Chimp 100 / 300   v2.05

Ordercode: 55000/01 /03 & 55010/13 /14

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 Chimp 100 or Chimp 300
● Schuko to Powercon power cable (1,4 m)
● User manual
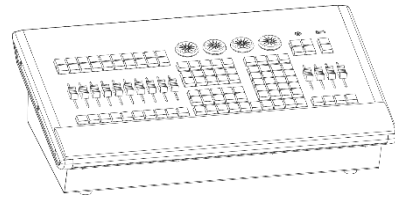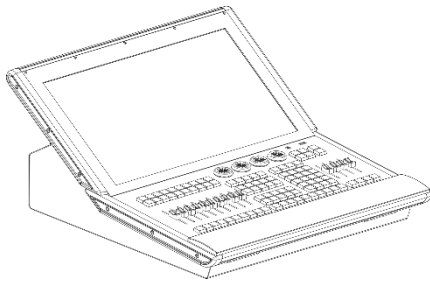
2.2.   Intended Use

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.
🗑️		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.
📖	Read and follow the instructions in the user manual before installing, operating or servicing the device.

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.

> **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 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.
- 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 intended for professional use as a lighting controller. It is suitable only for indoor installation. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households.
- 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:

- There are no deformations on housings, fixations and installation points.
- 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. Features

The Chimp 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 Chimps output manually, as the programmer always has precedence. To "empty" the programmers contents, you need to hit the clear button three times, or press it for a longer period of time.

"Tracking" as opposed to non-tracking defines that values are tracked over from one cue in a cuelist to another (Ie. a fixture has been brought to a level of 50% in cue #1, and it will remain at this level proceeding through the cuelist until you change it to a different level). This is default behavior, however you still have the option to set cuelists to a "Non-Tracking" mode on a per cuelist basis.

	Chimp 100	Chimp 300
On-board Screen	-	22" Full Color Touchscreen
External Monitor	2x HDMI; minimum Full-HD	1x HDMI
Faders	10 + 4	
Playback Pages	40	60
Encoders	4	
DMX Channels	1024 (extendable)	2048 (extendable)
DMX Universes	2	4
Universes Output via Network	2 (extendable to up to 10)	4 (extendable to up to 10)
CueLists	1000	
MIDI In / Through / Out	Yes	
SMPTE/Time Code	Yes (Using Peanut Box)	Yes (Using Audio In XLR)
DMX input	Yes (By switching direction)	
Audio Input	Yes	Yes
Desklight Connectors	2	2
Input Voltage	100-240V, 60/50Hz	100-240V, 60/50Hz
Power Consumption	75W	125W
Fuse	Internal Fuse	Internal Fuse
Housing	Metal & Flame retardant plastic	
Dimensions	400 x 575 x 160mm	647 x 575 x 279mm
Weight	9kg	18kg

4.2. Optional accessories

	Chimp 100	Chimp 300
Dustcover Ordercode	55001	55011
Flightcase Ordercode	D7250	D7251

5. Console Backpanel

5.1. Chimp 100 Backpanel

Please make sure to connect your main Monitor to HDMI Port 1, as this will be the primary screen you are interfacing with. If you are using one Touchscreen and one regular screen without touch fascilities, connect the touchscreen monitor to this port. Make sure both displays support 1920 by 1080 pixel resolution.

Connect both monitors prior to booting the console.
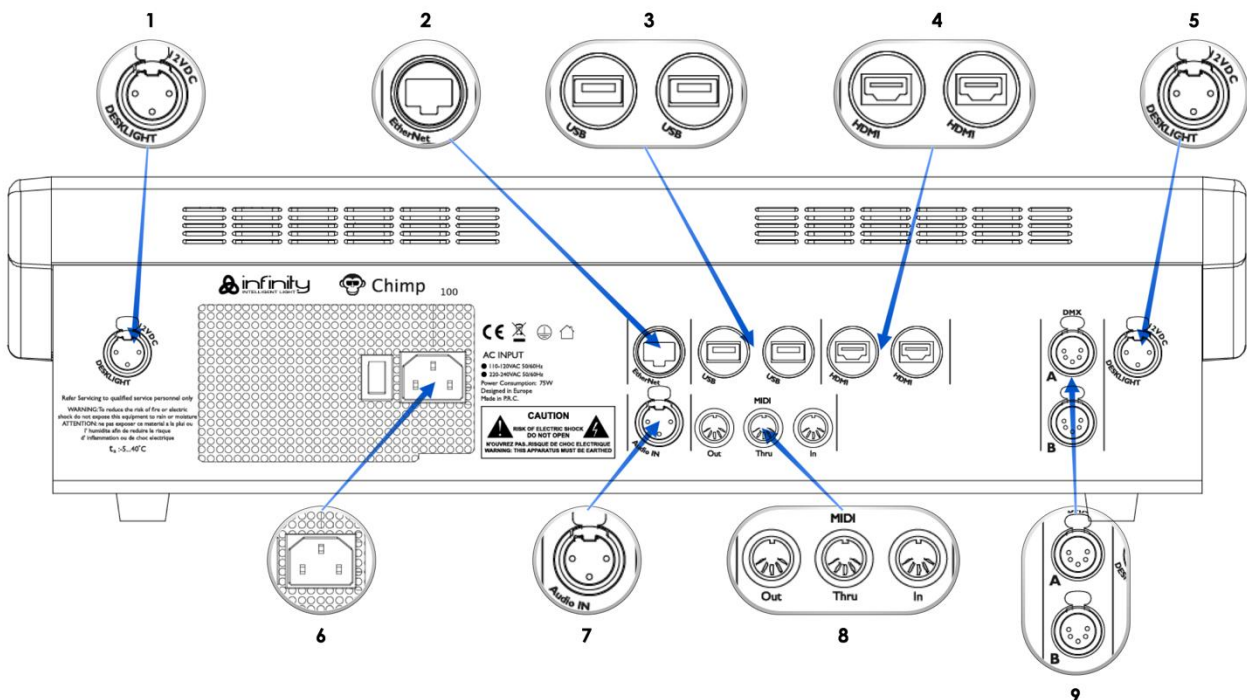
Fig. 1 Chimp 100 Backpanel

1	Desklight Connector	6	Power Connector
2	Ethernet Port	7	Audio Input
3	USB 2.0 Ports	8	Midi Out / Thru / In
4	HDMI Ports 1 & 2	9	DMX Ports
5	Desklight Connector		

5.2.   Chimp 300 Backpanel

Please make sure the external screen you are about to connect to the console, supports 1920 by 1080 pixels of resolution. Connect it before booting the console.

1	Desklight Connector	6	Power Connector
2	Ethernet Port	7	Audio Input
3	USB 2.0 Port	8	Midi Out / Thru / In
4	HDMI Port (External Screen)	9	DMX Ports
5	Desklight Connector		

6. The Frontpanel

6.1. Frontpanel

The frontpanel contains all the necessary buttons and faders for operation. The Frontpanel looks exactly the same across both products. Here is a quick overview:
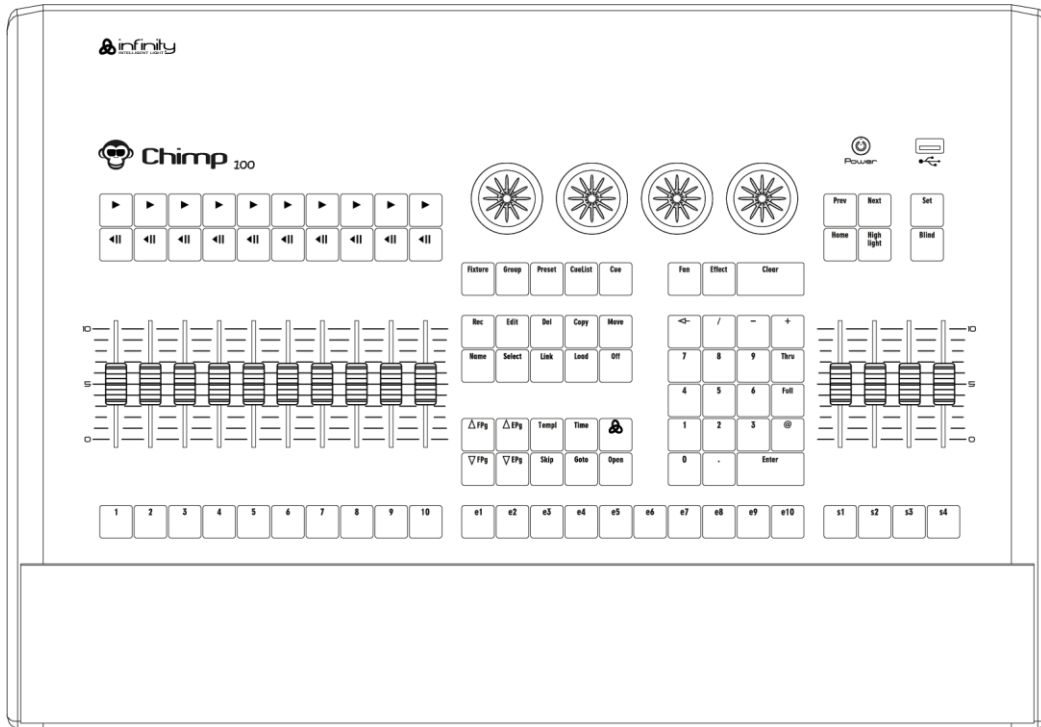
Fig. 3: Chimp 100 Frontpanel

6.2. Playback Faders

The Chimps frontpanel consists of multiple playback fader controls, each consisting of a fader and flash, go, pause/back buttons. These may contain *Cuelists*, *Groups* or *Special* Masters, like Speedmasters. These are pageable and the button functions are assignable. The buttons below the faders are labeled 1 to 10.
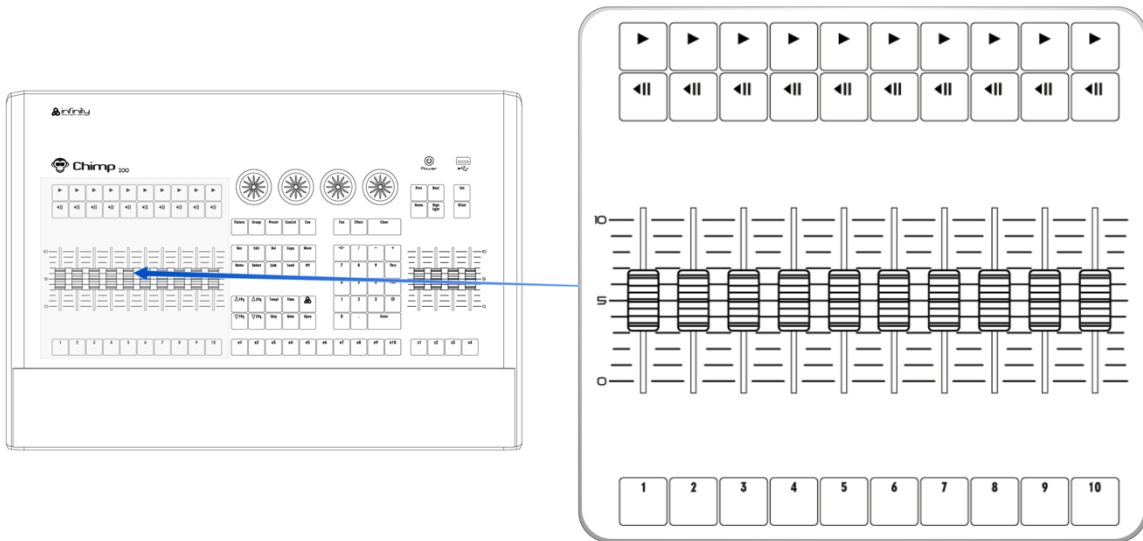
Fig. 4: Playback Faders

6.3. Programming Section

This part of the Chimps 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.
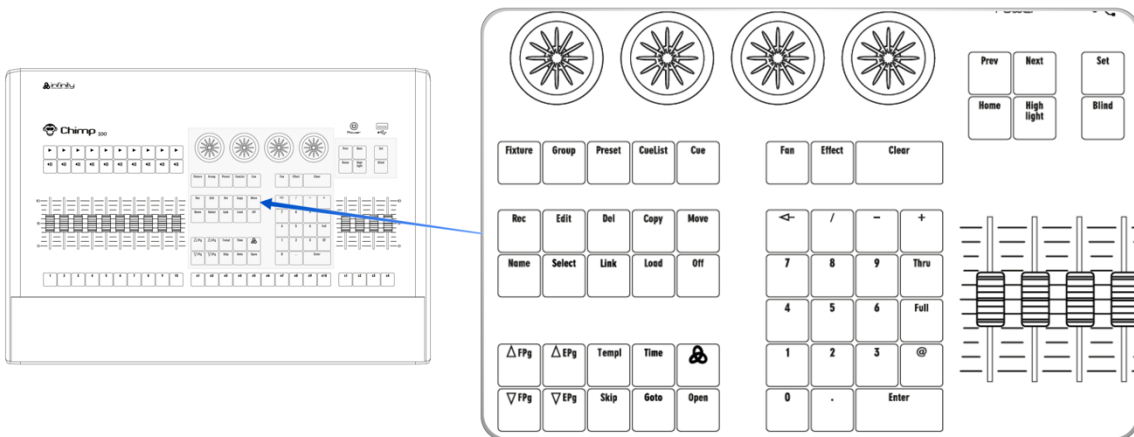
Fig. 5: Programming Section

6.4. Executor Buttons

You will find ten buttons labeled e1 to e10 next to the faders, below the programming section. These may contain *Cuelists* or *Groups*. The Executors are independently pageable from the Playback Faders. These buttons have assignable functions as well.
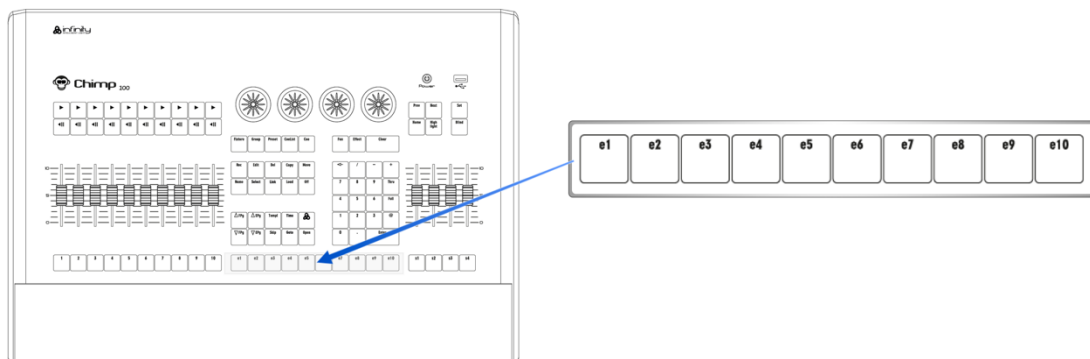
Fig. 6: Executor Buttons

6.5. Special Faders

The far right side of the Chimps frontpanel contains four special master fader controls, each consisting of a fader and button. These may contain *Groups* or *Special Masters*, like Speedmasters. The buttons below the faders are labeled s1 to s4.
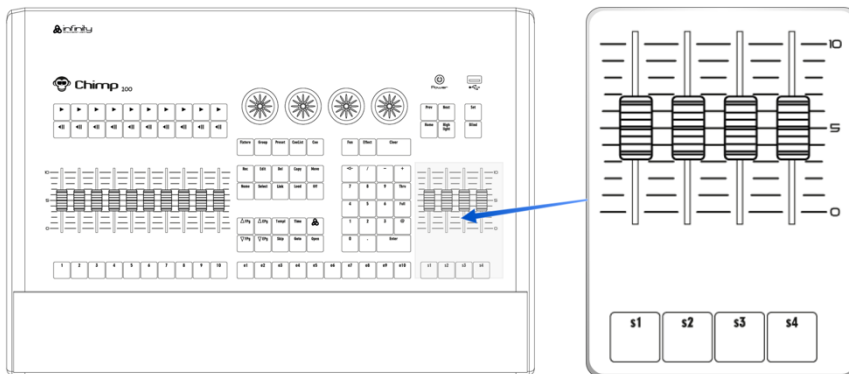
Fig. 7: Special Faders

6.6. Touchscreen (Applies to Chimp 300 Console, only)

The 22" Touchscreen of the Chimp 300 Console is one of the key elements used for user interaction with the Chimp. It features an easy and intuitive to use graphical user interface.

The Chimp 100 Console does not have an built-in screen, and needs to be connected to an external screen with full-HD resolution (1920 by 1080) as the userinterface is optimized for that resolution. The Screen may be a touch screen as well.

7.   Basic Concepts

7.1.   Hybrid Console

The Highlite Chimp is a hybrid console. This means it is not limited to control of a specific fixture type only. It equally treats Dimmer Channels and Movinglights.

7.2.   Fixtures vs. Channels

The Chimp does not distinguish between channels or fixtures. It only knows about "Fixtures". This is to allow more flexibility.

As an example: You may easily replace any fixture with a different model of fixture or even replicate fixtures while maintaining the values programmed previously.

To make fixture replacement and replication working, a conventional dimmer channel is also a "Fixture" and is patched using a library file that contains one attribute only: A Dimmer.

This also applies to numbering. Chimp uses "Fixture Numbers" for numbering, not "Channel Numbers".

7.3.   Priority Concept

7.3.1.   What is LTP and HTP?

In this part of the manual you will get a basic understanding about the priority concept used in the console. Depending on which consoles you have used in the past, these concepts may sound more or less familiar.

7.3.1.1. HTP (Highest takes precedence)

Generally, desks that are not designed to handle moving lights (like a simple 2 Preset Desk) work on a Highest Takes Precedence (HTP) basis.

This means that if a fixture's intensity is being controlled by two different parts of the console, such as a Preset 1 and Preset 2 at the same time, the intensity will be at the higher of the two levels.

For example, if Fixture 1 is at 50% on the first Preset bank, and at 100% on the second Preset bank, the level output is 100%. If the value set on Preset bank 2 is reduced to 40%, the Output level will be at 50%, since the value set by the first Preset bank is now the highest value, hence output.

Unlike other consoles, we have laid out the way the console decides which parameter of a moving light fixture should be treated as a dimmable channel quite smartly - we let you decide when creating a library. The intensity faders will also control everything that is set as dimmable in the library, and only those channels will be compared HTP.

7.3.1.2. LTP (latest takes precedence)

Highest takes precedence generally works well for non-moving light fixtures, but moving lights introduce a problem. Parameters other than intensity do not have 'higher' or 'lower' values: A colour of red is not higher or lower than green, and Gobo 1 is not higher or lower than Gobo 2.

When working with moving lights, a better way to decide precedence, called Latest Takes Precedence (LTP) is needed.

With this system, the fixture values will always be at the value they have most recently been set to. Taking our example made previously, setting the value of the fixture on the second Preset bank to 40% would result in an output level of 40%, since the level change has been the latest action and hence, takes precedence.

7.3.2.   Priority Stacks

The consoles maintains so called „Priority Stacks" which are used to figure out which values have been last set by which playback to calculate output values accordingly. There is a "Low Priority" stack, as well as a "High Priority" stack. Think of it as two different stacks of paperwork, where the piece of paper on top of the stack is the most recent one. Cuelists set to high priority will always take precedence over non-high priority cuelists.

7.3.3. Programmer Priority

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.

7.3.4. Priority Overview

The console has the following priority concept:

Priority	Level	
Highest	7	[Highlight] Button
	6	Grand Master
	5	Group Submasters
	4	Programmer
	3	Playbacks at High Priority
	2	Playbacks at Low Priority
Lowest	1	Default Values

7.3.4.1. Multiple Playbacks

The console allows multiple different cuelists to be run at the same time. You can have several cuelists active at the same time, each on its own playback.

7.3.5. Examples

7.3.5.1. Starting multiple Cuelists

Lets say you start multiple cuelists one after another controlling the same fixture:

Cuelist (In start order)	Dimmer	Color	Gobo
#1: Intensity	80%		
#2: Intensity and Color	50%	Red	
#3: Gobo			Gobo 1
#4: Gobo and Color		Blue	Gobo 2

The next table will show you what the results would be:

Dimmer	Color	Gobo
80%	Blue	Gobo 2

7.3.5.2. Starting multiple Cuelists with different priorities

Lets take our previous example and add different priorities to the mix:

Cuelist (In start order)	Priority	Dimmer	Color	Gobo
#1: Intensity		80%		
#2: Intensity and Color	High	50%	Red	
#3: Gobo	High			Gobo 1
#4: Gobo and Color			Blue	Gobo 2

The next table will show you what the results would be:

Dimmer	Color	Gobo
80%	Red	Gobo 1

As you can see, the „High Priority" option is only affecting LTP channels.

