of the full fixture.

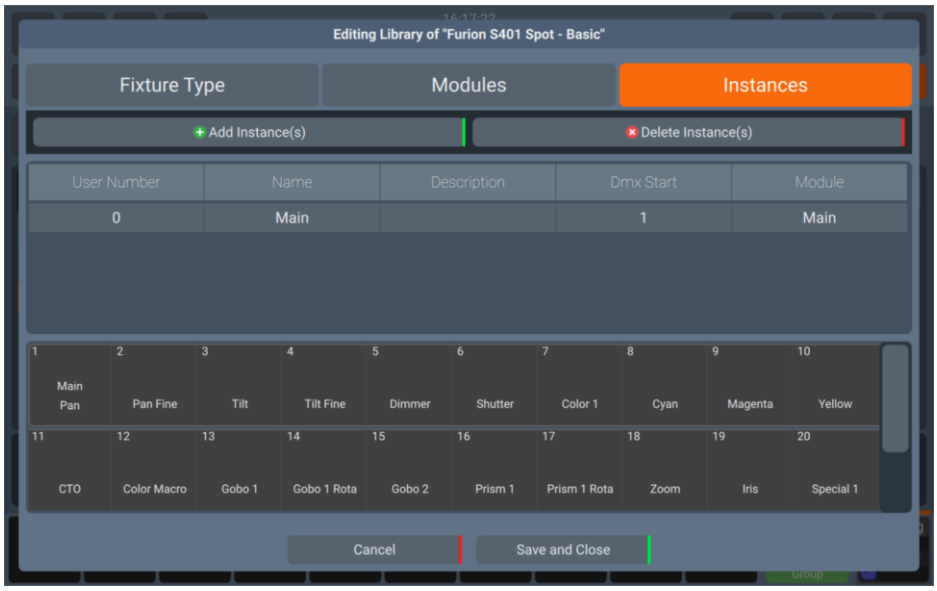


Fig. 93: Fixture Library Editor – Instances Tab

Add Instances Dialog

To add an instance of a module to the fixture type, click on **Add Instance**. A dialog will open.

You may enter a Name, the User Number, the Instance Start (DMX Start), the count of instances to be added. You can also select which module you would like to use with this instance, from the Select Module list.

The right side of this dialog shows a preview of the full fixture. You can also select the DMX Start in here, by tapping the desired DMX location. If there is a conflict with the chosen DMX channel, the slots will appear in red. Click **Ok** when done.

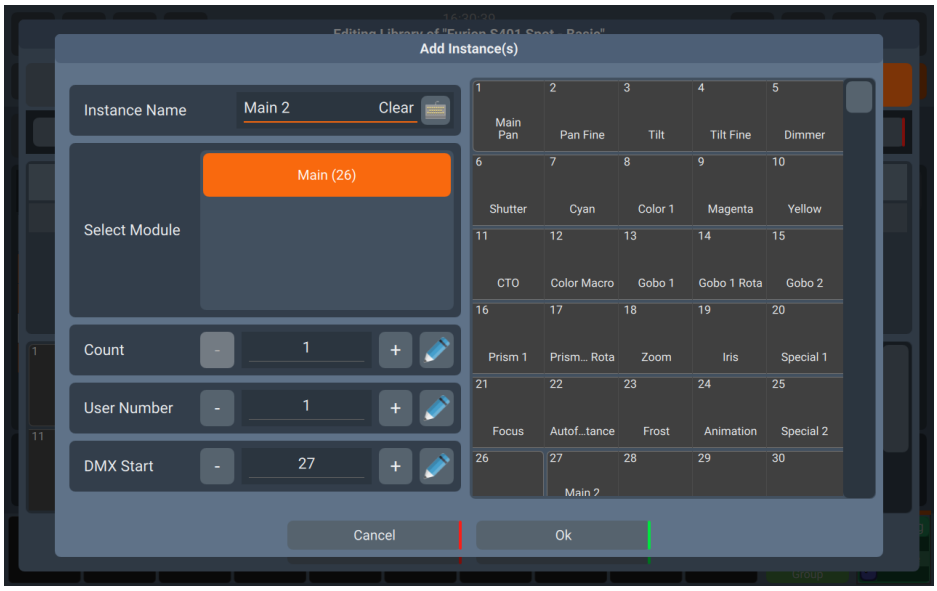


Fig. 94: Edit Fixture Library – Instances Tab – Add Instance(s)

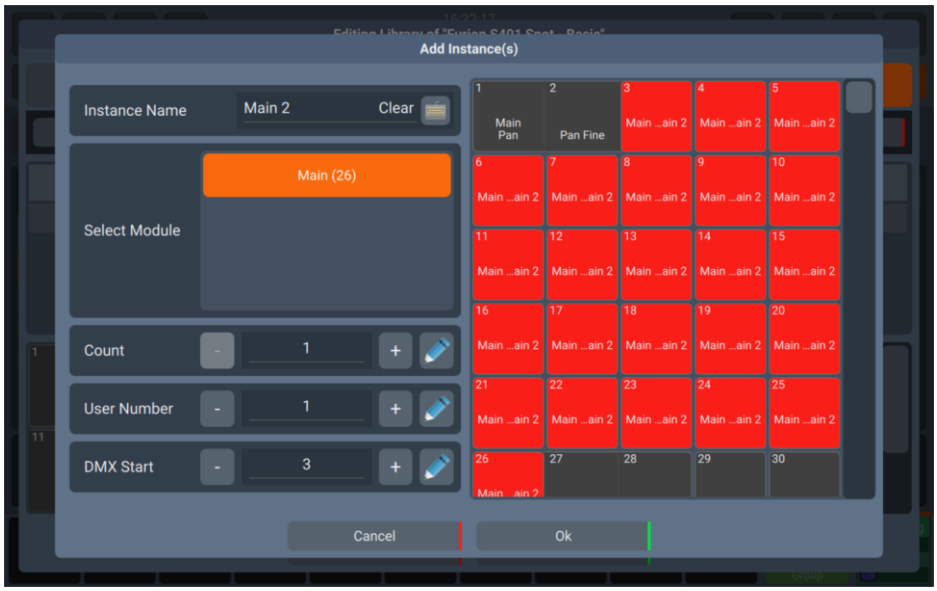


Fig. 95: Edit Fixture Library – Instances Tab – Add Conflicting Instances

Deleting Instances

To delete an instance, simply select it from the list and click on **Delete Instance**. A confirmation dialog will be shown.

8.5. Using the Home Screen

The home screen is the central place of the console where all the programming takes place.

You may open the Home Screen by clicking on the **Home** button in the top toolbar, or by pressing `[Home]` on the Frontpanel. Repeatedly pressing this button toggles through the different Views in the Home Screen.

It consists of the Fixtures, MagicSheet, Groups, Presets, Values (the Programmer) and Effect Views that may be also changed by clicking on the corresponding buttons found in the top part of the screen.

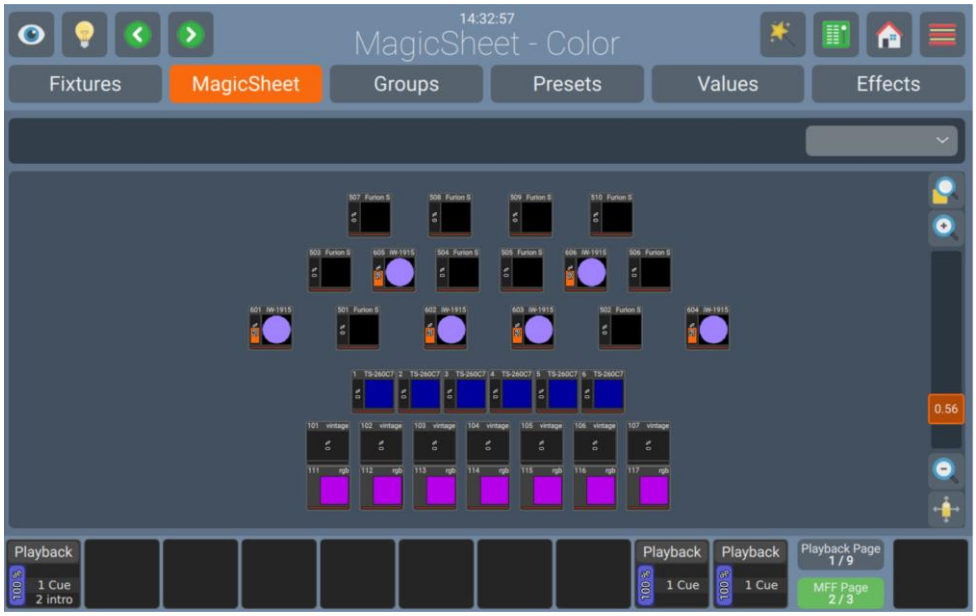


Fig. 96: Home Screen – Magic Sheet View

Whenever the Home-Screen is open, the Encoders control the attributes of the selected fixtures. To switch between the different attributes and attribute groups, press the `[Int]`, `[Pos]`, `[Color]`, `[Gobo]`, `[Beam]` or `[Spec]` keys on the Frontpanel or use the dropdown menu in the top right of the Home Screen.

8.5.1. The Fixtures View

The Fixtures View in the Home Screen is the place where all the fixtures from the show file are.

You may select or deselect one or multiple fixtures by tapping on each element.

By doing a long press on the fixture element, you will be able to see the full name of the fixture and change it by clicking on **Change Name.**

For multi-instance fixtures a double tap on one of the instances will select or deselect all the instances of this fixture.

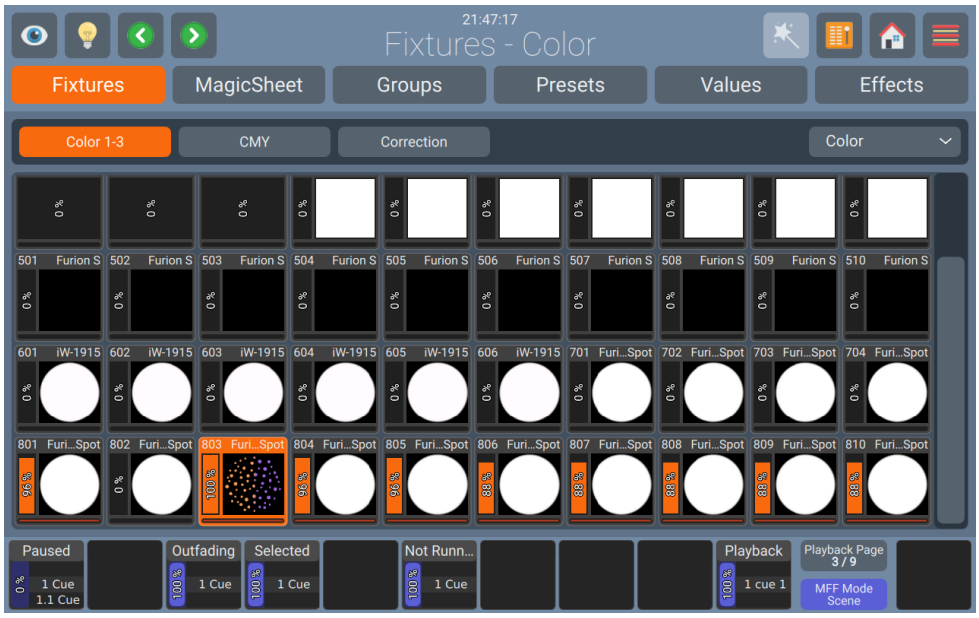
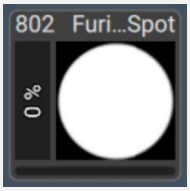


Fig. 97: Home Screen – Fixtures View

8.5.1.1. The Fixture Item

The Fixture Item itself provides several layers of feedback to you:

Item	Meaning
	This Fixture is not selected, Dimmer is at 0% and no Values are in the Programmer.
	This Fixture is selected (orange background), is outputting 100% Dimmer, yellow color and a Gobo. Pan / Tilt is centered. The Red Bar at the bottom indicates that this fixture has Values in the Programmer (Values View) set.

8.5.1.2. The Long-Click Menu

The long-click menu provides a fast way to **Change Name** of an item in the Fixtures View. It works in both, internal and external screen.

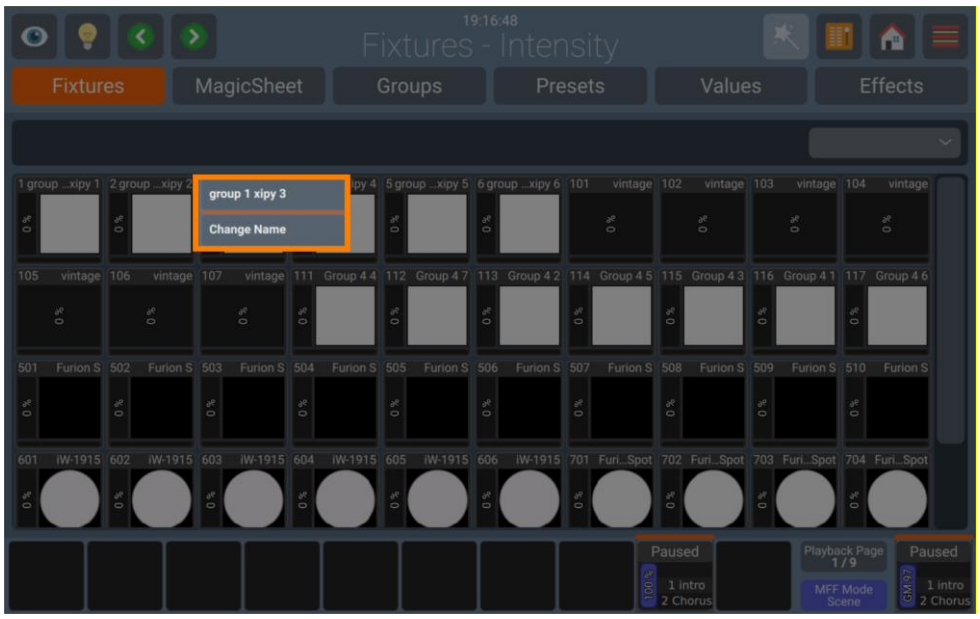


Fig. 98: Fixtures View – Long-click Menu

8.5.2. The Magic Sheet View

The Magic Sheet View in the Home Screen is the place where you select fixtures, which may be arranged to your liking, for example resembling the physical layout – or just in a very simple grid layout.

If you have a 2-Universe console or a 1 Universe console with the LAMPY DNGL attached, you have 2 different and independent Magic Sheets to lay out your fixtures. The different sheets may be selected using the **Sheet** Buttons in the top right of the Magic Sheet View.

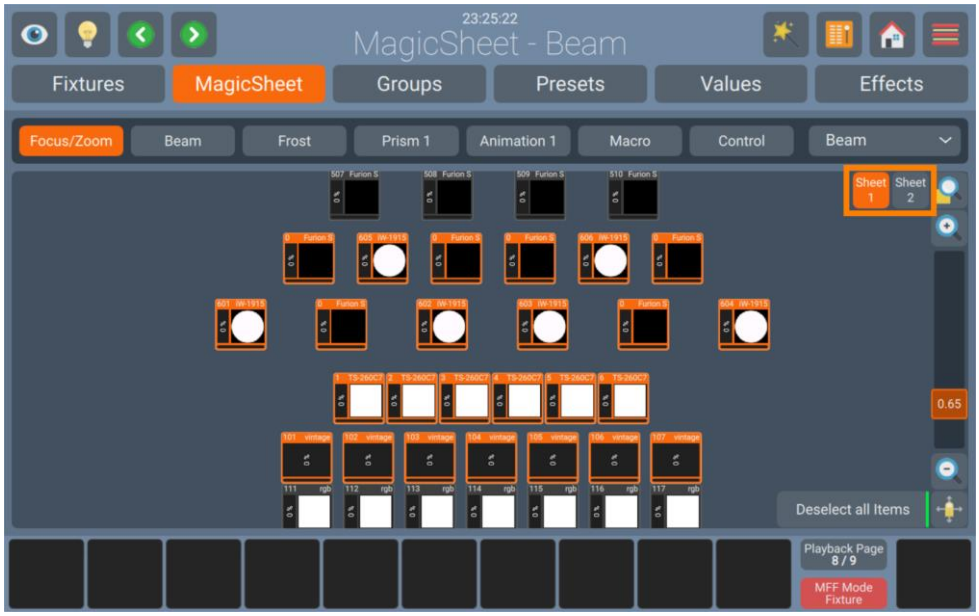


Fig. 99: Home Screen – Magic Sheet View – Select Sheet (With LAMPY DNGL only)

8.5.2.1. Navigating the Magic Sheet View

You may navigate around the Magic Sheet using the buttons and sliders found on the right side of the Magic Sheet View:

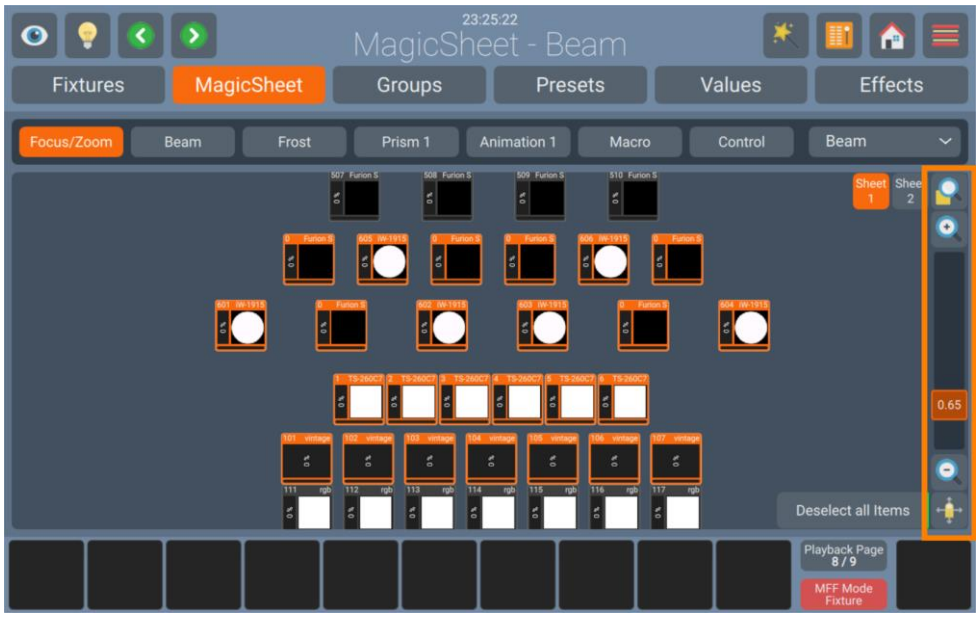


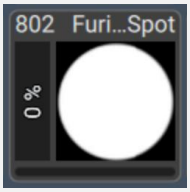
Fig. 100: Home Screen – Magic Sheet View – Navigation Controls

The buttons found in the navigation controls section have the following functions:

	Name	Action
	Zoom Fit	If no fixtures are selected, Zoom Fit will zoom and move the viewport showing the full extends of the Magic Sheet View. If fixtures are selected, it will zoom and center the view on the selected fixtures.
	Zoom +	Increases the zoom level, so items get bigger.
	Zoom -	Decreases the zoom level, so items get smaller.
	Move View	Changes into the “Move Viewport” mode, which allows you to move the view around.

8.5.2.2. The Fixture Item

The Fixture Item itself provides several layers of feedback to you:

Item	Meaning
	This Fixture is not selected, Dimmer is at 0% and no Values are in the Programmer.
	This Fixture is selected (orange background), is outputting 100% Dimmer, yellow color and a Gobo. Pan / Tilt is centered. The Red Bar at the bottom indicates that this fixture has Values in the Programmer (Values View) set.

8.5.2.3. The Long-Click Menu

The long-click menu provides distinct sets of actions based on the item whether it is invoked. In the context Fixture and group items, will provide the possibility to **Change Name**. Within a Label, will open the Edit Label dialog, so name and color can be change.

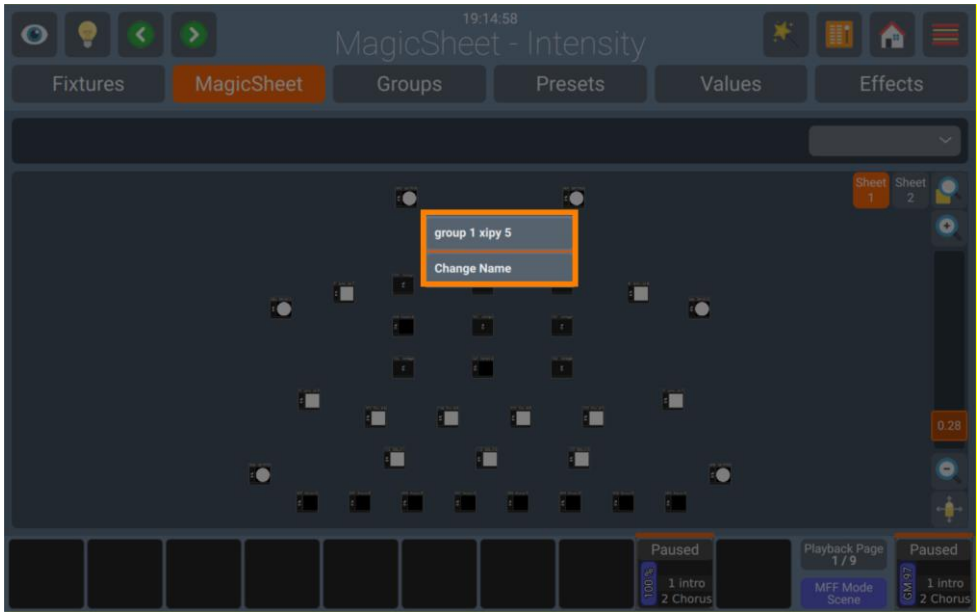


Fig. 101: Magic Sheet View – Long-click Menu for a Group

8.5.2.4. Magic Sheet Action Dialog (Magic Wand Button)

The Magic Sheet View Action Dialog allows you to enable and disable the edit mode. It may be opened by pushing the **Magic Wand** Button from within the Magic Sheet View. Many of the actions are only available if one or multiple items are selected within the view.

Fig. 102: Magic Sheet View – Action Dialog

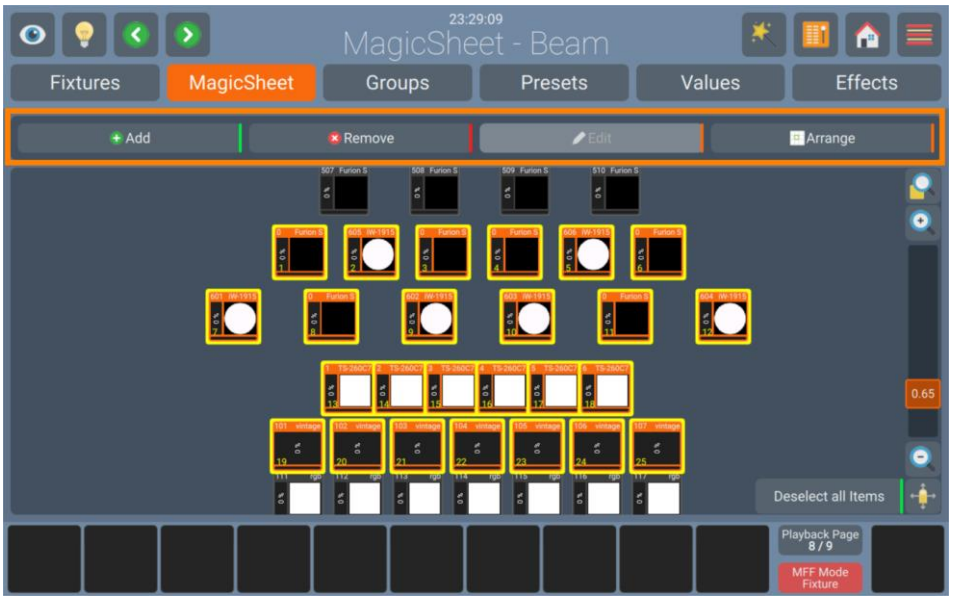


Fig. 103: Magic Sheet View – Edit Mode

Add

Used to add Items from the Magic Sheet.

Menu Item	Function
Label	Used to add a Label to the Magic Sheet View.
Groups	Used to add a Group Item to the Magic Sheet View.
Fixtures	Used to add Fixtures to the Magic Sheet View. Only available for fixtures that have not been added to the view.
Add Selected Fixtures	Used to add the currently selected Fixtures to the Magic Sheet. Only available for fixtures that have not been added to the view.

Remove

Used to delete Items from the Magic Sheet.

Edit

Used to set a label's text and color as well as size.

Arrange

Button	Function
Arrange Linear	Used to automatically arrange multiple elements along a line.
Arrange Grid	Used to automatically arrange multiple items in a grid.
Arrange Chessboard	Used to automatically arrange multiple items like a chessboard.
Arrange Arc	Used to automatically arrange multiple items along an arc.
Arrange Circular	Used to automatically arrange multiple items in a circle.

Moving Items

Selected items can be move via drag and drop.

8.5.2.5. Adding Elements to the Magic Sheet View

If you would like to add Items to the Magic Sheet View, press the **Magic Wand** button, click on **Edit Sheet.** A new toolbar will appear on the top, click on **Add** to display the list.

Fig. 104: Magic Sheet View – Edit Mode – Add Items

Adding Labels

Labels may be used for visual indication of different Items or to quickly select them. To add a label, please proceed as follows:

01) Enable the edit mode by clicking on the **Magic Wand** button and on the **Edit Sheet** button.
02) Click on **Label** within the **Add** list.
03) Draw a rectangle on the screen by pushing and dragging your finger where the label should go.
04) A window to edit the Label will open. You may change the name on the text field and pick a color for it.
05) Click **Ok** when done.
06) Now you have the chance to make some corrections. You may move the label by clicking and dragging on it, and you may resize it using the handle in the lower right corner of the new label.

Adding Groups

To add a Group to the Magic Sheet View, please proceed as follows:

01) Enable the edit mode by clicking on the **Magic Wand** button and on the **Edit Sheet** button.
02) Click on **Groups** within the **Add** list.
03) Select the Groups you would like to add from the window that was just opened. Click on **Ok** when done.
04) Now you have the chance to move the added groups where they should go. Do so by clicking and dragging a group.

Adding Fixtures

To add a Fixture to the Magic Sheet View, please proceed as follows:

01) Enable the edit mode by clicking on the **Magic Wand** button and the **Edit Sheet** button.
02) Click on **Fixtures** within the **Add** list.
03) Select the Fixtures you would like to add from the window that was just opened. Click on **Ok** when done.
04) Now you have the chance to select one of the arrange modes to place the fixtures in the view. For more information about the different arrange modes, please see section 8.5.2.8, Arranging Existing Elements on page 104.

Note: It is not allowed to add the same fixture to a sheet twice. If fixtures in the show file are already in the Sheet, the Add Fixtures Button will be greyed out.

8.5.2.6. Selecting and de-selecting Fixtures

You may select / deselect objects within the Magic Sheet View by clicking on them, or by "drawing" a selection rectangle, like keeping your mouse cursor pressed while moving the mouse to select multiple items on your computer's desktop. You may also select items that are inside a label by clicking on the label.

Whenever fixtures, labels, or groups are selected, a **Deselect all Items** button is shown on the bottom right part of the Screen.

8.5.2.7. Editing existing Elements

If you would like to edit Items to the Magic Sheet View, press the **Magic Wand** button, click on **Edit Sheet.**

Fig. 105: Magic Sheet View - Action Dialog – Edit Sheet

Edit Labels

To change a Labels appearance or size, please proceed as follows:

01) Enable the edit mode by clicking on the **Magic Wand** button and click on **Edit Sheet** button.
02) Select the Label you would like to edit in the Magic Sheet View.
03) You may now move or resize the label.
04) At the top tool bar, click on the **Edit** button.
05) A window that allows you to set the text and color of the label is opened.
06) Click on **Ok** when done.

Move Items

To move items in the Magic Sheet View in freehand mode, please proceed as follows:

01) Enable the edit mode by clicking on the **Magic Wand** button and click on **Edit Sheet**.
02) Select and move the items by drag and drop.
03) You may disable the edit mode by opening the **Action dialog** and click on **Edit Sheet.**

Removing Items

To delete an item from the Magic Sheet View, please proceed as follows:

01) Open the **Action Dialog** by clicking on the Magic Wand button.
02) Enable the **Edit Sheet** mode.
03) Select the Items you would like to remove in the Magic Sheet View.
04) Click on **Remove** in the top toolbar.

8.5.2.8. Arranging Existing Elements

You can arrange Items in the Magic Sheet View using one of the available arrange modes. Press the **Magic Wand** button. The Action Dialog will be opened to enable the **Sheet Editor**. Once enabled, click on the **Arrange** Menu from the editing toolbar and select a shape.

When the **Sheet Editor** is enabled, you may also move selected items on your sheet freely. Not only using the arrange modes.

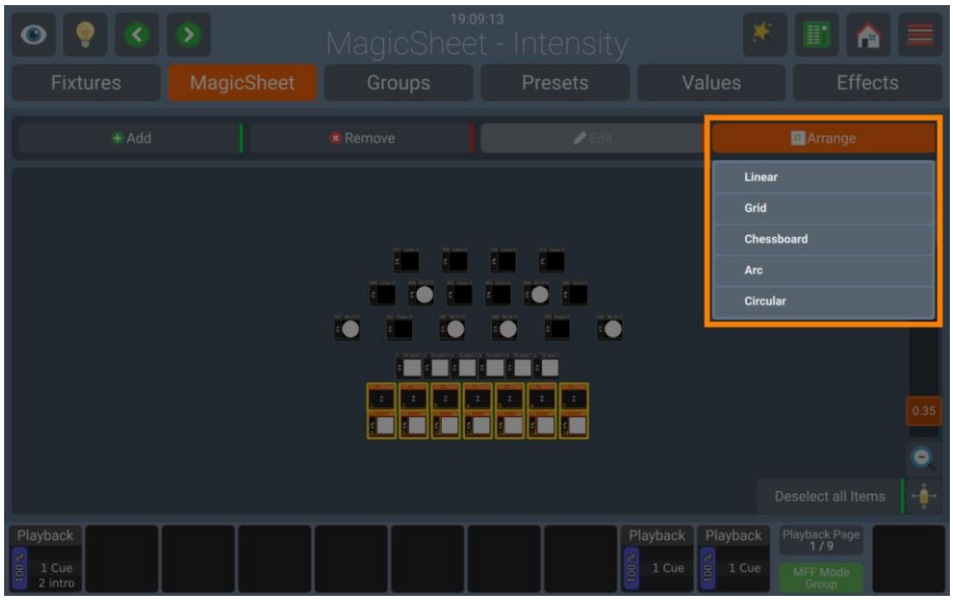


Fig. 106: Magic Sheet View - Action Dialog – Arrange Items

Arrange Linear

Arrange Linear will rearrange all Items in a line, asking you to specify the first and the last point of the line using drag handles. To arrange Items like this, please proceed as follows:

01) Enable the **Edit Sheet** mode by clicking on the **Magic Wand** button.
02) Select the Items you would like to arrange in the Magic Sheet View and click on **Arrange.**
03) Click on **Linear** found in the **Arrange** list on the top toolbar.
04) Adjust the start and end point of the arrange using the drag handles.
05) When done, click on **Apply** in the lower right corner.

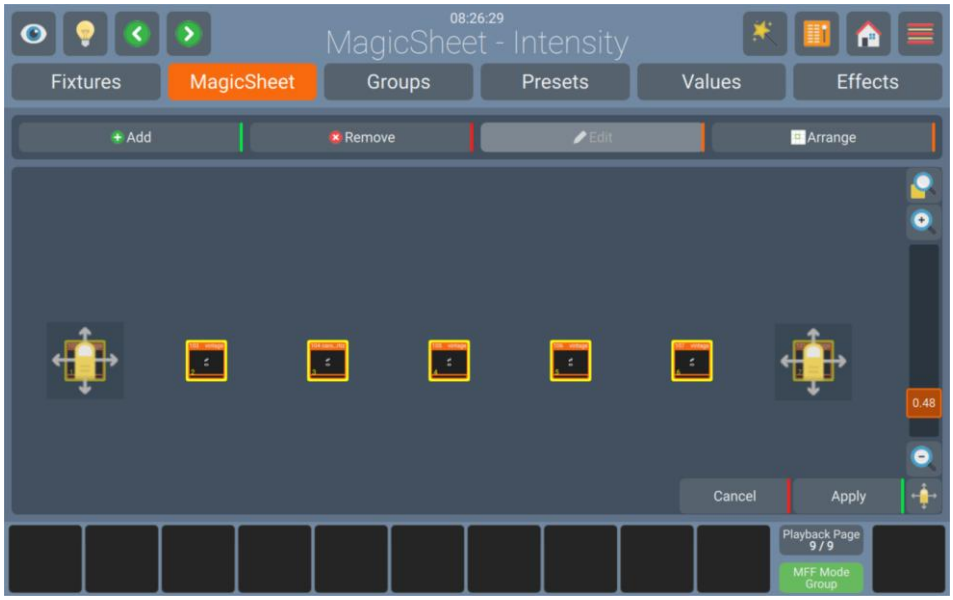


Fig. 107: Magic Sheet View – Arrange Linear

Arrange Arc

Arrange Arc will rearrange all Items in an Arc. Allows you to set a start point, radius, endpoint using drag handles.

01) Enable the **Edit Sheet** mode by clicking on the **Magic Wand** button.
02) Select the Items you would like to arrange in the Magic Sheet View and click on **Arrange.**
03) Click on **Arc.**
04) Adjust the start and end point as well as the drag handles. And change the radius by using the slider on the left. You may also use the **Invert** button in lower left corner to adjust the direction to your licking.
05) Click on **Apply**, in the lower right corner, when done.

Fig. 108: Magic Sheet View – Arrange Arc

Arrange Grid

Arrange Grid will rearrange all Items in a grid, asking you to specify the position and the size of the grid using drag handles. The slider on the left side specifies the number of columns.