7.3.5.3. Stopping Cuelists with different priorities

Lets take our previous example again and switch off one of the cuelists after starting them all:

Cuelist (In start order)	Priority	Dimmer	Color	Gobo
#1: Intensity		80%		
#2: Intensity and Color	High	50%	Red	
#3: Gobo	High			Gobo 1
#4: Gobo and Color			Blue	Gobo 2

Will genereate the following output:

Dimmer	Color	Gobo
80%	Red	Gobo 1

After stopping Cuelist #2, the following values are output:

Dimmer	Color	Gobo
80%	Blue	Gobo 1

7.4. Tracking

7.4.1. 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 cuelist, 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. It has its advantages over the "Non-Tracking" approach.

The Chimp console allows you to playback cuelists both in tracking or Non-Tracking modes.

7.4.2. Tracking in a Nutshell

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

You open up 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 after opening its door (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 cuelist:

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

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

Closed	On	Open	On

7.4.3. Examples

7.4.3.1. General Example

The following example shows the intensities of four fixtures in three cues on a Non-Tracking console:

	Fixture 1	Fixture 2	Fixture 3	Fixture 4
Cue 1	80%	80%	50%	50%
Cue 2	80%	50%	100%	50%
Cue 3	100%	50%	100%	50%
Cue 4	0%	50%	100%	50%

With a tracking console, however, the recorded information would be:

	Fixture 1	Fixture 2	Fixture 3	Fixture 4
Cue 1	80%	80%	50%	50%
Cue 2		50%	100%	
Cue 3	100%			
Cue 4	0%			

If the intensity has not been changed or touched, then no value is recorded for that attribute. During playback, if Tracking is enabled, attributes remain at their last assigned level, i.e.: Fixture 4 remains at 50% intensity while cue 2 is played back, because no change was recorded into cue 2.

7.4.3.2. 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 changed the intensity of Fixture 1 in cue 1 to 60%, this value would track through into cue 2, since Cue 2 has no information for Fixture 2 recorded. The value will still change to 100% in cue 3, because a value is recorded.

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.

While tracking can help speed up the modification of cues, you may not always want changes to track through. For example, in a theatre show, you probably would not want changes to track through from one scene to the next, and in a music concert, you would not want changes to track through from one song to the next. To prevent changes tracking through, you may record a so-called "blocking cue". A blocking cue contains values for all attributes that have values in the cuelist, regardless of whether the values have tracked through from previous cues. In the example given below, cue 4, would act as a blocking cue:

	Fixture 1	Fixture 2	Fixture 3	Fixture 4
Cue 1	80%	80%	50%	50%
Cue 2		50%	100%	
Cue 3	100%			
Cue 4 "Blocking Cue"	100%	50%	100%	50%

Cue 4 acts as an end-stop, preventing any future changes to cues 1-3 from tracking through to subsequent cues after cue 4.

7.4.3.3. 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 Chimp Console is taking care of maintaining the tracking state and will always calculate all values as if the cuelist was played back in order.

7.4.3.4. Track Thru End

Sometimes it is desirable to track values from the last cue in the cuelist to the first cue. A real live example for this is a looping cuelist that creates a color chase, that when you run it first should set the fixtures intensity to 100% cue by cue. After the loop, they should stay on and just alternate colors between red and blue.

	Fixture 1		Fixture 2		Fixture 3		Fixture 4	
Cue 1	100%	Blue		Red		Blue		Red
Cue 2		Red	100%	Blue		Red		Blue
Cue 3		Blue		Red	100%	Blue		Red
Cue 4		Red		Blue		Red	100%	Blue

Without Track Through End the intensity of a fixture is brought to 100% in each cue, and these values track through for the duration of the loop. However, as soon as the cuelists loops to cue 1, the console calculates tracking as if you just started this cuelist – hence only the first fixture would have its intensity set to 100%.

To stop this happening, you need to enable "Track Thru End" – this will tell the console to track everything from the last cue into the first as if it would be one large cuelist with a never-ending number of cues.

8. The Graphical User Interface

The console utilizes an easy to use and intuitive graphical user interface (GUI). 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 Chimp Consoles is divided into three different parts: The Top Toolbar, the Content Area and the Bottom Toolbar.

The Top Toolbar the Top Toolbar provides access to the different configuration and programming / playback views.
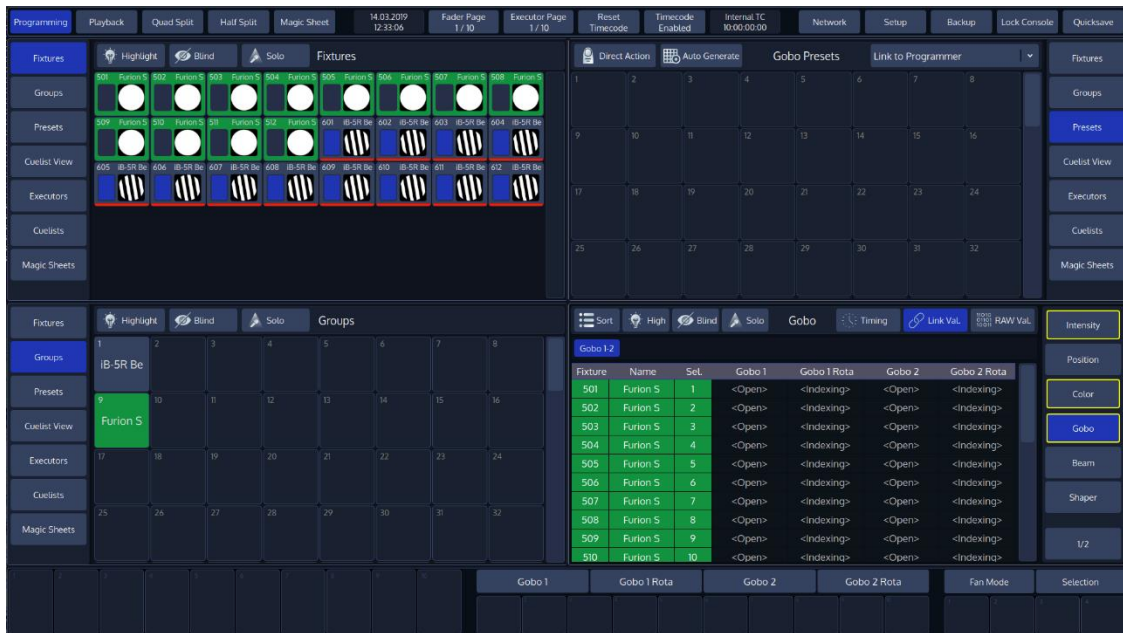
Fig. 8: The Graphical User Interface

8.1. The "Top Toolbar"

The Top Toolbar is divided into three parts. The left part shows the views that are used for programming and during playback. The center part shows status information like the current date and time, current Timecode and the active fader and executor pages.

The right part shows buttons to enter the Setup and Backup screens, and buttons to lock the consoler and to save the show.
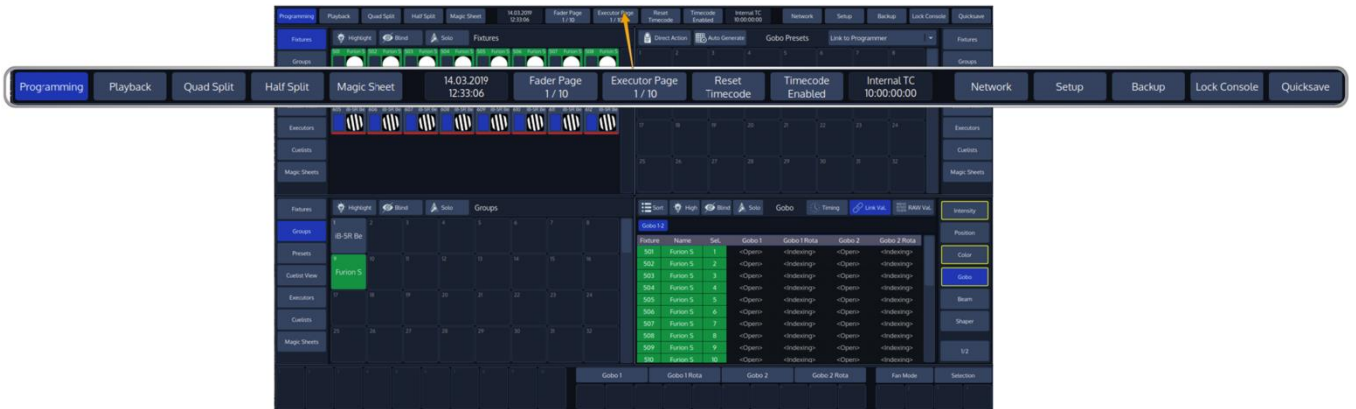
Fig. 9: The Top Toolbar

8.1.1. Main View Buttons

The Main View buttons provided in the top toolbar switches the Content Areas contents between various predefined views. Please note the programming interface (the programmer) is only available in "Programming".
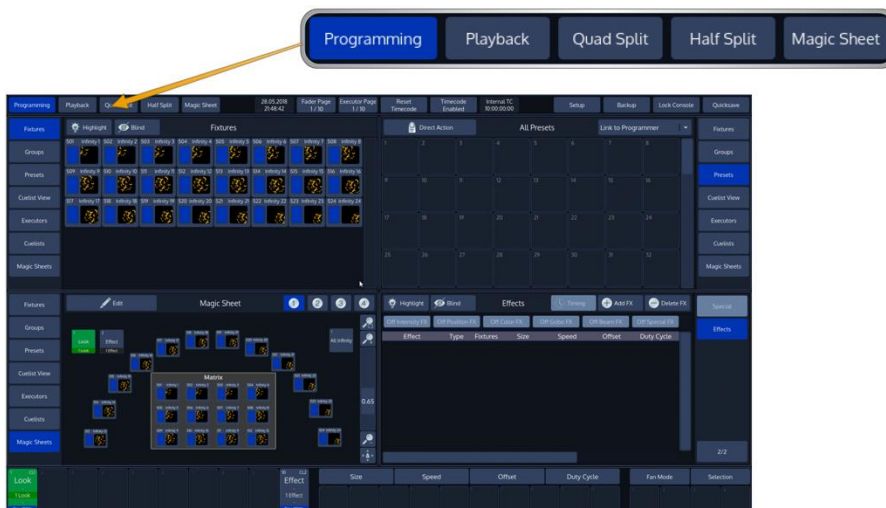
Fig. 10: Main View Buttons

8.1.2. Status Buttons

The time and date label provides quick information about the current date and time.

The **Fader Page** and **Executor Page** Buttons are used to display the current Fader or Executor Page, or to open the Page Directory for quickly changing between pages, or to move, delete and naming them.

The Timecode buttons provide quick access to most needed timecode functions, such as resetting the Timecode back to the start value or enabling and disabling the timecode. The label on the right side shows the current timecode value.
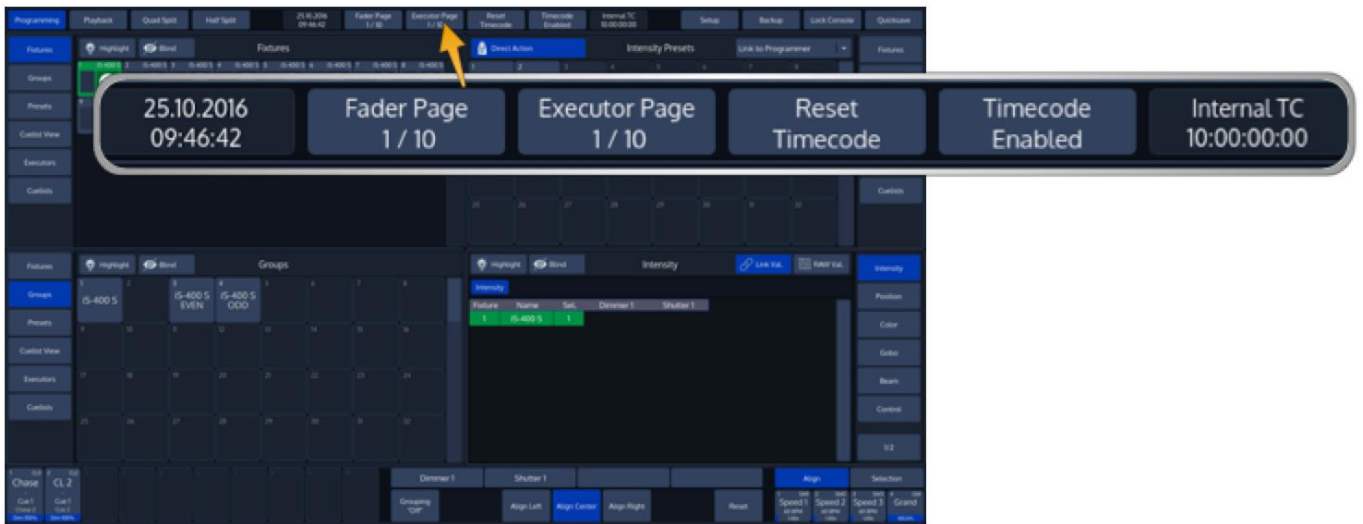
Fig. 11: Status Buttons

8.1.3. Network / Setup / Backup / Lock Console and Quicksave Buttons

The **Network** button is used to access the Multi-Console Networking functions of the console OS. For more detail please read the section "Multi Console Networking" on Page 202.

The **Setup** and **Backup** buttons show the corresponding menus to patch fixtures, setup preferences or to back up your show to an USB key.

To lock the userinterface of the console to unauthorized personell, click on the **Lock Console** button.

The default pin for the desklock is "0000".

The **Quicksave** button will save your showfile on the internal disk.
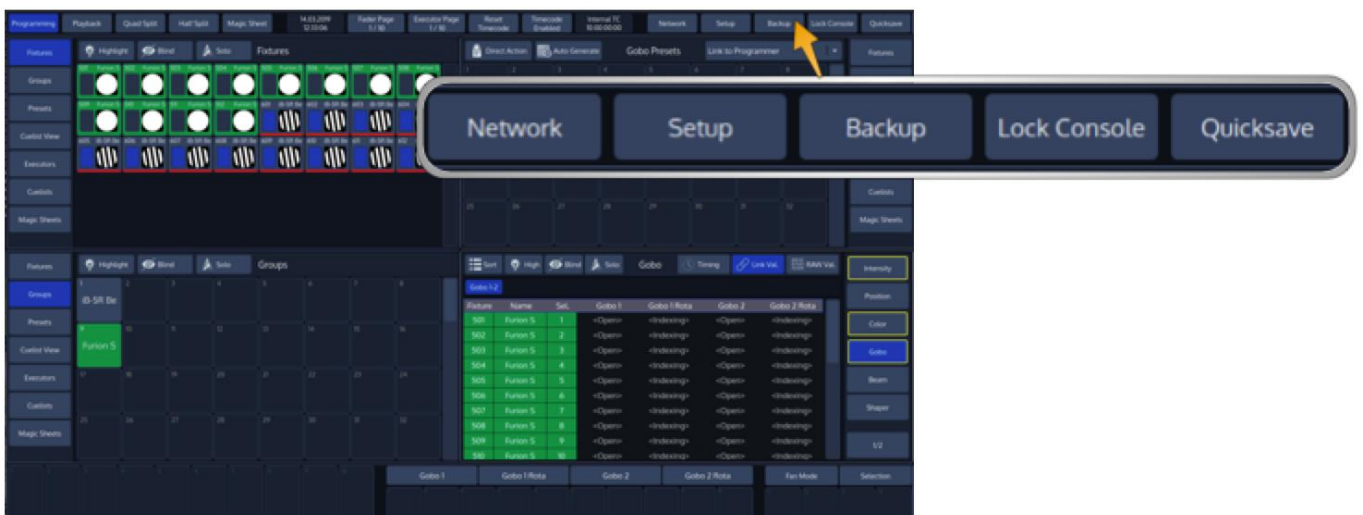
Fig. 12: Network – Setup – Backup – Lock Console – Quicksave Buttons

8.2. The "Content Area"

The Content Area is used to display context sensitive windows and widgets, based on the selection made from the top toolbar. It also displays dialogs which may be opened using the hard buttons on the frontpanel of the console.
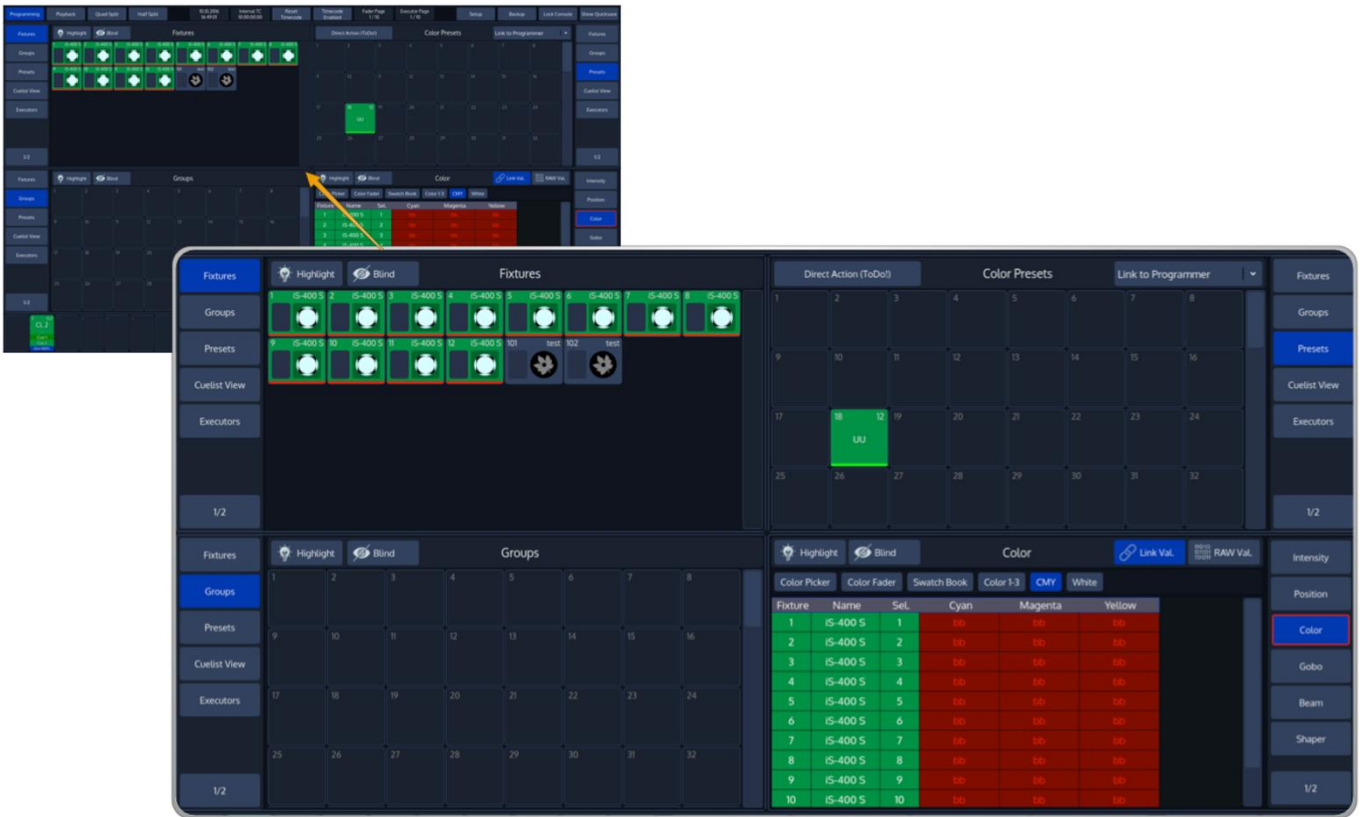
Fig. 13: The Content Area

8.2.1.   The different Split Widgets

Lets call any of the split items in the Content Area a "Split Widget".

Each of the Split Widgets behaves in the same way. They do have a Menu bar on the left (or right, dependant on the position of the widget).
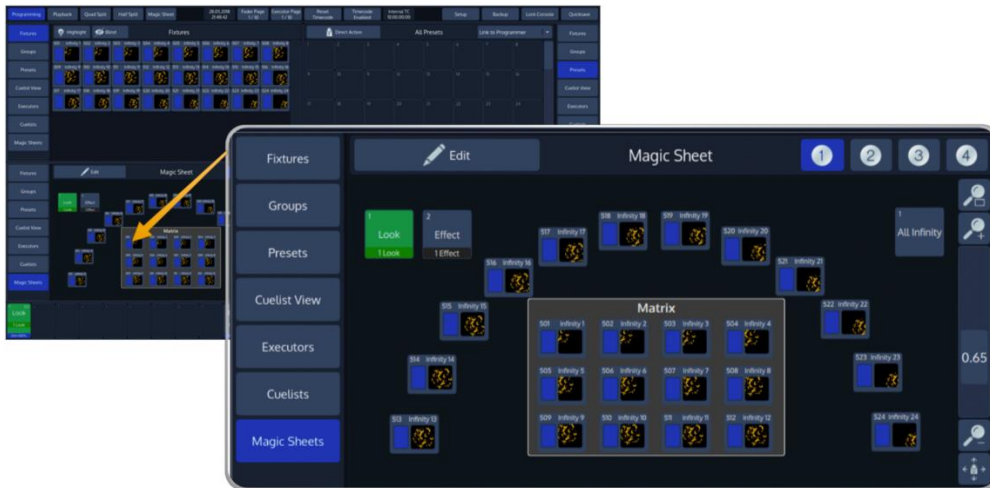
<p align="right">**Fig. 14: Split Widgets**</p>

The Menu on the left (or right) is used to switch the type of that particular Split Widget to a different type. Different Types are, for example: **Fixtures**, **Groups**, **Presets**, a **Cuelist View** Widget, Virtual **Executors** and **Magic Sheets** as well as **Cuelists**, an **Output View** and a **DMX Output** View displaying DMX Values.

In some cases you may notice a Button that says **x/y, for example 1/2**. Pressing that button will open the second level of the menu. If that button is missing – there is no second level for that menu.
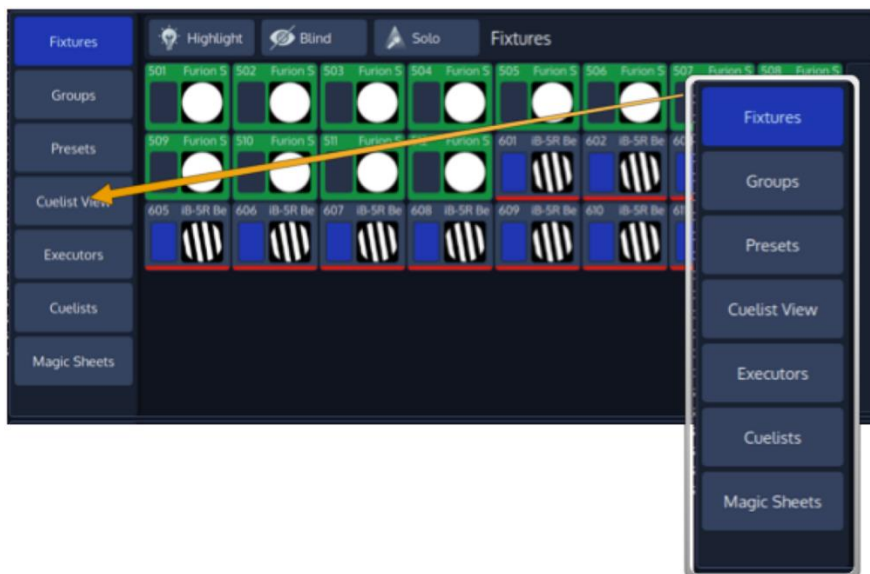
<p align="right">**Fig. 15: Side Menu Example**</p>

The Title Bar of a Split Widget may also contain some buttons that toggle between contents of the widget, or are used to trigger specific functions in the console.

<div align="right">
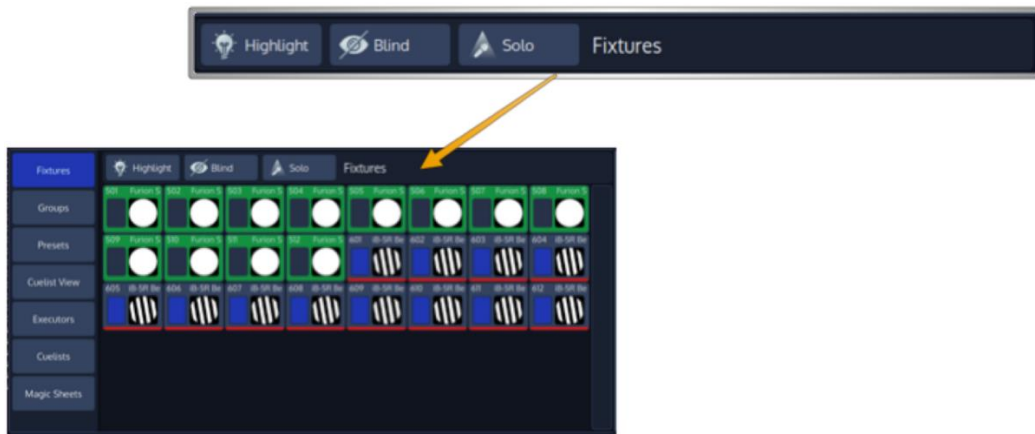
Fig. 16: Split Widget Title Bar

</div>

8.2.2. Pool Split Widgets

The so-called "Pools" are used throughout the console to provide a quick and easy way to interact with Fixtures, Groups, Presets and Cuelists.

If a single object within a Pool is referred to, we will often refer to it as a "Item".

Pool items may be used in combination with hard keys found on the face-plate of the console like [Record] or [Delete] or to quickly select or deselect the appropriate object by clicking (or touching) it.

More information about each Pool Split Widget can be found in the corresponding sections of the User Manual.

The Bottom Toolbar

The Bottom toolbar is used to show fader labels on the left side, encoder labels as well as executor labels on the center part, and the align settings, sub-selection and master faders on the right side.
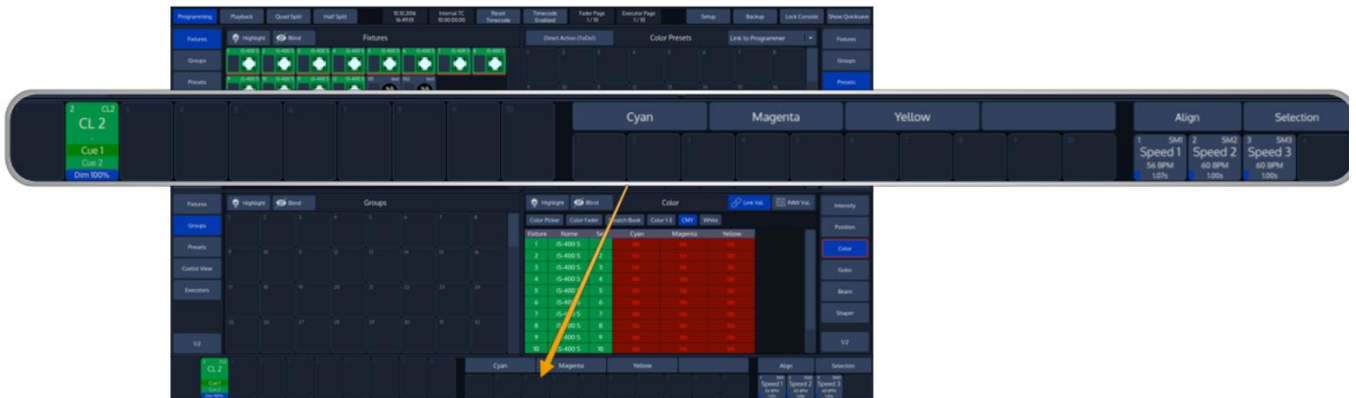
Fig. 17: Bottom Toolbar

Playback Fader Labels

Fader labels give you a quick overview of fader assignments, current cuelist states and much more. The look of the fader labels varies a little depending on the fader contents.
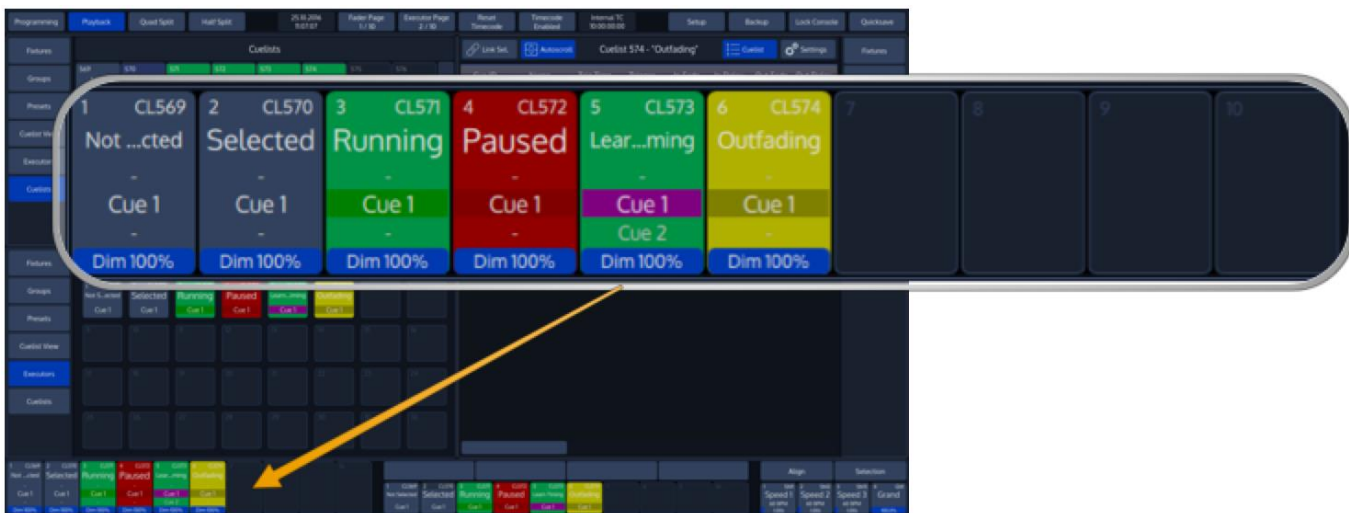
Fig. 18: Playback Fader Labels

Fader Fetch Mode Indicator

If Fader Fetch Mode is active, and the physical Fader Value is different from the Value of the Object linked to the fader, a red line will be shown in the dimmer bar to give you a hint on where to "Pick up" the value.
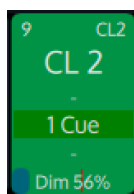
Fig. 19: Playback Fader Fetch Mode Indicator

8.2.3. Encoder Labels

The "Encoder Labels" show encoder function and values.

Clicking on the labels or pushing the encoder either shows the "select slots / keypad" dialog or toggles between a set of commonly used values. In the programmer screen, labels will not show values. Instead, the programmer window is used to display values.
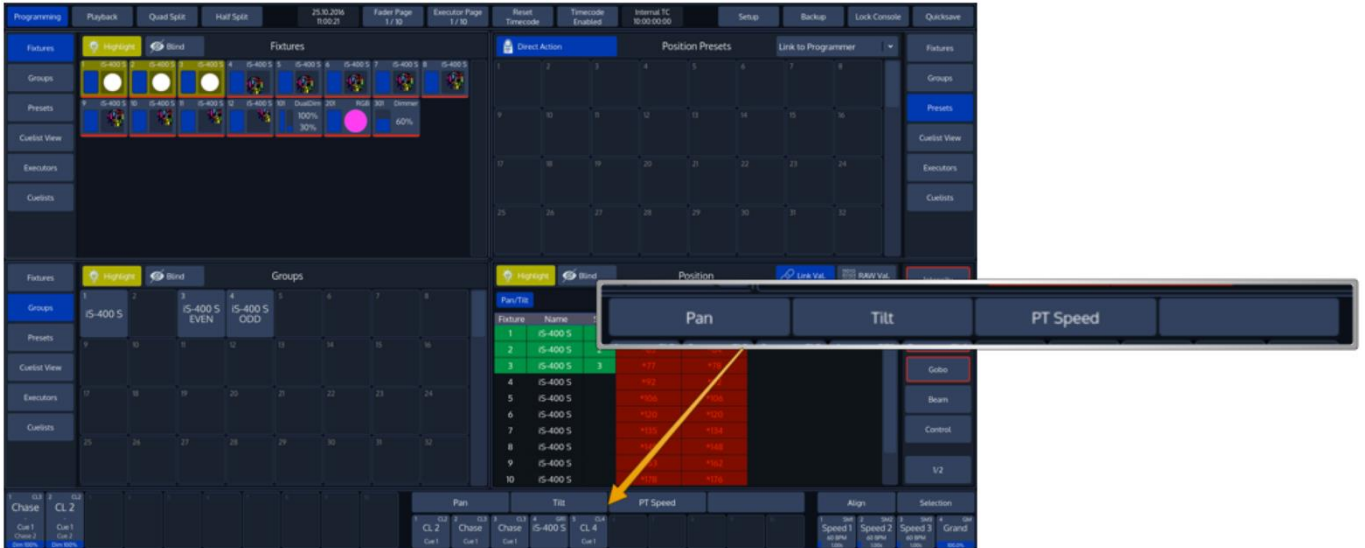
Fig. 20: Encoder Labels

8.2.4. Executor Labels

Executor labels give you a quick overview of executor assignments, current cuelist states and much more. The look of the executor labels varies a little depending on the executors contents.

Fig. 21: Executor Labels

Toolbars

Toolbars are context sensitive aid and provide quick access to multiple different functions. They are shown in the same position as the Executor Labels, when applicable.

Here is a quick overview over the available toolbars.

8.2.4.1. "Selection" Toolbar

The "Fixture Selection" Toolbar provides quick access to fixture sub selection.

Fig. 22: Selection Toolbar

For more Information on the Select Toolbar, please see section 15.3 Fixture Sub-Selection using the Selection Toolbar on page 91.

8.2.4.2. "Fan Mode" Toolbar

The "Fan Mode" –Toolbar is used to alter settings that are used in conjunction with the Fan function of the console. The Fan function is invoked by pressing the [Fan] key and may be used to spread fixture attribute values.

More information may be found in the Section "17.7 Adjusting how Fannings are applied using the Fan Mode Toolbar" on page 120.

Fig. 23: Fan Mode Toolbar

8.2.4.3. "Record" Toolbar

The "Record" –Toolbar provides you with modifiers when recording an object. It is shown after pressing the [Rec] hard key.

You may cycle through the options by holding the [Infinity] while pressing the [Rec] -key.
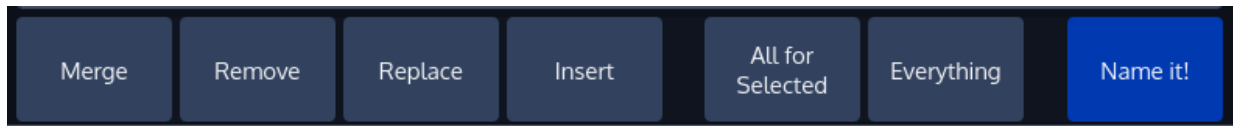
Fig. 24. Record Toolbar

Merge: Will merge the programmer values into the given object, combining the object and the programmer values.

Replace: Will replace a given object with the programmer values.

Insert: Only valid for Cuelists. Will insert a Cue in front of an already existing Cue.

Remove: Will remove the programmer values from the given object.

All for Selected: Will record all parameters of the selected fixtures, no matter if they are touched or not.

Everything: Will record every parameter for every fixture on the console.

Name It!: Will open up an On-Screen keyboard for quick naming after recording the object. If the Object type is Cuelist, Name it will name the recorded Cuelist for the first Cue that is recorded. After the Cues wil be named.

8.2.4.4. Delete" Toolbar

The "Delete" –Toolbar, like the "Record" –Toolbar shows several options useful for deleting objects. The toolbar is shown after pressing the [Delete] hard key.

You may cycle through the options by holding the [Infinity] while pressing the [Rec] -key.

Delete Object	Delete All	Delete Cues	Remove Content
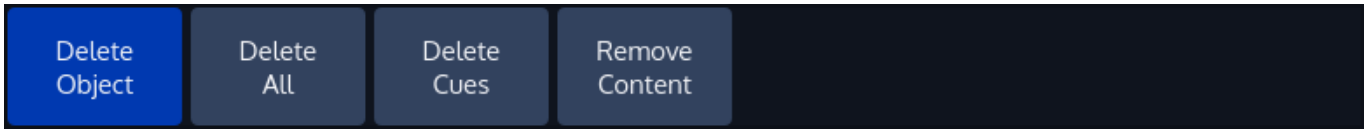
<p align="right">**Fig. 25: Delete Toolbar**</p>

Delete Object: Only deletes the selected Object

Delete All: Deletes the selected Object and all directly connected Objects. Example: When Delete All is selected while deleting a Fader Assignment, the assigned Object will be deleted as well.

Delete Cues: Is used to delete Cues from a Cuelist

Remove Content: Will remove all touched Values (if applied to a Preset or Cue) from the Preset or Cue, or selected Fixtures (if applied to a Group) from the Group.

8.2.4.5. "Off" Toolbar

The "Off" –Toolbar is shown after pressing the [Off] hard key. It can be used to quickly "Off" all running Cuelists, to reset all Sub (Fixture & Group Masters)- or assigned Grandmasters back to 100%.

The console will ask for confirmation when any of the "Reset" or "Release" buttons is pressed. However you may omit the Confirmation Screen by holding the [Infinity] button pressed while clicking on any of these buttons.

Off Window	Reset Group Fader	Reset Cuelist Fader	Off All Playbacks	Release Everything
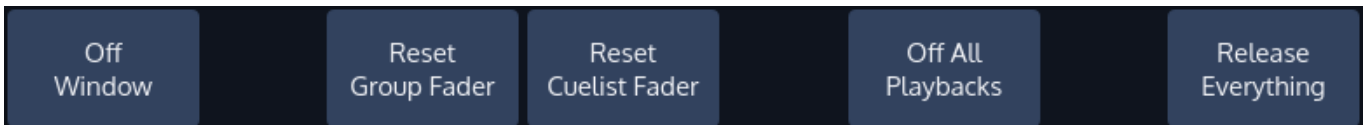
<p align="right">**Fig. 26: Off Toolbar**</p>

Off Window will open the "Off"-Window" which provides you with a more detailed view of Cuelist states and a quick way off switching off playbacks across all playback pages.

Reset Group Fader will reset all Group Master back faders to 100%.

Reset Cuelist Fader will reset all Cuelist Faders back faders to 100%.

Off All Playbacks wills switch off all running Playbacks (Faders and (Virtual) Executors.

Release Everything will off all Cuelists and reset all Fixture & Groupmasters as well as the Grandmaster to 100%.

8.2.5. Commandline

Whenever you enter commands on the consoles front panel they are written into the Command Line Interface.

It will also check if the command entered is a valid command. If the command is invalid (or incomplete), the CLI will show a warning sign.

8.2.6. Commandline Syntax

In general, the Commandline Syntax needs to be entered in "Action – Source – Target" form. When no Action is specified, the source Item will be selected. Please see the following table as an example:

Action	Source	Target
[Rec]	[Cuelist] [5]	
	[Cuelist] [5]	
[Copy]	[Cuelist] [5]	[Cuelist] [8]
[Move]	[Cuelist] [5]	[Cuelist] [8]
[Link]	[Cuelist] [2]	[Go] or [Pause / Back]

Commands interacting with a visual object (such as a Pool Item or a Faders Pause/Back Button) will be executed automatically once they are syntactically correct. However, commands that do not interact with visual elements need to be executed by pressing the [Enter] –Key.

8.2.7. Fan Options / Selection Buttons

Clicking on the **Fan Options** button will open the Fan Options Toolbar which is used to alter the way the Fan-Function works.

Clicking on the **Selection** button will open the Selection toolbar that contains several shortcuts for fixture sub selection (like Odd / Even, Half / Half, etc).

Fig. 30: Fan Options / Selection Button

8.2.8.   Special Master Fader Labels

Executor labels give you a quick overview of executor assignments, current cuelist states and much more. The look of the executor labels varies a little depending on the executors contents.

<div align="right">

Fig. 31: Special Master Faders

</div>

Dialog Windows

Dialog Windows are used throughout the console to pull your focus towards a specific task. Dialog windows block the remaining GUI, so they need to be closed or accepted first.

Dialog Windows may either be closed by clicking the **X** button in the top right corner, or by using the appropriate buttons found in the bottom row of the dialog.

Fig. 32: Dialog Windows

8.2.9. Keypad Dialogs

Whenever a Keypad Dialog is shown, the keypad on the faceplate of the console may be used to set values.