01) Enable the **Edit Sheet** mode by clicking on the **Magic Wand** button.
02) Select the Items you would like to arrange in the Magic Sheet View and click on **Arrange.**
03) Click on **Grid.**
04) Adjust the start and end point as well with the drag handles. And change the number of columns by using the slider on the left.
05) Click on **Apply**, when done.

Fig. 109: Magic Sheet View – Arrange Grid

Arrange Circular

Arrange Circle will rearrange all Items in a Circle, asking you to specify the center point and the size / rotation using drag handles.

01) Enable the **Edit Sheet** mode by clicking on the **Magic Wand** button.
02) Select the Items you would like to arrange in the Magic Sheet View and click on **Arrange.**
03) Click on **Circular.**
04) Adjust the start and end point as well with the drag handles.
05) Click on **Apply**, when done.

Fig. 110: Magic Sheet View – Arrange Circular

Arrange in a Chessboard

Arrange Chessboard will rearrange all Items in a Chessboard grid style only occupying every other spot, asking you to specify the position and the size of the Checkerboard using drag handles. The slider on the left side specifies the number of Columns. A button can be found next to the slider which is used to invert the arrangement.

01) Enable the **Edit Sheet** mode by clicking on the **Magic Wand** button.
02) Select the Items you would like to arrange in the Magic Sheet View and click on **Arrange.**
03) Click on **Chessboard.**
04) Adjust the start and end point as well with the drag handles. And change the number of columns by using the slider on the left.
05) Click on **Apply**, when done.

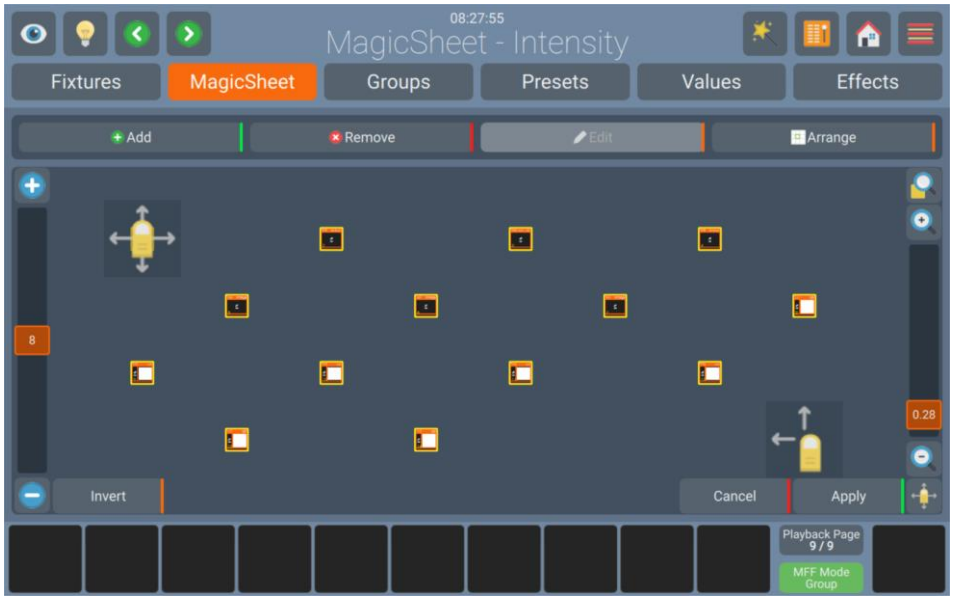


Fig. 111: Magic Sheet View – Arrange Chessboard

8.5.3. The Groups View

Groups are meant as a programming aid and are a quick way to access specific groups of fixtures. They store information about fixture selection and selection order.

You may open the Groups Screen by clicking on the **Home** button in the top toolbar, or by pressing [Home] on the front panel multiple times or by pressing it once and then selecting **Groups** from the buttons on top.

If you have a LAMPY DNGL attached to the console you can also access the Groups View on the external monitor.

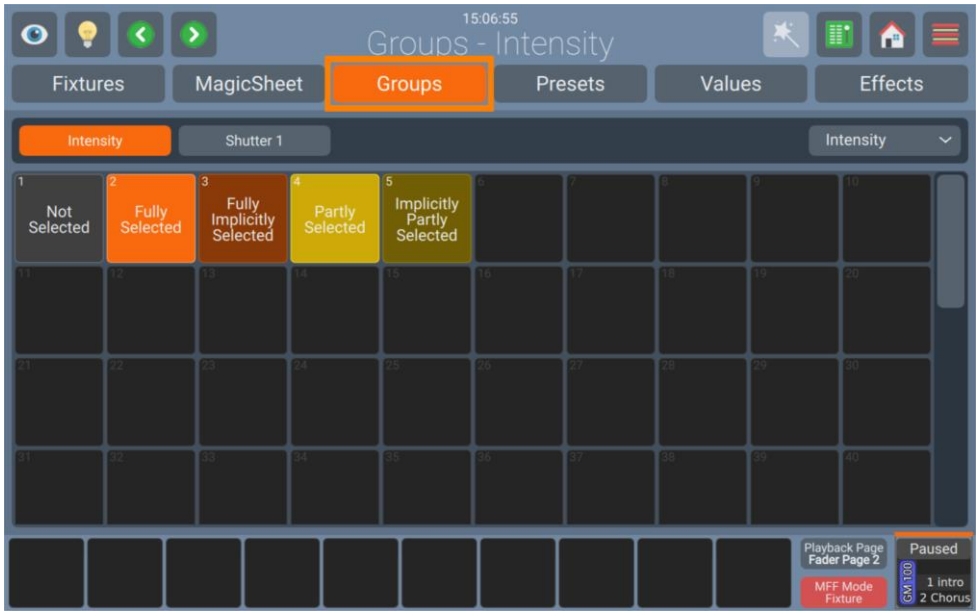


Fig. 112: Home Screen – Groups View

8.5.3.1. The Group Item

The Group Item itself provides several layers of feedback to you:

Item	Meaning
	This Group Item has the name "Not Selected" and is not selected.
	This Group has the name "Fully Selected" and is selected (orange background).
	This Group has the name "Fully Implicitly Selected" and indicates that all Fixtures inside the group are selected even though the Group itself is not selected (dark orange background).

Item	Meaning
	This Group has the name "Partly Selected" and indicates that the Group is selected but some Fixtures inside the group have been deselected (yellow background).
	This Group has the name "Fully Implicitly Selected" and indicates that some Fixtures inside the group are selected even though the Group itself is not selected (dark yellow background).
	This Group is empty.

8.5.3.2. The Long-Click Menu

The long-click menu provides distinct sets of actions based on whether it is invoked within an empty or non-empty Group Item.

In the context of an empty item, users are presented with the option to record a new Group using the selected Fixtures. However, if no Fixtures are selected, an error message will appear, indicating the necessity of selecting Fixtures before proceeding with the creation of a new Group.

Conversely, when activated within a non-empty item, the long-click menu options expand to facilitate the manipulation and management of the selected group. Allowing to **Update**, **Change Name**, or **Delete** the selected group.

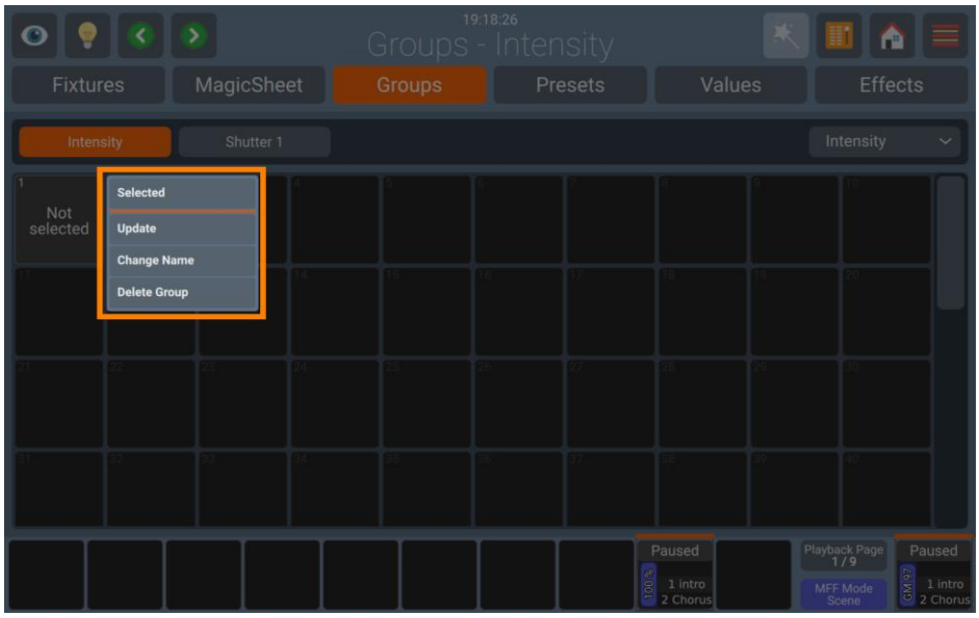


Fig. 113: Groups View – Long-click Menu non-Empty Group

8.5.3.3. Recording Groups

01) To record a Group, change to the Magic Sheet View and select at least one fixture. You may also select fixtures in the external screen Fixtures View. Alternatively, you may select fixtures by selecting other Groups or by selecting them on one or more of the Multi-Function Faders.
02) Change to the Groups View.
03) Press [Record]
04) Select an empty, slightly greyed-out Group Item in the Group View in either the internal or the external Screen.
05) The console will ask to name the new Group.
06) Press **Ok** when done.

Note: Groups store the order in which you selected the Items. This may be useful when creating effects, as explained later.

8.5.3.4. Naming Groups

01) Press the [Name]-Key on the console front panel.
02) Select the Group you want to rename. You can also do a long press on the selected group to change the name.
03) A dialog will be opened asking you for the name.
04) Hit **Ok** when done.

8.5.3.5. Selecting and deselecting Groups

01) To select a Group, change to the Groups View in the Home Screen or on the external monitor.
02) Simply click on the Group that you would like to select or deselect.

8.5.3.6. Copying Groups

01) Press the [Copy]-Key on the console front panel.
02) Select the Group you want to copy.
03) Select the destination Group.

8.5.3.7. Moving Groups

01) Press the [Shift] and [Copy]-Key on the console front panel at the same time.
02) Select the Group you want to move.
03) Select the destination Group.

8.5.3.8. Editing Groups

You may rename Groups and the fixtures contained in a group by pressing [Edit] on the front panel and selecting a Group from the internal or external Groups View.

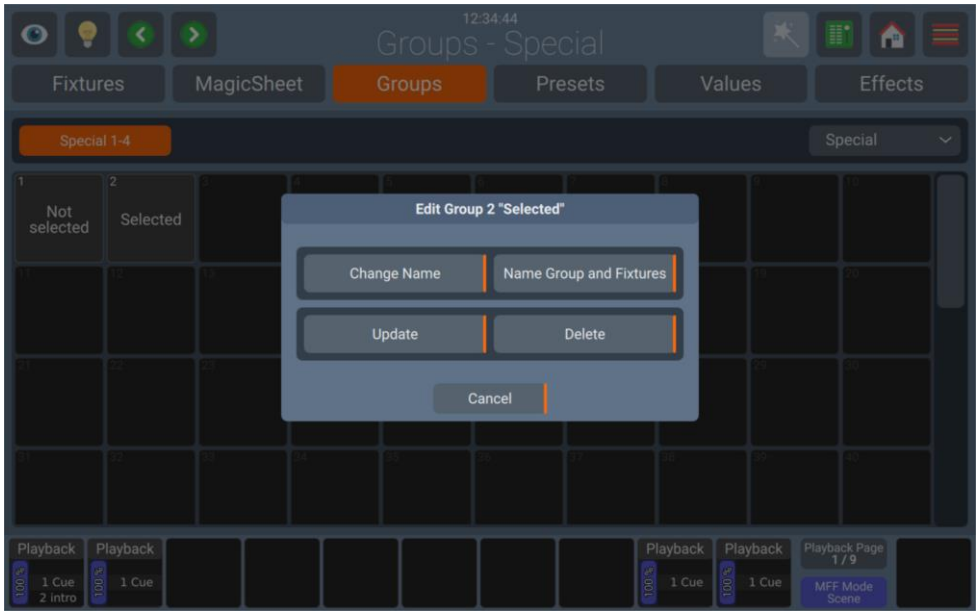


Fig. 114: Home Screen – Edit Group Dialog

Changing the Name

01) To change the name of a Group, press the [Edit]-key on the front panel and tap on a group item in the internal- or external screen Group View.
02) Click on **Change Name**.

Changing the Name of the Group and the Name of all contained fixtures

01) To change the name of a Group and name all fixtures contained in the group after the group, press the [Edit]-key on the front panel and tap on a group item in the internal- or external screen Group View.
02) Click on **Name Group and Fixtures**.

8.5.3.9. Removing Fixtures from Groups

To remove Fixtures from an existing group, please proceed as follows:

01) Select at least one fixture on the Fixture view, or the Magic Sheet View.
02) Change to the **Groups View**.
03) Press [Record].
04) Select the existing Group you would like to remove the fixture selection from in the Group View in either the internal or the external Screen.
05) The console will ask you what to do. Select **Remove** as pictured below.

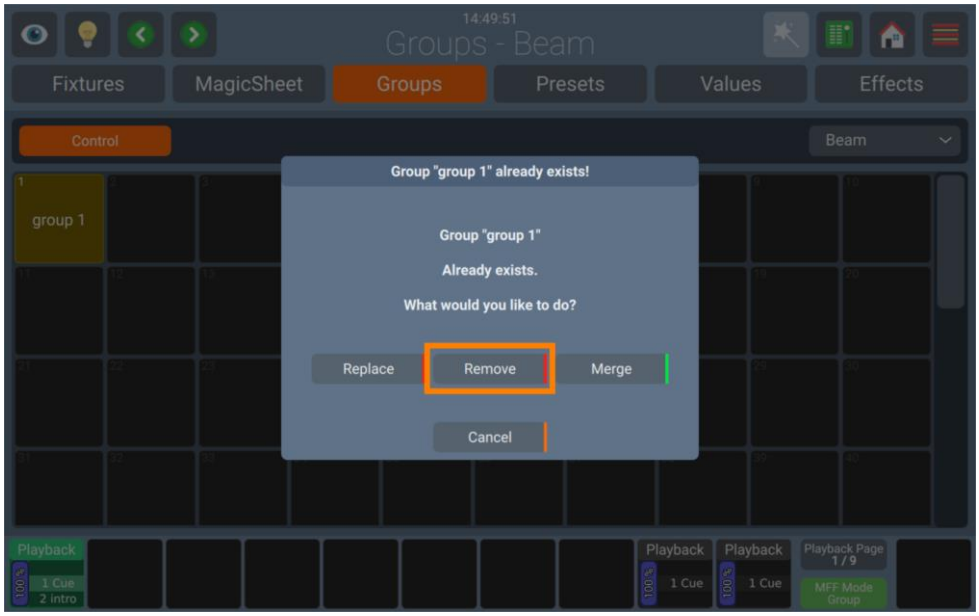


Fig. 115: Group Exists - Remove

8.5.3.10. Replacing a Group

Should you wish to replace all contents of a group, please proceed as follows:

01) Select at least one fixture in the Magic Sheet View or the Fixture View.
02) Change to the **Groups View**.
03) Press [Record].
04) Select the existing Group you would like to replace in the **Group View** in either the internal or the external Screen.
05) The console will ask you what to do. Select **Replace** as pictured below.

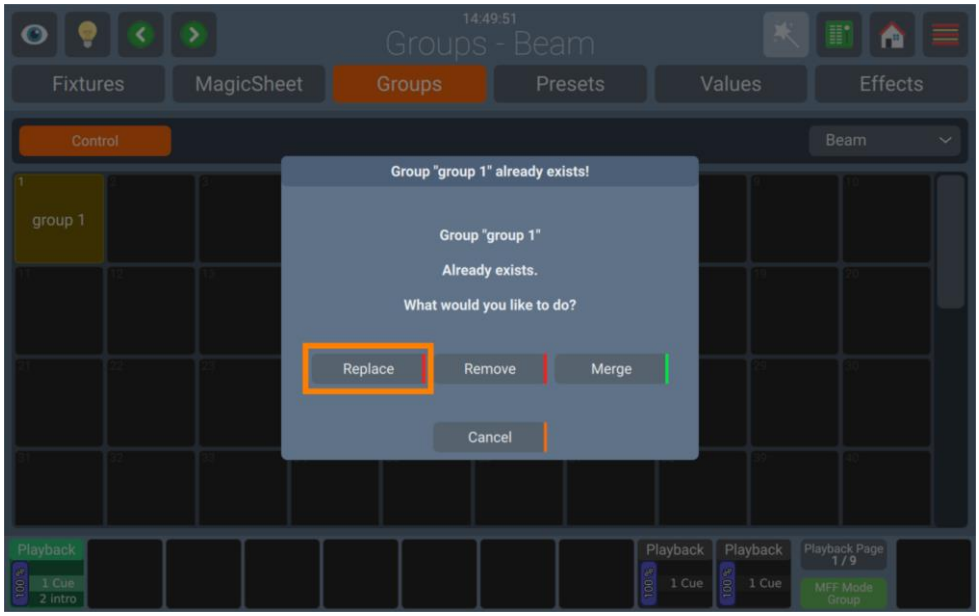


Fig. 116: Group Exists - Replace

8.5.3.11. Adding Fixtures to existing Groups

To add Fixtures to an existing group, please proceed as follows:

01) Select at least one fixture in the Magic Sheet View or the Fixture View.
02) Change to the **Groups View**.
03) Press `[Record].`
04) Select the existing Group you would like to add the fixture selection to from the Group View in either the internal or the external Screen.
05) The console will ask you what to do. Select **Merge** as pictured below.

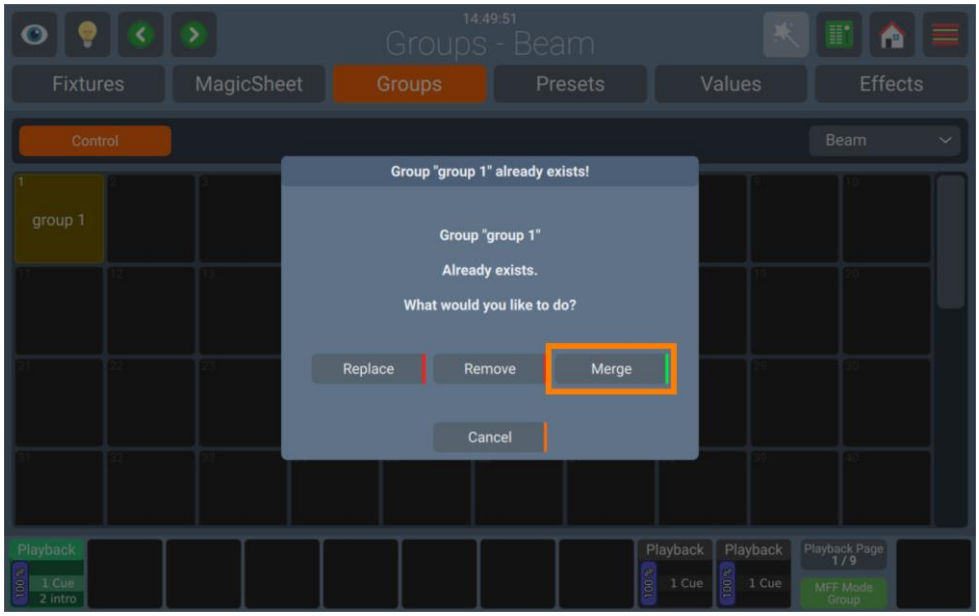


Fig. 117: Group Exists - Merge

Note: Fixtures added to a group will be added after the last fixture in this group.

8.5.3.12. Deleting Groups

To delete a group, please proceed as follows:

01) Change to the **Groups View** in either the internal or external screen.
02) Press `[Delete].`
03) Select group you would like to delete in either the internal or the external Screens Group View.
04) The console will ask you for confirmation.

8.5.4. The Presets View

Presets aid to simplify the programming process by allowing user-defined 'elements' to be created and then used as a toolkit to build your cues. Once you created a Preset, such as a couple of moving lights pointing at a particular position on stage, you may recall those settings at any point, and record them into Playbacks or Scenes.

The biggest advantage of using Presets is that they are only stored into cues as a reference, rather than the parameter values that the Preset contains. If you later decide to change the Preset, all looks that have been recorded using this Preset are also changed. This is especially useful if, in example, the position of a set-piece on stage is moved and moving lights have been programmed to light it. The preset can be updated once to accommodate the change, rather than reprogramming the change in every cue lighting the set-piece.

Presets are divided into different pools, whereas each Pool type will filter attributes stored into the presets by its equivalent type: Color Preset Pool will only store color attributes. The Pools are always linked to the selected feature group. So, if you select color from the dropdown menu in the home screen, you'll see the Color Preset Pool. The same applies if, for example you press the `[Color]` button on the front panel.

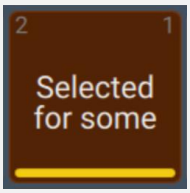
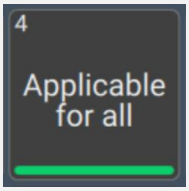
Presets are only applicable to fixtures that have values stored inside the preset but may be recalled by some of the fixtures only. In Example: You have recorded a preset containing only Pan and Tilt for Fixtures 1 through 10. This preset is not applicable to Fixtures 11 and 12. But this preset may be recalled for fixture 1 and 4 only.

Like fixtures and groups, presets can be found within the **Home Screen** by pressing the **Presets** button in the top part of the screen, or by clicking on the **Home** button in the top toolbar, or by pressing `[Home]` on the front panel multiple times.

Fig. 118: Home Screen – Presets View

8.5.4.1. The Preset Item

The Preset Item itself provides several layers of feedback to you:

Item	Meaning
	This Preset Item has the name “Not Selected” and is not selected.
	This Preset has the name “Selected for Some” and is selected for a part of the fixture selection (dark red background).
	This Preset has the name “Selected for All” and is selected for all of the fixtures selected (orange background).
	This Preset has the name “Applicable for All” and can be applied to all of the fixtures in the selection (green bar on the bottom).
	This Preset has the name “Applicable for Some” and can be applied to some of the fixtures in the selection (yellow bar on the bottom).
	This Preset has the name “Not Applicable” and cannot be applied to any of the fixtures that are currently selected.
	This Preset is empty.

8.5.4.2. The Long-Click Menu

The long-click menu provides distinct sets of actions based on whether it is invoked within an empty or non-empty Preset Item.

In the context of an empty item, users are presented with the option to record a new Preset using the values touched in the programmer. However, if no values are touched, an error message will appear, indicating the necessity of setting values before proceeding with the creation of a new Preset.

Conversely, when activated within a non-empty item, the long-click menu options expand to facilitate the manipulation and management of the selected Preset. Allowing to **Update**, **Change Name**, **Change Icon** or **Delete** the selected Preset.

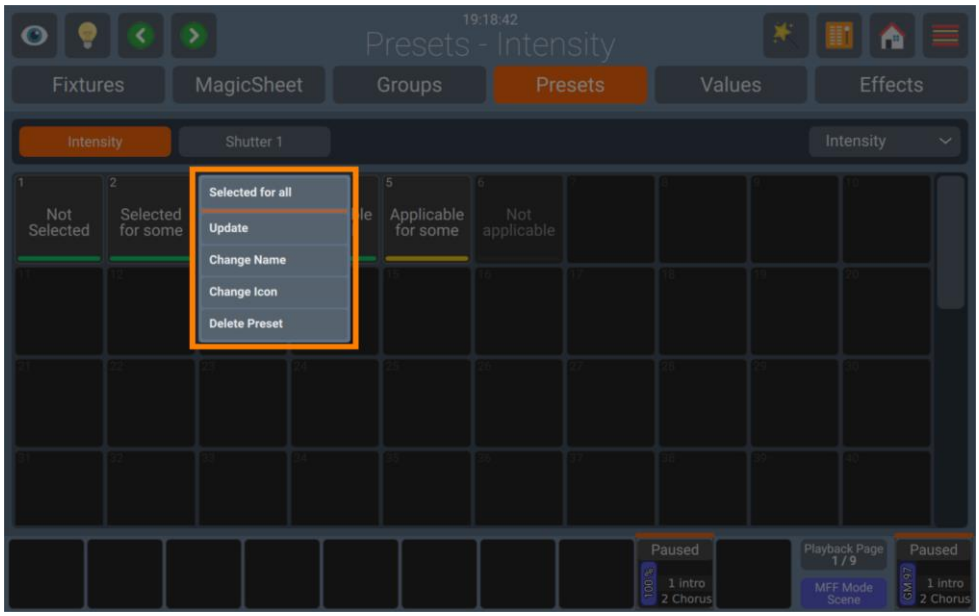


Fig. 119: Home Screen - Presets View – Long click menu non empty Preset

8.5.4.3. The Preset Action Dialog (Magic Wand)

The Presets View Action Dialog provides functions that make it easier to work with Presets. It may be opened by pushing the **Magic Wand** button from within the Presets View within the Home Screen.

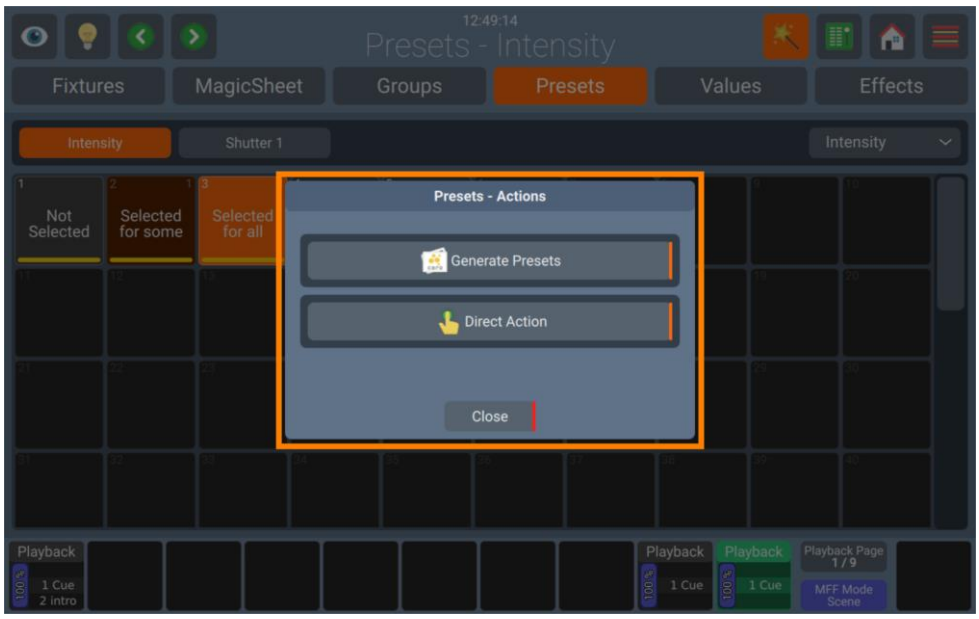


Fig. 120: Home Screen – Presets View Action Dialog

Generate Presets

One very useful function is to have LAMPY generate Presets for you automatically, including names, icons and colors. These Presets are built using the Ranges entered in the Fixture Library.

To create Presets automatically, do the following:

01) Select the fixtures you want to auto create presets for.
02) Open the Presets Pool and select the feature group you would like to generate presets for from the **dropdown menu** found in the top right corner, under the effects button.
03) Open the Preset Action Dialog pressing the **Magic Wand** button.
04) Click on **Generate Presets**.

Direct Action

Direct Action allows you to load presets for all the fixtures that are stored within this preset – without having to select them. This is a very useful function in a Live-Show setting.

To enable or disable direct action, please proceed as follows:

01) Open the Preset Action Dialog by pressing the **Magic Wand** button.
02) Click on **Direct Action**.

8.5.4.4. Recording Presets

01) Select one or more fixtures.
02) Set Values for the fixtures by choosing the attribute group and changing the values to be active in the Fixtures view.
03) Press the [Record] key.
04) Open the **Presets View** on the internal or external screen.
05) Select an Empty Preset.
06) The console will ask you for the name of the Preset.
07) Click on **Ok** when done.

8.5.4.5. Automatically Generating Presets

You may have the console auto-generate Presets based on the ranges defined in the library. For more information please see the section 8.5.4.3, The Preset Action Dialog (Magic Wand) on page 120.

8.5.4.6. Naming Presets

To change the name of a Preset, please proceed as follows:

01) Press the [Name]-key on the console front panel.
02) Select the Preset you would like to rename by tapping on it in the **Presets** View.
03) Enter the new name.
04) Click on **Ok**.

8.5.4.7. Selecting / Deselecting Presets

To select or deselect a Preset, please follow these steps:

01) Select some Fixtures.
02) Open the **Presets** View on the internal or external screen.
03) Tap on a Preset.

To deselect a Preset, simply tap on the selected Preset a second time.

When no fixtures are selected and direct action is disabled, selecting a preset for the first time will select all fixtures in that preset.

8.5.4.8. Loading a Presets value instead of using it as a reference

To load a Presets value rather than loading the Preset as a reference, please follow these steps:

01) Select some Fixtures.
02) Open the **Presets View** on the internal or external screen.
03) Hold down the [Shift]-key on the front panel while you tap on a Preset.

8.5.4.9. Copying Presets

01) Press the [Copy]-Key on the console front panel.
02) Select the Preset you want to copy.
03) Select the destination Preset.

8.5.4.10. Moving Presets

01) Press the [Shift] and [Copy]-Key on the console front panel at the same time.
02) Select the Preset you want to move.
03) Select the destination Preset.

8.5.4.11. Editing Presets

You may rename any Preset, set its icon and color by pressing [Edit] on the front panel and selecting a Preset from the internal or external Presets View.

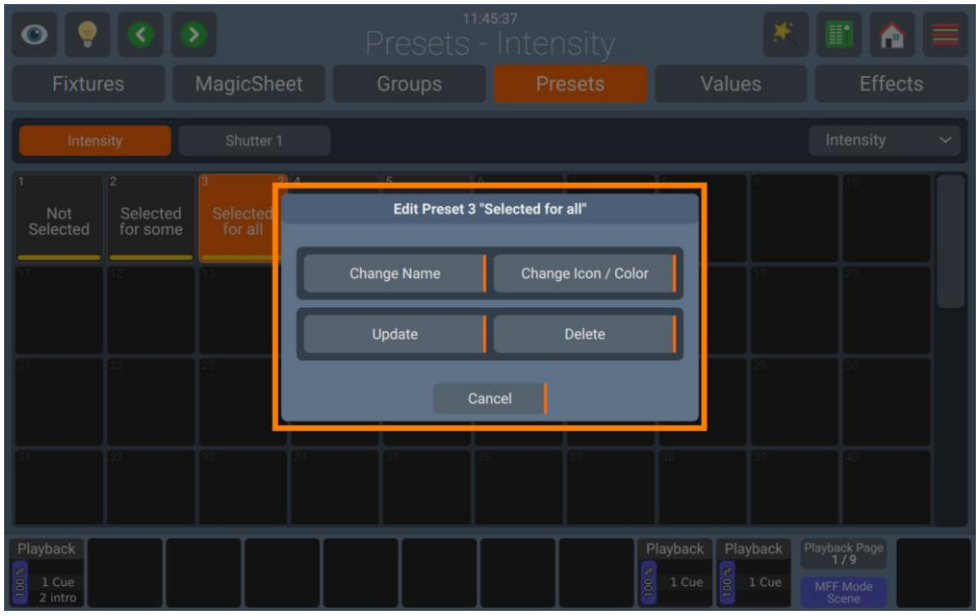


Fig. 121: Presets View – Edit Preset

Changing the Name

01) To change the name of a preset using the Edit Preset Dialog, press [Edit] on the console front panel and tap on the Preset Item.
02) From the Edit Preset Dialog, click on the **Change Name** button.
03) Enter the new name.
04) Click on **Ok**.

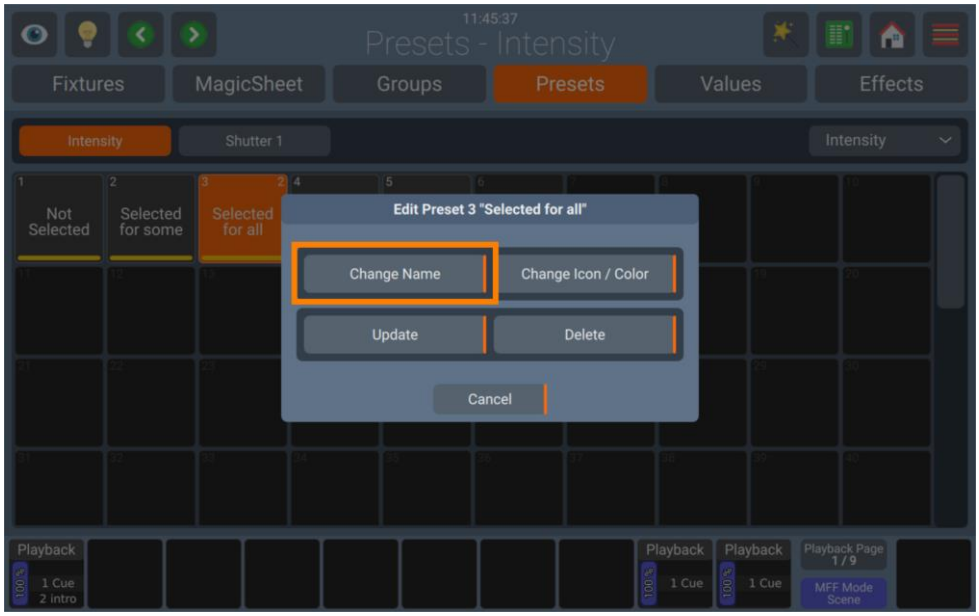


Fig. 122: Edit Preset – Change Name

Setting an Icon / Color

01) To set an Icon for the preset open the Edit Preset Dialog by pressing `[Edit]` on the console front panel and tap on the Preset Item.
02) From the Edit Preset Dialog, click on the **Change Icon / Color** button.
03) Pick an Icon, on the **Icon** Tab.
04) Pick a color, on the **Color** Tab.
05) Click on **Ok** and close the Edit Preset Dialog by clicking on **Ok**.

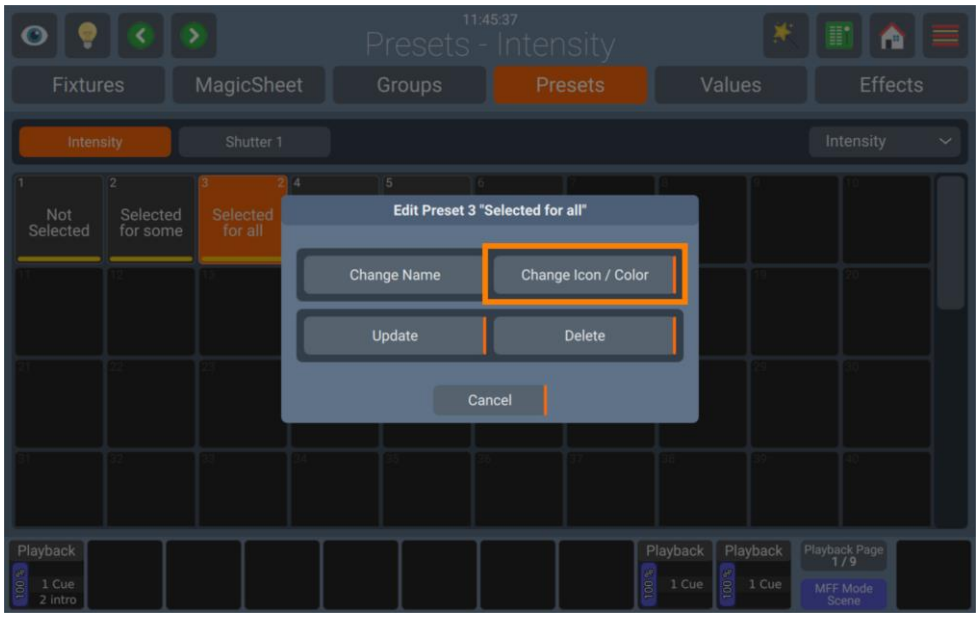


Fig. 123: Edit Preset – Change Icon / Color

8.5.4.12. Removing Values from Presets

To remove Values from an existing Preset, please proceed as follows:

01) Select the fixtures you want to remove from the preset.
02) Set some values for the attributes you want to remove.
03) Change to the **Presets View**.
04) Press [Record].
05) Select the existing Preset you would like to remove the values from in the Presets View in either the internal or the external Screen.
06) The console will ask you what to do. Select **Remove** as pictured below.

Note: Removing values from a Preset that is used in programmed Playbacks or Scenes causes these values to lose the reference to the Preset.

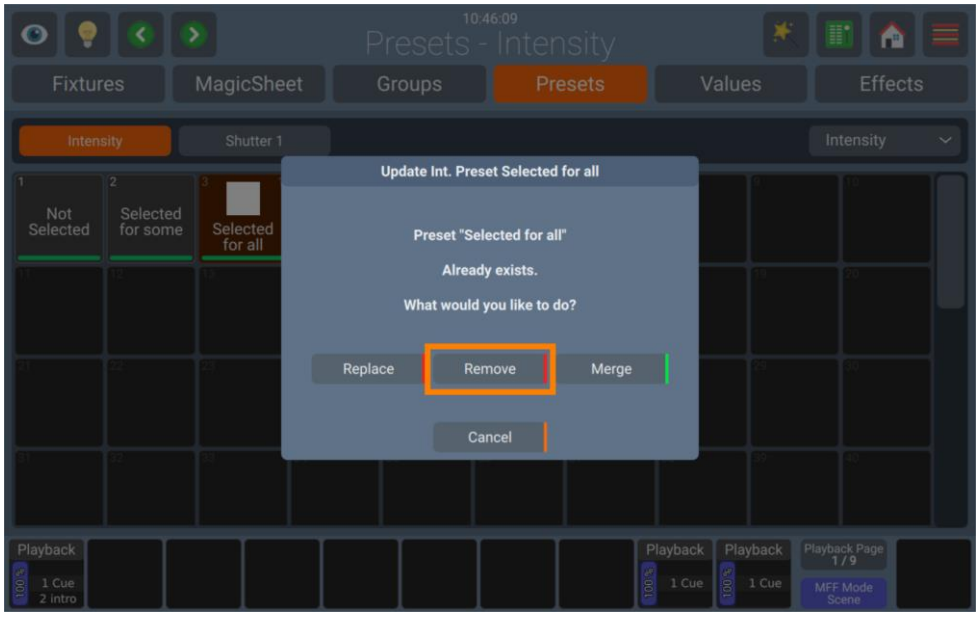


Fig. 124: Preset Exists - Remove

8.5.4.13. Replacing a Preset

Should you wish to replace all contents of a preset, please proceed as follows:

01) Select some fixtures and set values for them.
02) Change to the **Presets View**.
03) Press [Record].
04) Select the existing preset you would like to replace in the **Presets View** in either the internal or the external screen.
05) The console will ask you what to do. Select **Replace** as pictured below.

Note: If adding new parameters to a Preset, or if removing "old" parameters this is not carried over into existing Playbacks and Scenes using this Preset. Only attributes that existed when the Playback or Scene was programmed will be updated.

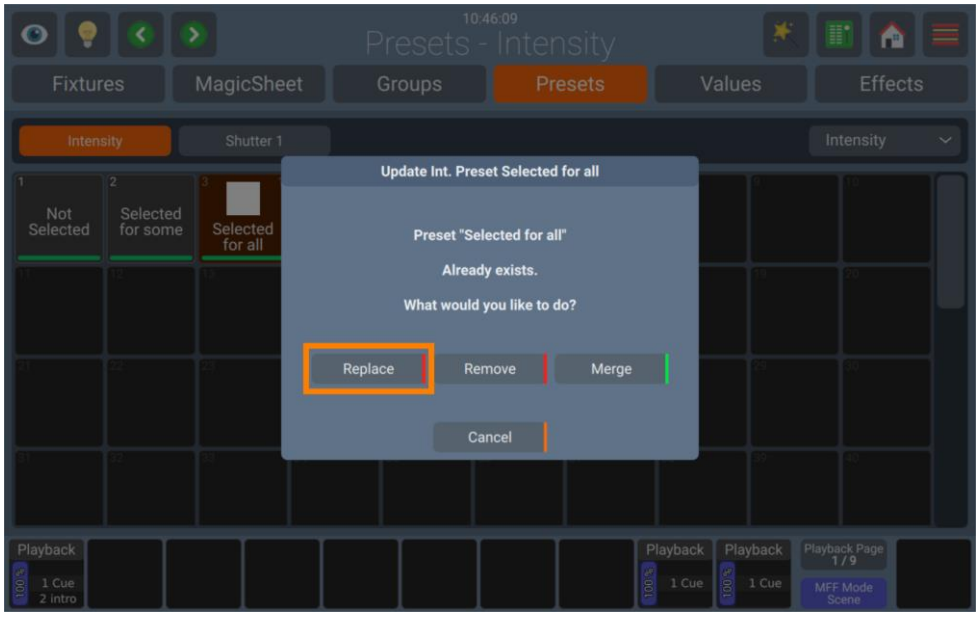


Fig. 125: Preset Exists - Replace

8.5.4.14. Adding or Changing Values in existing Presets

To add or modify values in an existing preset, please proceed as follows:

01) Select at some fixtures and set some values for them.
02) Change to the **Presets View**.
03) Press `[Record]`.
04) Select the existing Preset you would like to add or modify the values of from the Presets View in either the internal or external screen.
05) The console will ask you what to do. Select **Merge** as pictured below.

Note: If you used this Preset while programming Scenes or Playbacks, only values that existed when you used this Preset will be updated. New values are not automatically added to Playbacks and Scenes.

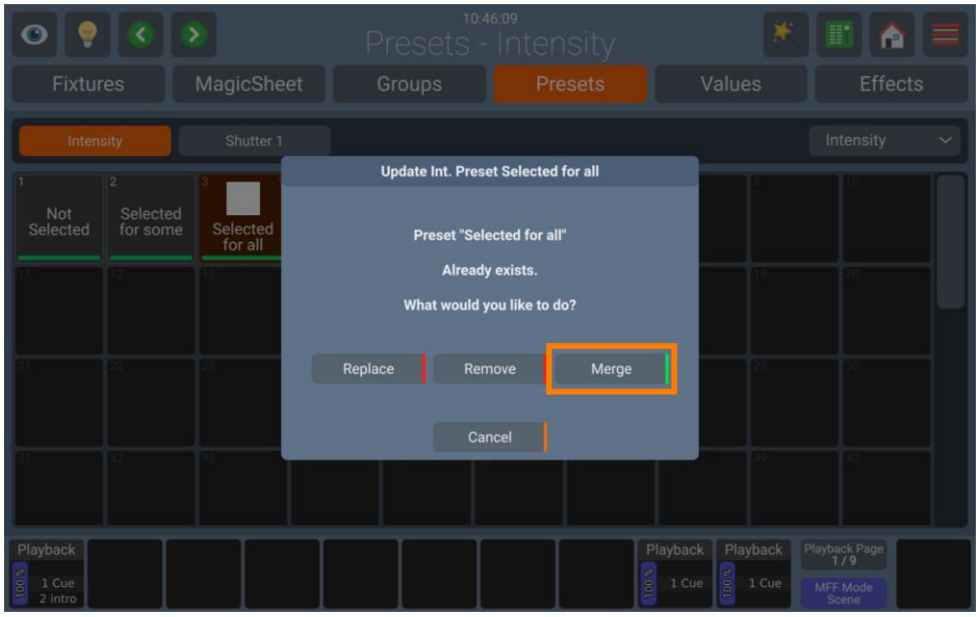


Fig. 126: Preset Exists - Merge

8.5.4.15. Deleting Presets

To delete an existing Preset, please proceed as follows:

01) Change to the **Presets View**.
02) Press `[Delete]` on the console front panel.
03) Select Preset you would like to delete from the Presets View in either the internal or the external screen.
04) The console will ask you for confirmation.

Note: Deleting a Preset that is used in programmed Playbacks or Scenes causes these values to lose the reference to the Preset.

8.5.5. The Values View

Altering fixture parameter values is best done from within the Values View in the Home Screen but is possible in every View of the Home Screen using the encoders or Presets. If you have an external monitor and LAMPY DNGL attached, you can modify fixture values any time by using Presets on the external screen.

The LAMPY groups fixture attributes in a sense full way by dividing them into separate attribute groups like **Intensity**, **Position**, **Color**, **Gobo**, **Beam** and **Special**.

There are different states of values that behave differently. We will explain this in depth a little bit further below.

The Values View sometimes also called "Programmer" always takes precedence over Playbacks and Scenes, this way you may modify the look on stage, at any point in a show, by overriding the Playback and Scene output.

To open the Values View, click on **Home** and select **Values** from the top bar.

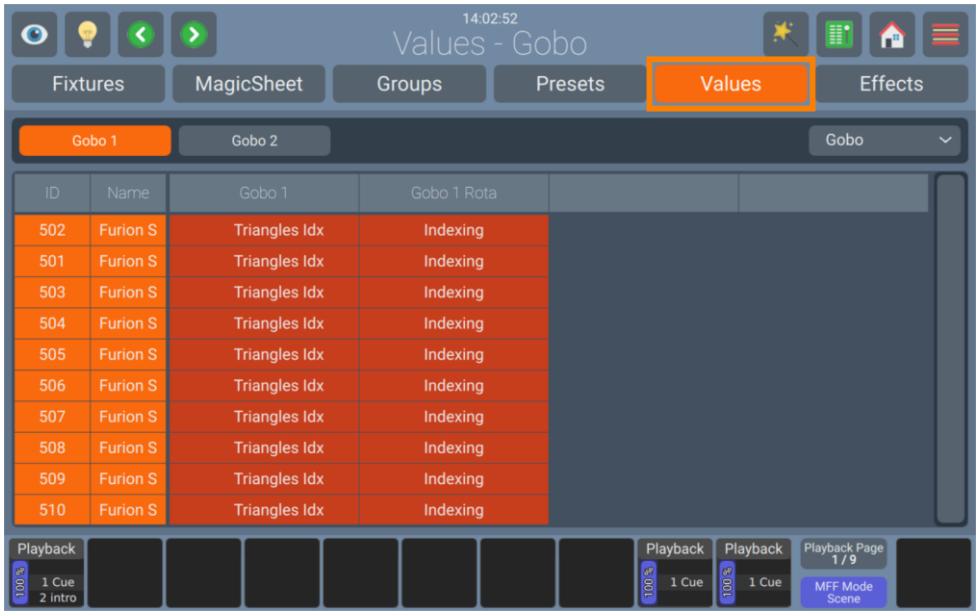
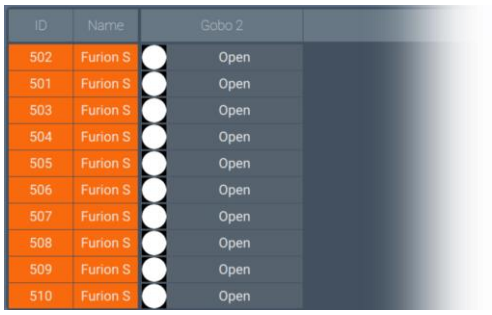


Fig. 127: Home Screen – Values View

8.5.5.1. Different States of Values



This image shows how the programmer looks like if you have fixtures selected, but no values assigned to them.

They are still outputting values set by Playbacks or their default values set in the library.

These values are displayed in grey color.

This image shows how the programmer looks like if you have fixtures selected, with values assigned in the programmer.

The programmer takes precedence over Playback and Scene output for the attributes with values in the programmer.

These Values are indicated by a red text color on the default background color.

However, these values are not recorded.

This image shows how the programmer looks like if you modified (touched) values of an attribute in the programmer.

The programmer takes precedence over Playback output for all attributes with values in the programmer.

As soon as values are "touched" (indicated by red background and texts color of the corresponding cell) they can be recorded.

8.5.5.2. Emptying the Values View Content

For all playbacks to re-gain control over the fixture attributes contained in the programmer, the programmer needs to be cleared out. This happens in three steps with each press of the `[Clear]` key.

The first press of the `[Clear]` key will un-touch all values, however they are still in the programmer overriding the playback.

The second press of the `[Clear]` button will remove all values from the programmer and playback values will be output again.

The third and last press will unselect all fixtures that were selected.

In short, three times `[Clear]` will clear the programmer:

`[Clear] [Clear] [Clear]`

If you accidentally cleared the programmer contents, `[Shift] + [Clear]` will undo the last clear command.

8.5.5.3. Programmer Buttons

Fig. 128: Programmer Buttons

The Programmer buttons provide the following functions:

	Name	Action	Action holding [Shift] key	Long Press
	Blind	"Hides" the programmer content. Second press will show the content again.		
	Highlight	Sets the selected fixtures to the "Highlight" value defined in the Library. Usually open Dimmer and 100% brightness. Second click will deactivate the function. Very useful for focusing.		
	Previous Fixture	Cycles through full selected fixtures, including all instances, in backwards direction.	Cycles through individual instances.	Selects all fixtures.
	Next Fixture	Cycles through full selected fixtures, including all instances, in forward direction.	Cycles through individual instances.	Even / Odd fixtures will be selected.

Blind Button

With **Blind** turned on, any change made in the programmer will not be output live. This enables you to prepare a look for later use or make changes to a different cue that is not yet played back.

To enable **Blind**, simply click on the button.

Highlight Button

Pressing the **Highlight** button temporarily sets the selected fixtures to a "Full on, open white" state, and will set attributes like Gobo, etc. to open or whatever value is defined as the Highlight Value in the fixture library.

This function may be useful when you need to see the beam of a fixture on stage, while focusing positions for example. It can also be used to quickly build groups.

Highlight only changes the attribute values in the output, not in the current cue or in the Programmer.

Highlight remains active until you press the Highlight key again. It also applies to sub-selections, meaning you may use highlight to find a specific light by stepping through the selected fixtures using the **Previous** or **Next** button found in the top toolbar.

To see how the Highlight function works:

01) Select some fixtures.
02) Press the **Highlight** button found in the top toolbar. The lights will keep their position on stage, but other attributes may change to the highlight value set in the library.
03) Hit the **Previous** or **Next** key to step through the fixtures.

8.5.5.4. The Values Action Dialog

The Values View Action Dialog provides functions that make it easier to work with Values. It may be opened by pushing the **Magic Wand** Button from within the Values View within the Home Screen.

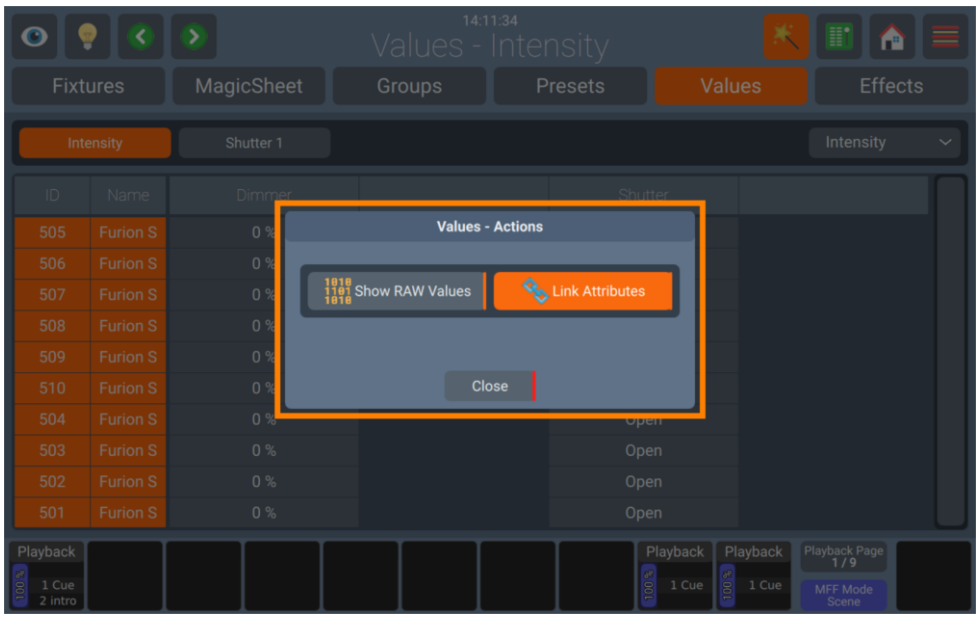


Fig. 129: Home Screen – Values Action Dialog

Show RAW Values

The **Show RAW Values** button will show the raw DMX Values being output instead of the captions of values that are defined in the library. If you have a Preset selected, the Preset name will be shown.

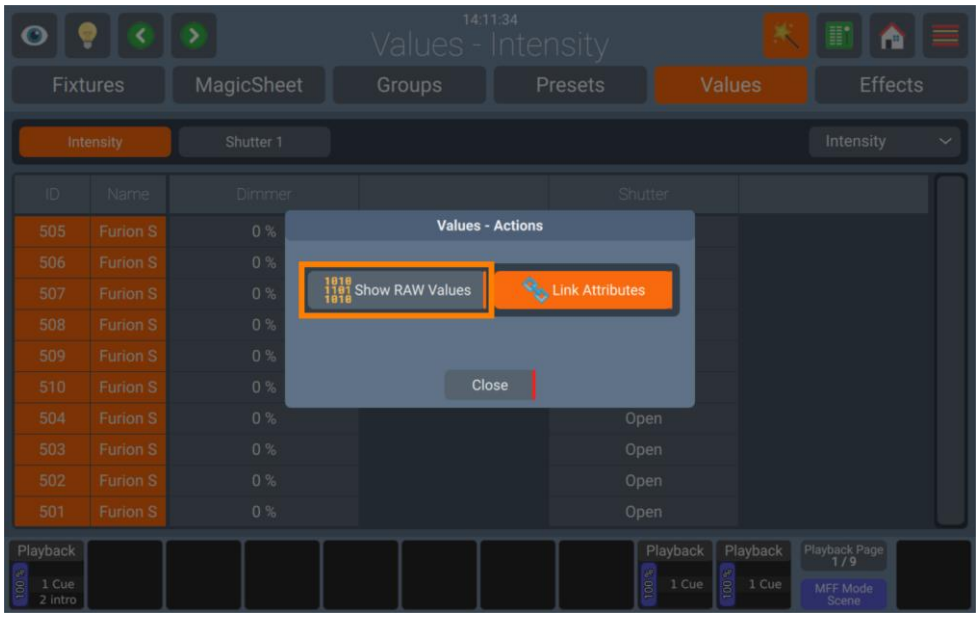


Fig. 130: Home Screen – Values Action Dialog – Show RAW Values

Link Attributes

Link Attributes is a convenience function that, by default, will touch all parameters within the Color or Position attribute group as soon as one of the other attributes in the attribute group is touched.

In example: If you touch the cyan attribute's value, the console will automatically touch magenta and yellow as well. The same holds true for hue and saturation as well as red, green, and blue as well as pan and tilt. This is to make sure you are always "touching" every of these linked parameters.

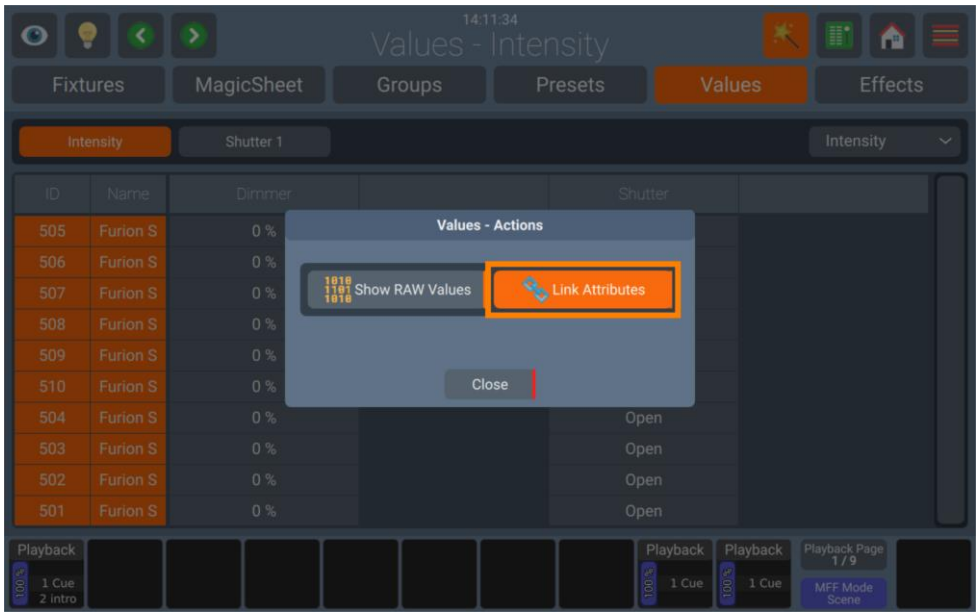


Fig. 131: Home Screen – Values Action Dialog – Link Attributes

8.5.5.5. Setting Fixture Values

Using the Encoders

To be able to alter fixture parameter values, i.e. set dimmer values, you first need to select some fixtures.

For example, to adjust the dimmer level, select **Intensity** by pressing the `[Int]` key on the console front panel, or choose intensity from the dropdown menu found in the values menu.

The encoders will now alter dimmer and shutter values for selected fixtures and the OLED Displays above the encoders will read the selected features.

To have the encoders control different features within the selected group (I.e. Gobo 3 and 4), simply press the appropriate button within the home screens menu bar. Only attribute groups supported by the patched fixtures are shown.

If you press on any of the attribute group buttons on the console front panel (`[Int]`, `[Pos]`, `[Color]`, `[Gobo]`, `[Beam]` or `[Spec]`) repeatedly, the console cycles through the different attributes of that given attribute group.

Pressing the `[Shift]` key allows you to adjust fine values by using the encoders. If **Show Raw Values** is turn on in the action dialog, you can see the fine values.

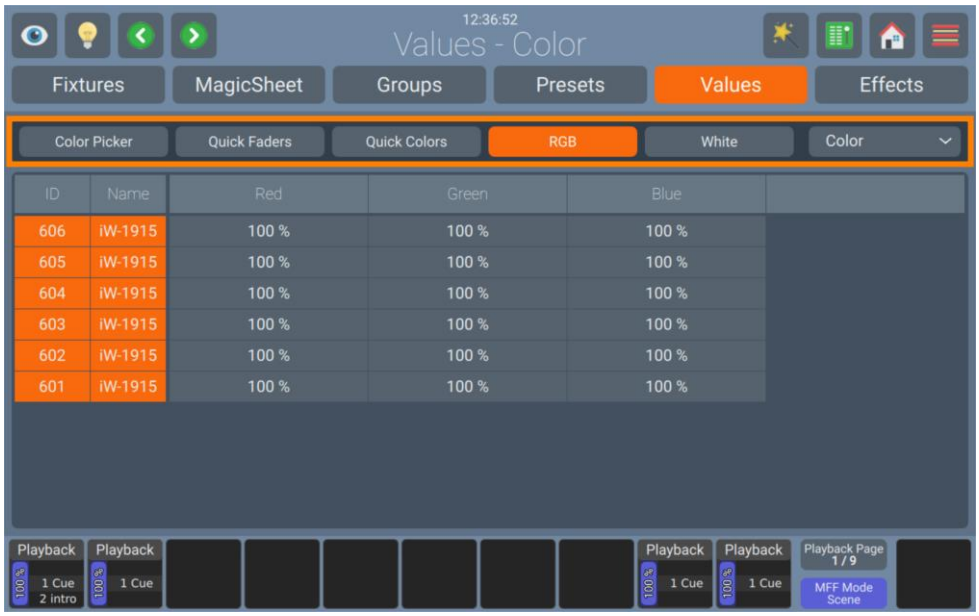


Fig. 132: Home Screen – Values View – Attribute Selection

Using the Set Value Dialog

To select values directly for all selected fixtures from the ranges defined in the fixture's library, press on the appropriate encoder, and select a value from the screen that popped up.

The top menu bar of the Set Value dialog contains a few functions that may be helpful:

Button	Function
Default	Used to set the values of this attribute to the default values defined in the Fixture Library.
Deactivate	Used to "Deactivate" / "Un-Touch" the values of this attribute, so that it is not recorded – but still output.
Off	Removes the values of this attribute.
Off FX	Sets an "Off-Effect" form for this attribute.
Load Output	Loads the values for this attribute from the output.
Load All Output	Loads all values (excluding effects) from the output.

To set values for specific fixtures, you may also select multiple cells in the Values table and right click or long-click to open the Set Values dialog for these fixtures only.

Fig. 133: Home Screen – Values View - Set Value Dialog

8.5.5.6. The Color Picker Concept

The new Color Picker provides maximal flexibility in handling lighting dynamics of modern multi-light source fixtures. A common approach is to simplify color manipulation to RGB channels, ignoring other potential light sources. Despite its efficacy in achieving the desired color, this greatly diminishes the return from the more powerful LED fixtures with up to 9 colors. This leads to an enhancement of lighting dynamics relative to the associated costs of such fixtures.

For color selection, we employ the following strategy:

- Split color selection into 2 components:

04) Targeted output color: The color selected in the **Color Picker**, manipulated by color encoders and color faders. This is the color displayed in the right side of color picker page. Only editable via **Color Picker**.

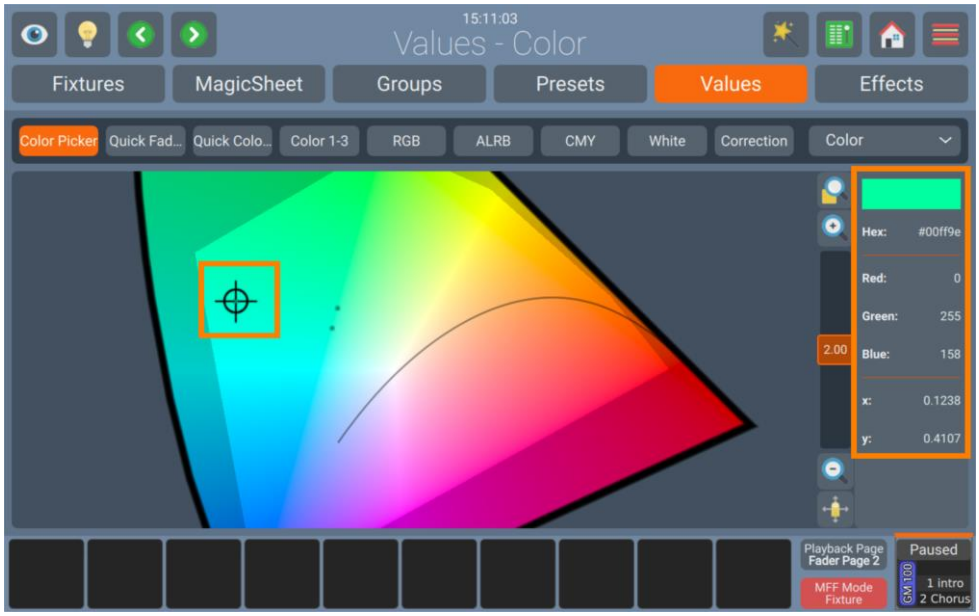


Fig. 134: Values View – Color Picker - Targeted output color

05) Individual output color: The color represented by the dots (for selected fixtures) in the Color Picker. Channel output for each fixture might (and probably will) differ, depending on the individual present light sources and data provided in library (if any color mixing is applied). The figure below, shows the multiple fixtures selected from the same type in a rainbow fade wave effect.

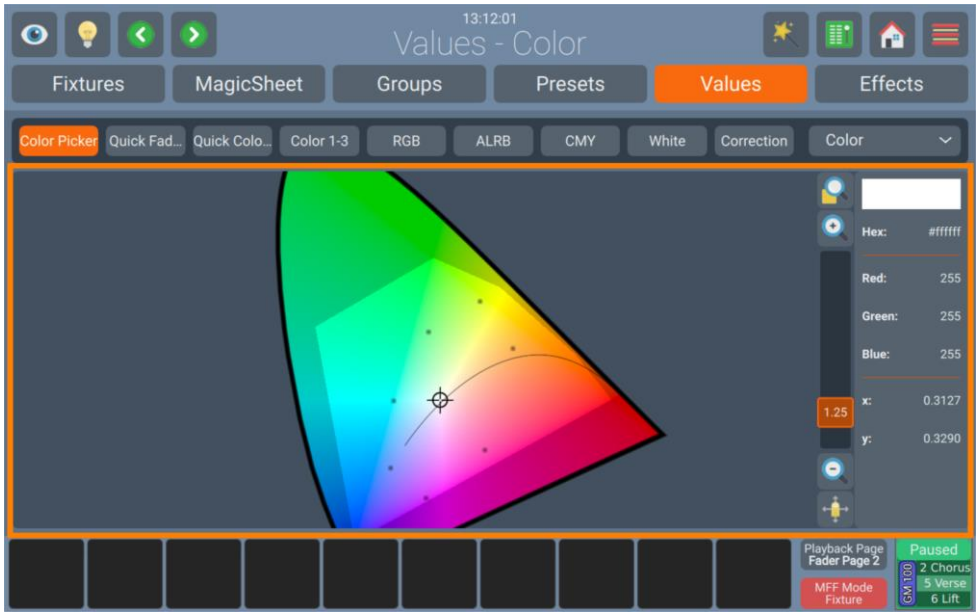


Fig. 135: Values View – Color Picker - individual output color

- Calculate color output per fixture:

Color output is calculated according to each fixtures color mixing data, editable in the Library Editor. If the targeted color lies outside of the fixtures color space, the closest projection in that fixture's color space is applied. This can be observed by light source dots separating in the color picker at certain boundaries when multiple fixture types with different color spaces are selected.

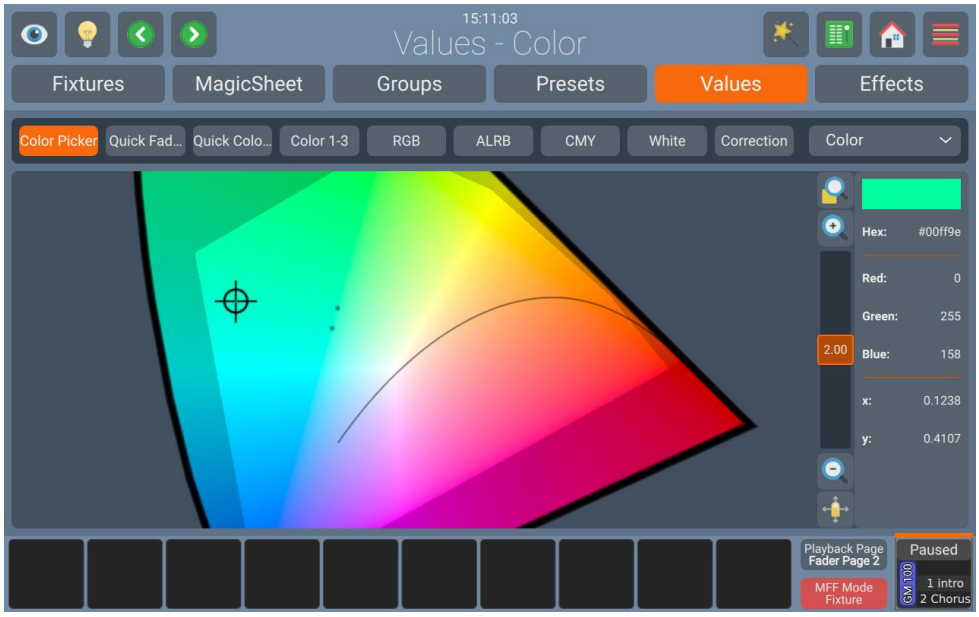


Fig. 136: Values View – Color Picker – Color Output per Fixture

- Auto-assign nearest RGB color wheel color and represent color wheel space:

Fixtures without color mixing can also be used in the Color Picker. The space spanned by the wheel's filters is represented in the color picker. Only a small subset of points from this space is selectable, corresponding to individual filter values. These color wheels spaces are usually rather small and are

shadowed by the typical RGB fixture. The above concerns only fixtures without color mixing, but with a color wheel.