The Keypad may be used to directly enter values or to increment / decrement values using the [+], or [-] Key. [Enter] closes the dialog.
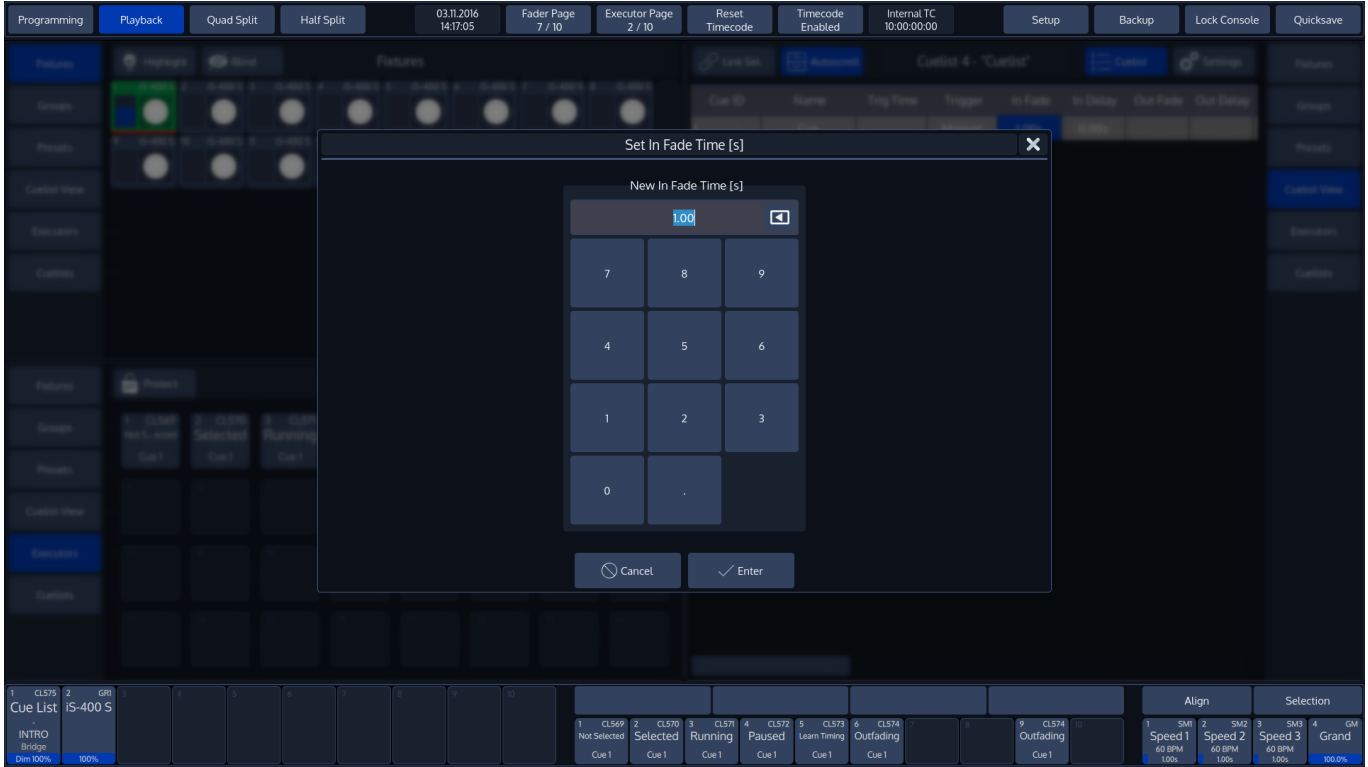
Fig. 33: Keypad Dialogs

8.2.10. On-Screen Keyboard

You may enter values and names using an external USB Keyboard connected to the console whenever the On-Screen Keyboard is shown.

For added convencience, starting to type when the keyboard is shown will erase the old text without the need to press backspace first.
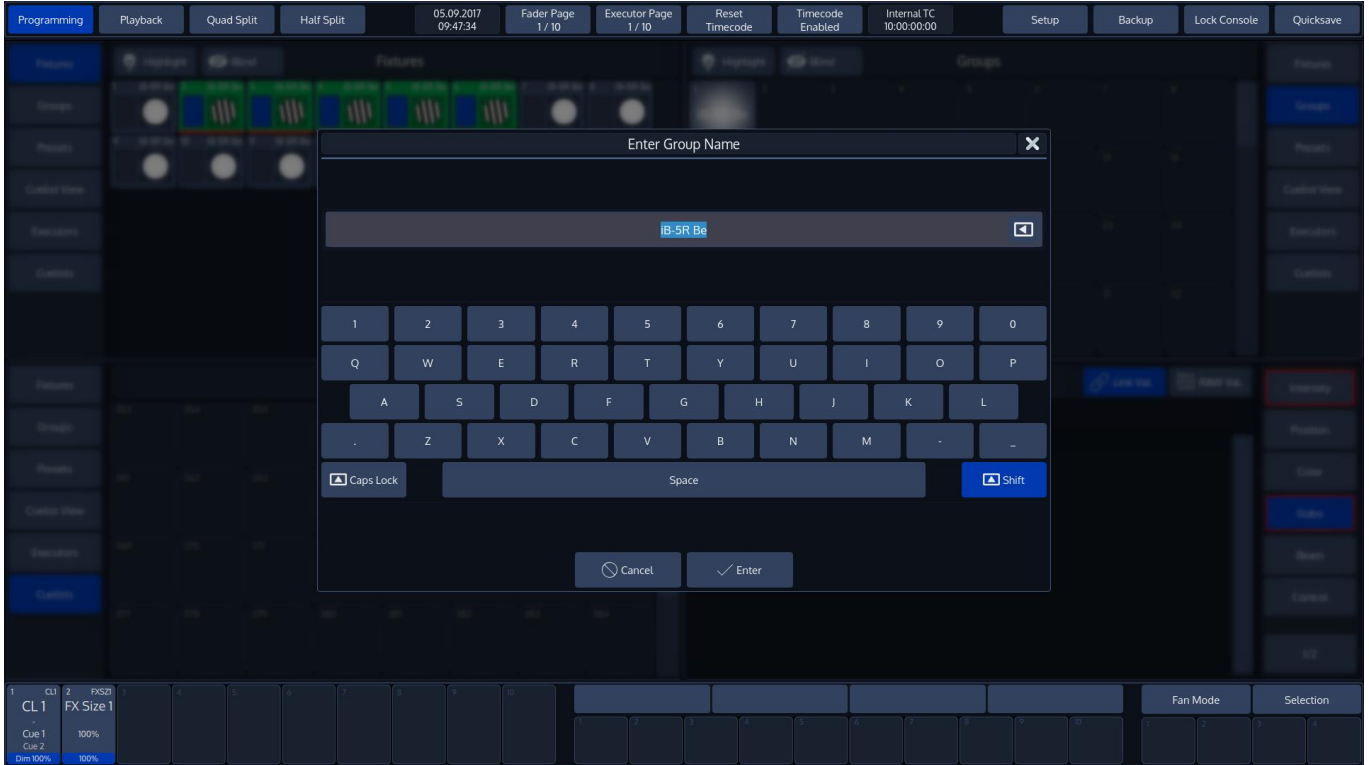
Fig. 34: Keyboard Dialog

9. Operation

9.1. To Begin Using the Console

9.1.1. Unpack Console and Accessories

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

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

9.1.2. Connect Console to Any Accessories and Power

Connect all optional accessories such as USB keyboard, mouse, touchscreen, etc. to the console.

Connect DMX cables to the console's DMX output ports.

If you are using ArtNet for data output, also connect the network cable to the consoles network port.

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.

Press the power button on the right hand side of the console, above the special faders to boot up the console.
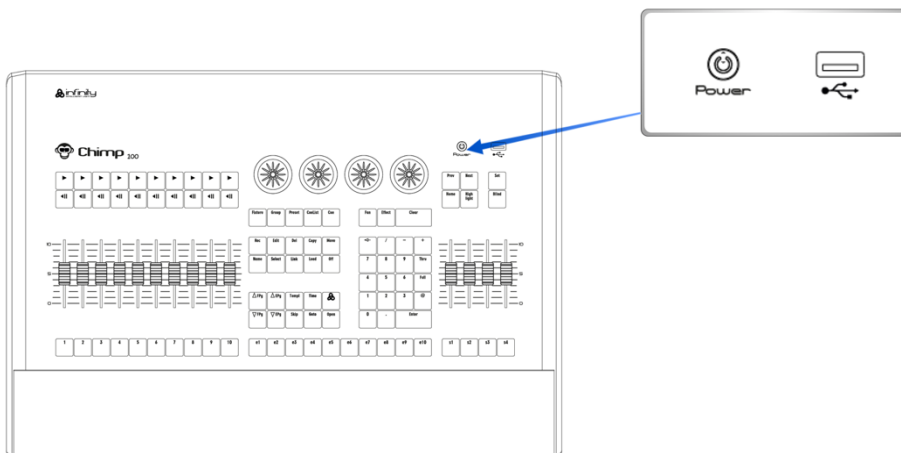
Fig. 35: Power Button

During the boot process a boot menu will be shown. This boot screen provides several maintenance utilities; however, it will continue to automatically boot the Console OS without user intervention.

The Chimp Lighting Control Console will perform a system check during boot up.

9.1.3. Boot up the Console

Once the system is ready to use, the Welcome screen will appear and you may either start a new show file, or load an existing one, or use one of the tabs from the side menu to access more options.
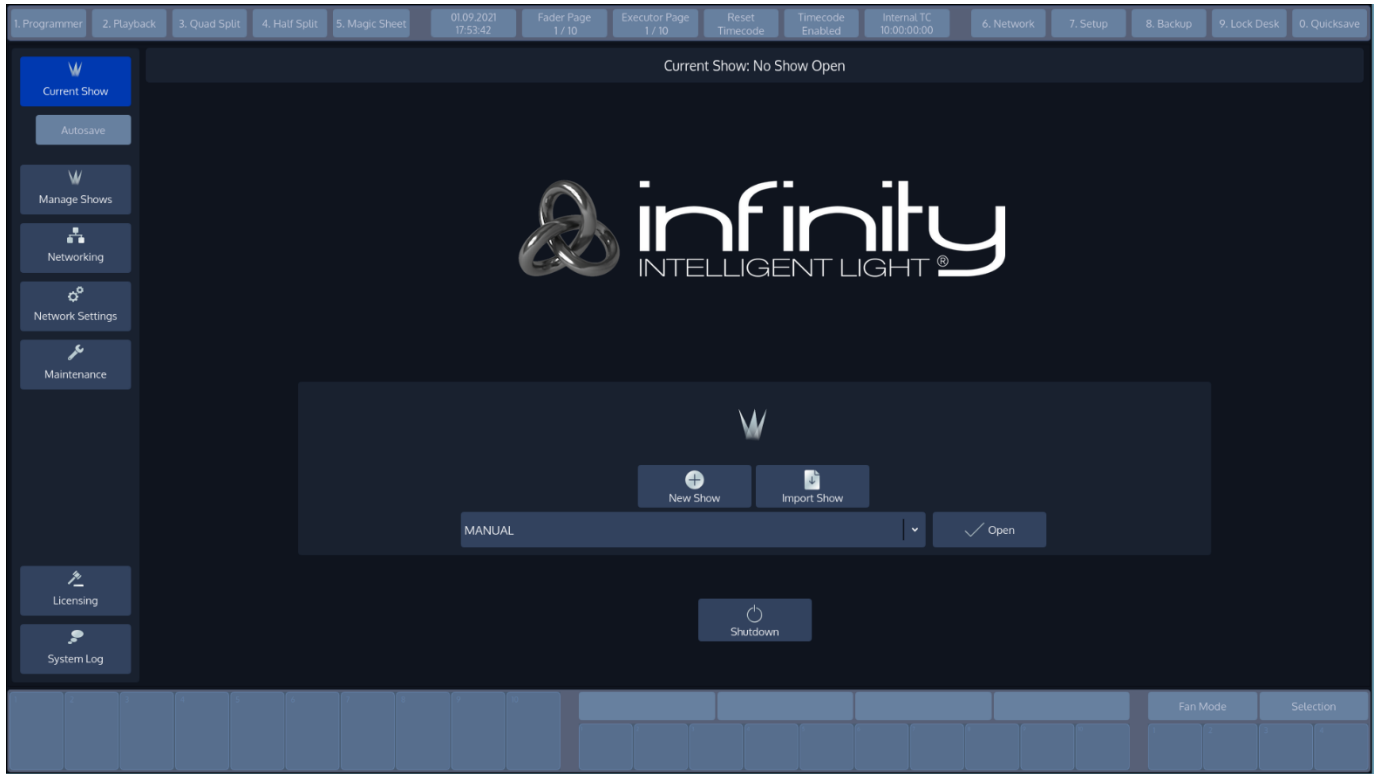
Fig. 36: Welcome Screen

10.   Working with Shows

Showfiles 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 amount 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 consoles memory.

10.1. Create a new Show

Within the touchscreen display, hit the **New Show** button.

This will open up a keyboard dialog to enter the name of the show to be created. You may also enter the Name using an attached USB-Keyboard anytime the keyboard dialog is shown. As soon as you hit the enter button a new show with the name you just entered will be created.

Fig. 37: Welcome Screen - New Show

10.2. Loading a Show

Within the touchscreen display, simply select the show you would like to open from the drop-down menu. After you selected the desired show to load, hit the **Open** button.
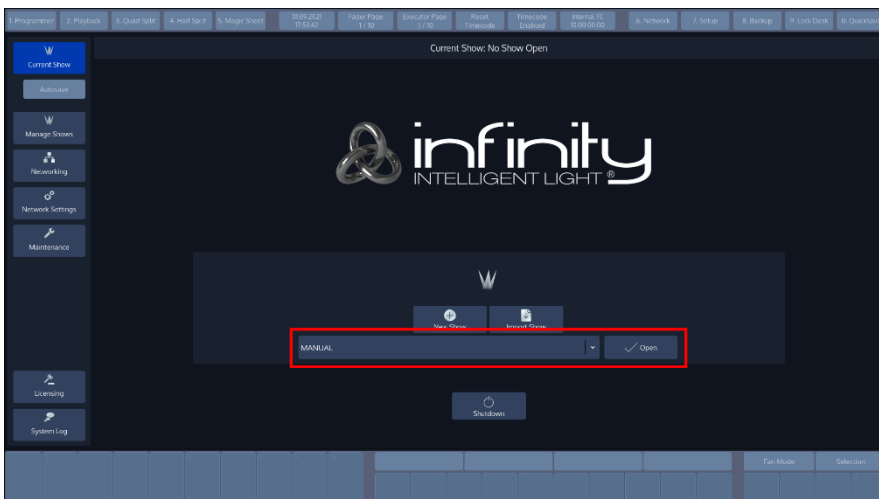
Fig. 38: Welcome Screen - Loading a Show

10.3. Saving the Showfile

We recommend saving your show every once in a while. You may do this from within a show by hitting the **Show Quicksave** button on the Top-Toolbar.

Fig. 39: Show Quicksave Button

10.4. Enable / Disable the "Autosave" -function

For added convenience, you may enable the „Autosave" function which will make sure your showfile is periodically saved to disk automatically.

To setup the autosave function, head over the Backup Menu by pressing the **Backup** Button on the Top Toolbar.

Switch to the **Autosave** menu by pressing the button in the Side Menu.

Enable or disable Autosave and set the interval in the **Show Autosave** groupbox.
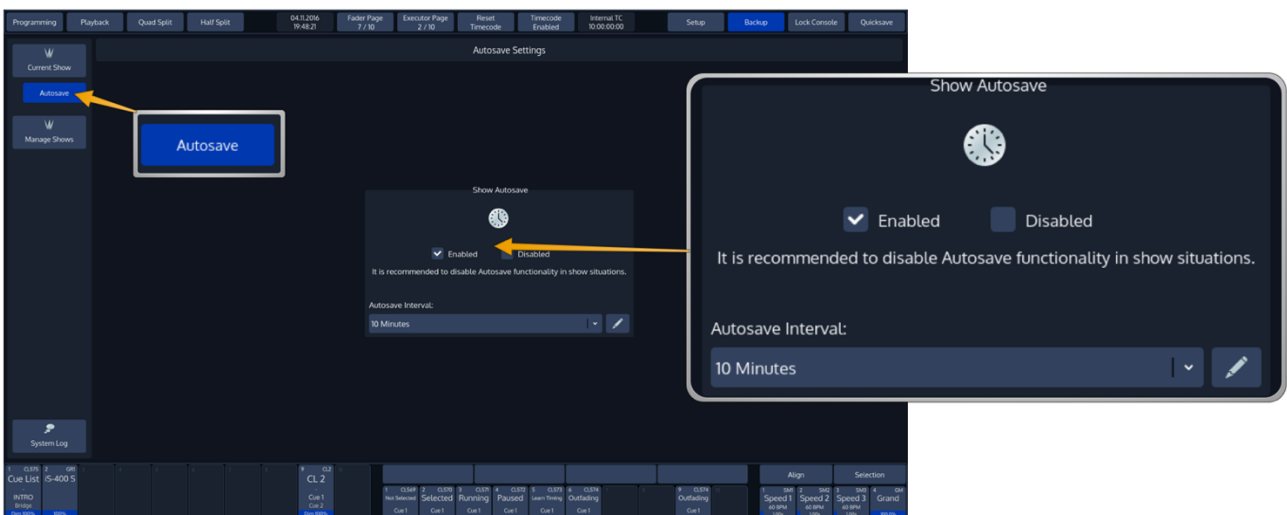
Fig. 40: Show Autosave

10.5. Saving as new Showfile

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

The „**Save Show as**" button will create a copy of the showfile you are working on at the moment (with a given name) and will automatically continue with the new showfile, preventing further changes to the previous show file.

To save as a new Showfile, , head over the Backup Menu by pressing the **Backup** Button on the Top Toolbar.

Make sure **Current Show** is selected in the side menu.

Click on **Save Show As**. An on-screen keyboard will be shown. Enter the new Showfile name and press **Enter** to complete the process.
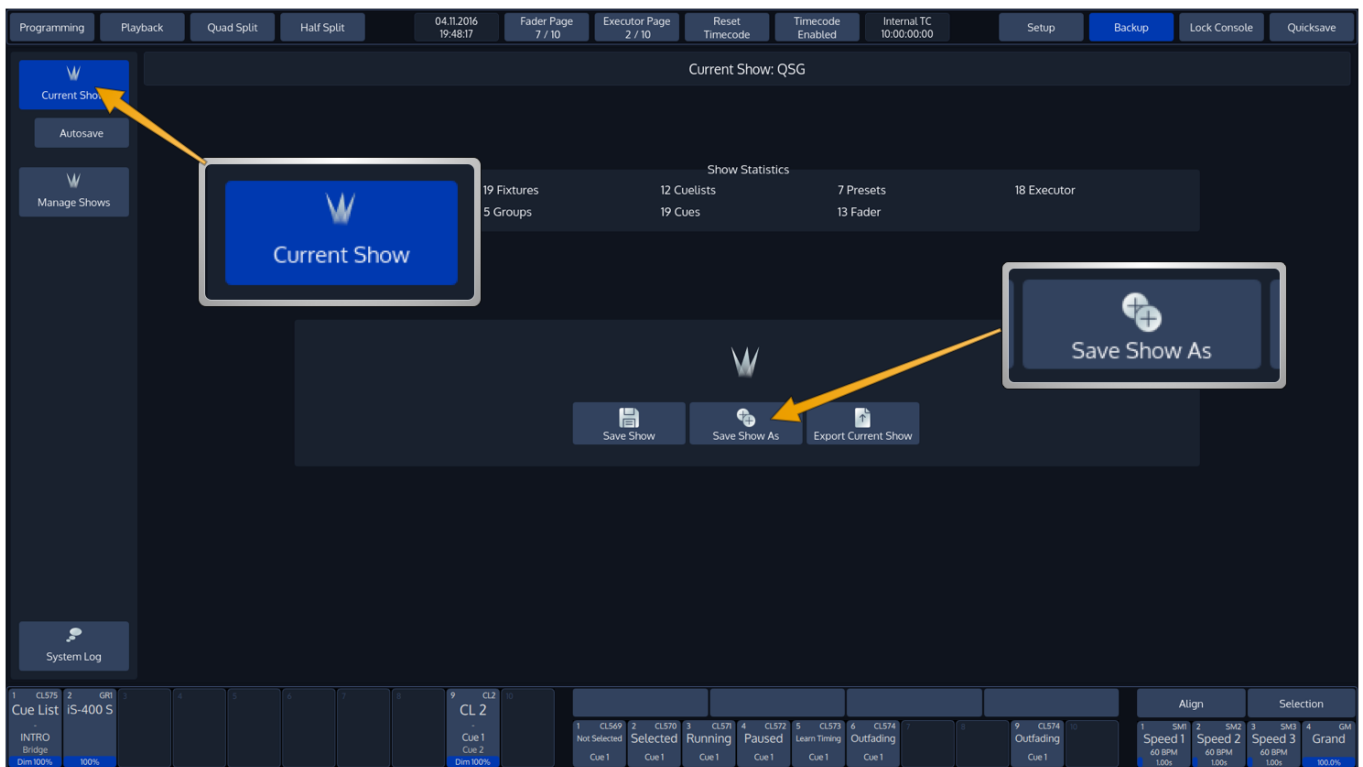
Fig. 41: Save Show as

10.6. Import Shows from USB

Plug the USB Key into one of the Chimps USB Ports and head over to the **Backup** Menu.

Select **Manage Shows** from the Side Menu.