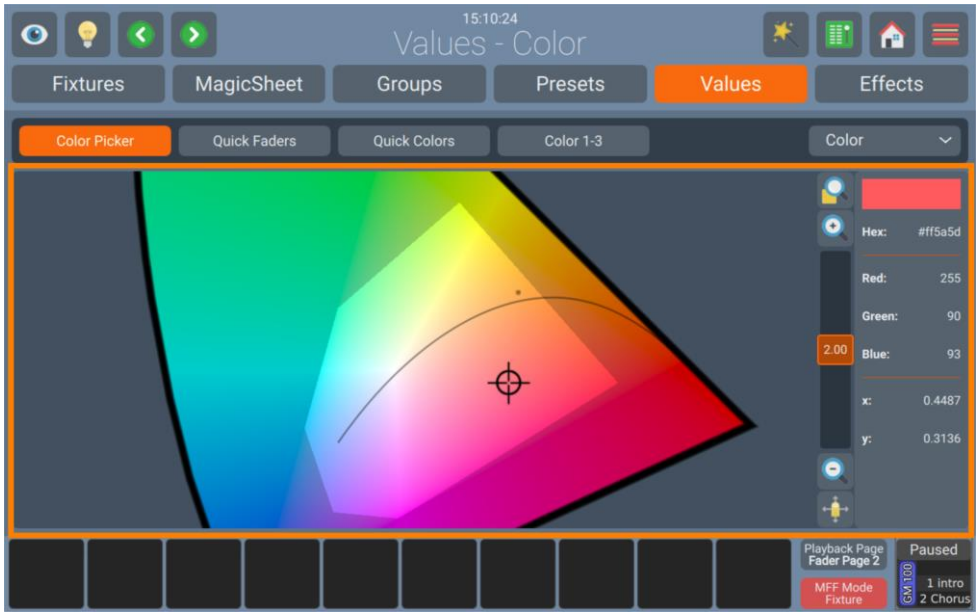


Fig. 137: Values View – Color Picker – Nearest color from Color Wheel Fixture

- Always highlight the biggest color space across selected fixture types:

Provides information about the maximal selectable color space.

- Editing of emitter data in the library editor:

Some fixtures already have emitter data in the library. For the rest, users can use the **Color Mixing** button to enter custom data for light source functions in library. This allows you to self-calibrate fixtures per type. For differences in the same type, you may create copies of the definition and patch according to emitter data distribution.

This makes for a highly optimized complex color selection, across multiple color channels, characterized by varying emitter intensities and different color mixing systems, including HSI and CMY. More retro fixtures, using color wheels instead of LED mixing, are also supported. The color picker works best when the fixture is used in 'RAW' mode, where internal color adjustments within the fixture do not clash with the chosen color spectrum.

8.5.5.7. Setting Color mixing Attributes

Alter Color-Values using the encoders.

To control color values using a specific attribute of the fixture, choose **Color** from the dropdown menu found in the Home Screen menu bar. Alternatively press the `[Color]` button on the console front panel. Then select the desired sub-attribute group from the menu bar.

Now the OLED displays next to the encoders will show the selected attributes and you may use the encoder to adjust the values of the selected fixtures.

Alter Color-Values using the Color-Picker

To use the color picker to select colors, choose **Color** from the dropdown menu found in the Home Screen menu bar. Alternatively press the `[Color]` button on the console front panel.

Select **Color Picker** from the menu bar.

Note: The Color Picker is only available from within the values tab.

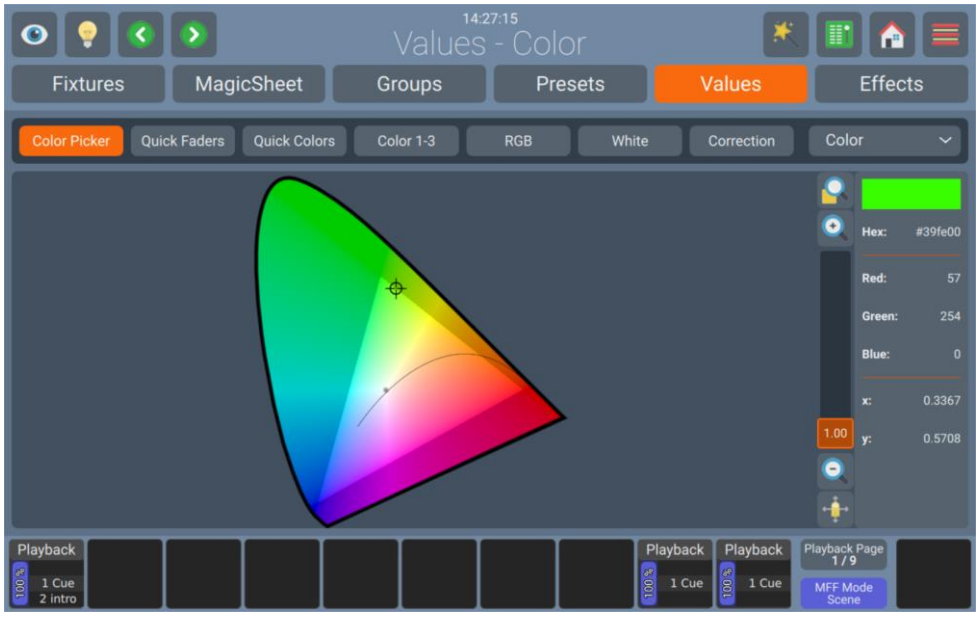


Fig. 138: Home Screen – Color Picker

Alter Color-Values using Quick Faders

To use the color faders to select colors, choose **Color** from the dropdown menu found in the Home Screen menu bar. Alternatively press the `[Color]` button on the console front panel. Select **Quick Faders** from the menu bar.

Note: The Color Faders are only available from within the values tab.

Fig. 139: Home Screen – Color Faders

Alter Color-Values using Quick Colors

To use the quick colors to select colors, choose **Color** from the dropdown menu found in the Home Screen menu bar. Alternatively press the `[Color]` button on the console front panel.

Select **Quick Colors** from the menu bar.

Note: The Quick Colors are only available from within the values tab.

Fig. 140: Home Screen – Quick Colors

8.5.5.8. Setting Values using Presets

You may also use Presets to set fixture values. For more information on how to use Presets to set values, please see section 8.5.4.7, Selecting / Deselecting Presets on page 121.

8.5.5.9. Loading Values from other sources

Loading all Values from Current Output

To grab all values that are currently being output for the selected fixtures (including the default values), hold down the [Shift] key and press the [Edit] key simultaneously.

This will grab all values including effects from the console's playback engine, but before any Group Master Dimmers are calculated.

Loading all Values for a specific Attribute Group from Current Output

To grab all values that are currently being output for a specific attribute group for the selected fixtures (including the default values), press the [Edit] key and press the desired attribute groups key ([Int], [Pos], [Color], [Gobo], [Beam] or [Spec]) on the front panel.

This will grab all values without effects for the selected Fixtures for the selected attribute group from the console's playback engine, but before any Group Master Dimmers are calculated.

8.5.5.10. Fanning / Spreading Values

Fanning is a very useful function used to distribute values across a range of fixtures.

Fanning of values may be applied to any fixture attribute, and to most effect attributes.

To activate fanning of attributes, press the [Fan] key on the console's faceplate. The Encoder Labels will add "Fan" to the encoder labels to indicate the fan functions status.

The fan function will remain active until you press the button again. However, if you keep holding the [Fan] button for a longer amount of time, the Fan-Function will only be turned on while you keep pressing its button.

Bear in mind that the fixture selection order is important when fanning.

8.5.6. The Effects View

Effects are applied to attributes using an effect table that applies mathematical functions (such as a sine- or cosine wave) to values against time. Each of these effects is displayed as one row within the Effect Programmer.

Effects created on the LAMPY control console are stored into Playbacks, Scenes or Executors. If a Playback contains multiple cues effects will be tracked through the Playback in the same way as regular values are.

If a cue with new effects starts, the LAMPY console will determine all effects that are running and will crossfade from them to the new effects and hence, turn off all previously started effects from previous cues running on the same attribute. To stop an effect running on a parameter for good, you would need to add an "Off Effect" curve, which is basically just a flat effect form without any size.

Keeping effects in sync is an important functionality, especially when different effects are combined over multiple parameters to create one "big" effect to create the desired result.

Let's have a look at a Fly Out Effect, which turns on a fixtures intensity as the tilt parameter fades up, then turns it off and moves tilt back down in black:

On most traditional consoles it is not possible to have Cue 1 contain just the Tilt part of the effect and Cue 2 contain the intensity part so you can pre-set the movement. LAMPY takes care of this problem since it will automatically sync these effects, so they always look the same, no matter when Cue 2 is started, as long as both Cues are in the same Playback. Also, Move in Black can preset effects automatically and keep them in sync. However, two separate Playbacks are not kept in sync.

To open the Effects View, click on **Home** and select **Effects** from the top bar.

Fig. 141: Home Screen – Effects View

8.5.6.1. The Effects Action Dialog

The Effects View Action Dialog provides core functions to work with Effects. It may be opened by pushing the **Magic Wand** Button from within the Effects View within the Home Screen.

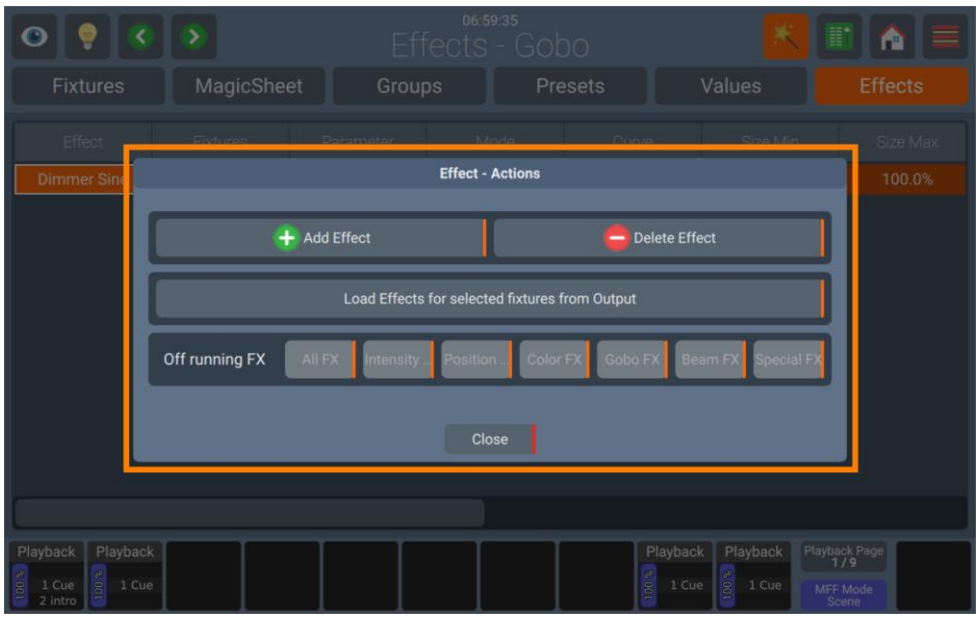


Fig. 142: Home Screen – Effects Action Dialog

Add Effect

The **Add Effect** button is used to add an Effect to your current fixture selection.

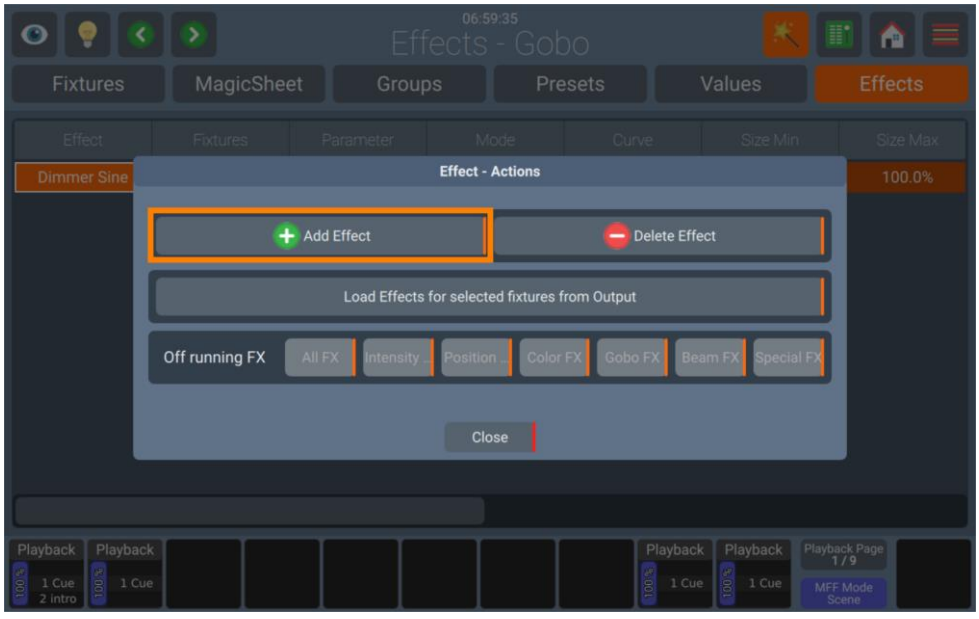


Fig. 143: Home Screen – Effects Action Dialog – Add Effect

Delete Selected FX

Delete Selected FX is used to delete the effects that are currently selected in the Effects View.

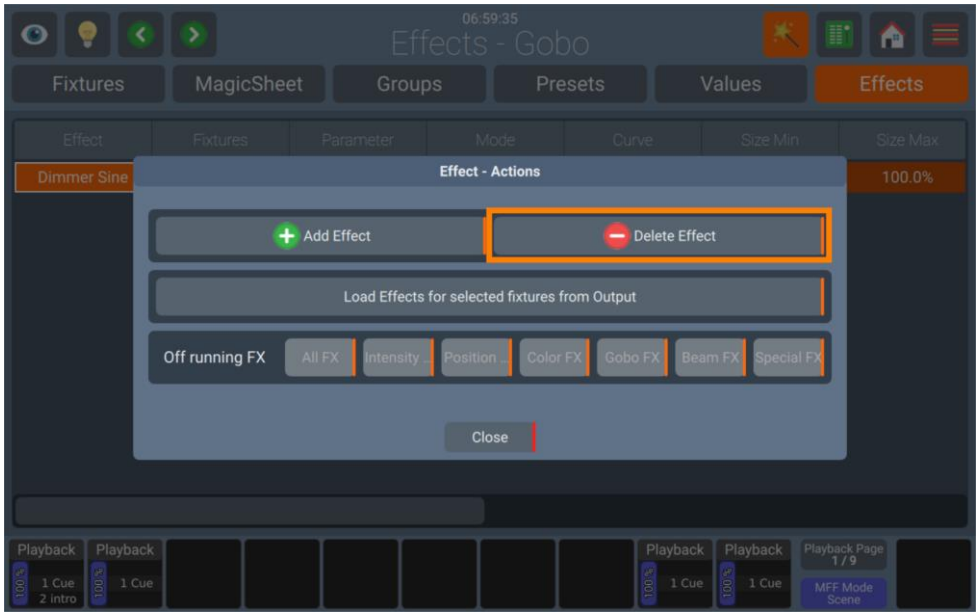


Fig. 144: Home Screen – Effects Action Dialog – Delete Selected FX

Load Effects for Selected Fixtures from Output

Load Effects for selected Fixtures from Output is used to load all effects that are running from the current consoles output for selected fixtures.

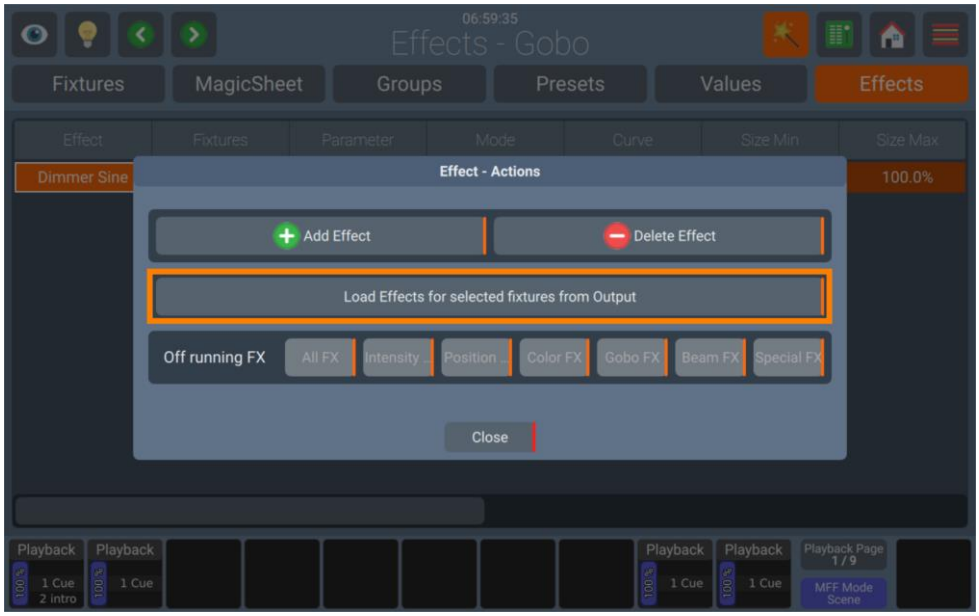


Fig. 145: Home Screen – Effects Action Dialog – Load Effects for selected Fixtures from Output

Off Running FX

The Effects Action Dialog includes a shortcut to stop a specific running effect or all running effects.

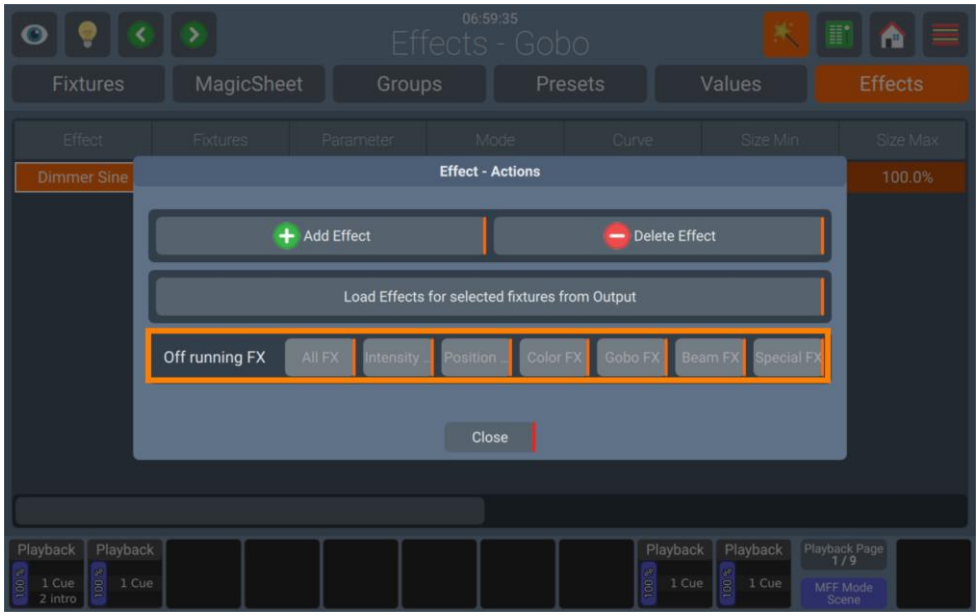


Fig. 146: Home Screen – Effects Action Dialog – Off Running FX

8.5.6.2. Adding Effects

To add an Effect, please proceed as follows:

01) Select the fixtures you would like to apply an effect to.
02) Press the **Magic Wand** Button from within the Effects View.
03) Click on **Add Effect**.
04) Choose if you would like to create a pre-defined or a custom Effect as explained below.

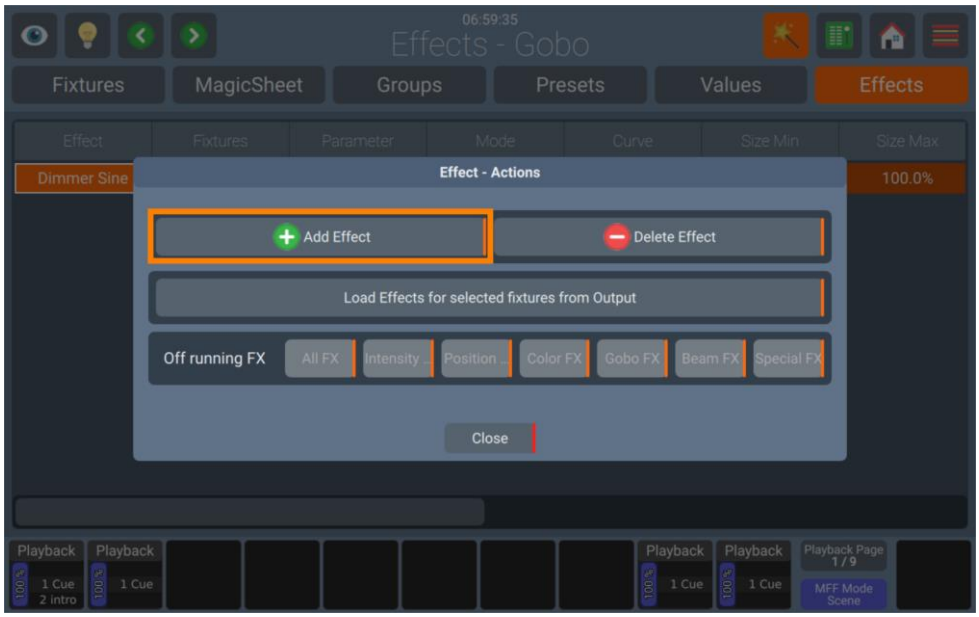


Fig. 147: Home Screen – Effects Action Dialog – Add Effect

Predefined Effects

Predefined Effects offer a basic selection of effects with the attributes already set up for your convenience.

To add a predefined Effect, follow the steps outlined above and select **Predefined FX** from the window that opened. After, select the desired effect from the list of pre-made effects.

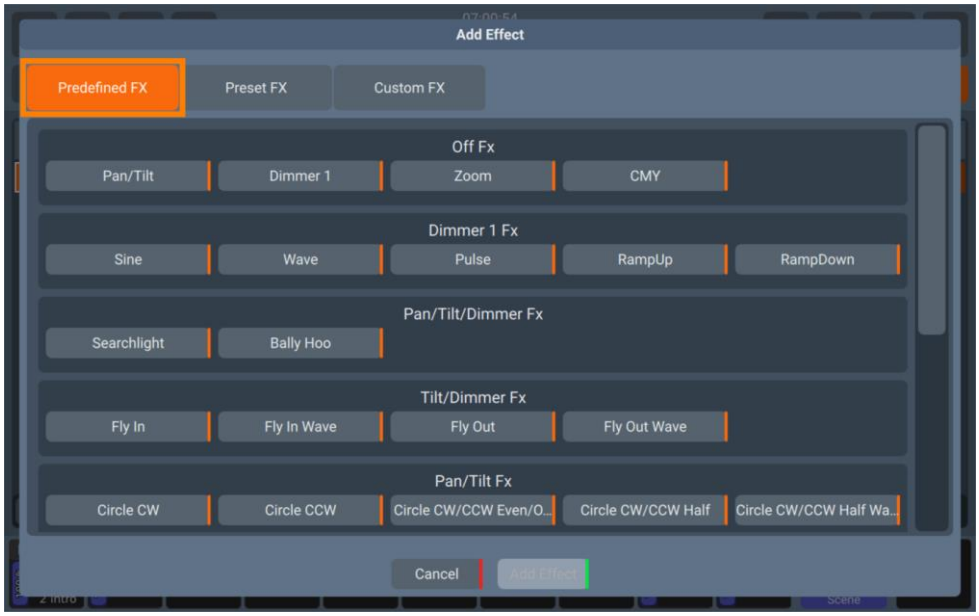


Fig. 148: Home Screen – Add Effect – Predefined Effects

Preset Effects

Preset Effects are a good base to create different effects using Presets. The function will generate an effect for each function which both selected presets contain. The mode of these lines is set to absolute, and the minimum and maximum size to the selected presets.

To add a Preset Effect, follow the steps outlined above and select **Preset FX** in the window that opened.

Pick the desired feature group on from the **Preset Type** list, the Min. Preset and the Max. Preset.

Click on **Add Effect** when done.

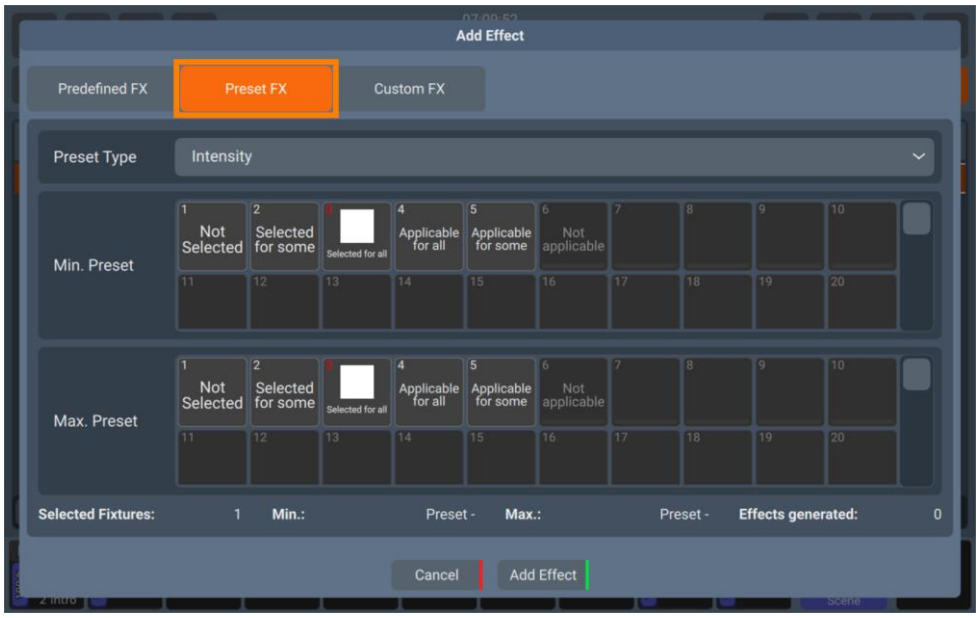


Fig. 149: Home Screen – Add Effect – Preset Effect

Custom Effects

Custom Effects are a good base to create different effects from the ones that are predefined.

To add a Custom Effect, follow the steps outlined above and select **Custom FX** in the window that opened.

Set a name for the Effect, and pick all the desired FX Attributes from the subsequent table.

Click on **Add Effect** when done.

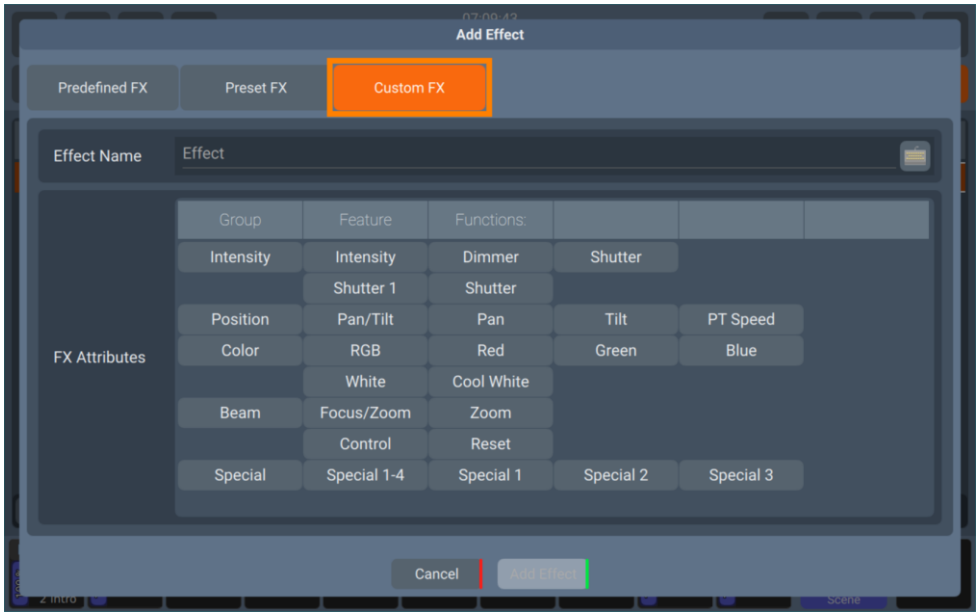


Fig. 150: Home Screen – Add Effect – Custom Effects

8.5.6.3. Modifying Effects

To be able to adjust the various attributes effects have using the encoders, the effect rows that you would like to modify need to be selected.

You may select or deselect effect rows by clicking on any of its cells. Or select multiple, by click and drag.

After, you may use the Encoders to alter Minimum Size, Maximum Size, Speed and Offset. You may also use the [Fan] key to fan these values.

Alternatively, you may double click on any of the cells to alter the values except the Parameter cell.

More information about the individual effect attributes may be found below in section 8.5.6.6, Effect Attributes on page 150.

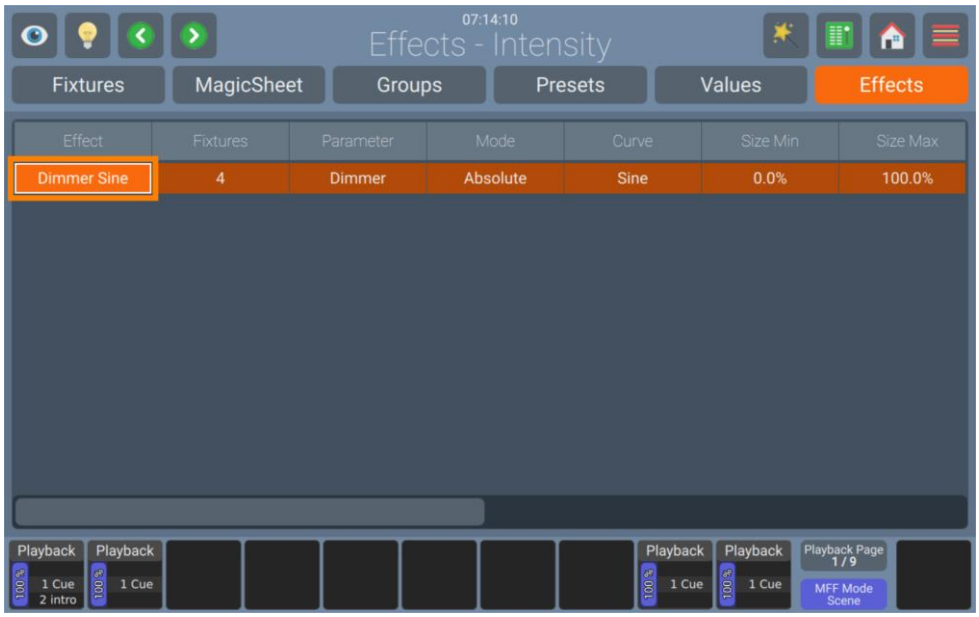


Fig. 151: Home Screen – Modify Effect

8.5.6.4. Deleting Effects

To delete one or multiple effect rows, they need to be selected.

You may select or deselect effect rows by clicking on any of its cells. Or select multiple by click and drag.

Once selected, click on the **Magic Wand** Button, and choose **Delete Effect** from the Action Menu. A confirmation dialog will appear.

Please note that deleting an Effect is not stopping the effect if it is already running in playback. So, for example: If you just created an Effect and recorded it into Cue 1 of a Playback, deleting the FX in the Editor and storing this to Cue 2 of the same Playback does not stop the Effect. Add an Off-Effect form for the Parameters in Cue 2 instead, as described below.

8.5.6.5. Stopping running Effects

To stop one or multiple effects in a Cue, you need to add an effect row for each of the parameters you would like to stop in the editor with an "Off"-Effect Type.

This may be done at any time, no matter if the effect you would like to stop is played back or not.

If the effect you would like to stop is still shown in the Effects View, just change the curve type of the appropriate row to **Off**.

Otherwise, proceed as follows:

01) Select the fixtures you would like to stop an effect for.
02) Press the **Magic Wand** Button from within the Effects View.
03) Click on **Add FX**.
04) If the desired parameter is listed in the **Predefined FX** tab **Off Fx** section, click on it.

Otherwise select **Custom FX**, set a name, select the **FX attribute,** and click on **Add Effect**. Once added, you can change the curve type to Off.

8.5.6.6. Effect Attributes

The LAMPY offers the following Effect attributes. More information on the individual attributes may be found further below:

Column / Attribute	Function
Effect	Used to select or deselect this row for modification with the Encoders, or to delete it using the Action Dialog. Will display the name of a custom FX
Fixtures	Indicates and sets the fixtures in this effect line.
Parameter	Indicates the attribute this effect is running on.
Mode	Used to indicate and toggle between “Relative” and “Absolute”.
Curve	Indicates and sets the curve this effect is running.
Size Min	Used to indicate and set the minimum size of the effect.
Size Max	Used to indicate and set the maximum size of the effect.
Speed	Used to indicate and set the speed of the effect.
Offset	Used to indicate and set the offset for each fixture in the effect.
Duty Cycle	Used to indicate and set the duty cycle for each fixture in the effect.
Grouping	Used to indicate and set the grouping of fixtures in the effect.
Symmetric	Used to indicate and set the if this effect is symmetric.
Direction	Used to indicate and set the Direction of the effect.
Shots	Used to indicate and set the number of times this effect should be run.

Fixtures Column

The Fixtures Column displays the number of fixtures that are assigned to this effect line. Double clicking, right clicking or a long press on this cell opens the Select Fixture dialog which allows to select the fixtures assigned to this effect row or update the fixtures that are assigned to this row.

Fig. 152: Home Screen –Effect – Select Fixtures Action

Parameter Column

The Parameter Column displays the attribute an effect is assigned to.

Mode Column

The Mode Column displays the mode of this effect line. Double clicking, right clicking or a long press toggles the mode between **Relative** and **Absolute**.

Relative

Relative Effects apply a mathematical function around the current base value of the selected attribute.

For example: An effect on the Dimmer channel that has a value of 50% and a size of -25% and +25% will alternate between 25% and 75% value. If the base value in the Values View or the Output is at 75%, the effect will alternate between 50% and 100%.