When the Manage Shows screen is shown, click on **Import Show**.
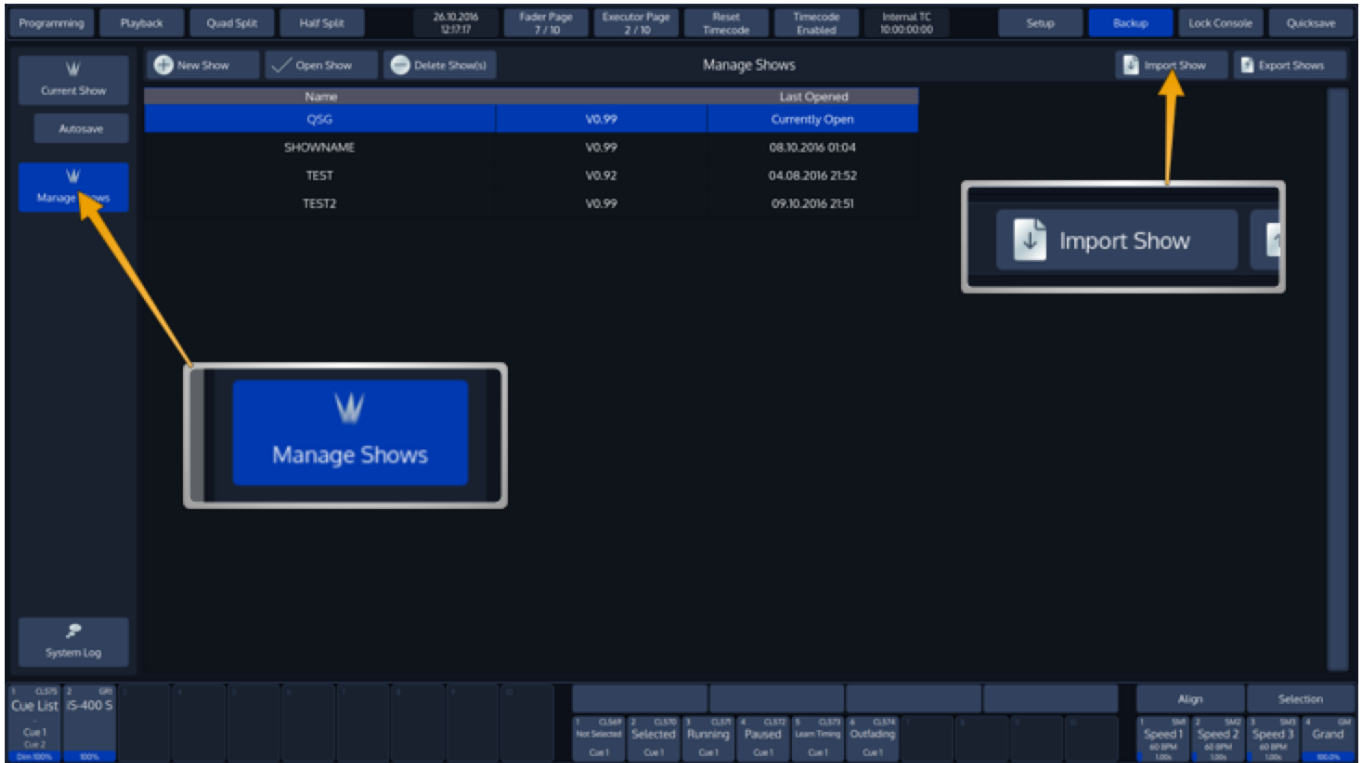
Fig. 42: Manage Shows

Chimp will open a wizard guiding you through the progress.

You can not import a showfile with the same name as the one that is opened. If this is the case, the Import Show wizard will ask you to close the showfile prior to import and provide a button to do so.

10.7. Export Shows to USB

Plug the USB Key into one of the Chimps USB Ports and head over to the **Backup** Menu. **Select Manage Shows** from the Side Menu.

From within the Manage Shows screen, select all shows to be exported from the list. Click on **Export Shows when done.**
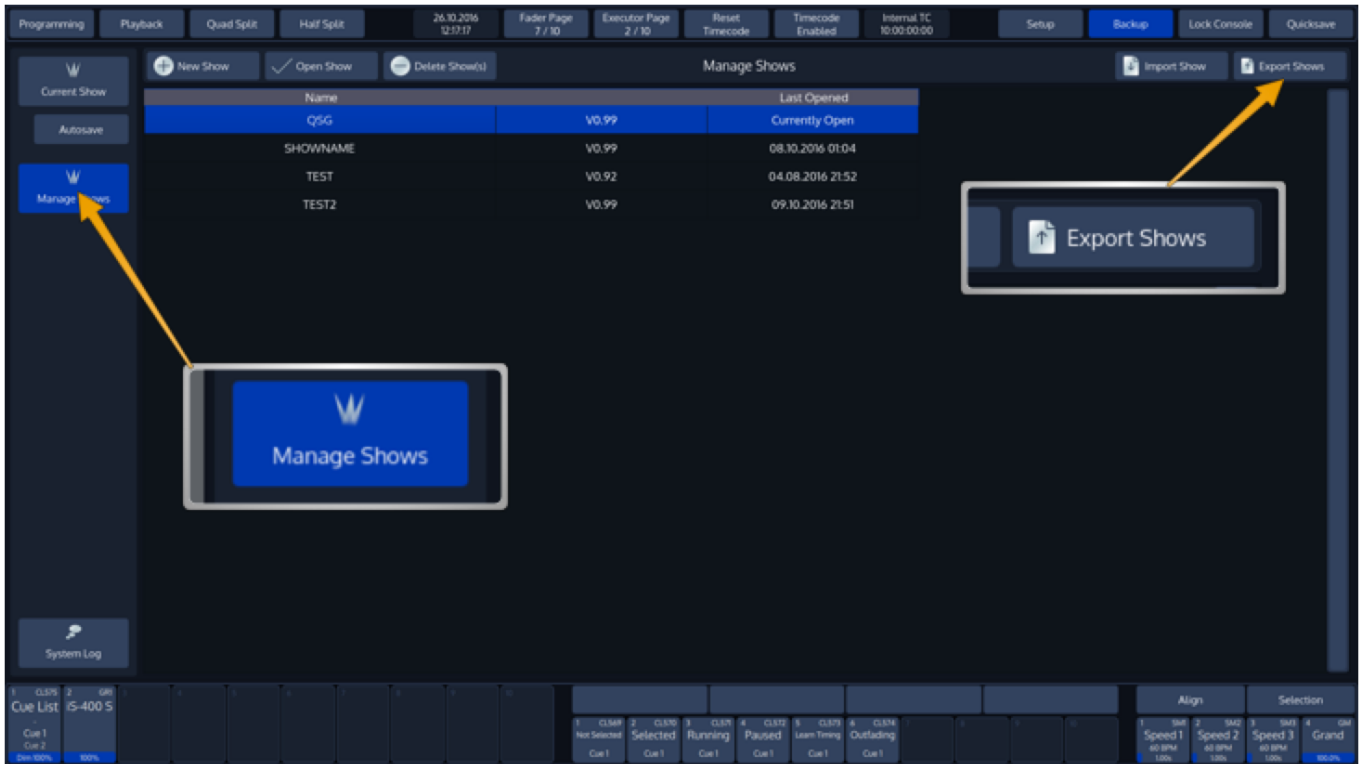
Fig. 43: Export Shows

10.8. Deleting Shows from the Consoles built-in Memory

From the top toolbar hit the **Backup** button.

Head over to the **Manage Shows** Screen.

You will now be presented with a list of shows. Select the show(s) you would like to delete and hit the **Delete Show(s)** button found in the title bar.
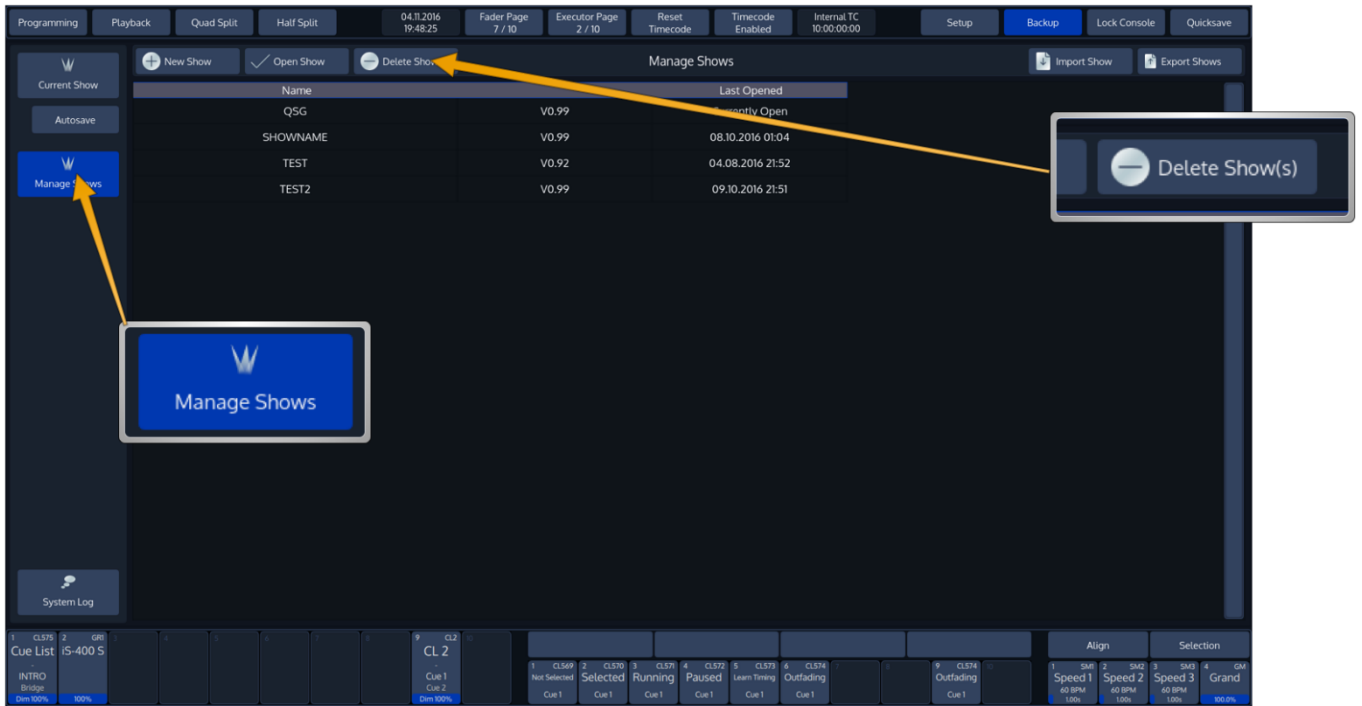
Fig. 44: Delete Shows

You can not delete a showfile that is opened

11. Show related Settings

The Chimp Lighting Console keeps different options that are related to the Showfile reduced to a minimum.

However, this section will cover the different customization options.

All Showfile related settings (Including Fixture Schedule and Patch) are defined in the **Setup** Screens Show Settings hierarchy.
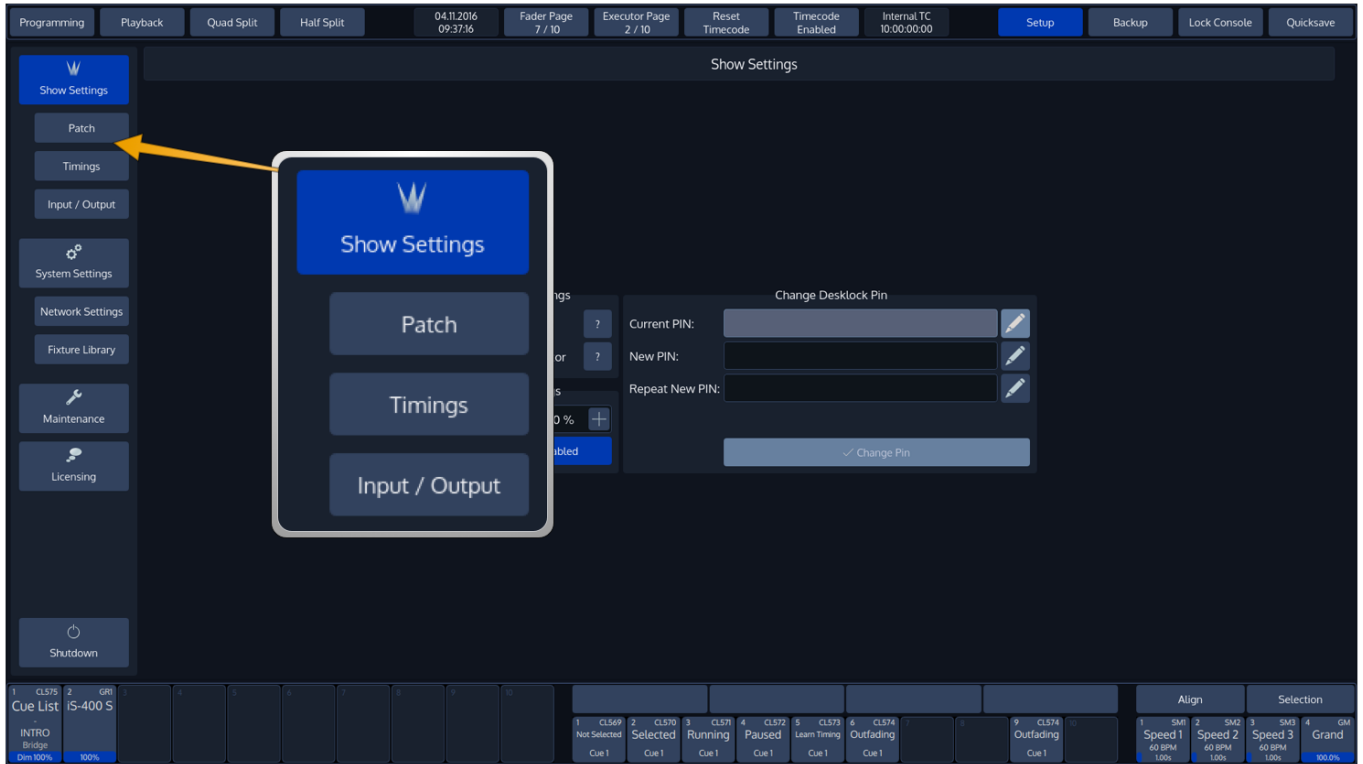
Fig. 45: Show Settings

The Setup Menu is not available when no Showfile has been started.

11.1. Fader / Executor Page Change Settings

To edit the Page Change settings, change to the **Setup** screen and click on the **Show Settings** button.
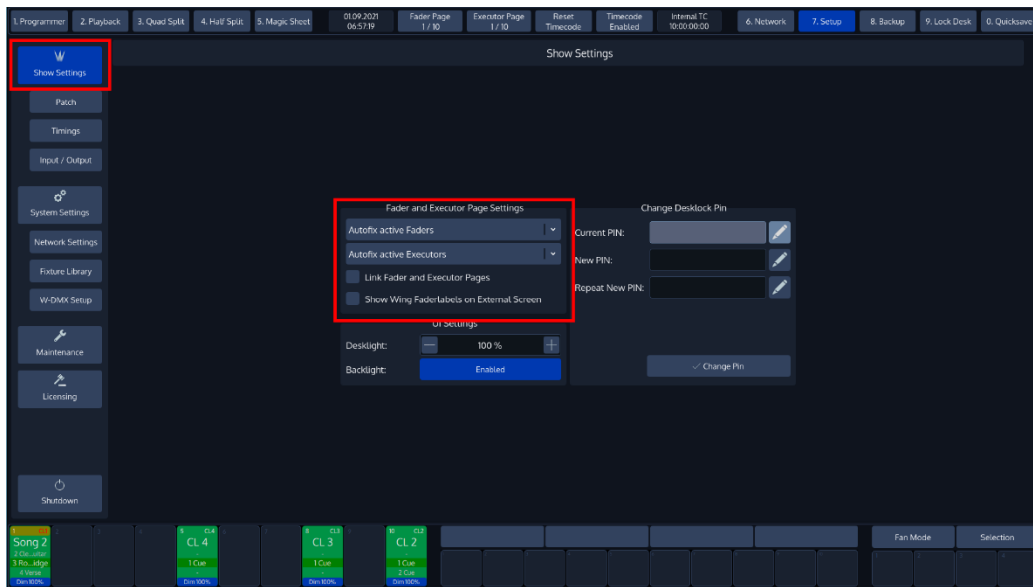
Fig. 46: Show Settings – Fader and Executor Page Settings

The **Fader and Executor Page settings** Group Box contains all the settings concerning Fader and Executor Page changes. The first drop-down menu changes the settings for the Faders, the second for the Executor buttons.

When Fader and Executer Pages are linked, the options set in the first drop down are applied to both faders and executor buttons.

11.1.1. Leave Faders / Executors in Background

When this option is selected the playbacks will be kept running "in the background".

11.1.2. Autofix Active Faders / Executors

Autofix is a convenience function that is used to carry over running playbacks to the new fader or executor page. It is best explained with a little example:

Imagine you have a cuelist running on Fader Page 1. With Auto Fix enabled, when you switch to Page 2 this playback will be carried over to the new page and will continue to be "fixed" to that particular spot until you switch it off.

11.1.3. Release Faders / Executors on Page Change

With this entry selected, the console will automatically release all playbacks on a fader or executor page when the active page is changed. Playbacks assigned to the template page will not be released.

11.1.4. Link Fader and Executor Pages

When checked, the console automatically changes the Executor Page when the fader page is changed and vice versa.

11.1.5. Show Wing Faderlabels on external Screen

Fader Labels for the Wing are displayed on the secondary screen if checked.

11.2. Set Desklight Brightness

To set the desklight brightness, head over to the **Show Settings** screen and use the **Plus** and **Minus** buttons of the **Desklight** text field accordingly.
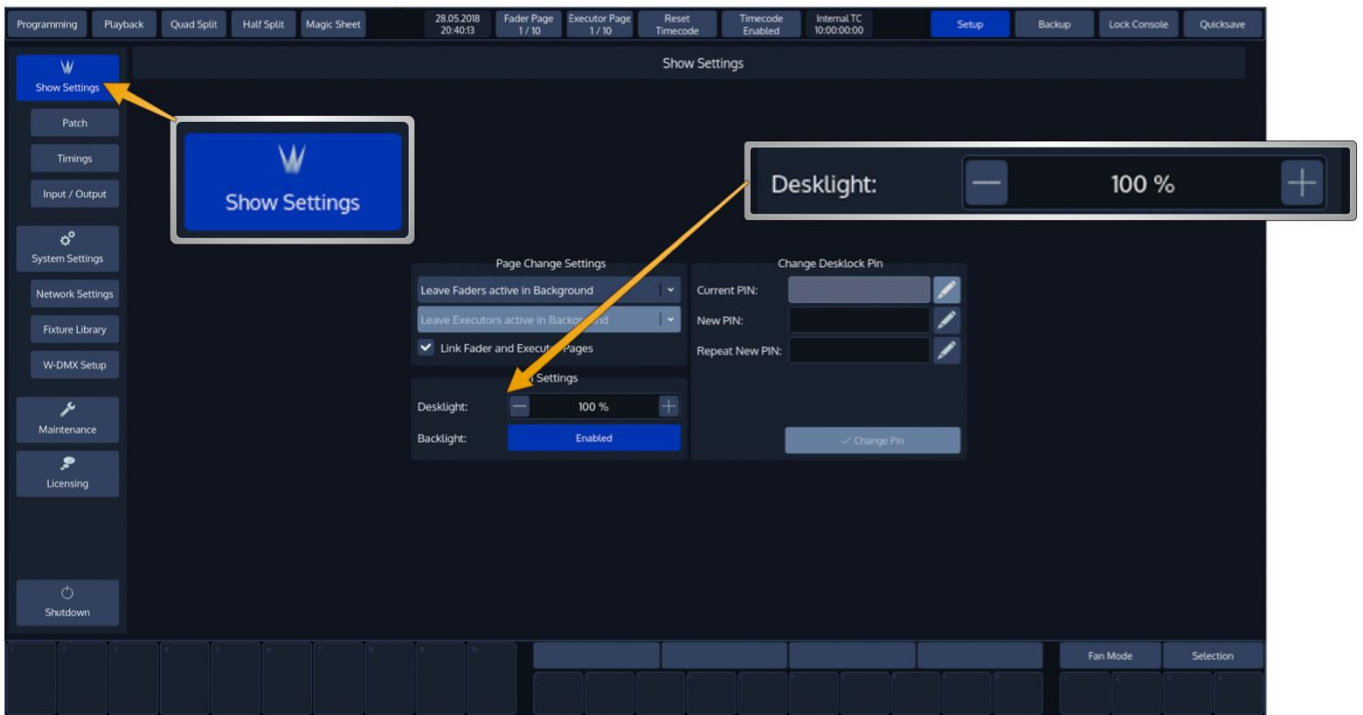
Fig. 47: Show Settings - UI Brightness