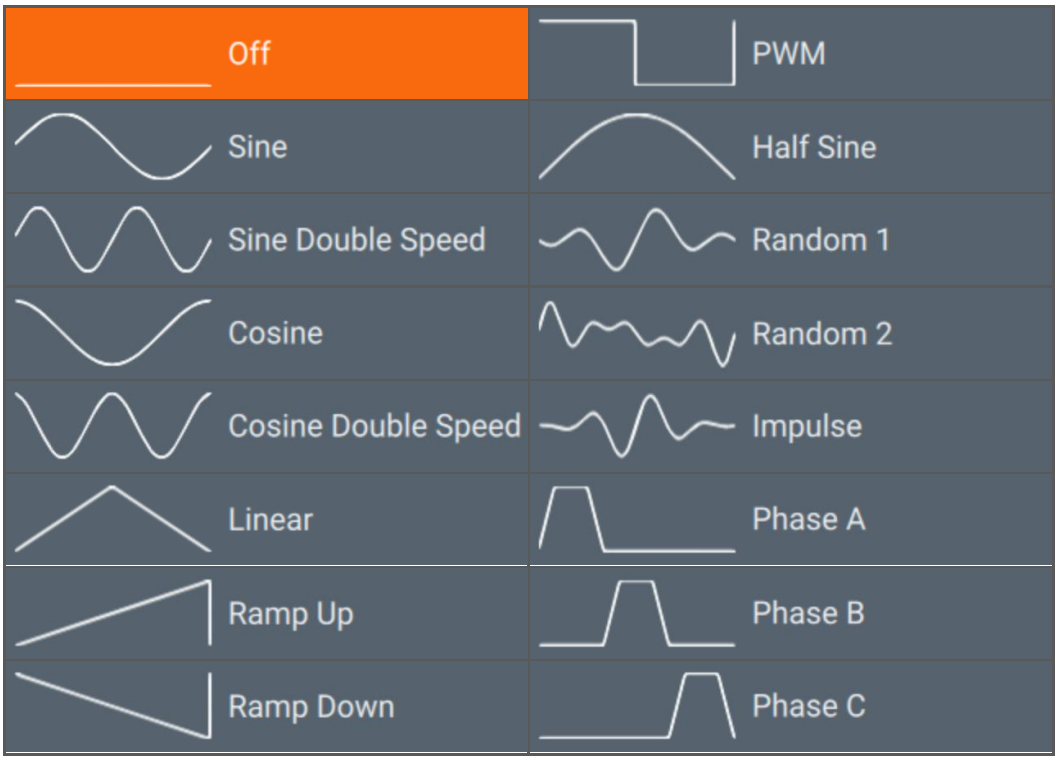
Absolute

Absolute Effects apply a mathematical function from the Size Min value to the Size Max value. In this case, it is also possible to use Presets for Size Min and Max values.

For example: Size Min is set to 25% and Size Max to 25% - then the effect will appear "frozen" at 25%. If the Size min is set to 25% and Size Max is set to 75%, then the effect will alternate between 25% and 75%.

Curve Column

Shown here are the different Effect curves supported by the LAMPY console. You may change the effect form on a per effect-line basis by double tapping, right clicking or long pressing the **Curve** cell.



Size Min Column

The function of the Size Min column depends on the Mode that is set. If the mode is set to "Absolute", you may also choose a preset for this value.

It may be changed by double, right or long-clicking into a Size Min cell. Please see the description of the Mode column above for more info.

It can also be set to a fanned using the [Fan]-key on the front panel, or from within the dialog that opens when you double, right or long-click.

Size Max Column

The function of the Size Max column depends on the Mode that is set. If the mode is set to "Absolute", you may also choose a preset for this value.

It may be changed by double, right or long-clicking into a Size Max cell. Please see the description of the Mode column above for more info.

It can also be set to a fanned using the [Fan]-key on the front panel, or from within the dialog that opens when you double, right or long-click.

Speed Column

The Speed column defines the speed of the effect. The measure is cycles per minute, or CPM, which refers to the number of full run-throughs of a full effect cycle per minute.

It may be changed or fanned by using the encoders in conjunction with the [Fan]-key found on the front panel, or by double, right or long clicking into a Speed-cell.

Offset Column

The Offset column defines the starting offset of the effect for each fixture in the effect. It is entered in Degrees. 0 to 360 degrees means that the offset is fanned, and the first fixture starts at 0 degrees, whereas the other fixtures in this effect row will be "delayed" having a staggered kind of effect. This is useful for wave-like effects.

It may be changed or fanned by using the encoders in conjunction with the [Fan]-key found on the front panel, or by double, right or long clicking into an Offset-cell.

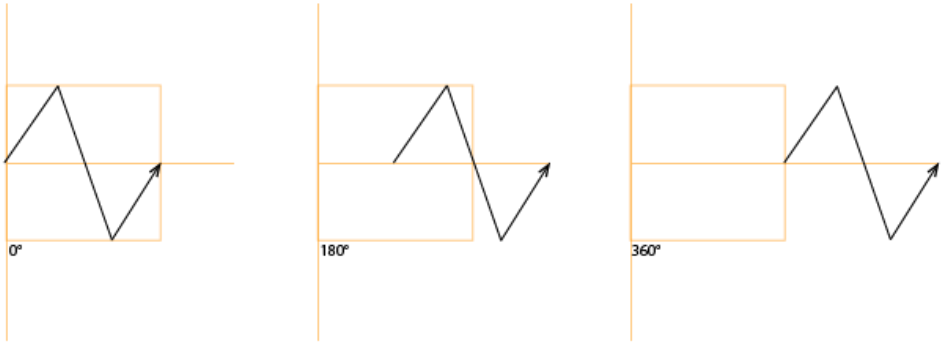


Fig. 153: Offset Effect Attribute

Duty Cycle Column

The "Duty Cycle" attribute defines how long the duration of the effect within a cycle is. It is assigned as a percentage.

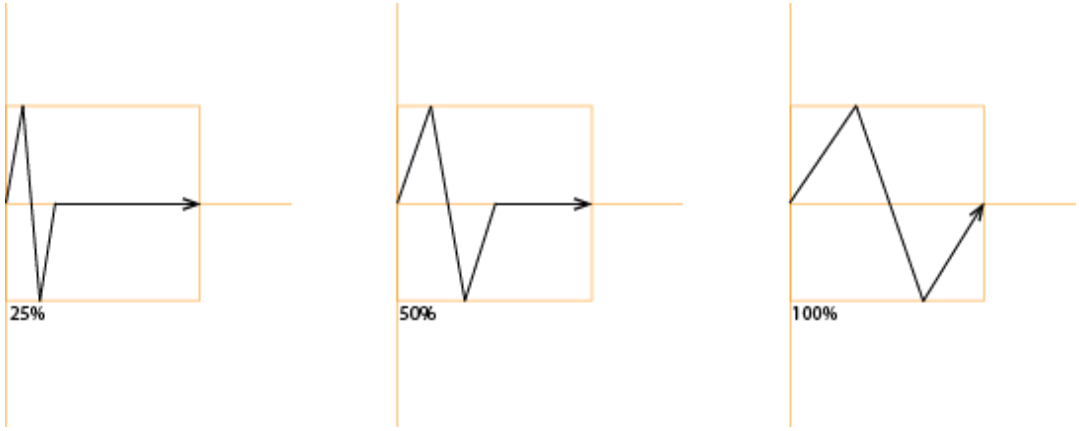


Fig. 154: Duty Cycle Effect Attribute

It may be used to build chases and more. Best way to see how it works is to select a few lights, add the Dimmer Wave predefined effect and play with the duty cycle.

Grouping Column

The "Grouping" attribute divides all fixtures running the effect into groups. The value specified defines the number of fixtures in one group.

For example, a tilt wave across 8 fixtures without grouping will look like this:

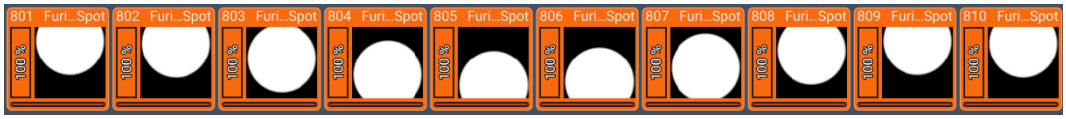


Fig. 155: Grouping Attribute - No Grouping

With Grouping set to a value of 4, the effect will look like this:

Fig. 156: Grouping Attribute - Value of 4

As you can see, Fixtures 1 and 5 are outputting the same values, Fixtures 2 and 6 are as well, and so on.

It may be changed by double, right or long clicking into **Grouping** cell.

Symmetric Column

When symmetric is set to yes, the effect of this line will be mirrored between all fixtures. Pan will also be inverted, to be able to create effects which are fully symmetric.

It may be changed by double, right or long clicking into **Symmetric** cell.

Direction Column

The direction column displays the direction of the effect. It may be changed by double, right or long clicking into the **Direction** cell, and choosing the desired option from the Set Effect Direction Dialog.

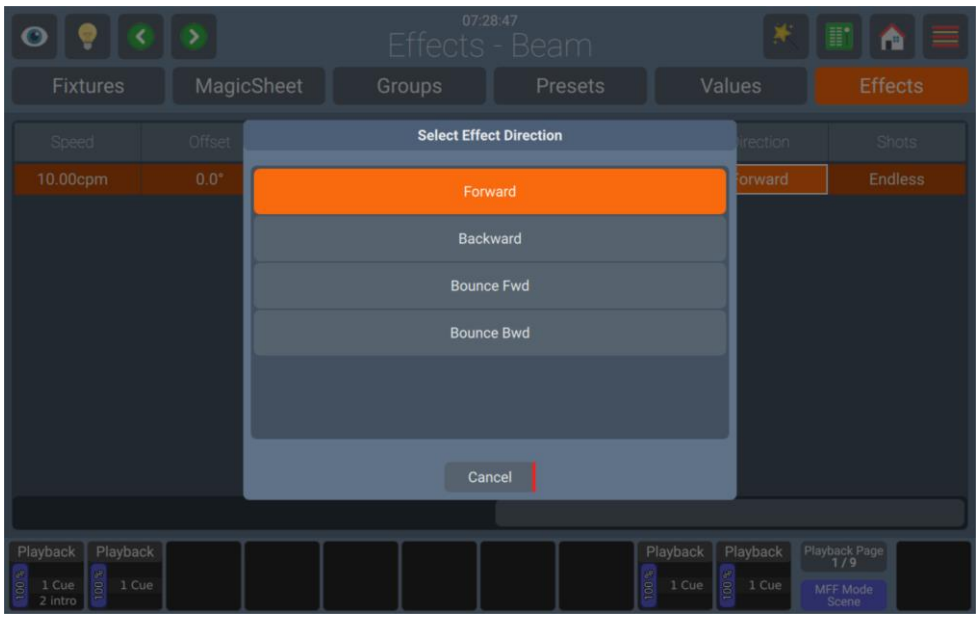


Fig. 157: Home Screen –Effect – Set Effect Direction

Shots Column

The Shots-Column defines how many times an effect should be run before it "self-terminates".

If set to endless, the effect will run until it is stopped by another effect or until the Playback or Scene is switched off. If set to 1, the effect will run once. And so on. To reset the effect to run endless, enter 0.

It may be changed by double, right or long clicking into the **Shots** cell.

8.6. Using the Playback Faders

The 10 Playback Faders below the internal touch screen are the backbone of your programming and show. They may contain one or more cues, whereas each cue might have different timings and values stored. They are also pageable.

Each Playback has its own settings that define the behavior of the Playback which may be set from within the Faders Playback Window using the **Magic Wand** Button.

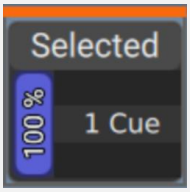
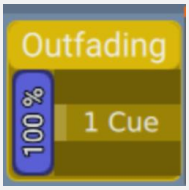
All editing of playback faders is done using the Playback-Fader-Window which may be opened by **pressing on the fader label** shown in the bottom of the touch screen above the physical fader.

Alternatively, the Playback-Fader-Window may be opened by pressing the `[Edit]`-key on the console front panel followed by the button underneath the Playback-Fader.

Fig. 158: Playback Fader View - Cue list

8.6.1. The Playback-Fader Labels

The Fader Label itself provides several layers of feedback to you:

Item	Meaning
	This Playback has the name “Not Running” and is not being played back.
	This Playback has the name “Selected” and is selected but not running.
	This Playback has the Name “Running” and is switched on and running – or: played back. The triangle indicates this Playback is displayed in the Cuelist view.
	This Playback has the name “Paused” and is Paused.
	This Playback has the name “Out fading” and is currently out fading (Off-Time setting when switched off).
	This Playback is empty.

8.6.2. The Long-Click Menu

The long-click menu provides distinct sets of actions based on whether it is invoked within an empty or non-empty Playback Item.

In the context of an empty item, users are presented with the option to record a new Playback.

Conversely, when activated within a non-empty item, the long-click menu options expand to facilitate the manipulation and management of the selected Playback. Allowing to **Select** the Playback, **Add Cue**, **Load Cue**, **Update Cue, Change Name**, or **Delete Playback**.

Long-Click Menu Option	Function
Select	Assigns the Playback to the Master Fader and display its content at the Cuelist View of the external screen.
Add Cue	Opens a dialog to name and add a new Cue.
Load Cue	Will load the Cue to be Playback. If the Playback contains more than one Cue, a dialog will be open to confirm the Cue to load.
Update Cue…	Update Cue contains additional options: Merge, Remove or Replace. When a Playback contains more than one Cue, a dialog prompt will facilitate the selection of the Cue(s) intended for updating. If there is only one Cue on the Playback, the dialog will be skipped, and the update will be done on the existing Cue.
Delete Cue	When is one Cue Playback, a confirmation dialog will be open to delete the Cue and therefore the Playback. When a Playback contains more than one Cue, a dialog prompt will facilitate the selection of the Cue(s) intended for deletion.
Change Name	Opens a dialog to change the Playback name
Delete Playback	A confirmation dialog to complete deletion will prompt.

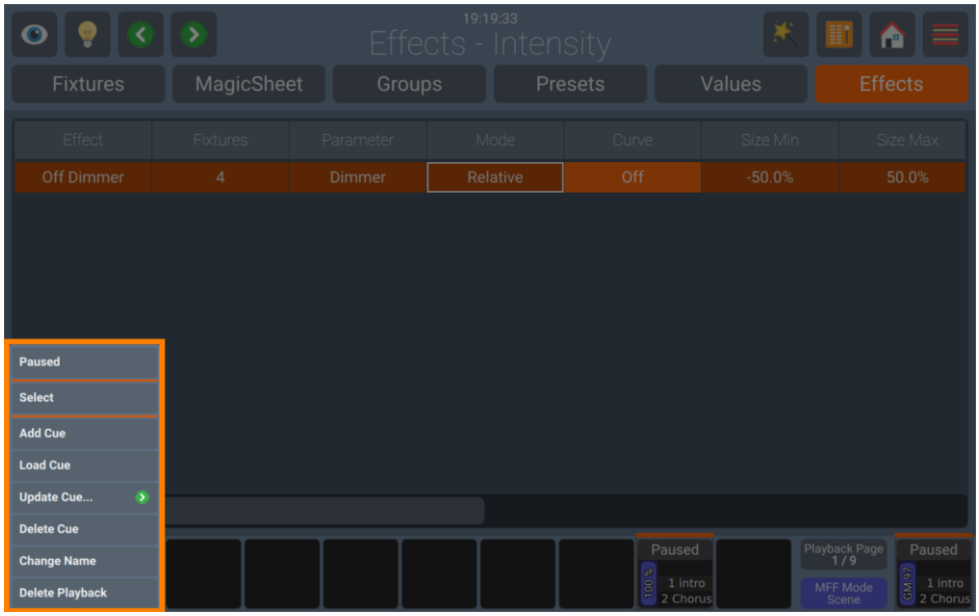


Fig. 159: Playback Button – Long click Menu for an existing Playback

8.6.3. Playback Fader Pages

You may switch between playback pages 1 to 9 at any time by clicking on the **Playback Page Button** between fader label 10 and the Master Fader Label. Long clicking on it, will go to the previous Playback Page. Alternatively, you can press and hold [SHIFT] key while pressing the Master [GO] to change to the next Playback Page or Master [PAUSE/BACK] to change to the previous Playback Page.

Fig. 160: Playback Page Button

Holding down the [Shift]-key while pressing on the **Playback Page Button** will open the Playback Page directory, which allows to change to the template page, which contents are available on any other page, or to name and move pages.

Fig. 161: Playback Page Directory

8.6.4. Playback View – Direct Control Section

The Direct-Control-Section of the playback view contains several buttons to control the playback that is opened within the Playback View.

Fig. 162: Playback Page View – Direct Control

Button	Function
Select	Will select the Playback and make it available to the Master Fader.
Go To	Issues a Go command to start the selected Cue in the Playback view.
Skip-	Skips to the previous cue in the Playback without switching it on. If the Playback is running it will skip to the next cue, ignoring all fade times.
Skip+	Skips to the next cue in the Playback without switching it on. If the Playback is running it will skip to the previous cue, ignoring all fade times.
Off	Will switch the Playback off.
Pause / Back	The first press on the button will pause the Playback including all ongoing fades. The second press will advance through the Playback in reversed order.
Go	Issues a Go command to start the Playback, or, if it is already running, advances through the different cues of the Playback.

8.6.5. Playback View Columns

The following is a list of the columns found in the playback view and their associated functions.

As soon as the Playback View for the appropriate playback has been opened up (you may do so by clicking on the fader label), select the cell with the value you would like to change and double, right click or long-click.

Multiple rows across the same column may be selected, however you cannot select multiple columns at the same time.

Column	Function
Sort	Used to move cues in the Cuelist by dragging and dropping.
Cue ID	Indicates the Cue number.
Name	Indicates and sets the Cue name.
Trig Time	Indicates and sets the time after this cue will be started.
Trigger	Indicates and sets the type of the trigger for this cue. More information may be found below.
In Fade	Indicates and sets the time to fade into this cue.
In Delay	Indicates and sets the delay time this cue will wait to fade in after being started.
Out Fade	Indicates and sets the time in which dimmer values that decrement their values will fade down.
Out Delay	Indicates and sets the delay which dimmer values that decrement their values will wait until fading down.
In Snap	Indicates and sets the percentage of the fade at which "Snap" values will snap to the new value.
MiB	Indicates and sets if this cue should be pre-set by the move in black function of the LAMPY.
Load Values	Used to load Values of a Cue into the programmer.

Sort Column

This column allows you to reorder cues by dragging and dropping the sort handle. It is not possible to drop cues before cue 1. If you would like to do so, please reorder cue 1 instead.

Cue ID Column

The Cue ID Column indicates the number of the cue. Cues can be renumbered by double-clicking in the cell.

Name Column

The Name Column indicates the name of a cue. It may be changed any time by double, right or long clicking into the cell. Alternatively, you may press the [Name]-key on the front panel and select the cue which you would like to rename from the Playback View.

Trig Time Column

This is the time that needs to pass until this cue will be started, use however depends on the trigger selected for this cue. Find more information about the different trigger types below. It may be changed any time by double, right or long clicking into the cell.

Trigger Column

Each cue might have different triggers that affect how the Trig Time Column is used. You may change the trigger on a per-cue basis by right, double or long-clicking into the cell.

These trigger types are available:

Manual Go

This cue will not be played back automatically. The Trig-Time column is unused.

Wait

Once the previous started, this cue will wait until the defined trig time elapsed until it will be started automatically.

Follow

This cue will start after all timings of the previous cue have been completed. The Trig Time column may be used to enter a positive or negative time to delay or antedate the start of this cue.

Timecode

This can be used to have the cue played back by Timecode. The Trig Time Cell for this cue will change into a timecode time.

In Fade Column

This is the duration of the crossfade for all fixtures increasing dimmer values. It may be changed any time by double, right or long clicking into the cell.

In Delay Column

This is the delay that needs to pass for this cue to start any in fade after it has been started. It may be changed any time by double, right or long clicking into the cell.

Out Fade Column

This is the duration of the crossfade for all fixtures that have decreasing dimmer values. By default, the Out Fade is equivalent to the In Fade. It may be changed any time by double, right or long clicking into the cell.

Out Delay Column

This is the delay that needs to pass for this cue to start any out fade after it has been started. It may be changed any time by double, right or long clicking into the cell.

In Snap Column

This is the percentage of the overall cue time after which parameters that are set to be a "Snap-Channel" (in the fixture library) will snap to their new value. It may be changed any time by double, right or long clicking into the cell.

MiB Column

MIB (Move In Black) is a function which in a Cuelist the console will look ahead and preposition parameters of fixtures that are raising the dimmer value from zero, to automatically prevent "ugly" transitions where you would normally see the fixture move the attributes into position, while the fixture is fading in.

You may enable or disable MiB by right, double or long-clicking into the MiB cell.

MIB is enabled on a cue-per-cue basis.

For MiB to work the fixture must be programmed with a dimmer value of 0% before the Move in Black Cue. Also, for MiB to work, the attributes that should be preset need to be set to "Mark" or "Mark Zero" in the library of the fixture.

Here's a quick example of how MiB works:

Cue	Dimmer	Color	Gobo	MiB Setting
#1: Intensity	100%			
#2: Intensity and Color	80%	Red		Early
#3: Intensity	0%			
#4: Gobo and Color	100%	Blue	Gobo 1	Early

In Cue 2 MiB is set to early, but MiB will not be executed because the Dimmer Value before this Cue has not been programmed at zero.

Cue 4 has the MiB set to early as well. As in cue 3 the dimmer value is set to 0%, the gobo and color wheel will already be pre-set to Gobo 1, so that when the light comes on when Cue 4 is run, the gobo and color will not fade in or snap visibly.

Load Values Column

To load values back into the programmer for editing, simply click on the **Load Values** button.

8.6.6. Recording and Modifying Cues

8.6.6.1. Recording Cues to a Playback

To record your first Cue on a Playback, proceed as follows:

01) Select some fixtures.
02) Set Values for these fixtures.
03) Press the [Record] -key followed by the faders [Button].
04) A dialog to set the Cue Name will open. Click **Ok** when done.

Remember, only values that are touched and active will be recorded.

8.6.6.2. Recording a second Cue to a Playback

01) To store another cue into the same Playback, simply press the [Record] key again, followed by the [Button] of the Playback you would like to add the cue to.
02) If the Playback only contains one Cue, a window will pop up asking you what to do.
03) Select **Add New Cue.**

8.6.6.3. Removing Values from a Cue in a Playback

To remove values to a cue in a Playback, proceed as follows:

01) Select some fixtures
02) Set some values for the attributes you would like to remove from the cue for the selected fixtures
03) Open the Playback-View for this playback by clicking on the Playback Fader Label.
04) Press the [Record] -key followed by a tap on the appropriate cue shown in the Playback View.
05) Select **Remove** from the dialog that is shown.

Remember, only values that are touched and active will be removed from the selected Cue.

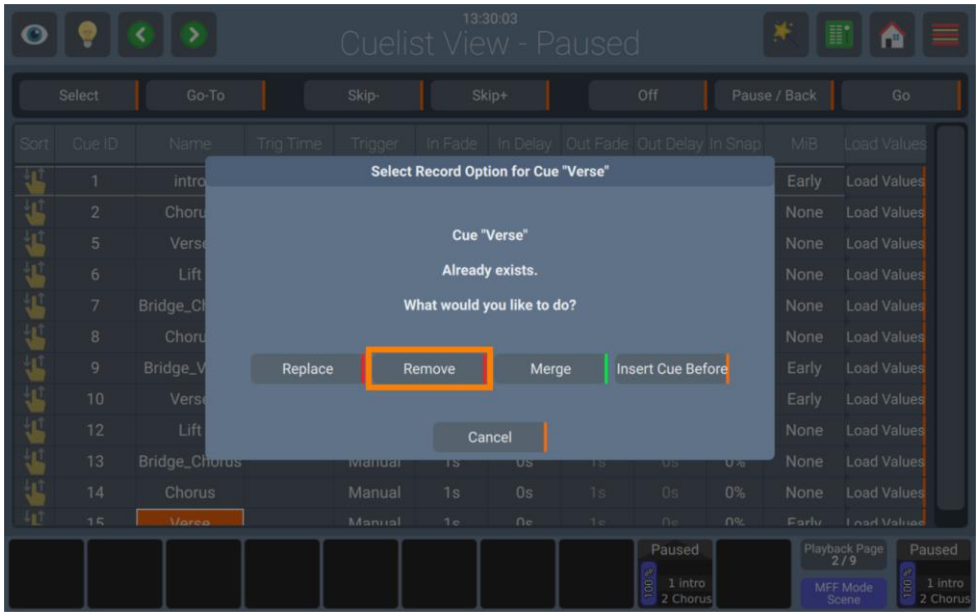


Fig. 163: Edit Playback Fader – Remove Values from Cue

8.6.6.4. Replacing all Values in a Cue in a Playback

To replace a cue in a Playback, proceed as follows:

01) Select some fixtures.
02) Set some values for the selected fixtures.
03) Open the Playback-View for this playback by clicking on the Playback Fader Label.
04) Press the [Record] -key followed by a tap on the appropriate cue shown in the Playback View.
05) Select **Replace** from the dialog that is shown.

Remember, only values that are touched and active will be stored into the selected Cue.

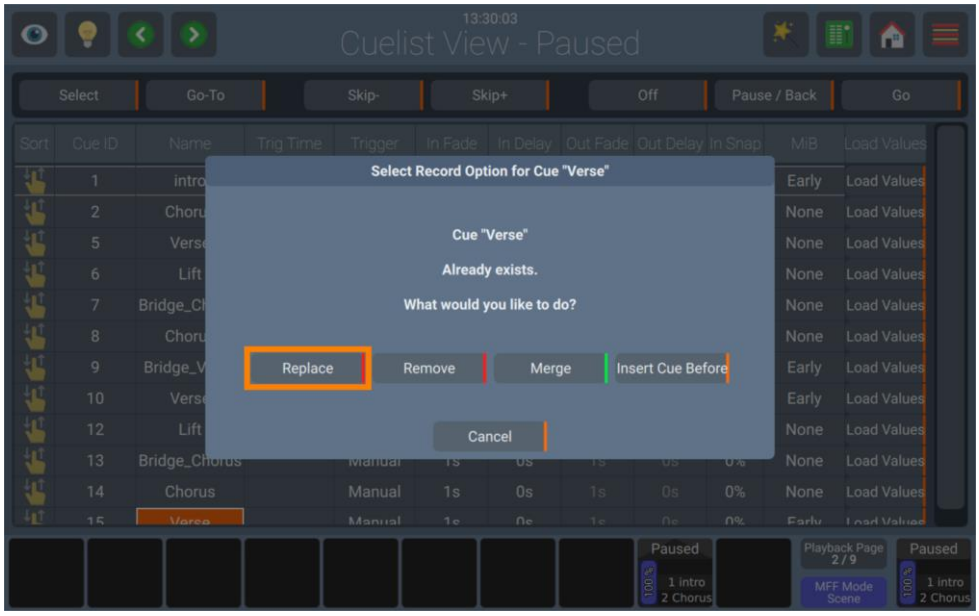


Fig. 164: Edit Playback Fader – Replace Values in Cue

8.6.6.5. Adding or Changing Values in a Cue in a Playback

To add or modify values in a cue in a Playback, proceed as follows:

01) Select some fixtures.
02) Set Values for these fixtures.
03) Open the Playback-View for this playback by clicking on the Playback Fader Label.
04) Press the [Record] -key followed by a tap on the appropriate cue shown in the Playback View.
05) Select **Merge** from the dialog that was opened.

Remember, only values that are touched and active will be recorded and that no values are removed using the merge function.

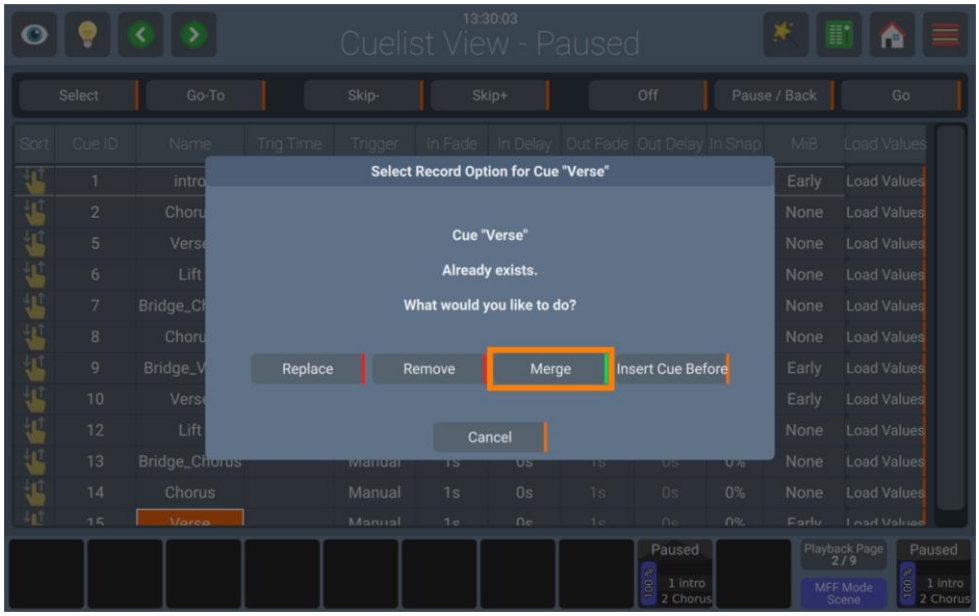


Fig. 165: Edit Playback Fader – Merge Values into Cue

8.6.6.6. Inserting a Cue in between cues in a Playback

To add a cue in between cues in a Playback, proceed as follows:

01) Select some fixtures.
02) Set Values for these fixtures.
03) Open the Playback-View for this playback by clicking on the Playback Fader Label.
04) Press the [Record] -key followed by a tap on a cue shown in the Playback View.
05) Select **Insert Cue Before** from the dialog that was opened.

Remember, only values that are touched and active will be recorded.

Fig. 166: Edit Playback Fader – Insert Cue in between Cues

8.6.6.7. Deleting a Cue in a Playback

To delete a cue in a Playback, proceed as follows:

01) Open the Playback-View for this playback by clicking on the Playback Fader Label.
02) Press the [Delete] -key followed by a tap on the cue to be deleted shown in the Playback View.
03) Confirm the deletion of this cue.

8.6.6.8. Copying a Cue in a Playback

You may copy cues by clicking on them:

01) Open the Playback-View for this playback by clicking on the Playback Fader Label.
02) Press the [Copy] -key followed by a tap on the cue to be copied shown in the Playback View.
03) A new copy of the cue will be created at the end of the Cuelist. If you want to move the Cue somewhere else, please use the *sort* column.

8.6.7. Copying a Playback

You may copy Playbacks as follows:

01) Press the [Copy] -key on the console front panel.
02) Tap on the button of the Playback to be copied.
03) Tap on the destination Playback button.

You may also select a Playback to the Master Fader by copying the Playback onto the Master Fader Item.

Note: While you may copy Playbacks between Playbacks and Scenes and Executors to Playbacks, copying a Playback to an Executor or Scene is possible if the Playback has only one Cue.

8.6.8. Moving a Playback

You may move Playbacks as follows:

01) Press the [Shift] and [Copy] -key on the console front panel at the same time.
02) Tap on the button of the Playback to be moved.
03) Tap on the destination Playback button.

You may also select a Playback to the Master Fader by moving the Playback onto the Master Fader Item.

Note: While you may copy Playbacks between Playbacks and Scenes and Executors to Playbacks, copying a Playback to an Executor or Scene is possible if the Playback has only one Cue.

8.6.9. Adjusting a Playbacks Settings

The Playback Fader Action Dialog provides all settings for the playback displayed in the Playback Window. It can be opened by clicking on the **Magic Wand** Button.

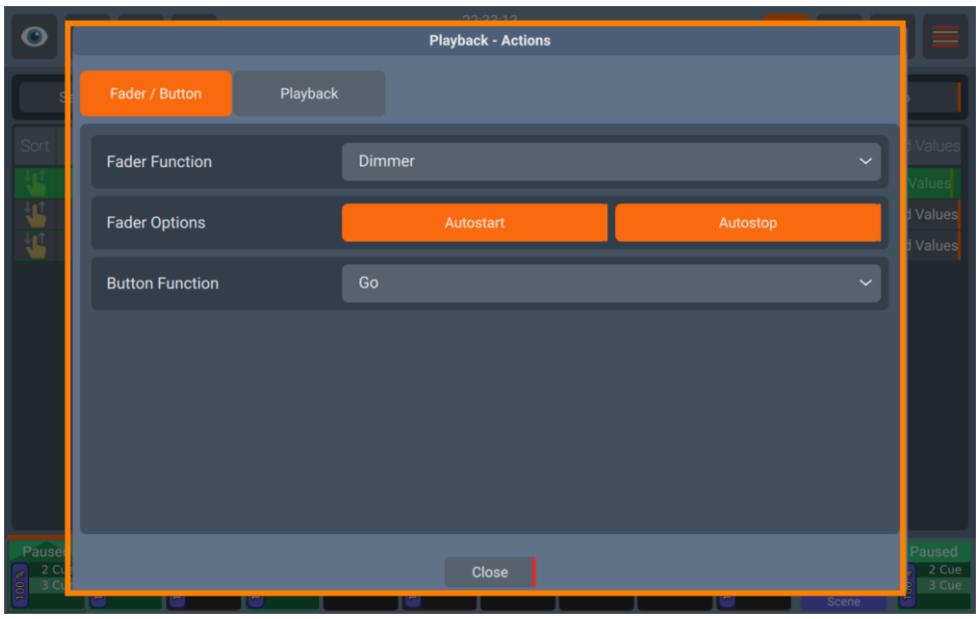


Fig. 167: Edit Playback Fader – Playback Action Dialog

8.6.9.1. Customizing the Fader Function

To customize the Faders function and behavior for this Playback, open the Playback Settings dialog by pressing the **Magic Wand** button.