11.3. Enable Button LED Backlight

To enable or disable the Backlighting of Keys found on the faceplate, head over to the **Show Settings** screen and Enable or Disable the **Backlight**.
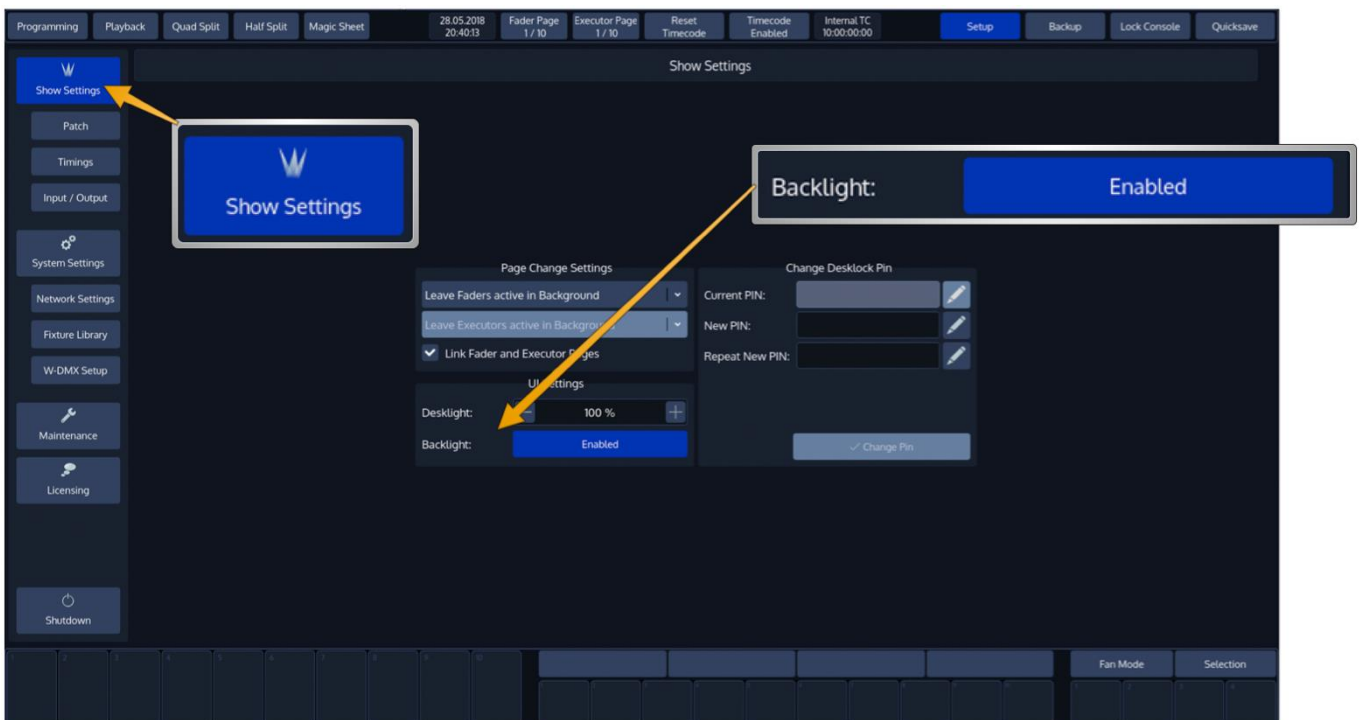
Fig. 48: Show Settings - Enable Button Backlight

11.4. Change Desklock PIN

To change the PIN Code requested to unlock the console, head over to the **Show Settings** screen and fill in the current PIN code (If you already changed it).

Enter the new PIN in the **New PIN** and **Repeat New PIN** fextfields. And click on **Change PIN**.

The Pin Code may be any Numeric Number.
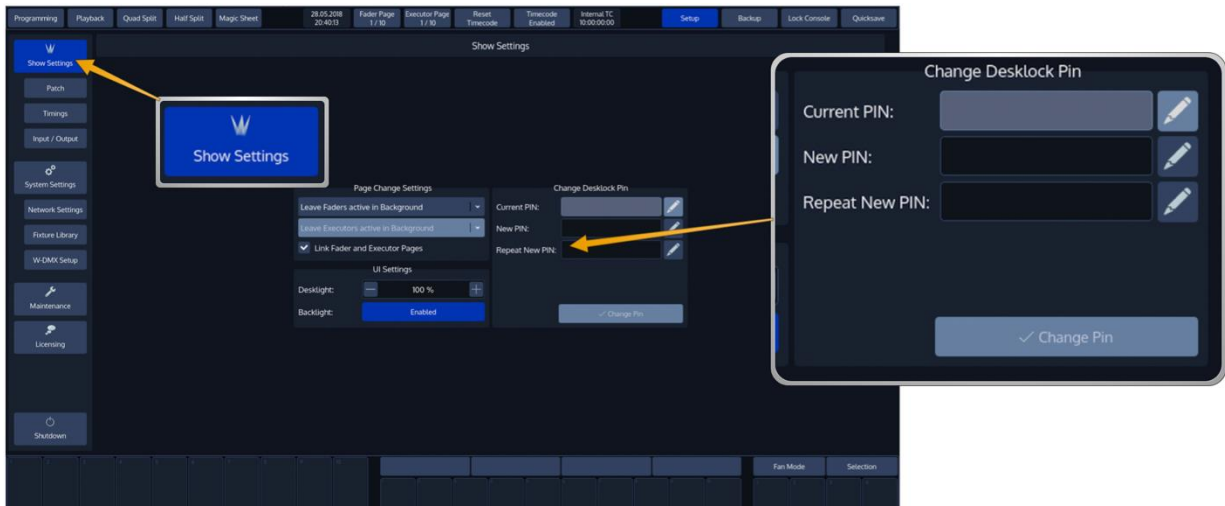
Fig. 49: Show Settings - Desklock Pin

The default PIN Code is "0000" – four times zero.

11.5. Locking the Console

To lock / unlock the console, simply select the **Lock Console** button from the top Menu Bars right hand side.

12.   Fixture Setup

All actions regarding the fixture setup are done from within the patch screen. To open the patch screen:

- Press the **Setup** Button on the Chimps top-menu bar
- Choose **Patch** from the left-hand side menu**.** The Patch Screen, listing all your fixtures, will be shown.
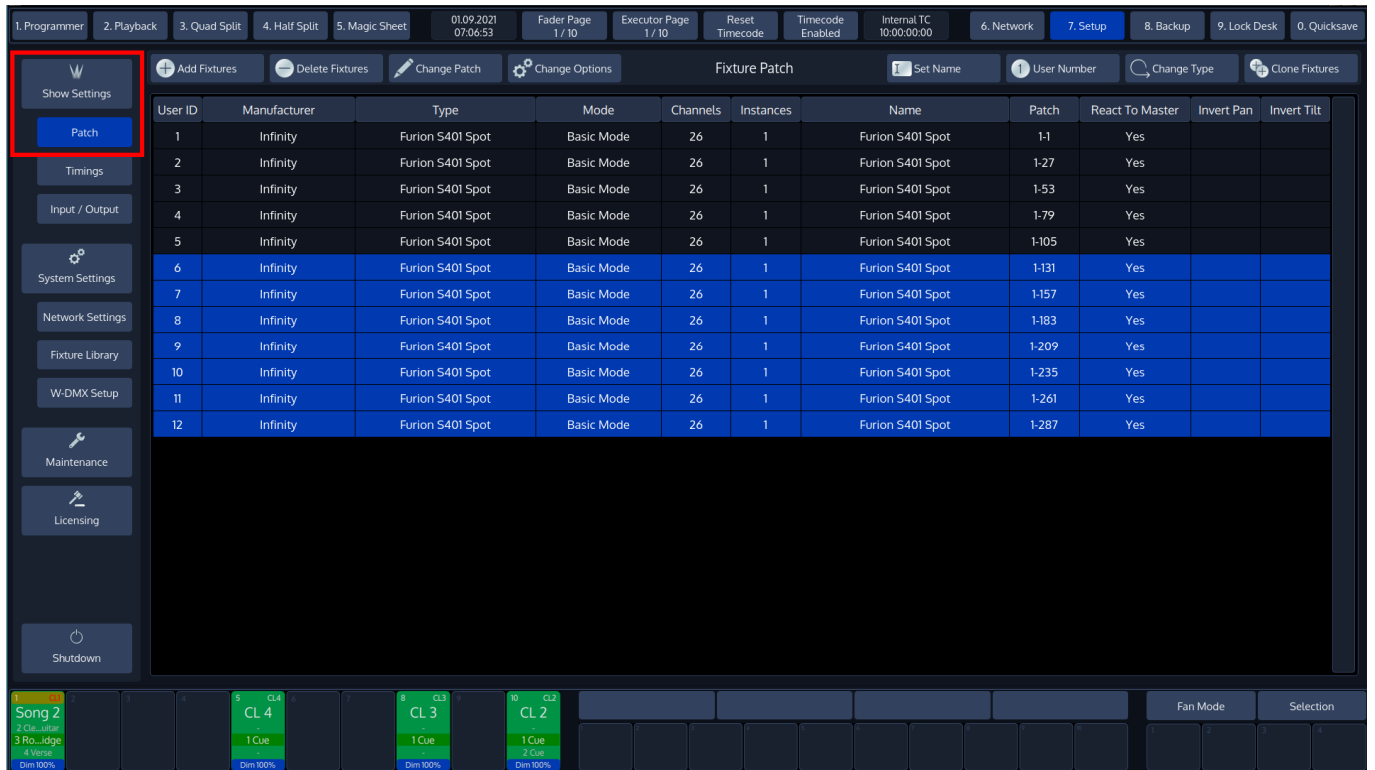
Fig. 50: Patch Screen

12.1. Add Fixtures to the Show

From within the Patch Window, select **Add Fixtures**.
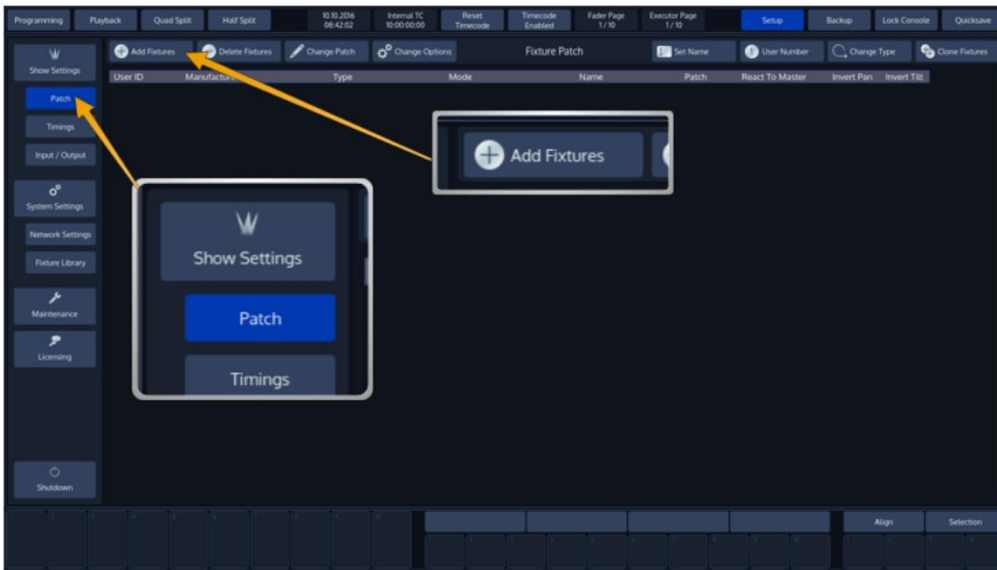
Fig. 51: Patch Screen – Add Fixtures

A menu allowing you to pick the manufacturer and fixture type from the *Show Library* (this is the Fixture Library that contains all Fixtures in the Show File) will be opened. Since we haven't added any fixture types to the show yet, this Library is empty.

Click on **Add Type from Factory Library** to proceed. Should you wish to import a user defined or imported fixture, select **Add Type from User Library.**
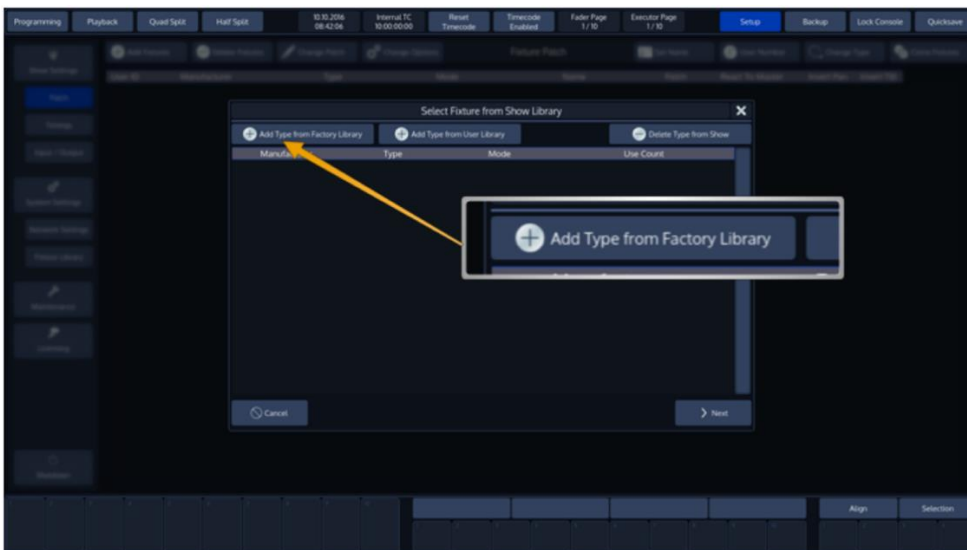
Fig. 52: Add Library to Show

Select the fixture type you would like to add from the built-in library. You may also use the full text search provided.

Hit the **Ok** button as soon as you are done.
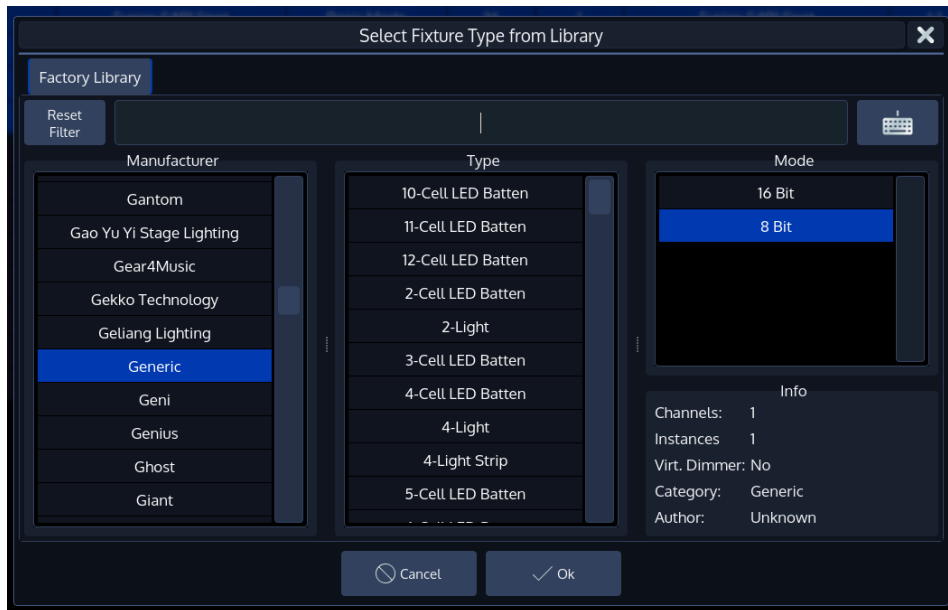
You are asked to enter the fixture count, and more importantly, set a user number which will be the "identifier" that is used to select these fixtures using the numberblock.

When you have done so, click on **Next**.
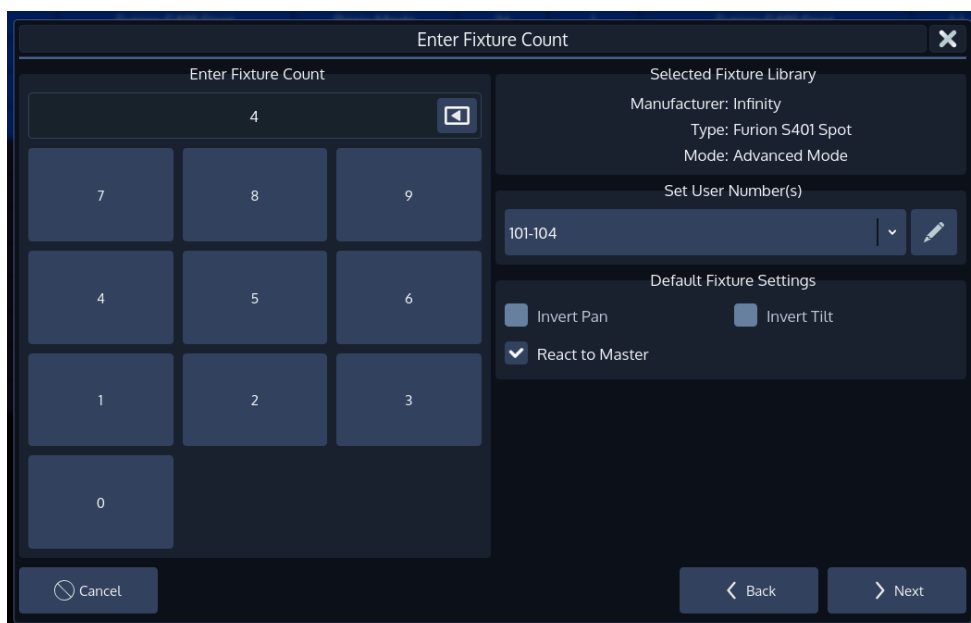
Fig. 54: Enter Fixture Count

The next screen is used to patch the fixtures to the DMX-Universes. For an explanation of the options, please see section 12.2.4 Change DMX-Patch on page 69.

To finish the process of adding fixtures to your show, press **Finish**.
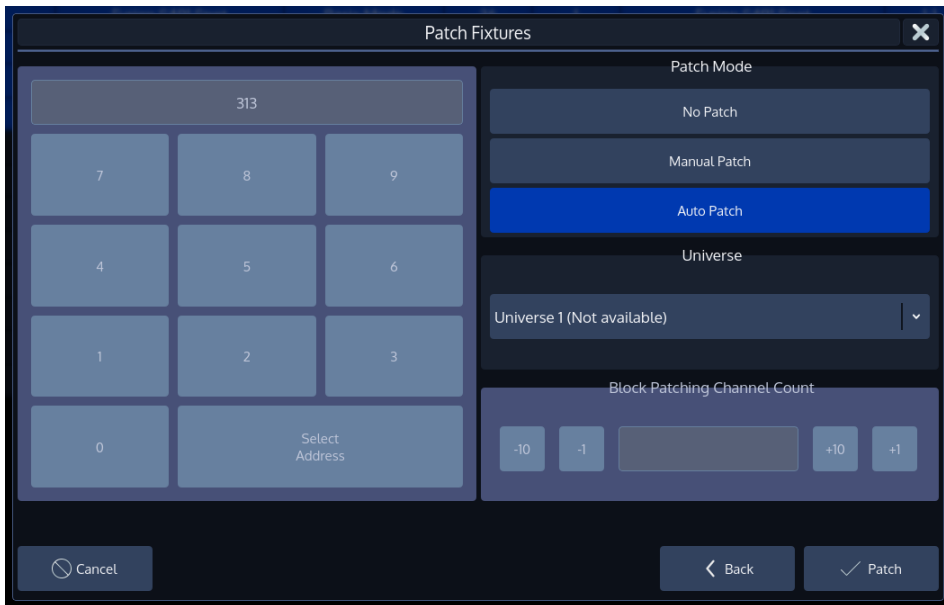
Fig. 55: Patch Fixtures While Adding

12.2. Configuring existing Fixtures

All options in the Patch screen will be applied to the selected fixtures only. Fixtures may either be selected by using the standard methods of fixture selection (see Selecting Fixtures) Or by selecting the rows of fixtures within the Patch screen.

You may edit each of the cells directly by selecting it and double, right or long-clicking or by pressing the [Set]-key.