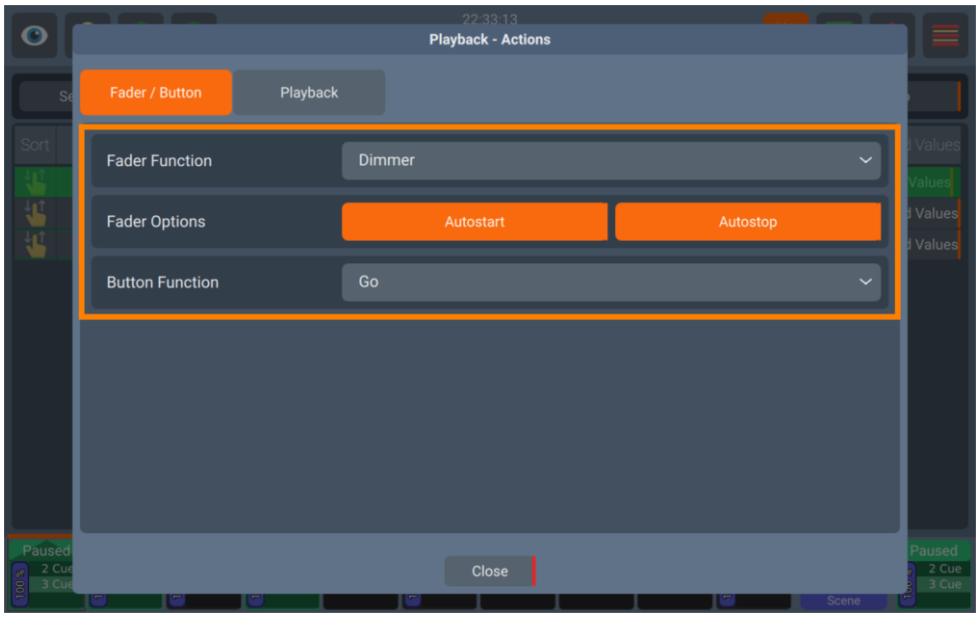


Fig. 168: Playback Settings – Fader Settings

Fader Function

The fader function dropdown defines what the fader of this playback should do. Possible options are:

Setting	Function
Disabled	Fader has no function.
Dimmer	The fader acts as a Dimmer Master for the Cuelist Contents. Only Dimmer channels are affected.
Speed	The fader controls Cuelist (Next, Fade and Snap Timings) and Effect speed of the contained Cuelist. 100% is equivalent to the speed programmed.
Infade	The fader will fade all parameters contained in the Cuelist, even channels set to Snap within the Fixture Library.
Manual Crossfade	The fader will crossfade between the current and the next cue allowing for manual crossfades.
Effect Size	The fader controls the Effect Size of effects contained in its Cues.
Effect Speed	The fader controls the Effect Speed of effects contained in its Cues.

Fader Options

AutoStart

AutoStart will cause the Cuelist to be started when the fader is pulled up from 0%.

AutoStop

AutoStop will cause the Cuelist to be stopped as soon as the fader reaches the 0% value.

8.6.9.2. Customizing the Button Function

To customize the Button function and behavior for this Playback, open the Playback Settings dialog by pressing the **Magic Wand** button and scroll down to the Button Settings section.

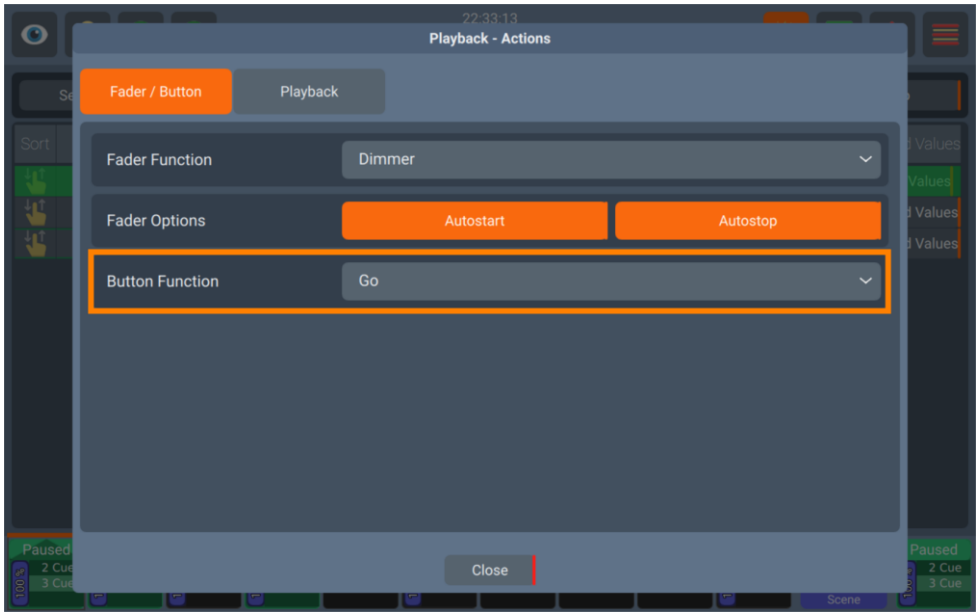


Fig. 169: Playback Settings – Button Settings

Possible options for the button function are:

Setting	Function
Disabled	Button has no function.
Toggle On / Off	The first press on the Button will start the Playback, the second press will switch it off.
Go	Issues a Go command to start the Playback, or, if it is already running, advances through the different cues of the Playback.
Pause / Back	The first press on the button will pause the Playback including all ongoing fades. The second press will advance through the Playback in reversed order.
Skip to next Cue	Skips to the next cue in the Playback without switching it on. If the Playback is running it will skip to the next cue, ignoring all fade times.
Skip to previous Cue	Skips to the previous cue in the Playback without switching it on. If the Playback is running it will skip to the previous cue, ignoring all fade times.
Flash	Will flash the master's fader value to 100% without Switching the Playback on or off.
Flash + Go	Will flash the master's fader value to 100% and switch on the Playback. The Playback stays "On" after releasing the Button.
Flash + Release	Will flash the master's fader value to 100% and switch off the Playback when releasing the Button. It will not start the Playback.
Flash + Go + Release	Will flash the master's fader value to 100% and switch on the Playback. The Playback will be switched "Off" when releasing the Button.
Release	Switches off the Playback using the Off time to fade out given in the Playback options.
Tap Sync (Chase)	If this Playback is set to "Chase" Mode and not linked to a Speed Master, this Button may be used to "Learn" (control) the speed of the Chase.
Select Playback	Selects the Playback. When selected, the Fader shows up on the Master Fader and the External Screen Playback View
Go + Release	Will switch on the Playback when pressing the button. The Playback will be switched "Off" when releasing the Button.

8.6.9.3. Playback Settings and Mode

To set the Mode for this Playback, open the Playback Settings dialog by pressing the **Magic Wand** button and click to open the **Playback** tab.

Playbacks may be set to two different modes, **Cuelist** or **Chase**.

Chases offer different functionality and behave differently in some cases compared to playbacks. All timings will be replaced with global Fade and Snap Timings which are part of the Chase configuration options. Chases also disable the cue dependent trigger selection, instead global Chase Trigger Options from the Playback Settings Dialog will be used.

The Chase Crossfade setting is also shown in the Playback View for the selected chase.

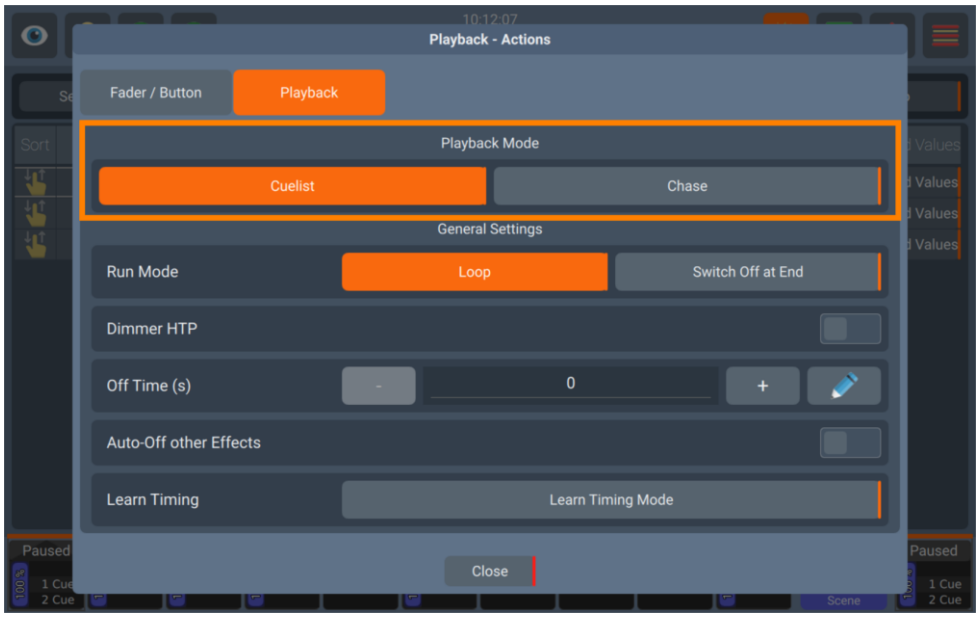


Fig. 170: Playback Settings – Button Settings

Playback Options

Setting the Run Mode of the Playback

To define if this Playback should be looping or switching off at the end, open the Playback Settings dialog by pressing the **Magic Wand** button and scroll down to the Playback Settings section.

Playbacks may be set to two different run modes, **Loop** or **Switch Off at End**.

If a Playback is set to Switch Off at End, it will automatically switch off after all timings of the last cue have been completed.

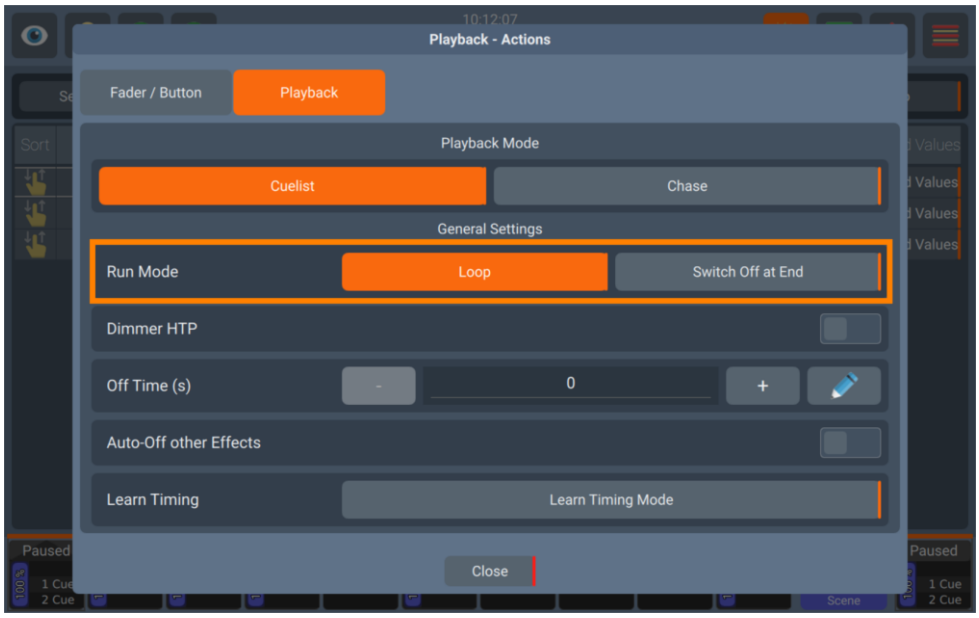


Fig. 171: Playback Settings – Run Mode Settings

Dimmer HTP

When enabled, all values being stored in this Playback will be compared to others by the "Latest Takes Precedence" principle - except the dimmer values, which will be compared by dimmer level. That means that values will override values which have been output previously, except for the dimmer value. Here, the Playback set to HTP with the highest dimmer level will be output.

When disabled, all values being stored in that Playback will be compared to others by the "Latest takes Precedence" principle. That means that values from this playback will override values, which have are output by other scenes or playbacks.

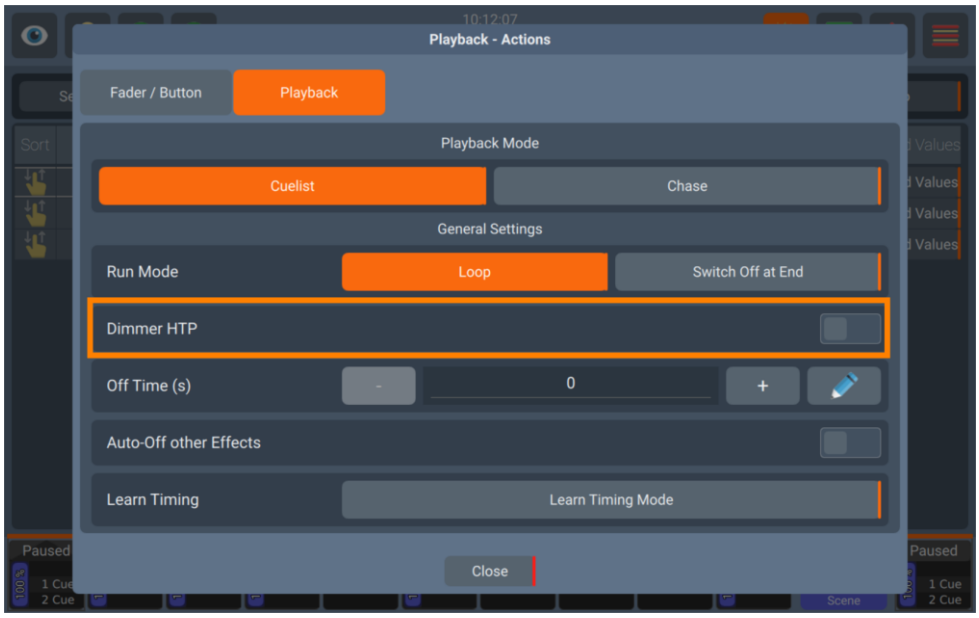


Fig. 172: Playback Settings – Run Mode Settings

Off Time

To define if this Playback should switch off instantly or fade out when being switched off, open the Playback Settings dialog by pressing the **Magic Wand** button and scroll down to the Playback Settings section.

Adjust the value in the **Off-Time** box to set an off fade-time.

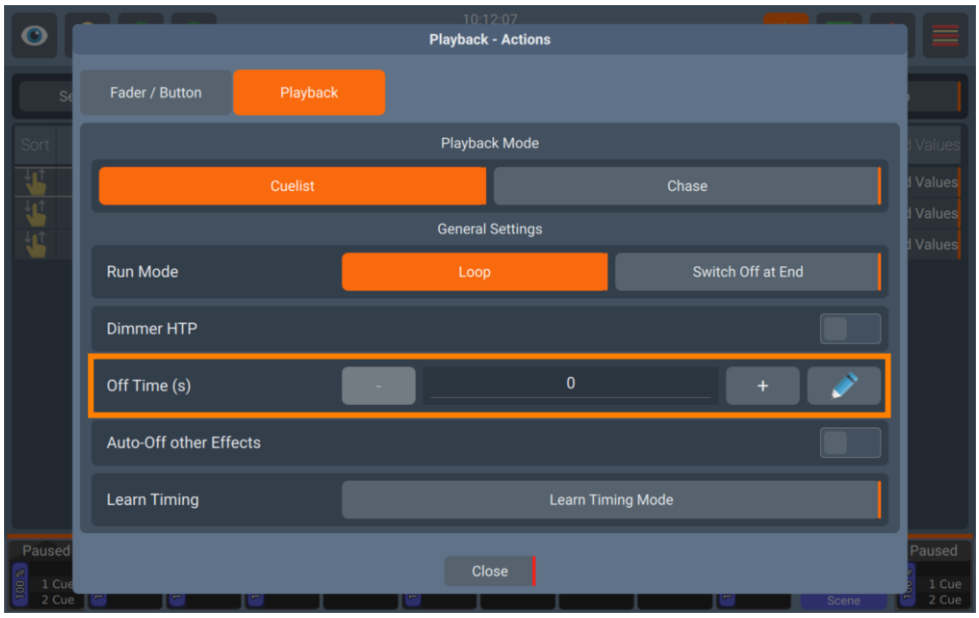


Fig. 173: Playback Settings – Run Mode Settings

Auto Off other Effects

With Auto-Off other Effects turned on, effects played back by other Playbacks or Scenes will be stopped automatically for attributes stored in this playback when it is started.

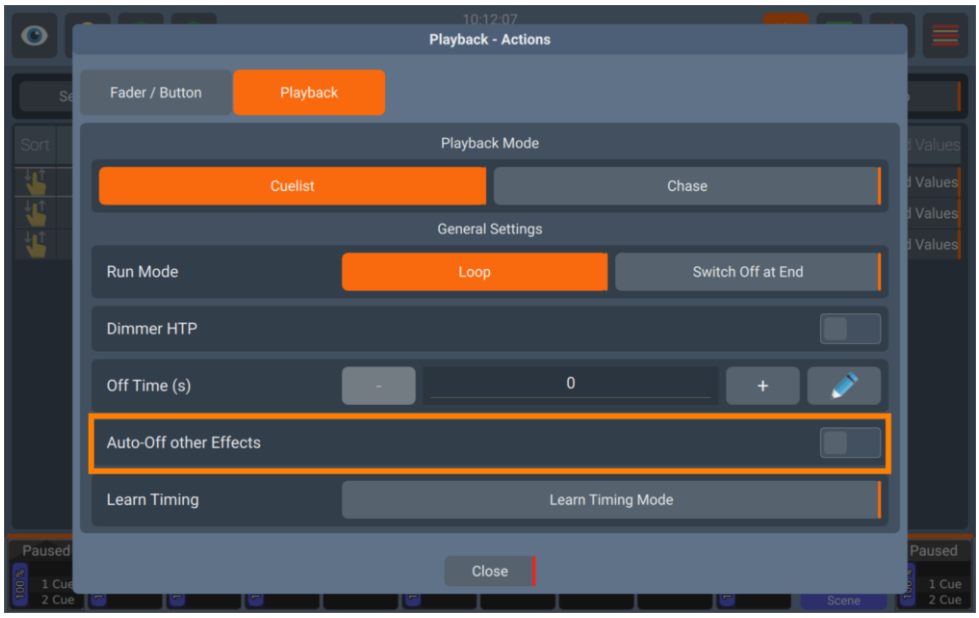


Fig. 174: Playback Settings – Auto-Off other Effects

Learn Timing

The **Learn Timing** Button is very useful if you need to learn next or Timecode timings for given Cuelist.

When the Cuelist is in Learn Timing Mode, the current Cue's color will be indicated with a magenta background color, and each press of the Go button will cause the cuelist to add the time elapsed between the start of this cue and the Go command to start the next Cue into the Trig Time field.

If the Cuelist is set to Timecode, it will set the Cue time to the Timecode that was received during the press of the Go Button.

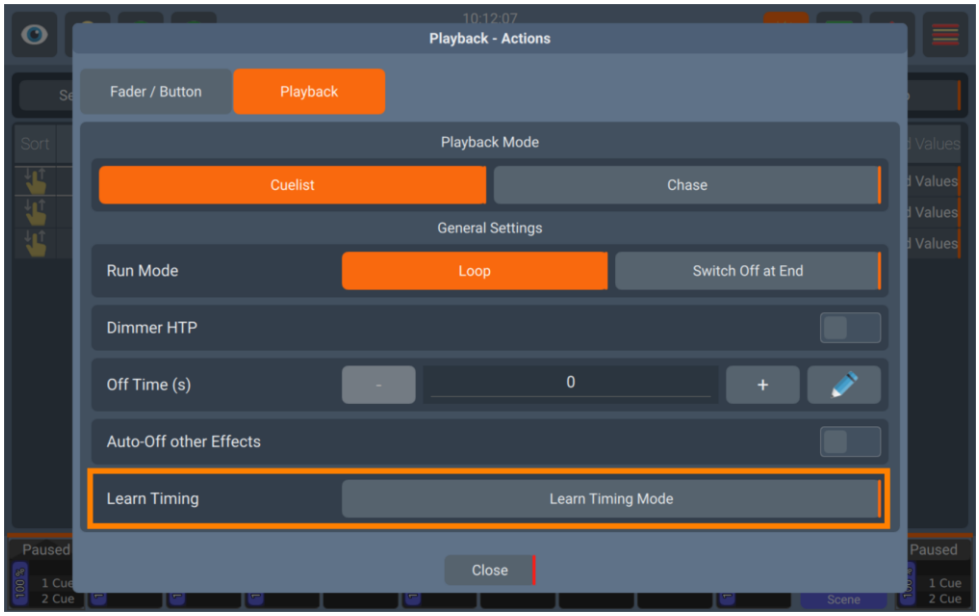


Fig. 175: Playback Settings – Learn Timing Button

Chase Options

If **Chase** is selected in the Playback Mode, an additional section with Chase Settings will be available. It contains the following settings:

Chase Trigger

The Chase Trigger setting defines what this Chase will be using as its timing source. It may be set to one of the following options:

Setting	Function
Chaser Speed	Chase is synchronized to the global Chase speed master in the Virtual Playback-screen.
Local Speed / Tap Sync	Chase is synchronized to the speed tapped using the Button Mode "Tap Sync"
Sound	Chase is synchronized with the input sound. When choose, and additional list will allow you to choose the sound section of the console's audio input: Bass, Mid, or High.

More information in regards to the Sound Input may be found in section 8.4.2.6, Enable and configure the Sound Input on page 64.

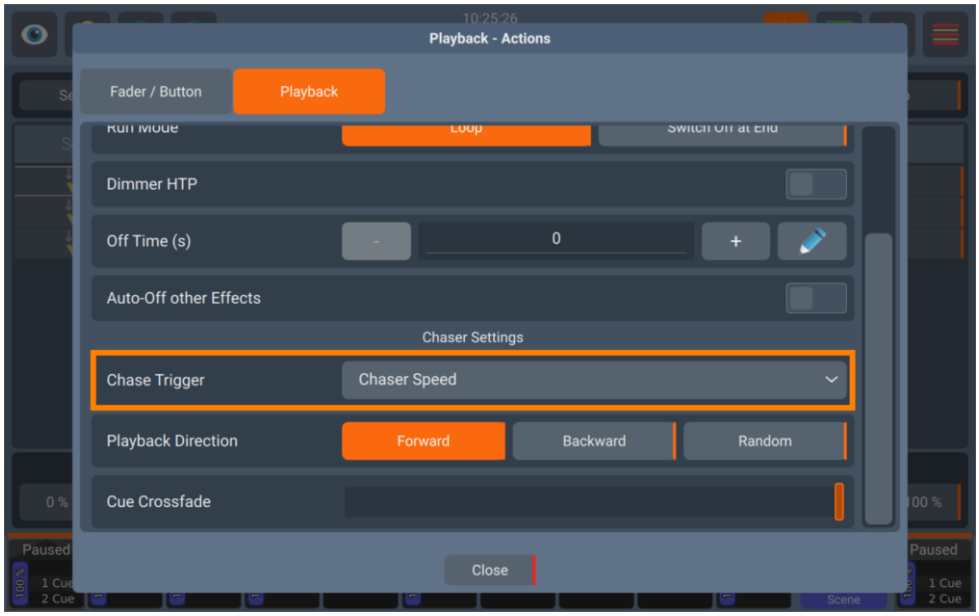


Fig. 176: Playback Settings – Chase Trigger Settings

Playback Direction

Defines the order in which the cues in this Chase are going to be played back.

Possible options are **Forward**, **Backward** and **Random**

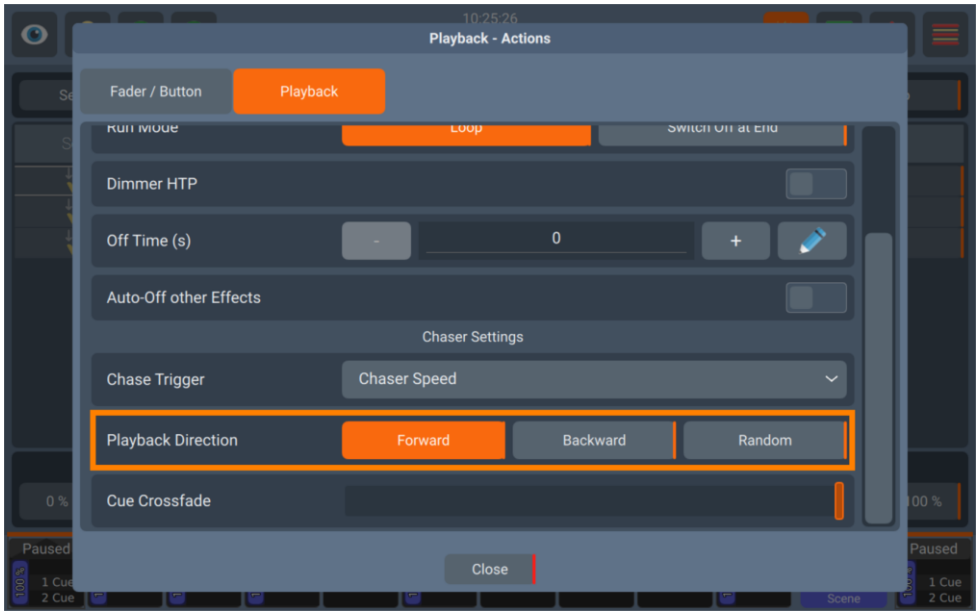


Fig. 177: Playback Settings – Playback Direction

Cue Crossfade

Defines the crossfade time between steps in the Chase in percent. 0% means the values will snap, 100% mean that the values will fade for the whole duration of the cue.

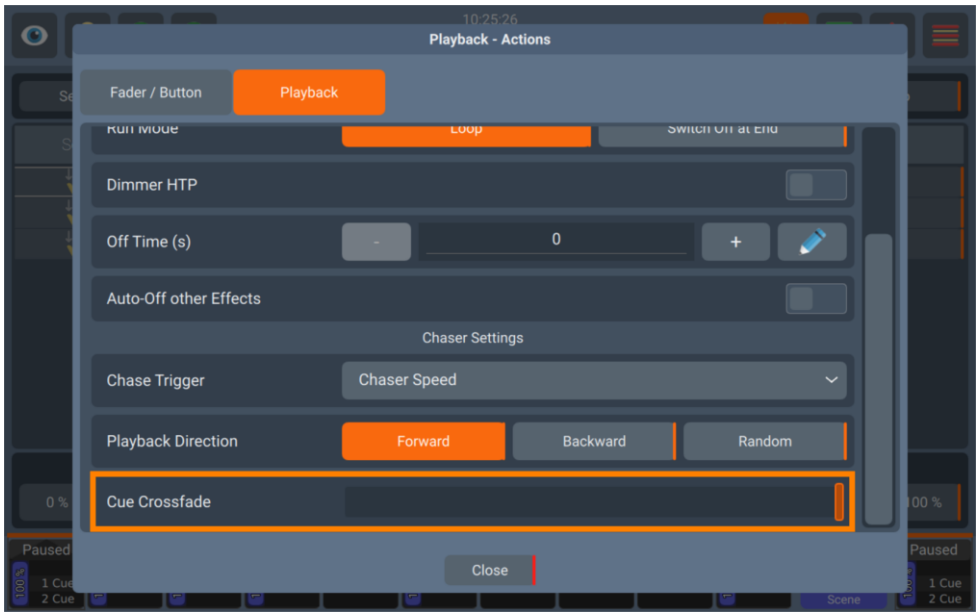


Fig. 178: Playback Settings – Cue Crossfade

8.7. Using the Multi-Function Faders

The Multi-Function faders offer direct access to Fixtures, Group and Scenes. These are divided into three different modes, which may be switched by clicking on the **MFF Mode** button found in the bottom right of the touchscreen.

Modes may be directly selected by pressing `[Shift]` while clicking on the **MFF Mode** button.

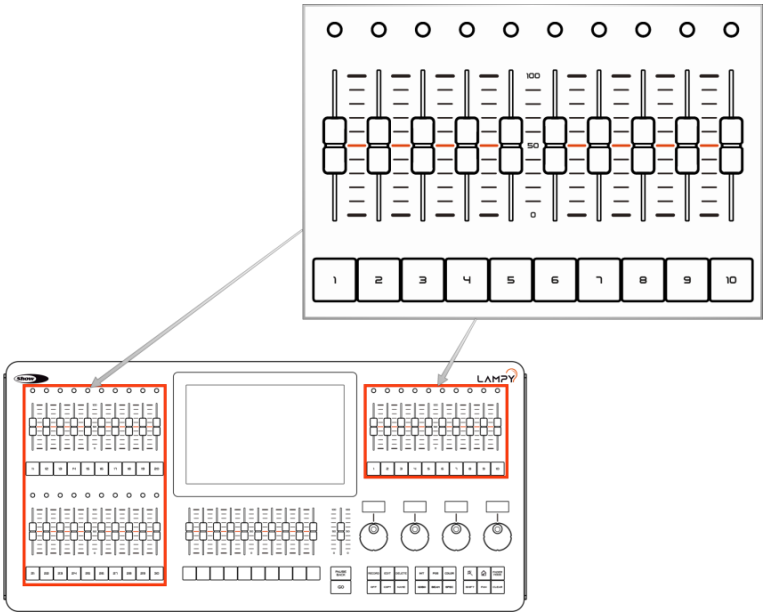


Fig. 179: Multi-Function Faders

Fig. 180: Multi-Function Fader Mode Button

For easier identification of the multi-function fader mode, the different modes are color coded. This color scheme is used in fader labels found in the Fader Overview window or external screen, LEDs above the faders and in all Fader Mode Selection Buttons and Dialogs. Long press on **MFF Mode** Button will go back to the previous page

The colors used are the following:

Background Color	Type
Red	Fixture Faders
Green	Group Faders
Blue	Scene Faders

8.7.1. Fixture Mode (Red)

In Fixture Mode the Faders will always write the Fixture Dimmer Value into the programmer, which makes this mode perfect for less experience people, or for ultra-quick programming. The Buttons are always used to Select or De-Select fixtures.

In case the faders are in a different physical position than the value, the ones that are different from the actual value will have their LED blinking as an indicator. The fader values from before are remembered and you have to move the fader physically to this position.

The LEDs in this mode light up in orange but can be set to mimic the fixture's current output color in the setup menu. For selected fixtures, the LED will be shown brighter.

8.7.1.1. Assigning Fixtures to a Fixture MFF

To connect one or more fixtures to one or more of the Faders:

01) Make sure your Multi Fader Mode is set to **Fixture**.
02) Select one or multiple fixtures.
03) Press the [Record] -key.
04) Press the button of the first Multi-Function Fader you would like to use.

Selected fixtures will be assigned consecutively to the selected fader.

8.7.1.2. Deleting Fixtures from the MFF Faders

To delete a fixtures connection with the MFF, proceed as follows:

01) Press the [Delete] -key.
02) Press the MFF button of the Fixture you would like to delete.

8.7.1.3. Copying a Fixture MFF

You may copy Fixture MFFs as follows:

01) Press the [Copy] -key on the console front panel.
02) Tap on the button of the MFF to be copied.
03) Tap on the destination MFFs Button.

Note: You cannot copy Fixture MFFs to Executors, Scenes or Playbacks

8.7.1.4. Moving a Fixture MFF

You may move Fixture MFFs as follows:

01) Press the [Shift] and [Copy] -key on the console front panel at the same time.
02) Tap on the button of the MFF to be moved.
03) Tap on the destination MFFs Button.

Note: You cannot move Fixture MFFs to Executors, Scenes or Playbacks

8.7.1.5. Naming a Fixture MFF

You may name Fixture MFFs as follows:

01) Press the [Name] -key on the console front panel.
02) Tap on the button of the MFF.
03) Enter the new name in the On-Screen Keyboard or with a USB Keyboard.

8.7.2. Group Mode (Green)

In Group Mode the Faders will always act as a master dimmer, dimming down programmed values or values in the programmer for the fixtures contained in the group.

In case the faders are in a different physical position than the value, the ones that are different from the actual value will have their LED blinking as an indicator. The fader values from before are remembered and you must move the fader physically to this position.

The Buttons are always used to Select or De-Select groups.

The LEDs in this mode light up in green. For selected groups, the LED will be shown brighter.

8.7.2.1. Assigning Groups to a Group MFF

To connect one or more groups to one or more of the Faders:

01) Make sure your Multi Fader Mode is set to **Group**.
02) Select one or multiple fixtures.
03) Press the [Record] -key.
04) Press the button of the first Multi-Function Fader you would like to use.
05) A window will be shown, asking you if you would like to create a new Group with the selected fixtures, or if you would like to assign an existing group.
06) If you choose "Existing Group", you may now select a group.

8.7.2.2. Deleting Groups from the MFF Faders

To delete a groups connection with the MFF, proceed as follows:

01) Press the [Delete] -key.
02) Press the MFF button of the Group you would like to delete.

8.7.2.3. Copying a Group MFF

You may copy Group MFFs as follows:

01) Press the [Copy] -key on the console front panel.
02) Tap on the button of the MFF to be copied.
03) Tap on the destination MFFs Button.

Note: You cannot copy Group MFFs to Executors, Scenes or Playbacks

8.7.2.4. Moving a Group MFF

You may move Group MFFs as follows:

01) Press [Shift] and [Copy] on the console front panel at the same time.
02) Tap on the button of the MFF to be moved.
03) Tap on the destination MFFs Button.

Note: You cannot move Group MFFs to Executors, Scenes or Playbacks

8.7.2.5. Naming a Group MFF

You may name Group MFFs as follows:

01) Press the [Name] -key on the console front panel.
02) Tap on the button of the MFF.
03) Enter the new name in the On-Screen Keyboard or with a USB Keyboard.

8.7.3. Scene Mode (Blue)

In Scene Mode the Fader and Button function are user definable. Scenes itself are comparable to Playbacks or Executors but may only contain one Cue.

In case the faders are in a different physical position than the value, the ones that are different from the actual value will have their LED blinking as an indicator. The fader values from before are remembered and you must move the fader physically to this position.

The LEDs in this mode light up in blue. For running scenes, the LED will be shown brighter.

8.7.3.1. Recording to a Scene MFF

To record your first cue into a Scene MFF, proceed as follows:

01) Select some fixtures.
02) Set Values for these fixtures.
03) Press the [Record] -key followed by the MFFs Button.

Remember, only values that are touched and active will be recorded.