The header of the Patch screen table shows the following information:

User ID	Manufacturer	Type	Mode	Channels	Instances	Name	Patch	React To Master	Invert Pan	Invert Tilt

Fig. 56: Patch Table – Header

Caption	Description
User ID	Indicates and sets the User ID of the fixture
Manufacturer	This is the Manufacturer of the Fixture Type
Type	This column displays the Fixture Type
Mode	DMX Mode of the Fixture
Name	Indicates and sets User given Name of the Fixture within the showfile
Channels	Displays the number of channels of the fixture
Instances	Displays the number of instances
Patch	Indicates and sets the fixtures DMX Address (Universe – Channel)
React To Master	Indicates and sets if the Fixture will react to the Grandmaster Fader
Invert Pan	Indicates and sets if Tilt is inverted
Invert Tilt	Indicates and sets if Pan Inverted

12.2.1. Change User ID

The User ID is a unique ID that is used to select a single or multiple fixtures using the keypad found on the console's faceplate. In order to change the User ID, open the Patch Screen as described in section

Configuring existing Fixtures.

Select the fixtures you would like to change and hit the **User Number** button from within the Patch Screens title bar.
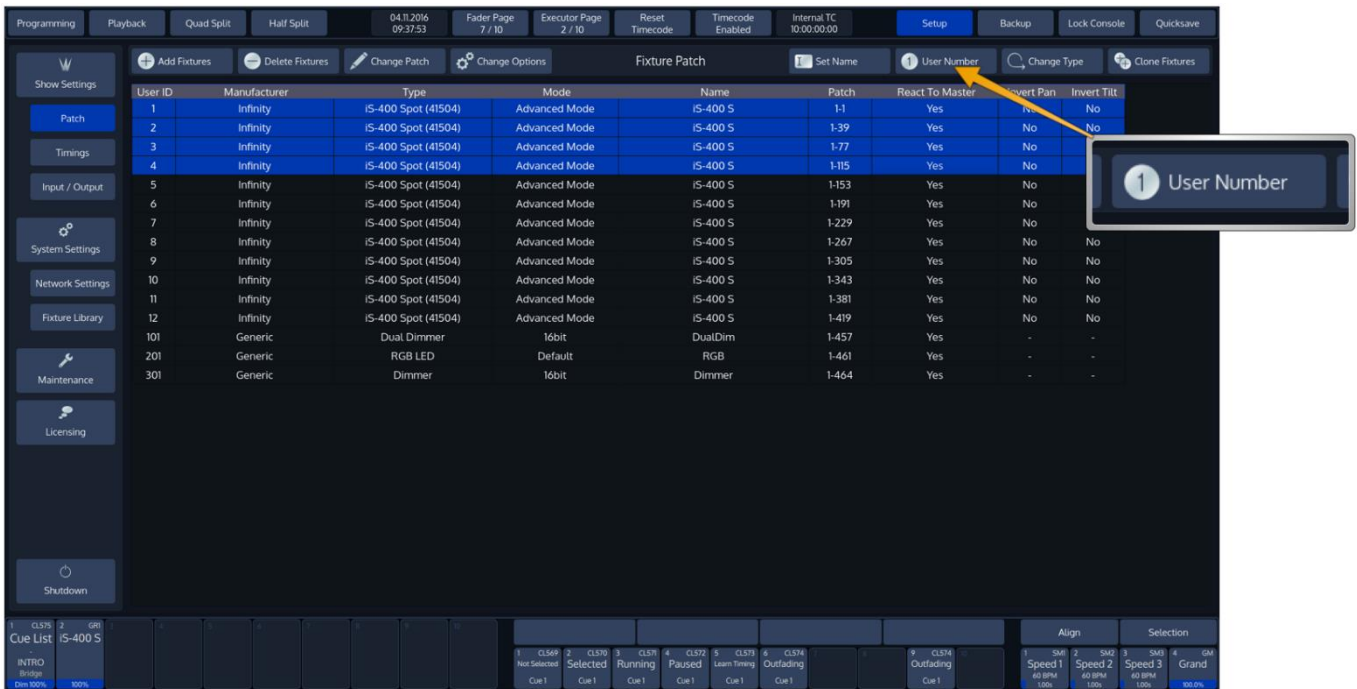
An on-screen Keypad asking you to enter new User IDs will be opened.

Click on **OK** when done.

12.2.2. Change Fixture Name

To change the Fixture Name for one or multiple fixtures at once, open the Patch window as described in section

Configuring existing Fixtures.

Select the fixtures in question and hit the **Set Name** button from the Patch Screens title bar.

<div align="right">
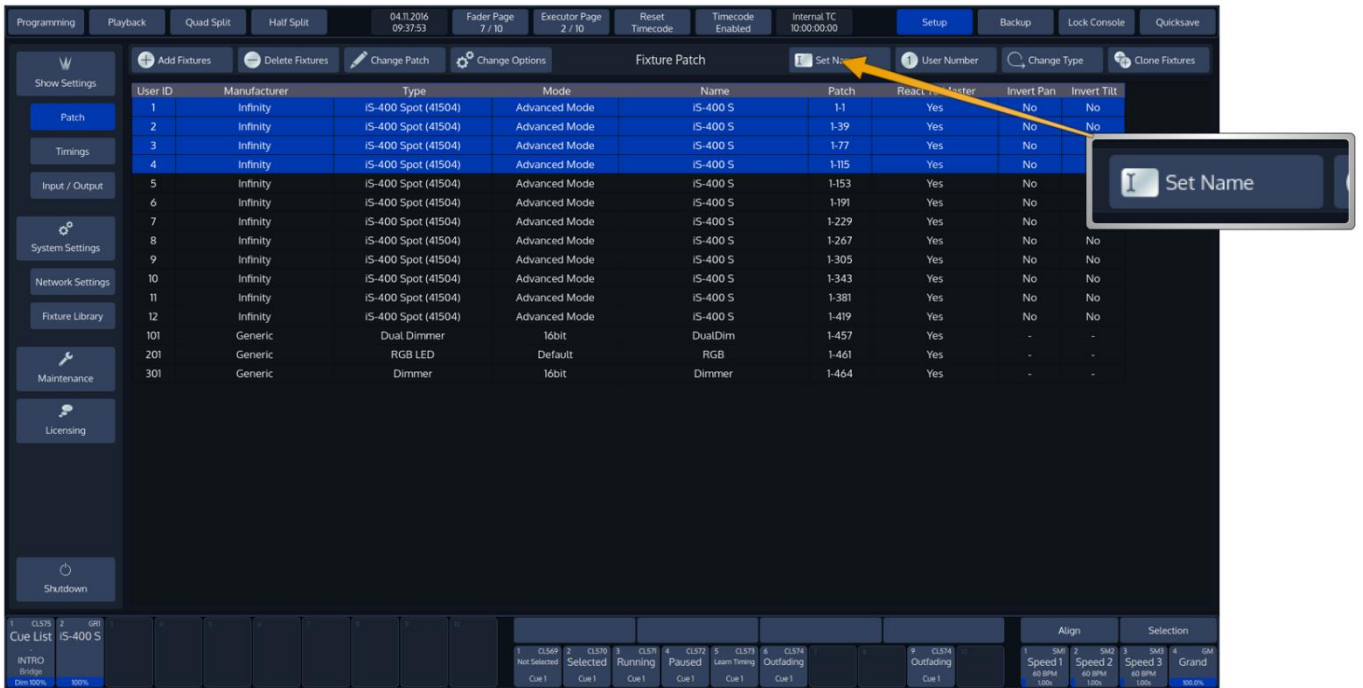
Fig. 58: Set Fixture Name Button

</div>

An on-screen keyboard will be shown.

Notice the **Auto Number** button next to the Fixture Name Textfield

If Auto Number is active, Chimp will automatically append numbers to the fixture name based on the selection order.

Click **Enter** when done.

12.2.3. Inverting Pan / Tilt and defining if a Fixture reacts to the Grandmaster Fader

Sometimes it may be necessary to invert the direction of a fixture's Pan or Tilt attribute or define if a fixtures Dimmer should react to the Grandmaster.

To do this for multiple fixtures at once, first select the fixtures you would like to change the Pan and Tilt Invert for and click on **Change Options** within the Patch Screen. The Change Fixture Options dialog will be opened.

Alternatively, you may select the appropriate cells from the table and press the [Set]-key, or double, right or long click.
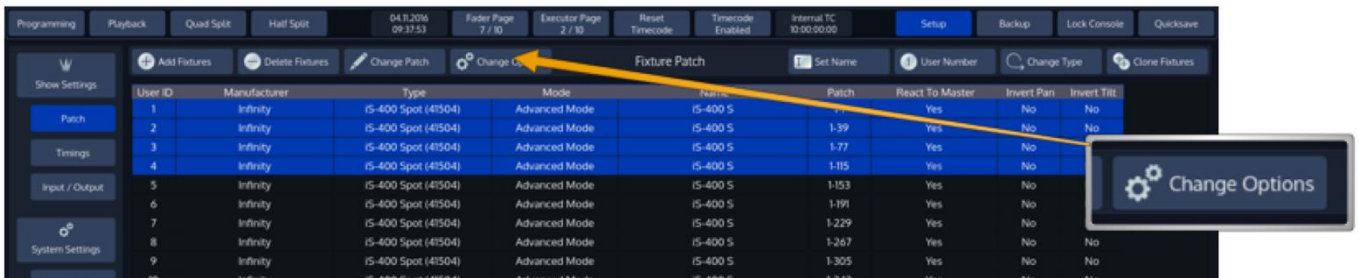
Fig. 59: Change Fixture Options Button

The Change Fixture Options dialog consists of multiple dropdown menus, where the default setting of each menu is "Keep".

This ensures that only modified values are applied to the fixtures.

Select if a fixture's Pan or Tilt should be inverted or not, and if the selected Fixtures should react to the Chimps grandmaster fader.

Select the appropriate options from the drop-down menus.

Click on **Change** to finish.
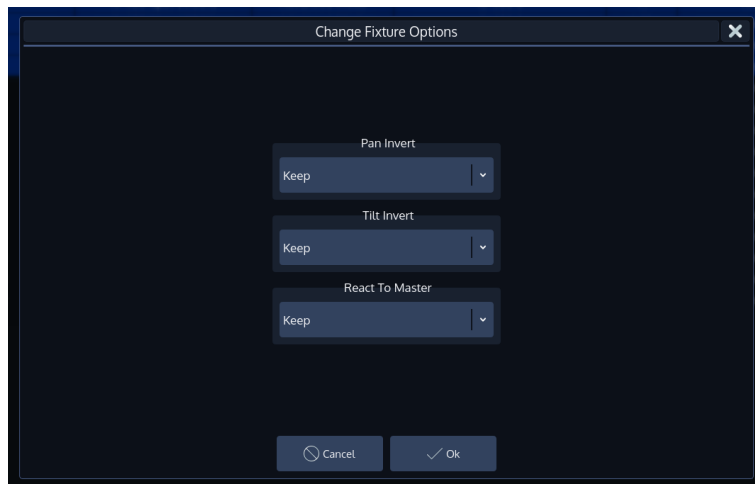
Fig. 60: Fixture Options Dialog

12.2.4. Change DMX-Patch

To change the DMX-Patch for a single or multiple fixtures at once, select the fixtures you would like to patch and click on **Change Patch** within the Patch Screen.

Programming on the chimp is not dependent on the patch, so unpatching or repatching a fixture will not cause any programming to be lost.
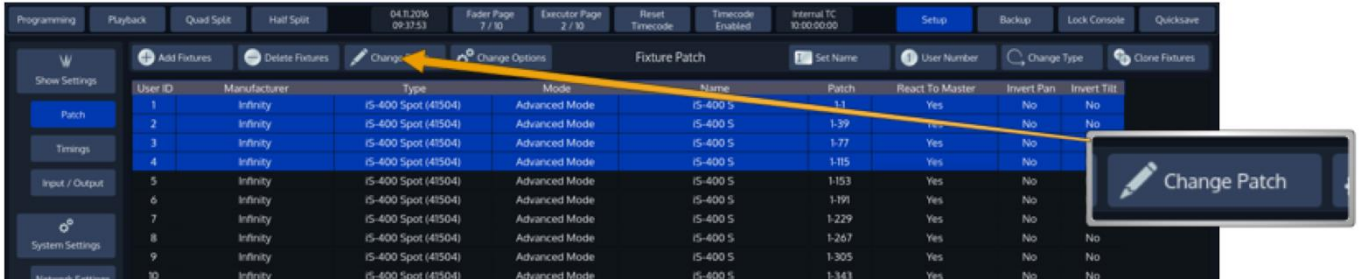
Fig. 61: Change Patch Button

The Patch Fixtures Dialog will be opened:
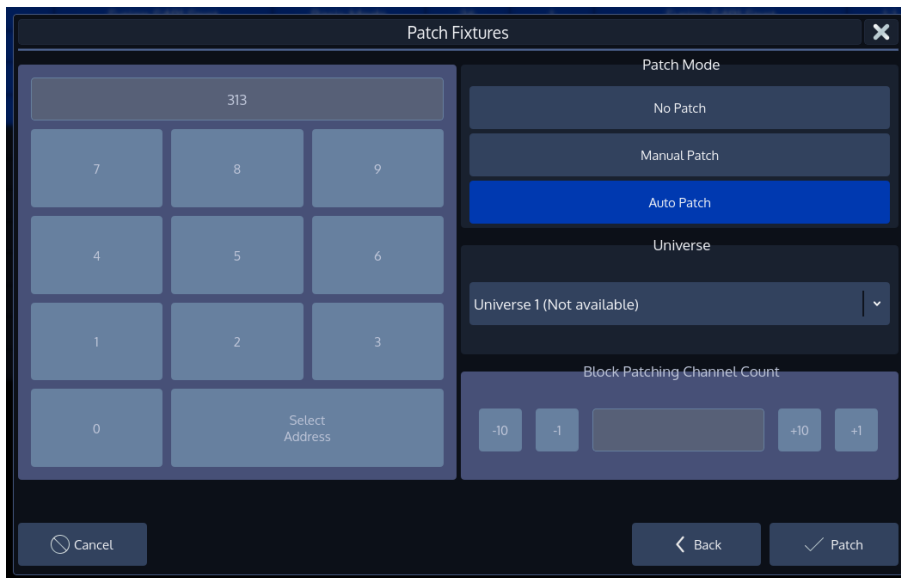
Fig. 62: Change Patch Dialog

12.2.4.1.　　Unpatch

Unpatch will remove any patch information from the fixtures. However, the fixtures and all of their programming will be kept within she showfile.

12.2.4.2.　　Manual Patch

The fixtures will be patched to the address and universe specified by the user.

● Select **Manual Patch**.
● Select the **Universe** drop-down menu.
● Then enter the DMX Address of the fixtures

Block Patching or Patch Offset as some consoles call it is a function that enables to leave gaps between each fixture that is patched. The Number specified here is the total number of channels a single fixture will "occupy" on the universe. So if your Fixture for example has three channels and you set the Block Count to 5, each fixture patched will be patched as the fixture type had a total of five channels.

You may also select an address visually by hitting the **Select Address** button. This will open up a new screen enabling you to select the address visually.

This screen will also indicate free addresses by a green color, as well as used addresses by a red color. If you click onto one channel, the console will show you how many addresses the fixture(s) you are about to patch will use, and if they fit.

12.2.4.3. Auto Patch

The fixtures will be patched at the next free address of the selected universe automatically. Should the selected universe not have sufficient unused DMX channels left, **Auto Patch** will automatically add the remainders that do not fit onto the next DMX Universe.

However, **Auto Patch** will always patch all the selected fixtures in one big block. This means that should there not be sufficient space to patch all fixtures in between other fixtures, no fixture will be patched.

12.2.5. Change Fixture Type

To change the Type of a single or multiple fixtures at once, select the fixtures you would like to change the type of and click on **Change Type** within the Patch Screen.

Changing the fixture type is only possible with single instance fixtures – if you would like to transfer data from a single instance to a multi instance fixture, or vice versa or in between multi instance fixtures, please add the new fixture type to the show first and use the cloning functionality and delete the old fixtures afterwards.

Chimp will keep the programming of the fixtures as good as it can (parameters that exist in both fixtures will carry over the programming; RGB will be converted to CMY and vice versa).
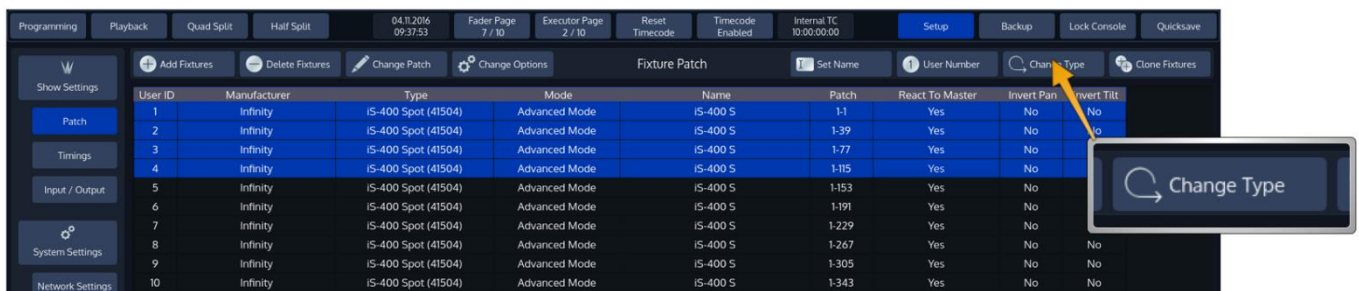
Fig. 63: Change Fixture Type Button

A dialog window will be opened, asking you to select the new fixture type from the Show Library.

- If the desired fixture type is not yet in the Show Library, click on the appropriate **Add Library** button. The procedure is very similar to adding a new fixture type to the show.
- After selecting the fixture from the show library, click on **Next**.
- The console will now ask for confirmation on the fixture replacement, displaying a brief summary of the changes to be made. Click **Ok** to proceed.
- Chimp will now work its magic, and will transfer existing programming over to the new fixture type. After this process is completed you will be notified of the changes made.
- Click on **OK** to proceed to the Patch window to patch the fixtures.

12.2.6. Clone Fixtures

Sometimes you might wish to add more fixtures to a show and copy existing programming of specific fixtures to the new fixtures. To do this, open the Setup Menu and select the **Patch** widget.

First, add the new fixtures to the showfile as usual. When done, click on **Clone Fixtures**.
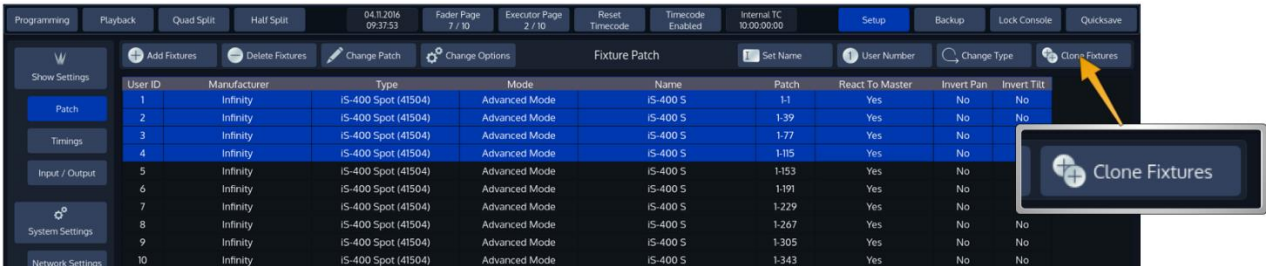
Fig. 64: Clone Fixtures Button

A wizard that assists you in the cloning process will be shown.
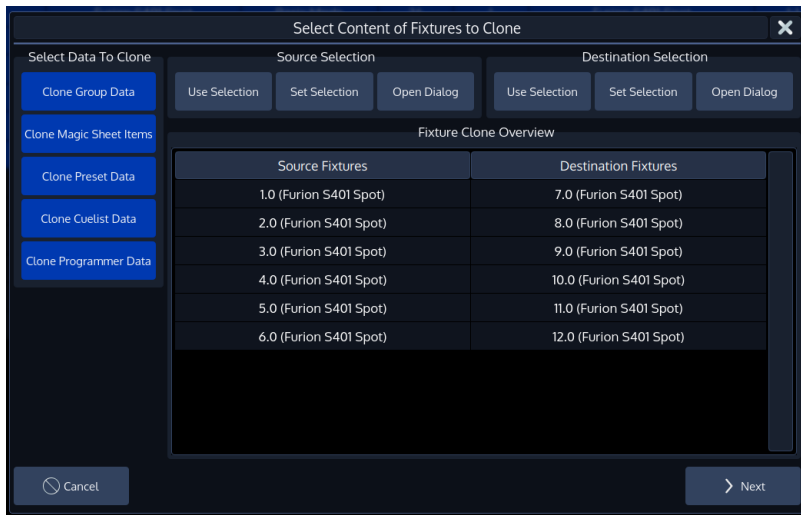
Fig. 65: Clone Fixtures Dialog

Select which data you would like to transfer to the new fixtures from the left-hand side of the dialog.