8.7.3.2. Removing Values from a Scene MFF

To remove values from a Scene MFF, proceed as follows:

01) Select some fixtures.
02) Set some values for the attributes you would like to remove from the Scene.
03) Press the [Record] -key followed by a tap on the MFFs Button.
04) Select **Remove** from the dialog that is shown.

Remember, only values that are touched and active will be removed from the selected Executor.

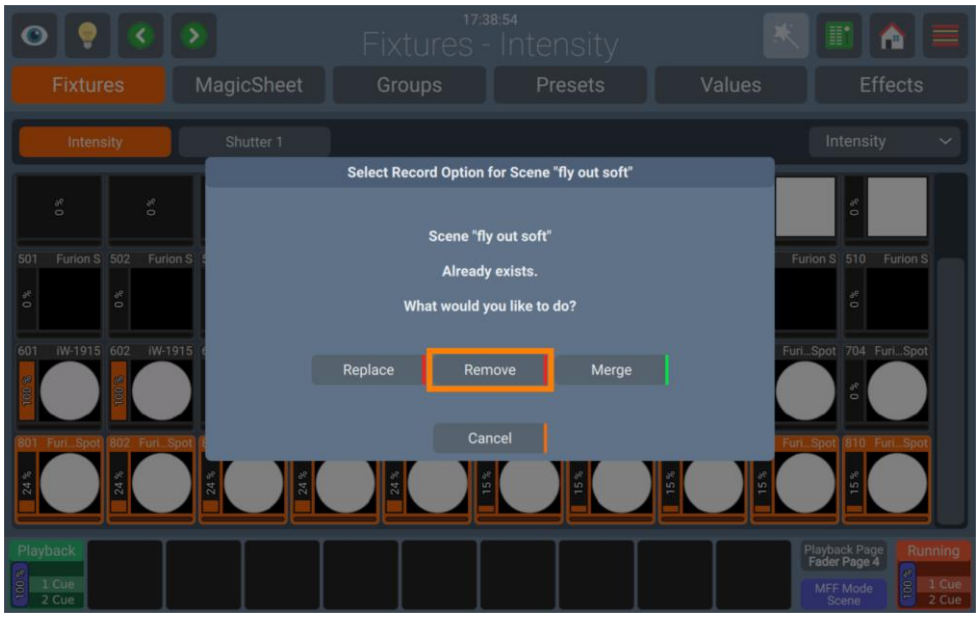


Fig. 181: Scene – Remove Values

8.7.3.3. Replacing all Values from Scene MFF

To replace a Scene, proceed as follows:

01) Select some fixtures.
02) Set some values for the selected fixtures.
03) Press the [Record] -key followed by a tap on the MFFs Button.
04) Select **Overwrite** from the dialog that is shown.

Remember, only values that are touched and active will be stored into the selected Executor.

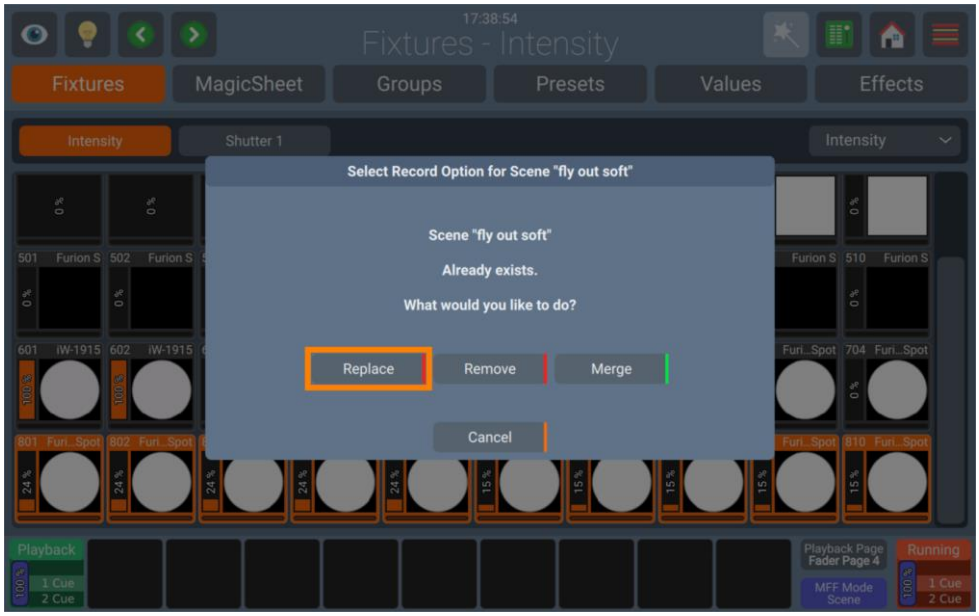


Fig. 182: Scene – Overwrite

8.7.3.4. Adding or Changing Values in a Scene

To add or modify values in / to a Scene, proceed as follows:

01) Select some fixtures.
02) Set Values for these fixtures.
03) Press the [Record] -key followed by a tap on the MFFs Button.
04) Select **Merge** from the dialog that was opened.

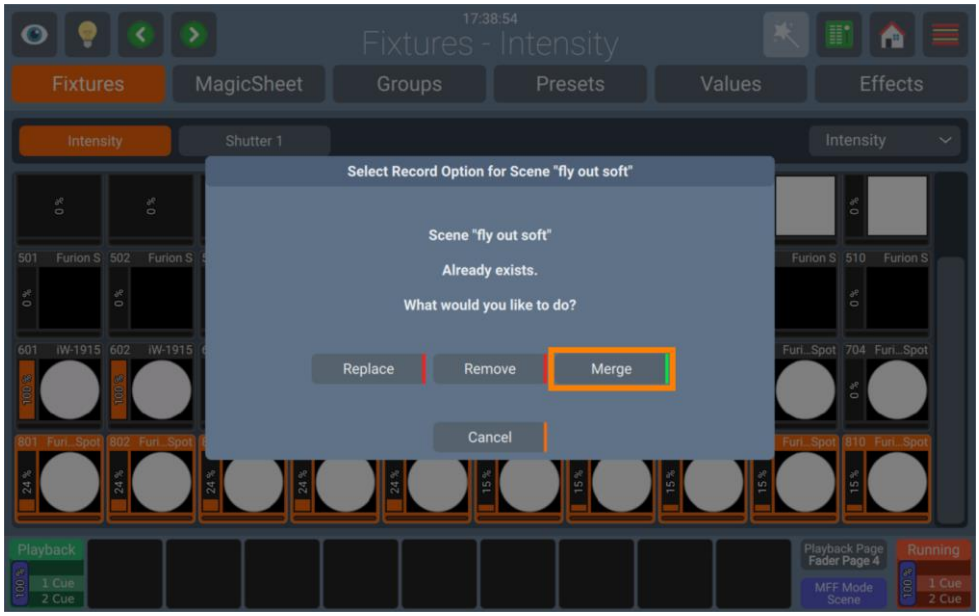


Fig. 183: Scene – Merge Values

8.7.3.5. Deleting a Scene

To delete a Scene MFF, proceed as follows:

01) Press the [Delete] -key.
02) Tap on the Scene's Button.
03) Confirm the deletion of the Scene.

8.7.3.6. Copying a Scene

You may copy a Scene as follows:

01) Press the [Copy] -key on the console front panel.
02) Tap on the source Scene's Button.
03) Tap on the destination Scene's Button.

Note: You may copy Scenes to virtual Executors and Playbacks

8.7.3.7. Moving a Scene

You may move Scenes as follows:

01) Press [Shift] and [Copy] on the console front panel at the same time.
02) Tap on the source Scene's Button.
03) Tap on the destination Scene's Button.

Note: You may move virtual Scenes to Executors and Playbacks

8.7.3.8. Adjusting a Scenes Settings

To change the button and fader function as well as the fade time of each Scene individually, press the [Edit]-Key and press the Scene's button.

Changing a Scenes Fader Function

Open the Edit Scene Dialog by pressing the [Edit]-key on the front panel of the console and press the Scenes Button.

The behavior of the fader can be selected from the **Fader Settings** section in the window which just opened.

Setting	Function
Disabled	The Fader will be disabled and has no function.
Infade	The Fader will crossfade into all Values that are stored inside this Scene.
Dimmer	The Fader will only crossfade Dimmer Values stored inside this Scene.
Effect Size	The Fader will control the Size of any Effects stored inside this Scene.
Effect Speed	The Fader will control the Speed of any Effects stored inside this Scene.

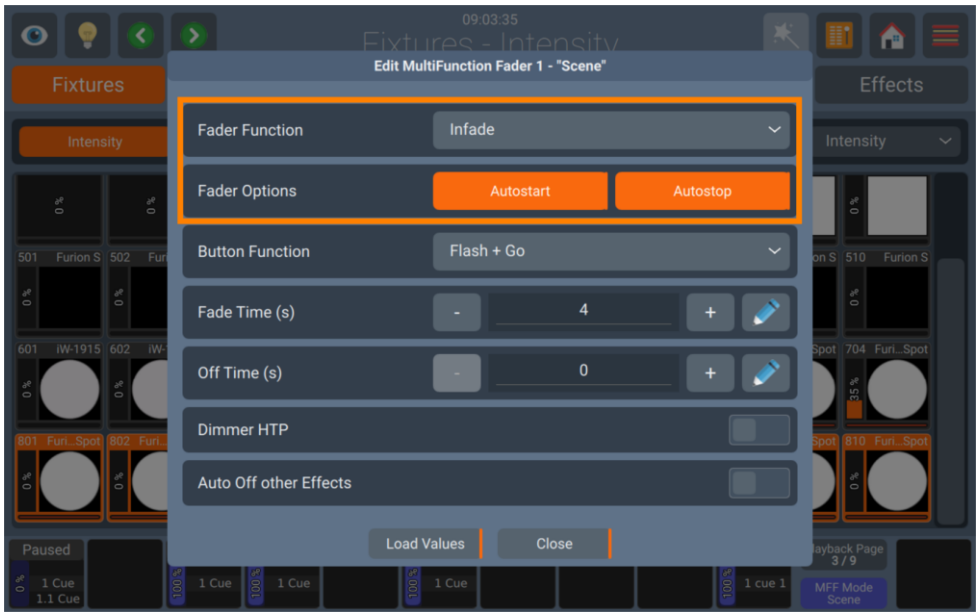


Fig. 184: Edit Scene - Change Fader Function

Changing a Scenes Button Function

Open the Edit Scene Dialog by pressing the `[Edit]`-key on the front panel of the console and press the Scene's Button.

The behavior of the button can be selected from the **Button Settings** section in the window which just opened.

Setting	Function
Disabled	The Button will be disabled and has no function.
Toggle On / Off	First press on the Button turns the Scene on, second press turns it off.
Flash	A Press on the Button will flash the fader value to 100%, when releasing the Button, the value returns to the fader value.
Flash + Go + Off	A Press on the Button will flash the fader value to 100% and start the Scene, releasing the Button sets the value to the fader value and the Scene will be turned off.
Go + Off	A Press on the Button will start the Scene, releasing the Button will turn off the Scene.

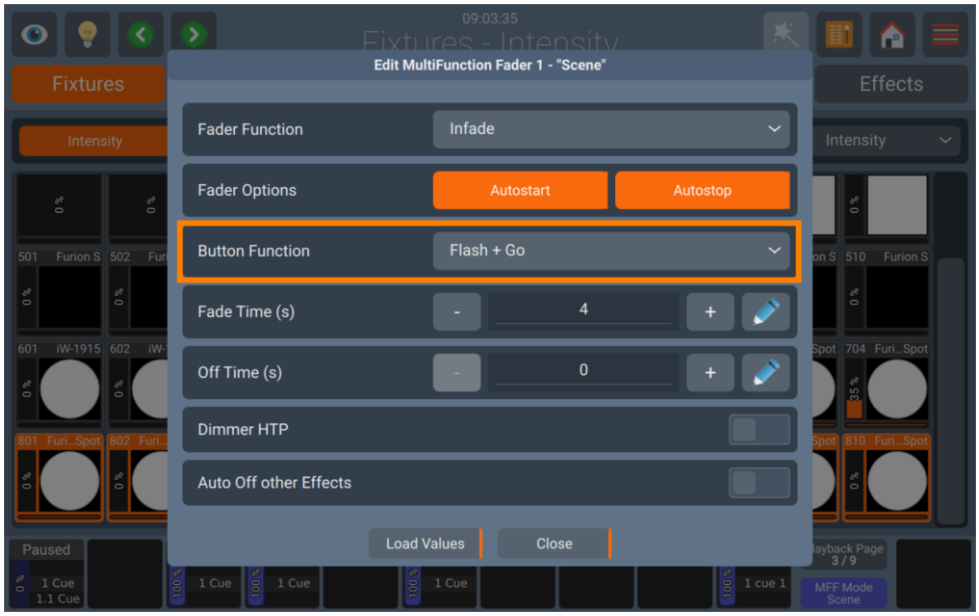


Fig. 185: Edit Scene - Change Button Function

8.7.3.9. Changing a Scenes Fade and Off-Fade Time

Open the Edit Scene Dialog by pressing the [Edit]-key on the front panel of the console and push the Scene's button.

The in-fade and off-fade time of the Scene can be edited.

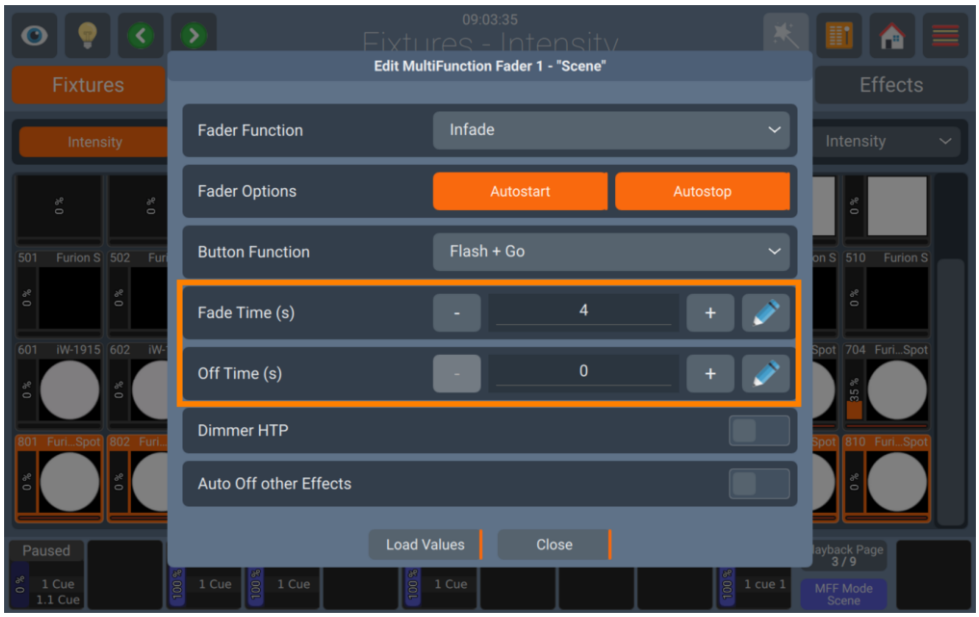


Fig. 186: Edit Scene - Change in and Off Fade Time

8.7.3.10. Dimmer HTP

When enabled, all values being stored in this Scene will be compared to others by the "Latest Takes Precedence" principle - except the dimmer values, which will be compared by dimmer level. That means that values will override values which have been output previously, except for the dimmer value. Here, the Scene set to HTP with the highest dimmer level will be output.

When disabled, all values being stored in that Scene will be compared to others by the "Latest takes Precedence" principle. That means that values from this scene will override values, which have are output by other scenes or playbacks.

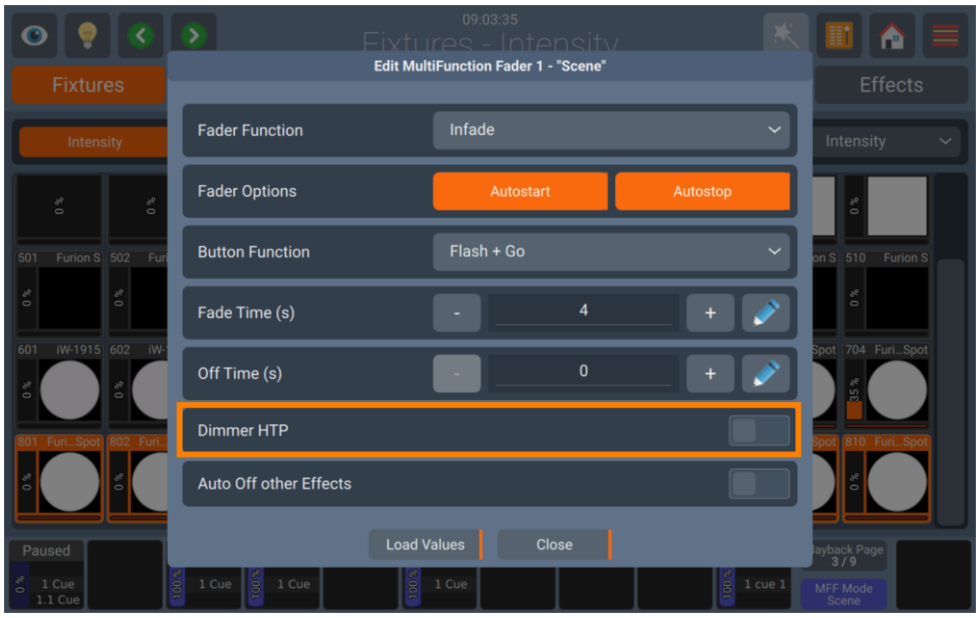


Fig. 187: Edit Scene – Dimmer HTP

8.7.3.11. Auto-Off other Effects

With Auto-Off other Effects turned on, effects played back by other Playbacks or Scenes will be stopped automatically for attributes stored in this playback when it is started.

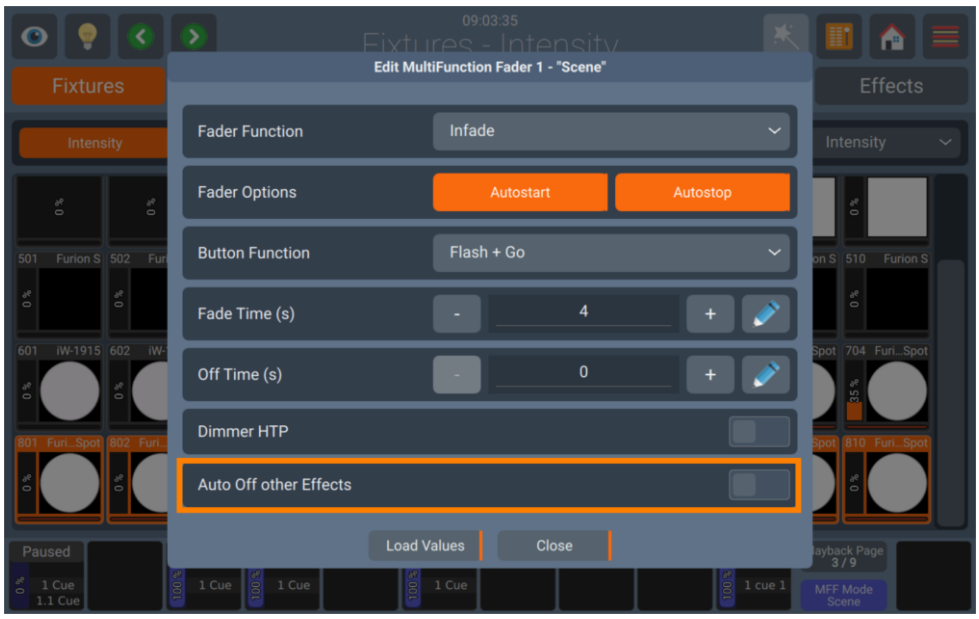


Fig. 188: Edit Scene – Auto-Off other Effects

8.7.3.12. Loading Values from a Scene into the Programmer

Open the Edit Scene Dialog by pressing the [Edit]-key on the front panel of the console and push the Scene's button.

Tap on the **Load Values** button found on the bottom part of the screen.

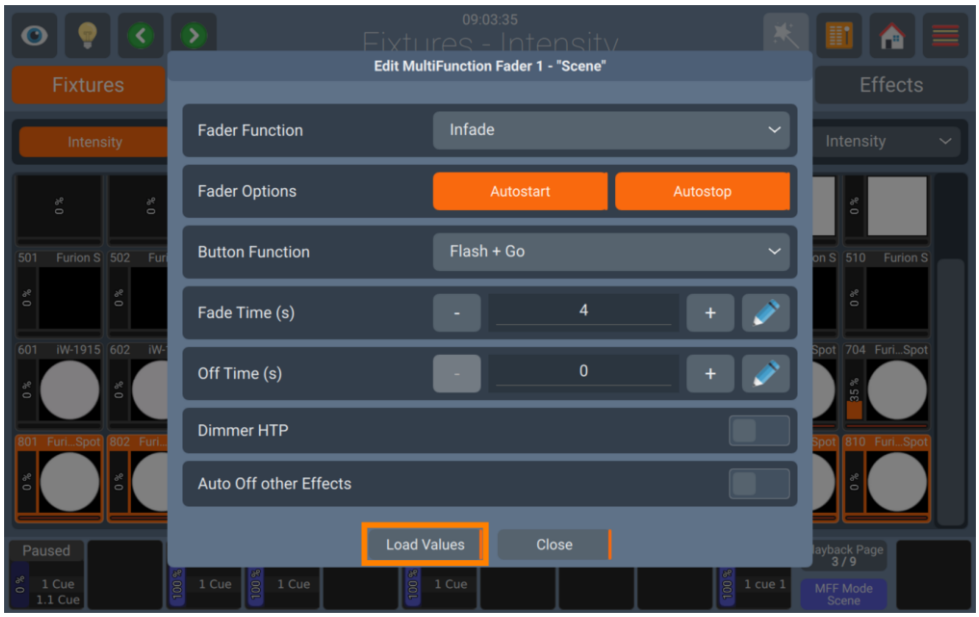


Fig. 189: Edit Scene - Load Values

8.8. Using the Virtual Executor Window

The Virtual Executor Window contains a total of 40 Executor Buttons in 5 rows. Each row may be set to only allow one active Playback at a time ("Linked"). You may do so by pressing the **Magic Wand** Button from within the Virtual Executor Window. Linked rows are indicated using and orange background color.

Virtual Executors may only contain one cue. They may be controlled using OSC or Midi. Please see the section about OSC and MIDI in the appendix of the User Manual.

Furthermore, the Virtual Executor Window contains global Speed Faders that affect Executors, Playbacks and Scenes. It also contains a Grand Master Fader, which globally dims down the brightness for all fixtures.

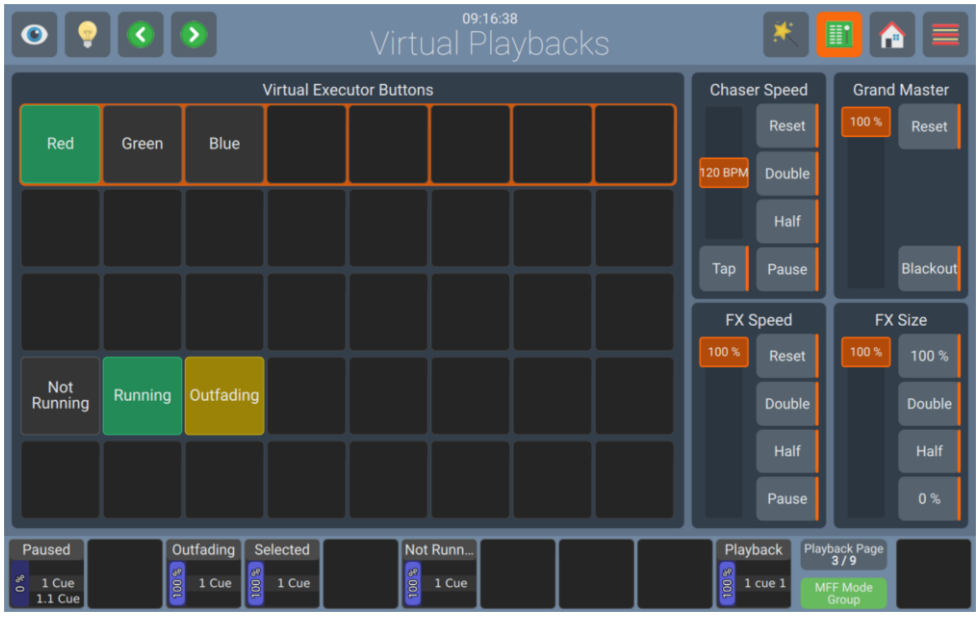


Fig. 190: Virtual Executor Window

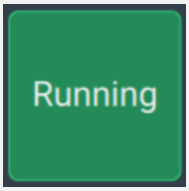
The Virtual-Executor Window button also indicates if one of the master's within the window is active:

The Button functions and names are as follows:

	Action
	Switches to the Virtual Executor View. If one of the Virtual Masters is active, the Icon will be shown in Orange color. If the Grand Master or any of the Speed Masters is set to 0%, the button will turn red.

8.8.1. The Virtual Executor Labels

The Fader Label itself provides several layers of feedback to you:

Item	Meaning
	This virtual Executor has the name “Not Running” and is not being played back.
	This virtual Executor has the Name “Running” and is switched on and running – or: played back.
	This virtual Executor has the name “Out fading” and is currently out fading (Off-Time setting when switched off).
	This virtual Executor is empty.

8.8.2. Link Row Setting (Allow only one Executor at a time per row)

The Virtual Playbacks allow each row to be "linked", which means only one Executor at a time within a row can be active.

You may access this setting by pressing the **Magic Wand** Button from within the virtual Executor Window.

Then from the dialog that opened, select the rows you would like to "link".

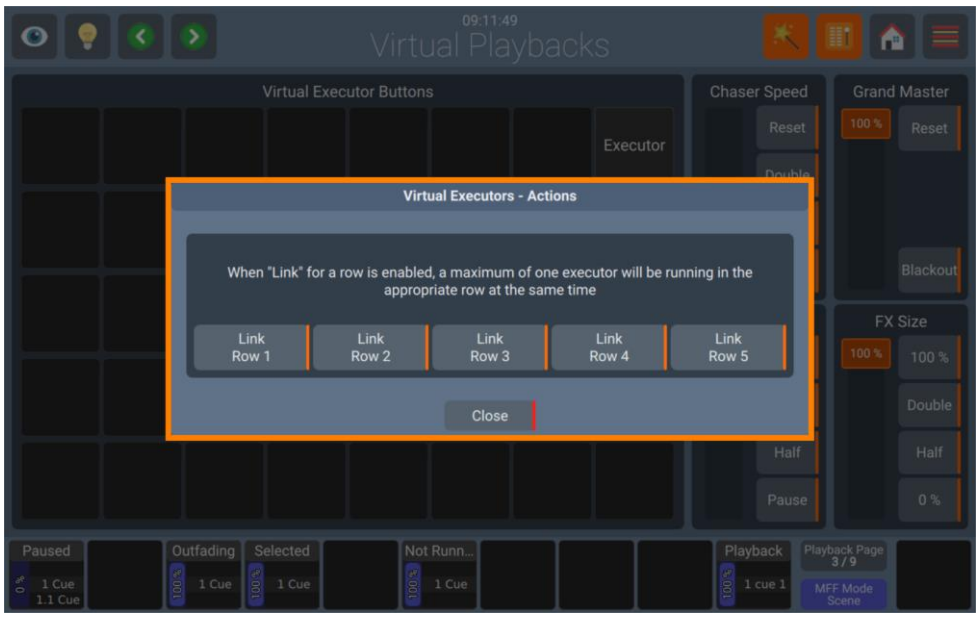


Fig. 191: Virtual Executor Window – Action Dialog

8.8.3. Recording and Modifying Virtual Executors

8.8.3.1. Recording to a virtual Executor

To record your first Cue into a virtual Executor, proceed as follows:

01) Select some fixtures.
02) Set Values for these fixtures.
03) Press the [Record] -key followed by the virtual executor's button on the screen.

Remember, only values that are touched and active will be recorded.

8.8.3.2. Removing Values from a virtual Executor

To remove values from a virtual Executor, proceed as follows:

01) Select some fixtures.
02) Set some values for the attributes you would like to remove from the Executor for the selected fixtures
03) Press the [Record] -key followed by a tap on the virtual executor's button on the screen.
04) Select **Remove** from the dialog that is shown.

Remember, only values that are touched and active will be removed from the selected Executor.

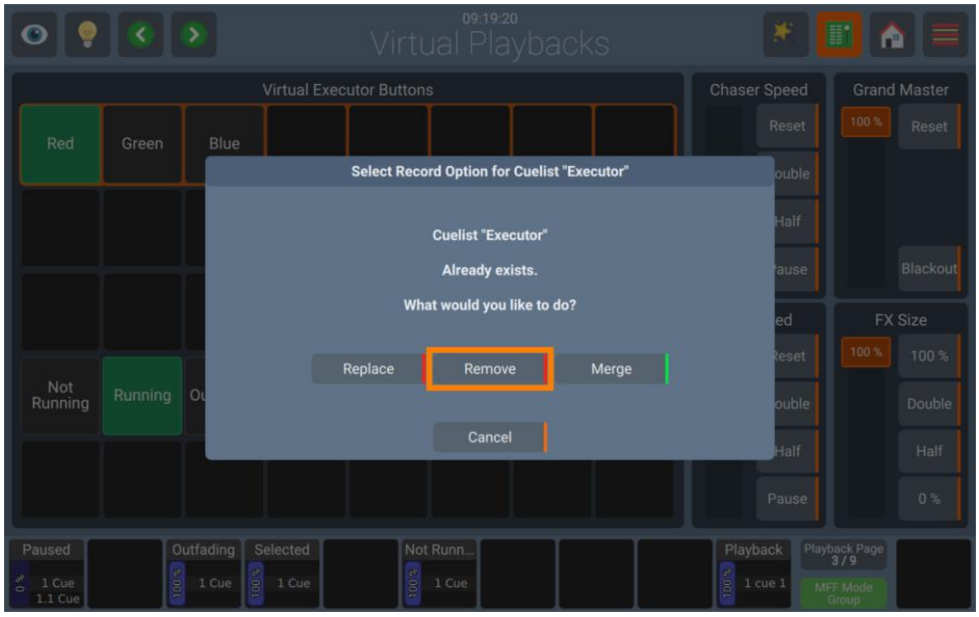


Fig. 192: Edit Virtual Executor – Remove Values

8.8.3.3. Replacing all Values from a virtual Executor

To replace a virtual Executor, proceed as follows:

01) Select some fixtures.
02) Set some values for the selected fixtures.
03) Press the [Record] -key followed by a tap on the virtual executor's button on the screen.
04) Select **Replace** from the dialog that is shown.

Remember, only values that are touched and active will be stored into the selected Executor.

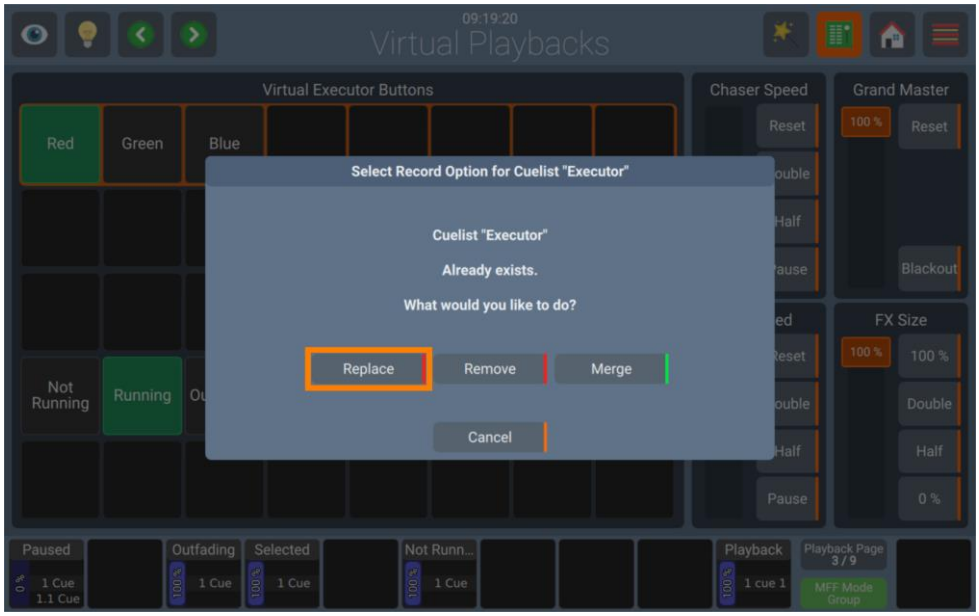


Fig. 193: Edit Virtual Executor – Replace Values

8.8.3.4. Adding or Changing Values in a virtual Executor

To add or modify values in / to a virtual Executor, proceed as follows:

01) Select some fixtures.
02) Set Values for these fixtures.
03) Press the [Record] -key followed by a tap on the virtual executor's button on the screen.
04) Select **Merge** from the dialog that was opened.

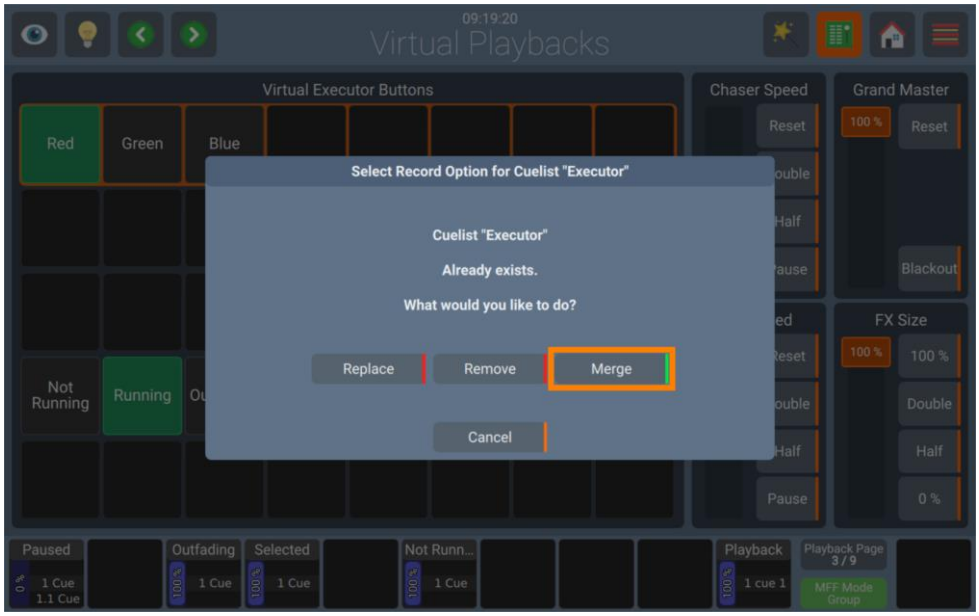


Fig. 194: Edit Virtual Executor – Merge Values

8.8.3.5. Deleting a virtual Executor

To delete a virtual Executor, proceed as follows:

01) Press the [Delete] -key followed by a tap on the virtual executor's button on the screen.
02) Confirm the deletion of the executor.

8.8.4. Copying a virtual Executor

You may copy virtual Executors as follows:

01) Press the [Copy] -key on the console front panel.
02) Tap on the virtual executor to be copied.
03) Tap on the destination virtual Executor.

Note: You may copy virtual Executors to Scenes and Playbacks

8.8.5. Moving a virtual Executor

You may move virtual Executors as follows:

01) Press [Shift] and the [Copy] -key on the console front panel at the same time.
02) Tap on the virtual executor to be moved.
03) Tap on the destination virtual Executor.

Note: You may move virtual Executors to Scenes and Playbacks

8.8.6. Adjusting a virtual Executors Settings

To change the button function and fade time of each virtual executor, press the [Edit]-Key and select the virtual executor's button from the Virtual Executor View.

8.8.6.1. Changing the Virtual Executors Button Function

Open the Edit Virtual Executor Dialog by pressing the [Edit]-key on the front panel of the console, followed by tapping on the virtual executor that you would like to change.

The behavior of tapping the Virtual Executor can now be selected from the **Button Function** section in the window which just opened.

Setting	Function
Toggle On / Off	First press on the Button turns the Executor on, second press turns it off.
Flash	Executor turns on when the button is pressed and is switched off when the button is released.

Fig. 195: Edit Virtual Executor - Change Button Function

8.8.6.2. Changing the Virtual Executors Fade and Off-Fade Time

Open the Edit Virtual Executor Dialog by pressing the [Edit]-key on the front panel of the console, followed by tapping on the virtual executor that you would like to change.

The in-fade and off-fade time of the Virtual Executor can now be selected.

Fig. 196: Edit Virtual Executor - Change Button Function

8.8.6.3. Auto-Off other Effects

With Auto-Off other Effects turned on, effects played back by other Playbacks or Scenes will be stopped automatically for attributes stored in this playback when it is started.

Fig. 197: Edit Virtual Executor – Auto-Off other Effects

8.8.6.4. Loading Values from an Executor

Open the Edit Virtual Executor Dialog by pressing the `[Edit]`-key on the front panel of the console, followed by tapping on the virtual executor that you would like to change. Tap on the **Load Values** button found on the bottom part of the screen.

Fig. 198: Edit Virtual Executor - Load Values

8.8.7. Chase Speed

The Chase Speed fader and buttons found in the Virtual Executor Window is used as a global speed master for all Chases which are not assigned to a local Chase **Tap** or Sound Input.

The **Reset** Button will reset the Chase Speed Fader to its default value. The **Double** and **Half** buttons multiply or divide the current value by 2. The **Pause** button will pause all Chases and a second press will reset the value that was active when the Chase Speed was paused.

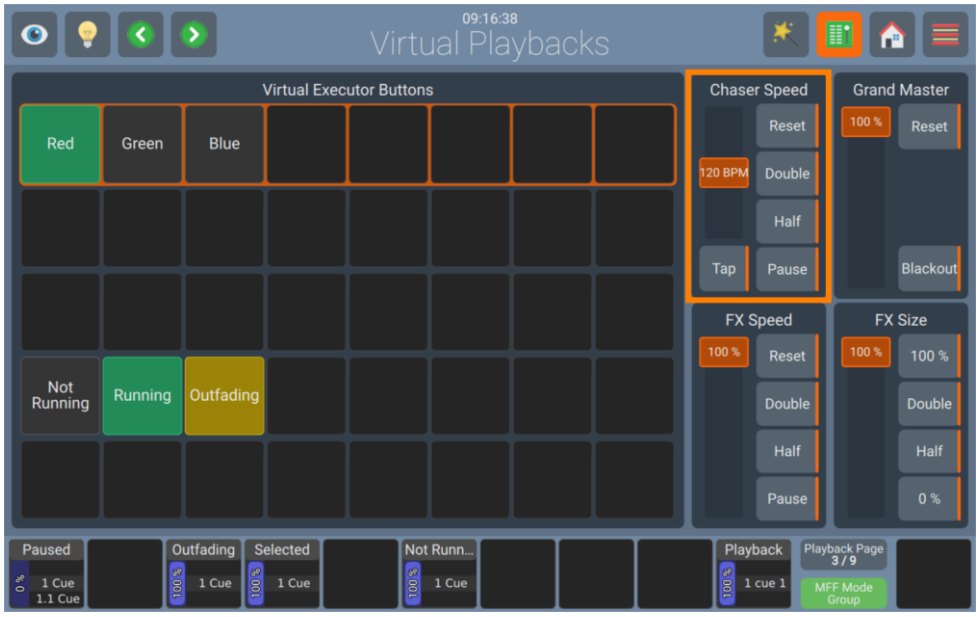


Fig. 199: Virtual Executor Screen - Chase Speed

8.8.8. Grand Master

The Grand Master acts as a master dimmer fader for all fixtures patched on the console. The **Reset** button will reset the fader back to 100%, whereas the **Blackout** button will set the fader to 0%.

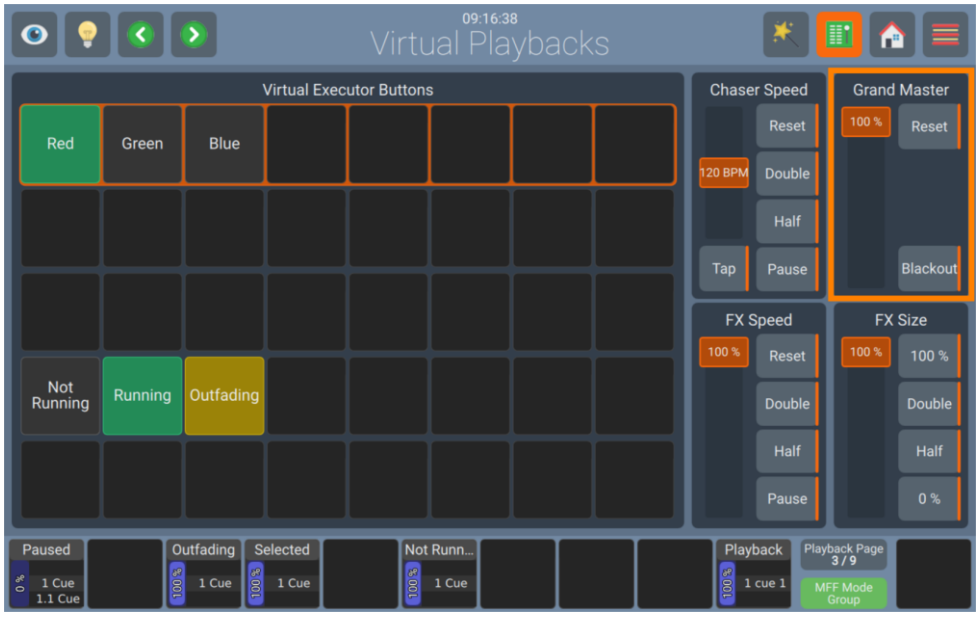


Fig. 200: Virtual Executor Screen - Grand Master

8.8.9. Global FX Speed

The FX Speed fader and buttons found in the Virtual Executor Window is used as a global speed master for all Effects running in any Playback, Scene or Executor.

The **Reset** Button will reset the Fader to its default value. The **Double** and **Half** buttons multiply or divide the current value by 2. The **Pause** button will pause all Effects and a second press will reset the value that was active when the Global FX Speed Master was paused.

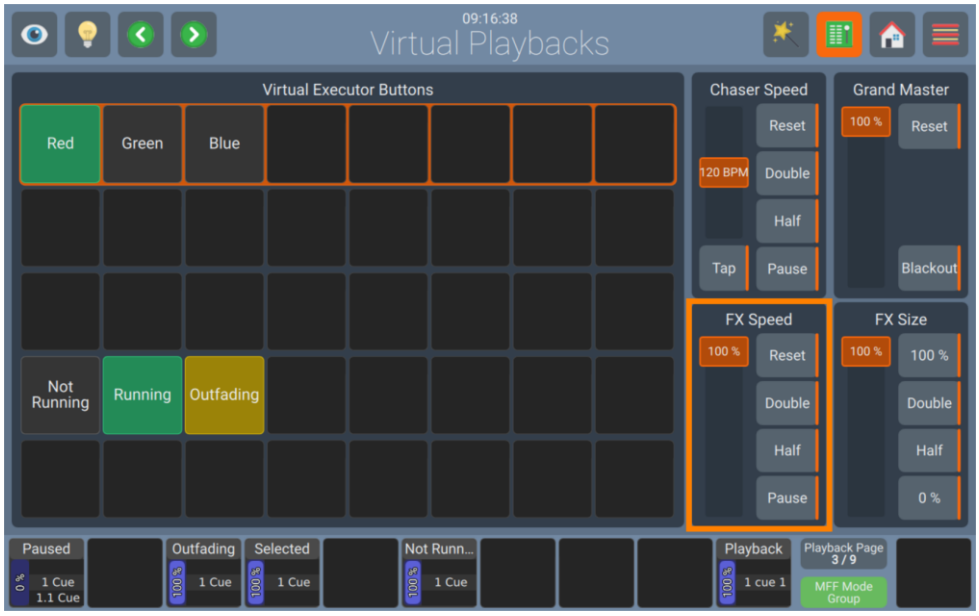


Fig. 201: Virtual Executor Screen - Global FX Speed

8.8.10. Global FX Size

The FX Size fader and buttons found in the Virtual Executor Window are used as a global size master for all Effects running in any Playback, Scene or Executor.

The **100%** Button will reset the Fader to its default value. The **Double** and **Half** buttons multiply or divide the current value by 2. The **0%** button will set all Effects to 0% size.

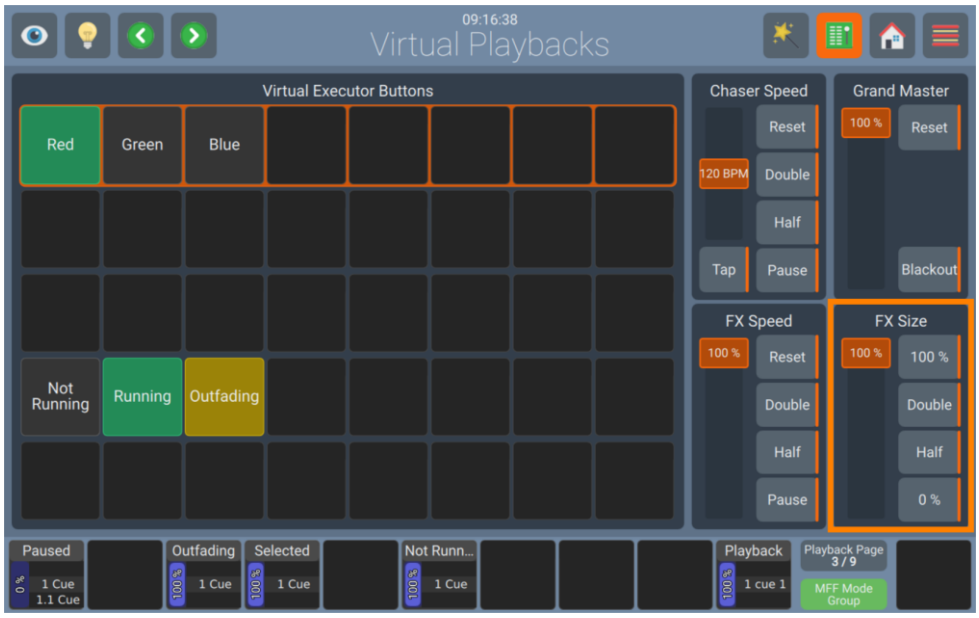


Fig. 202: Virtual Executor Screen - Global FX Size

8.9. Using the Fader Overview Window

The Fader Overview gives you an overview of your multifunction faders. This includes fader labels that contain name, number of the memory, fader value and status.

You may open the fader overview window by clicking on the **Menu** button and clicking on **Fader Overview**.

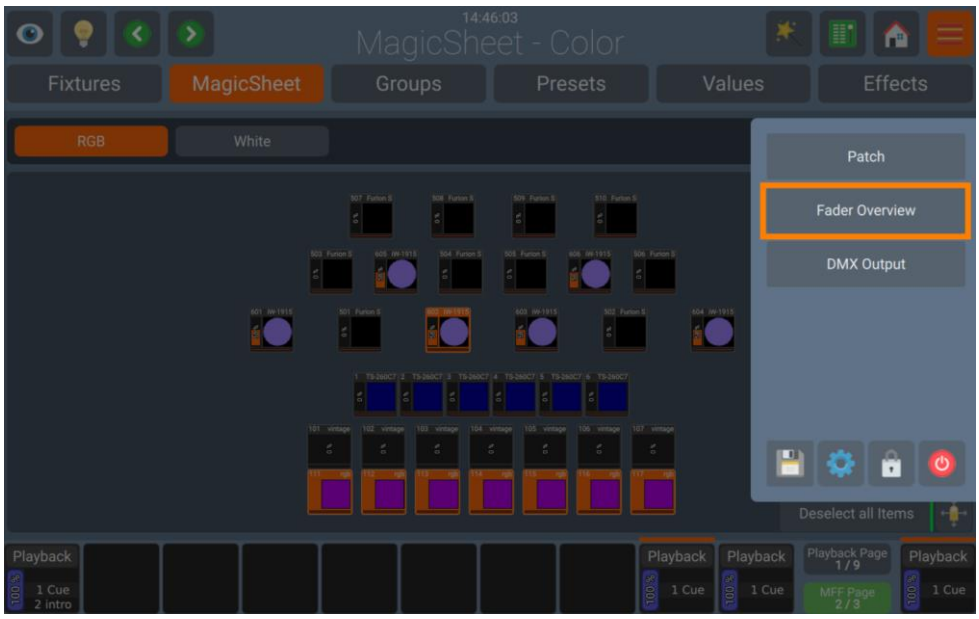


Fig. 203: Side Menu - Fader Overview

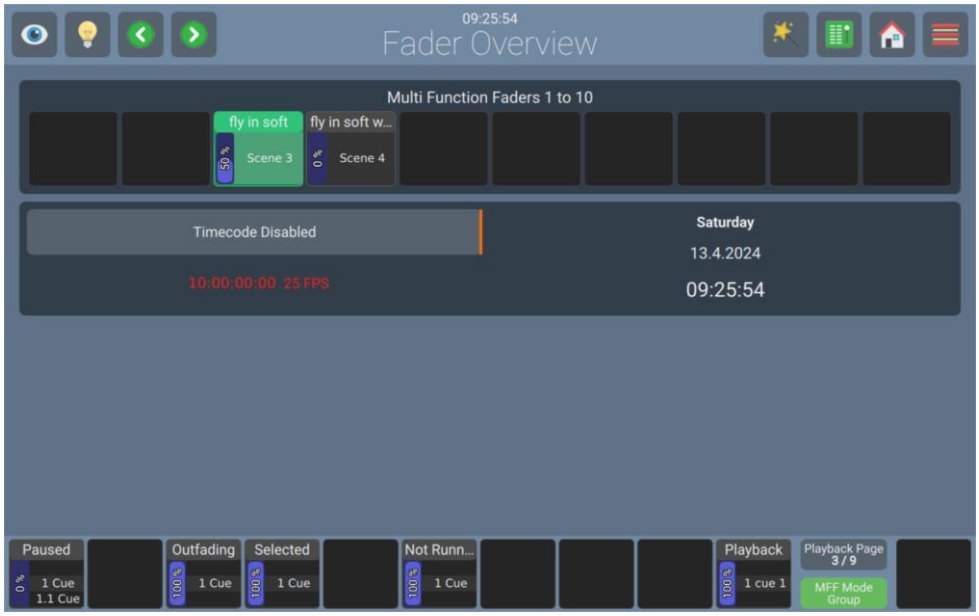


Fig. 204: Fader Overview

8.9.1. Fader Overview Action Dialog

You may access the settings by pressing the **Magic Wand** Button from within the Fader Overview.

The dialog will present you with the following settings:

Setting	Function
Fixture	Changes the MFF Mode to Fixture
Group	Changes the MFF Mode to Group
Scene	Changes the MFF Mode to Scene

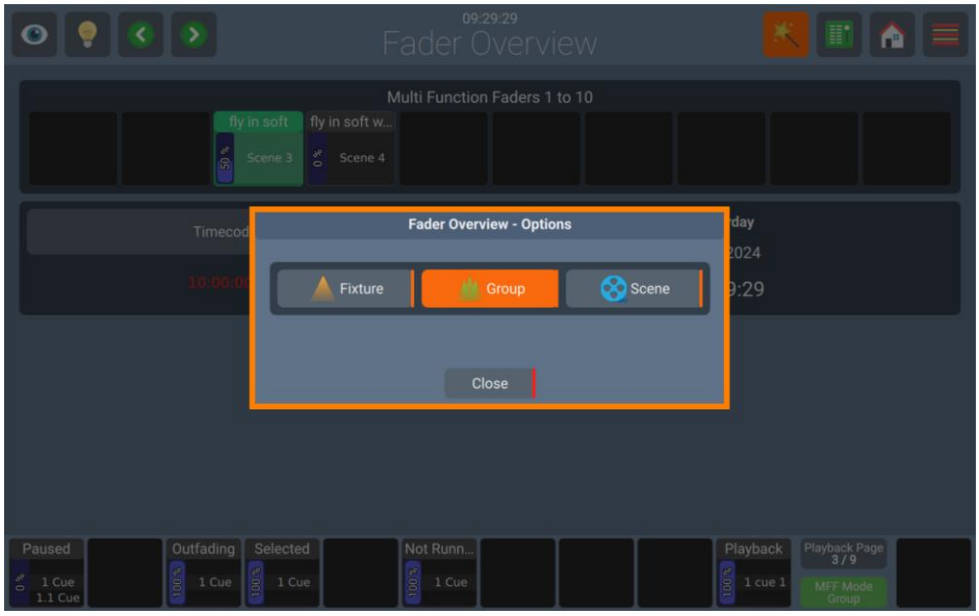


Fig. 205: Fader Overview– Action Dialog

8.10. Using the DMX Output Window

The DMX Output Window is a useful tool to troubleshoot Data / DMX Issues, or simply to double check which channels are being output at which value.

You may open the DMX Output window by clicking on the **Menu** button and clicking on **DMX Output**.

You can search for fixtures on the DMX Output window with the search bar on the top of the view. Search can be done by typing name, universe or Fixture number. You may also filter your DMX Output View based on specific universes, by holding the **Filter** button pressed. This filtering can then be disabled/reenabled by toggling the button.

Fig. 206: Side Menu - DMX Output

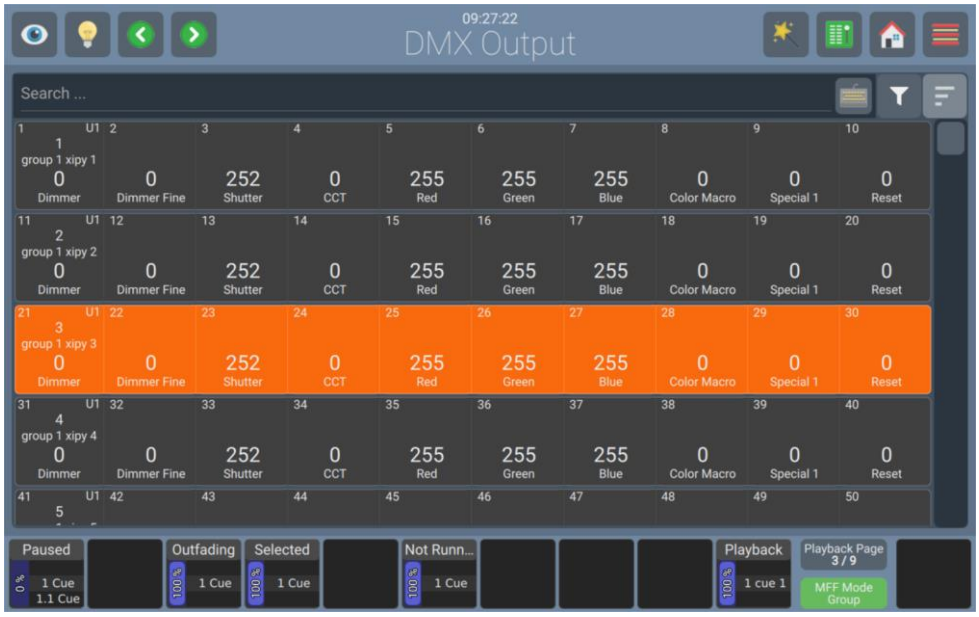


Fig. 207: DMX Output

8.11. Locking the Console

You may lock the console to prevent unauthorized access by clicking on the **Menu** button and clicking on the **Lock** button.

The default Pin Code is "0000", but the PIN may be changed from within the Setup Menu.

Fig. 208: Side Menu – Lock Console

8.12. Shutting down or Rebooting the Console

You may close the show, shut down or reboot the console by clicking on the **Menu** button and then on the **Power** button.

Fig. 209: Side Menu – Reboot / Shutdown Console

9. Protocol Specifications

9.1. Open Sound Control (OSC)

9.1.1. What is OSC

Open Sound Control (OSC) is a modern network-based communication protocol that can be used to send a variety of control messages between OSC enabled devices. OSC input is supported on every product within the LAMPY Series.

OSC enables you to use OSC enabled controllers such as a synthesizer, electronic music instruments, production audio software, and mobile phone apps such as Touch OSC to remotely control your console.

9.1.2. OSC via Wireless LAN

Sending and receiving OSC over WIFI is supported using 3rd party wireless routers, however, we do not recommend using OSC over Wi-Fi for show critical tasks for several reasons:

- Reliability: OSC uses UDP (User Datagram Protocol), which does not include error-checking. This means that the LAMPY cannot verify that OSC messages sent by the console will be received by mobile clients and vice-versa.
- Interference: Wireless routers that operate in the 2.4 GHz radio spectrum are subject to large amounts of interference due to the popularity of the 2.4 GHz radio band for consumer-grade wireless devices.
  So if you have a lot of people attending your show, your Wi-Fi may or may not work properly, or the speed might slow down.

9.1.3. How to Setup OSC

For information on how to setup OSC, please see section 0,

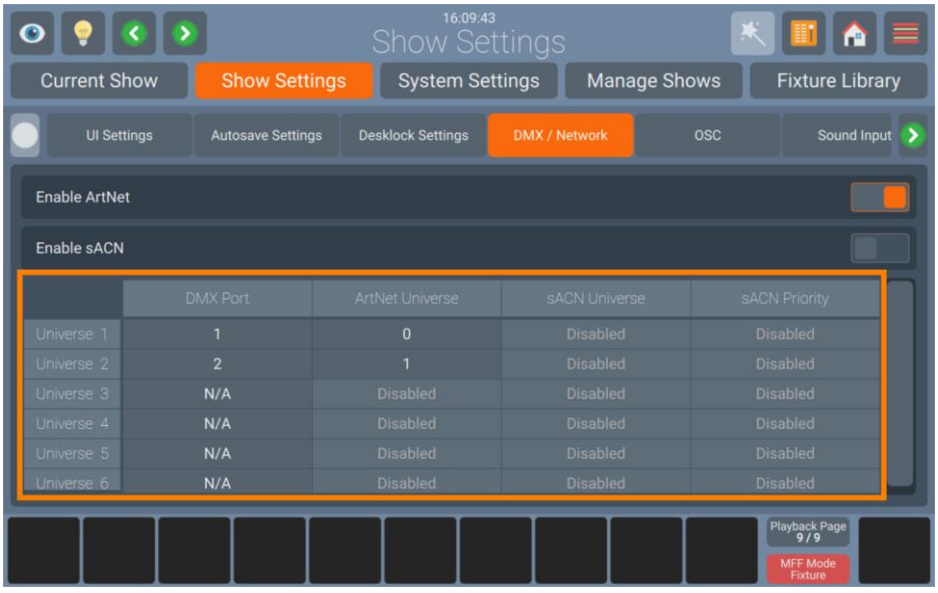


Fig. 61: Show Settings – DMX Mapping Table

9.1.3.1. OSC

Enable Open Sound Control (OSC) Input on Page 62.

9.1.4. Touch OSC Application

In order to simplify your OSC Setup, we are providing Example files for the TouchOSC Mobile application. The examples can be found on the Highlite.com website within the Downloads Tab of the LAMPY console, however there are no restrictions in OSC across the product series.

More Info on the TouchOSC Application can be found at www.hexler.net.

9.1.5. OSC Command Specification

OSC Command Path				Data
/lampy	/pbf (Playback Fader)	/1-10	/flash	0 = release, 1 = press
			/value	0 < 1000 fader value
			/name	[string]
		/page	/next	0 = release, 1 = press
			/previous	0 = release, 1 = press
			/template	0 = release, 1 = press
			/name	[string]
	/mff	/1-30	/flash	0 = release, 1 = press
			/value	0 < 1000 fader value
			/name	[string]
		/mode	/name	[string]
			/mode_button	0 = release, 1 = press
			/fixture	0 = release, 1 = press
			/group	0 = release, 1 = press
			/scene	0 = release, 1 = press
	/virtual_executor	/1-40	/flash	0 = release, 1 = press
			/name	[string]
	/virtual_fader	/grand_master	/value	0 < 1000 fader value
			/reset	0 = release, 1 = press
			/blackout	0 = release, 1 = press
		/chase_speed	/value	0 < 1000 fader value
			/reset	0 = release, 1 = press
			/double	0 = release, 1 = press
			/half	0 = release, 1 = press
			/pause	0 = release, 1 = press
			/tap_speed	0 = release, 1 = press
		/global_fx_size	/value	0 < 1000 fader value
			/reset	0 = release, 1 = press
			/double	0 = release, 1 = press
			/half	0 = release, 1 = press
			/zero	0 = release, 1 = press
		/global_fx_speed	/value	0 < 1000 fader value
			/reset	0 = release, 1 = press
			/double	0 = release, 1 = press

OSC Command Path					Data
/lampy	/programmer	/global_fx_speed	/half		0 = release, 1 = press
			/pause		0 = release, 1 = press
		/record			0 = release, 1 = press
		/edit			0 = release, 1 = press
		/delete			0 = release, 1 = press
		/copy			0 = release, 1 = press
		/name			0 = release, 1 = press
		/shift			0 = release, 1 = press
		/magic			0 = release, 1 = press
		/home			0 = release, 1 = press
		/fader_mode			0 = release, 1 = press
		/pan_tilt			0 < 1 XY Value
		/blind	/btn		0 = release, 1 = press
			/led		0 = led off, 1 = led on
		/highlight	/btn		0 = release, 1 = press
			/led		0 = led off, 1 = led on
		/fan	/btn		0 = release, 1 = press
			/led		0 = led off, 1 = led on
		/select	/all_none		0 = release, 1 = press
			/next		0 = release, 1 = press
			/previous		0 = release, 1 = press
			/even_odd		0 = release, 1 = press
			/first_second_half		0 = release, 1 = press
		/feature_direct	/pan	/inc	-1 < 1 variable value
				/value	0 < 1000 value
			/tilt	/inc	-1 < 1 variable value
				/value	0 < 1000 value
			… and so on …		0 = release, 1 = press
		/clear	/btn		0 = release, 1 = press
			/led		0 = led off, 1 = led on
		/commandline	/content		[string]
			/error_led		0 = led off, 1 = led on
		/encoder	/1-4	/btn	0 = release, 1 = press
				/inc	-1 < 1 variable value
				/text1	[string]
		/encoder	/1-4	/text2	[string]

OSC Command Path			Data
/lampy	/programmer	/intensity	0 = release, 1 = press
		/position	0 = release, 1 = press
		/color	0 = release, 1 = press
		/gobo	0 = release, 1 = press
		/beam	0 = release, 1 = press
		/special	0 = release, 1 = press
	/use_accel		0 = release, 1 = press
	/sync		0 = release, 1 = press

9.2. MIDI Input

9.2.1. How to Setup MIDI

9.2.1.1. For information on how to setup MIDI, please see section 8.4.2.7., MIDI

Enabling the MIDI Input on page 65.

9.2.2. MIDI Command Specification

9.2.2.1. MIDI Note On /Off Command Mapping

Note	Type	Action
0 - 9	Playback Fader 1 – 10 on Page 1	Button press
10 - 19	Playback Fader 1 – 10 on Page 2	Button press
20 - 29	Playback Fader 1 – 10 on Page 3	Button press
30 - 39	Scene Fader 1 – 10	Button press
40 - 49	Scene Fader 11 – 20 (LAMPY 40 only)	Button press
50 - 59	Scene Fader 21 – 30 (LAMPY 40 only)	Button press
60 – 99	Virtual Executor 1 - 40	Button press
100	Master Dimmer	Blackout On / Off
101	Chase Speed	Tap sync Tap
102	Chase Speed	Half Speed
103	Chase Speed	Double Speed
104	Chase Speed	Pause
105	Chase Speed	Reset
106	Global FX Size	100 %
107	Global FX Size	Half
108	Global FX Size	Double
109	Global FX Size	Zero
110	Global FX Speed	Reset
111	Global FX Speed	Double
112	Global FX Speed	Half
113	Global FX Speed	Pause

9.2.2.2. MIDI Control Change Mapping

Control Change (CC)	Type	Action
0 - 9	Playback Fader 1 – 10 on Page 1	Fader Value
10 - 19	Playback Fader 1 – 10 on Page 2	Fader Value
20 - 29	Playback Fader 1 – 10 on Page 3	Fader Value
30 - 39	Scene Fader 1 – 10	Fader Value
40 - 49	Scene Fader 11 – 20 (LAMPY 40 only)	Fader Value
50 - 59	Scene Fader 21 – 30 (LAMPY 40 only)	Fader Value
60	Master Dimmer	Fader Value
61	Chase Speed	Fader Value
62	Global FX Size	Fader Value
63	Global FX Speed	Fader Value

10. Key Combinations / Shortcuts

Here is a list of shortcuts that can help you program your show:

[Edit] + [AttributeGroup]- key loads all values of the corresponding attribute group without effects into the programmer.

[Shift] + [AttributeGroup]- button opens the Presets window for the respective attribute group.

[Shift] + [MagicWand]- key on the front panel for 2s triggers the calibration of the internal screen.

[Shift] + [Home]- key on the front panel for 2s restarts the user interface.

[Shift] + **Multi Function Fader Mode** Button opens the fader mode window.

[Shift] + [Clear] retrieves the last programmer content.

[Shift] + [Fan] opens the Effects-Programmer.

[Shift] + [Copy] corresponds to "Move" (to move an element).

[Shift] + [Off] switches off all running playbacks, scenes and executors.

[Shift] + [Master Go] advances to the next playback page

[Shift] + [Master Pause / Back] goes back to the previous playback page

[Shift] + **Close Show** / **Shutdown** / **Reboot** triggers the respective action without saving the show.

[Shift] in Programmer (Fixtures View) and Library Editor shows fine DMX values and increases encoder resolution.

[Shift] in Fixtures View allows to move the viewport and a pinch gesture to zoom.

[Shift] + **Preset** loads the value stored in the preset instead of a reference to this preset.

11. Maintenance

11.1. Safety Instructions for Maintenance

DANGER
Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

WARNING
Risk of burns due to hot surface

Allow the device to cool down for at least 15 minutes before servicing or cleaning.

11.2. Preventive Maintenance

Attention
Before each use, examine the device visually for any defects.

Make sure that:

- All screws used for installing the device or parts of the device are tightly fastened and are not corroded.
- There are no deformations on housings, fixations and installation points.
- The Display is not cracked or damaged.
- The power cables are not damaged and do not show any material fatigue.

11.2.1. Basic Cleaning Instructions

The screen of the device should be cleaned periodically. The cleaning schedule depends on the conditions at the site where the device is installed. When smoke or fog machines are used at the site, the device will need more frequent cleaning. On the other hand, if the device is installed in well-ventilated area, it will need less frequent cleaning. To establish a cleaning schedule, examine the device at regular intervals during the first 100 hours of operation.

To clean the device, follow the steps below:

01) Disconnect the device from the electrical power supply.
02) Allow the device to cool down for at least 15 minutes.
03) Remove the dust collected on the external surface with dry compressed air and a soft brush.
04) Clean the screens with a damp cloth. Use a mild detergent solution.
05) Dry the screens carefully with a lint-free cloth.
06) Clean the DMX and other connections with a damp cloth.

Attention

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.
- Make sure that the connections are fully dry before connecting the device to the power supply and to other devices.

11.3. Corrective Maintenance

The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

12. Deinstallation, Transportation and Storage

12.1. Instructions for Deinstallation

WARNING
Incorrect deinstallation can cause serious injuries and damage of property.

- Let the device cool down before dismounting.
- Disconnect power supply before deinstallation.
- Always observe the national and site-specific regulations during deinstallation of the device.
- Wear personal protective equipment in compliance with the national and site-specific regulations.

12.2. Instructions for Transportation

- Use the original packaging to transport the device, if possible.
- Always observe the handling instructions printed on the outer carton box, for example: "Handle with care", "This side up", "Fragile".

12.3. Storage

- Clean the device before storing. Follow the cleaning instructions found above.
- Store the device in the original packaging, if possible.

13. Disposal

Correct disposal of this product

Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

14. Approval

CE

Check the respective product page on the website of Highlite International (www.highlite.com) for an available declaration of conformity.