Now, select the source fixtures. You may do so by using the Numberblock or by selecting a group from the secondary screen. Then, from within the Source Selection group box, click on **Use Selection**.

Alternatively, you may click on **Open Dialog** from within the Source Selection group box to open a dialog window to select the source fixtures.

Now, select the destination fixtures. You may do so by using the Numberblock or by selecting a group from the secondary screen. Then, from within the Destination Selection group box, click on **Use Selection**.

Alternatively, you may click on **Open Dialog** from within the Destination Selection group box to open a dialog window to select the source fixtures.

The **Set Selection** button will select the fixtures from either the source list of fixtures or the destination list of fixtures, respectively.

Click on **Next** when done.

12.2.7. Delete Fixtures

Click on **Delete Fixtures** from within the Patch Screen. A confirmation dialog will be shown.

Please note that this will delete all data of these fixtures from the showfile and can not be undone! We recommend saving the showfile as a new file before doing so.
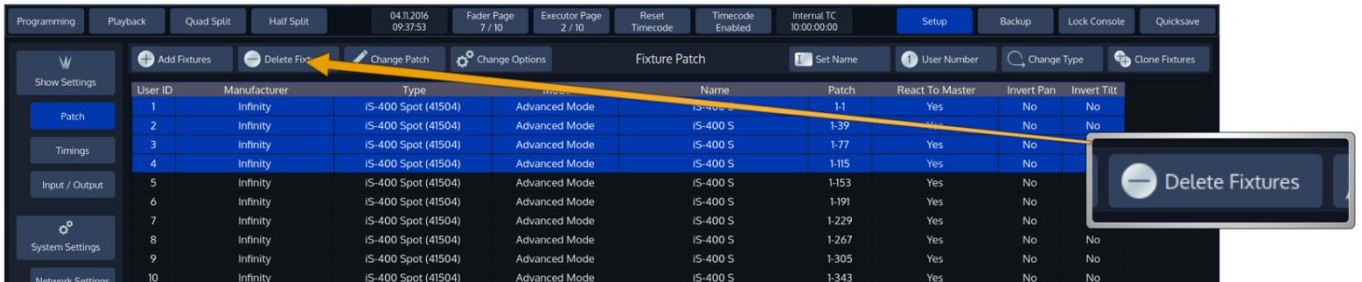
Fig. 66: Delete Fixtures Button

13.   Setting up Default Timings and Speed Master Options

Default timings and Speed Master settings are configured from within the Setup screen. Open the Setup screen by clicking on the Setup Button on the top toolbar and select Timings from the left hand side menu.
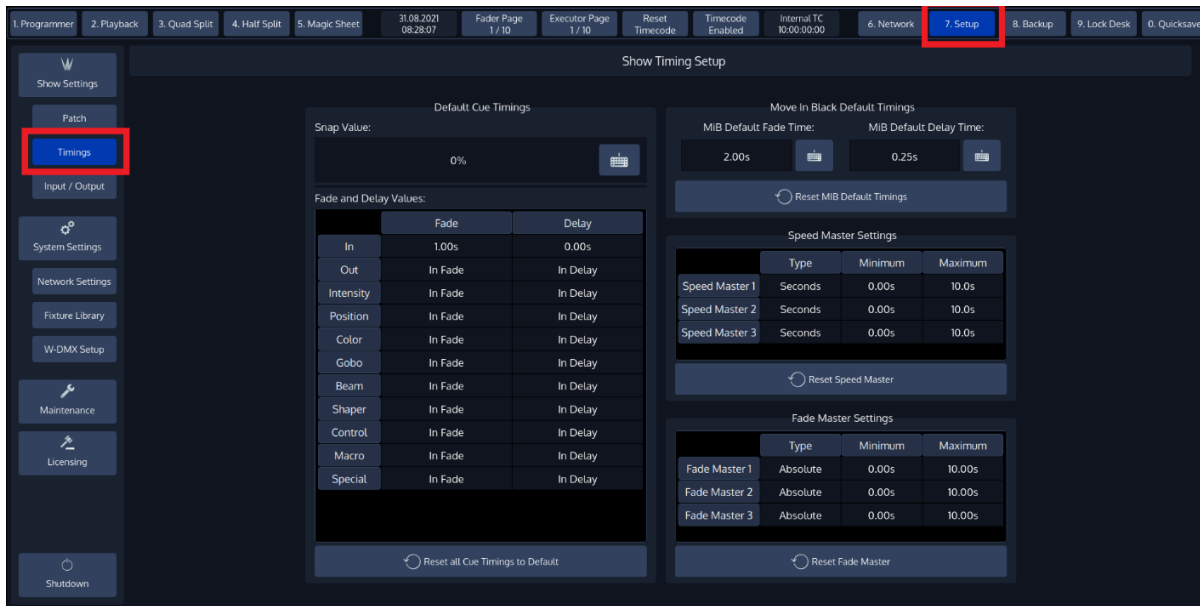
Fig. 67: Setup Menu – Timing Page

13.1. Cue Timing

The Cue Default Timings may be altered on the left-hand side of the screen. These timings will be used for all new Cues that are recorded afterwards.
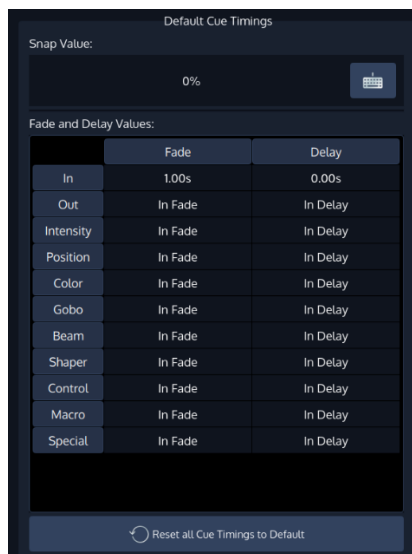
Fig. 68: Default Cue Timing

The Cue Default Timings will be stored as part of the Showfile. Cue Default Timings may be overridden by temporary Timings which can be set using the [Time] button prior to recording a Cue.

These temporary Programmer Timings will be reset whenever the Programmer is cleared or when the Cue Timings for the Show are being edited.

Selecting a Cell and hitting the [Set] Button or double-clicking a cell will open a Keypad dialog to configure each timing.

The Default Snap Value can be edited using the Keyboard Button in the top right corner.

13.2. MiB (Move in Black) Default Timings

The Move in Black default Timings may be altered on the right-hand, top part of the screen.

Fig. 69: Move in Black Default Timings

These values will be used by all Cues recorded after altering the default MiB timing.

13.3. Speed Master Settings

The Speed Master Settings may be altered on the right-hand side, middle part of the screen.
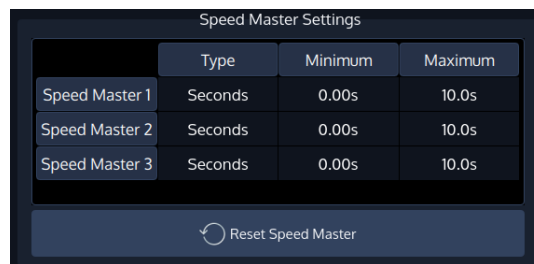
Fig. 70: Speed Master Settings

Each Speed Master may be configured to either count in seconds or BPM. For each setting a Minimum and a Maximum value can be set.

These Minimum and Maximum values will be used by Cuelists / Chasers that have been linked to the according Speed Master as their Min and Max values.

Settings and Timings can be changed by selecting a Cell and hitting the [Set] button or by double-clicking a Cell.

13.4. Fade Master Settings

The Speed Master Settings may be altered on the right-hand, bottom part of the screen.

	Type	Minimum	Maximum
Fade Master 1	Absolute	0.00s	10.00s
Fade Master 2	Absolute	0.00s	10.00s
Fade Master 3	Absolute	0.00s	10.00s

Reset Fade Master

Fig. 71: Fade Master Settings

Each Fade Master may be configured to either be an absolute or relative Fade Master. A Minimum and a Maximum value can be set.

These Minimum and Maximum values will be used by Cuelists / Chasers that have been linked to the according Fade Master as their Min and Max values.

Settings and Timings can be changed by selecting a Cell and hitting the [Set] button or by double-clicking a Cell.

14. Setting up Inputs and Outputs

Setup DMX Output via Ethernet

14.1.1. Enable DMX Output over Ethernet

To set up DMX Output over Ethernet, open the **Setup** Screen, head over to the **Input Output** Page and select **DMX Output** from the Tabs shown in the center of the screen.
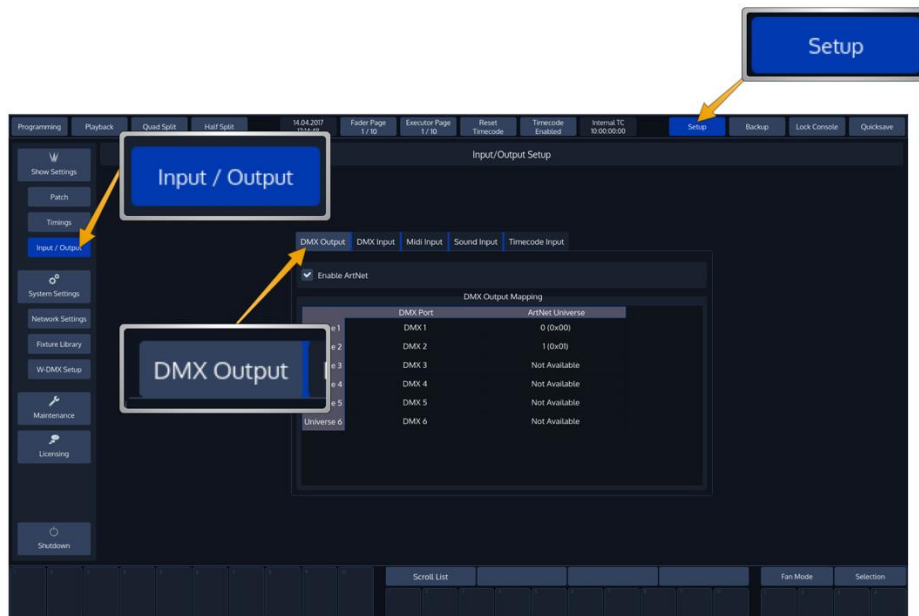
Fig. 72: Setup Input / Output

All DMX Output settings are stored inside the Showfile.

Please note that depending on your Console type, some Universes may not be available.

14.2. ArtNet Output

14.2.1. What is ArtNet

ArtNet is a protocol for transmitting the lighting control protocol DMX512 over Ethernet. It uses UDP for data transmission. The protocol was developed by Artistic Licence Engineering (UK) Ltd and is open for implementation without charge. It is typically implemented in ArtNet to DMX converters, often called „nodes", and being driven from a lighting desk or similar software operating as a transmitter.

ArtNet compatible products are made available by dozens of companies, however not all ArtNet to DMX converter units are built complying with the ArtNet specification.

14.2.1.1. IP Addresses

According to the specification units outputting and accepting ArtNet should be in a class A-Subnet (Subnet Mask 255.0.0.0) and using IP-Addresses in the range 2.xxx.xxx.xxx or 10.xxx.xxx.xxx.

However, you may change the IP Address to your liking. The console will continue to output ArtNet, even if the IP is dramatically different from what the ArtNet specification dictates.

14.2.1.2. Different ways of numbering universes

The ArtNet Standard is very comprehensive, but unfortunately leaves one thing open: The way different ArtNet Nodes represent their Universes. Here is what we 've seen out on the road so far:

Description	Example (Universe 12)	Universe Representation
Decimal zero based values, separated by Subnet and Universe	0, 11	Subnet 0 - 15, Universe 0-15
Decimal one based values, separated by Subnet and Universe	0, 12	Subnet 1 - 16, Universe 0-16
Hexadecimal values, separated by Subnet and Universe	0, B	Subnet 0 - F, Universe 0-F
Decimal zero based values, not separated	11	0 - 255
Decimal one based values, not separated	12	1 - 256
Hexadecimal values, not separated	0B	00 – FF – or – 0x00 - 0xFF

Chimp represents the data in the following way:

A (0xBC)

Whereas A represents the Universe in a Decimal, zero based notation. *B* represents the ArtNET Subnet, *C* the Universe in Hexadecimal.

14.2.2. Setup ArtNet

To enable ArtNet Output, tick the **Enable ArtNet** Checkbox from within the DMX Output Tab in the Setup Screen. To further configure each Universe, select it from the List and press the [Set] key. A new screen allowing to enable or disable the ArtNet Output, as well as to configure the ArtNet Universe for this Universe will be shown.
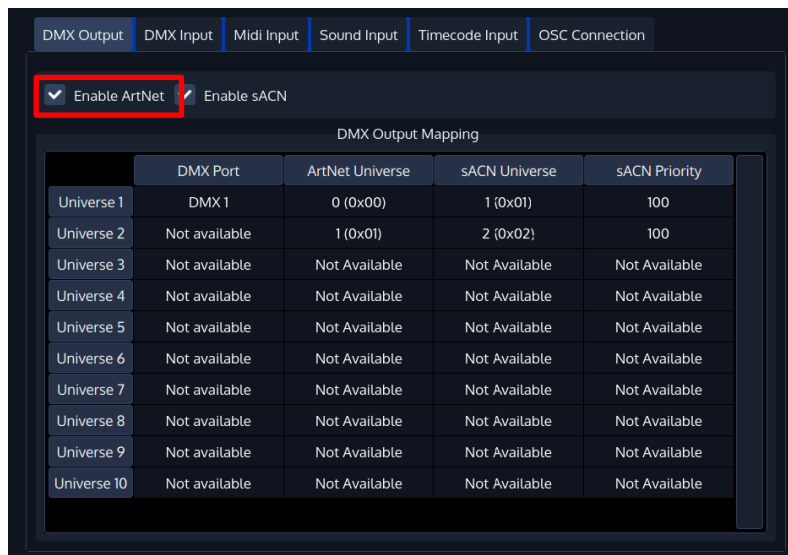
Fig. 73: Enable Artnet Output

14.3. sACN E1.31 (Streaming ACN) Output

14.3.1. What is sACN

sACN is another protocol for transmitting DMX512 over Ethernet. It also uses UDP for data transmission, but utilizes Mulitcast Groups as opposed to Broadcasting Data like ArtNet. The Protocol is described in the ANSI Standard E1.31. It is typically implemented in so called „nodes" that convert the data back to DMX or lighting fixtures. One advantage over ArtNet is that it follows a clear Universe Numbering Scheme and implements a Priority setting whereas the receiver will take the data from the sender with the highest priority.

14.3.2. More on sACN Priority

Nodes / receivers must take care about the sACN Priority setting. As a general rule of thumb:

The sACN Universe with the higher priority will be output. If that data stops being transmitted on the network, the lower priority data for that given Universe will be output.

So, if, for example you have 2 devices sending the same Universe, one with a priority of 50 and one with a priority of 100, the data from the device with 100 Priority will be output. If this signal is absent for at least 5 seconds, the data from the device with 50 priority will be output.

If you have two different devices ouputting the same sACN Universe with the same priority, these Universes, according to the sACN specification, should be merged by the receiver (the merge mode is set in the receiver).

If you have the same device outputting on the same sACN Universe with the same priority, the Data Stream which was first received by the receiver will be output.

14.3.3. Setup sACN

To enable sACN Output, tick the **Enable sACN** Checkbox in the Setup Screens Input / Output tab.

To further configure each Universe, select the corresponding Cell from the List and press the [Set] key. A new screen allowing to enable or disable the sACN Output, as well as to configure the sACN Universe on a per DMX Universe basis, will be shown.

	DMX Port	ArtNet Universe	sACN Universe	sACN Priority
Universe 1	DMX 1	0 (0x00)	1 (0x01)	100
Universe 2	DMX 2	None	2 (0x02)	100
Universe 3	Not available	Not Available	Not Available	Not Available
Universe 4	Not available	Not Available	Not Available	Not Available
Universe 5	Not available	Not Available	Not Available	Not Available
Universe 6	Not available	Not Available	Not Available	Not Available

Fig. 74: Enable sACN Output

14.4. DMX Input

To set up DMX Input, open the **Setup** Screen, head over to the **Input Output** Page and select **DMX Input** from the Tabs shown in the center of the screen.
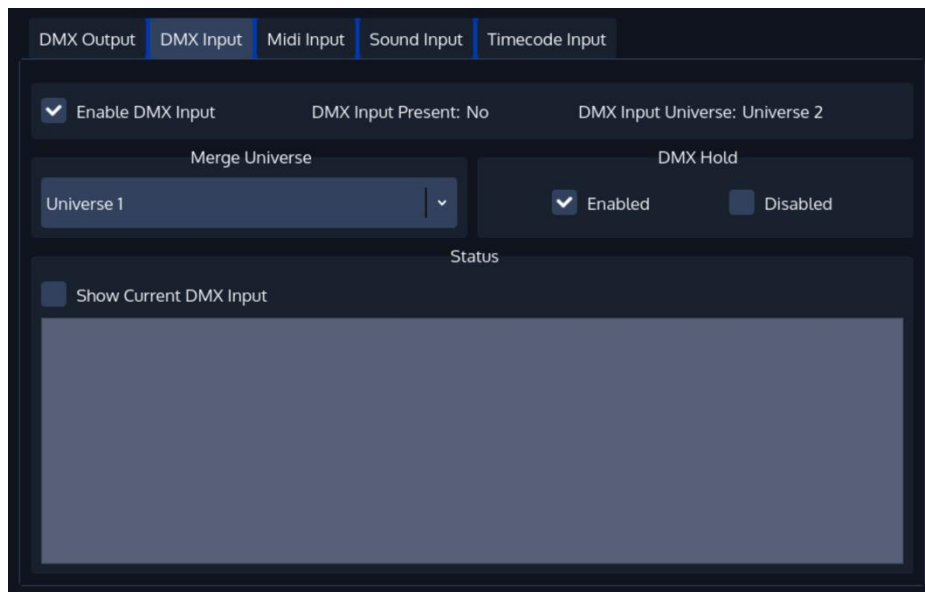
When using the DMX Input, the last available DMX Universe on the Console itself will be switched in direction and is used as an Input.

With the DMX Input enabled, you may choose a Universe the incoming DMX Data should be merged to. Data is merged Highest Takes Precedence.

Furthermore, you may choose to have the console hold the last received DMX Values on loss of the DMX Signal, or to reset the input to all zero values.

14.5. Midi Input

To set up MIDI Input, open the **Setup** Screen, head over to the **Input Output** Page and select **MIDI Input** from the Tabs shown in the center of the screen.

Enable the MIDI Input by ticking the **Enable Midi Input** Checkbox.
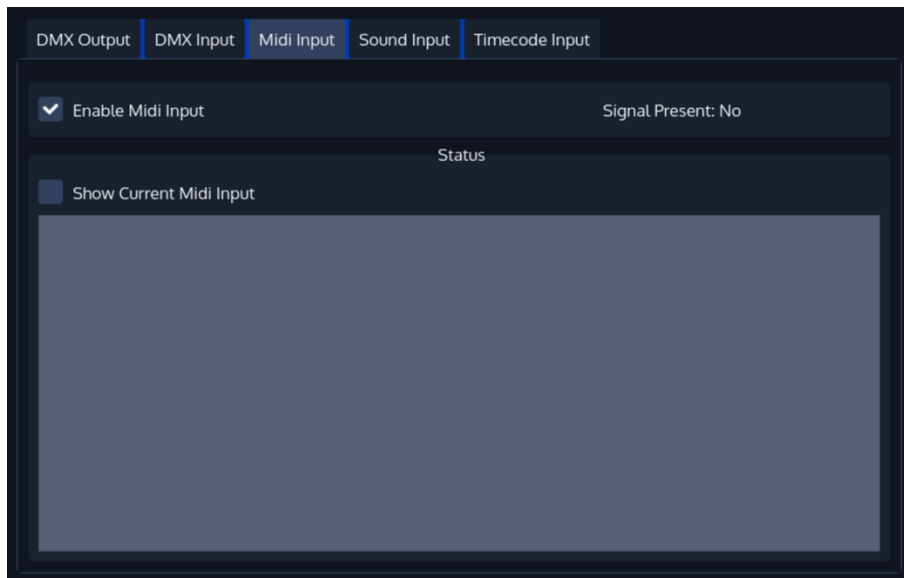
Fig. 76: Midi Input Settings

14.5.1. Show Current Midi Input

To enable MIDI Monitoring, tick the **Show Current Midi Input** Checkbox. The Console will now show received MIDI Signals.

14.5.2. Midi Input Mapping

The Midi Input is mapped the following:

- **Midi Note On/Off 0-59**: Executor Page 1-6 with 10 Executors each
  Midi Note On/Off 60-91: Virtual Executor 1-32
- **Midi Note On/Off 100-102**: Master Speed Tapsync 1-3
- **Midi Note On/Off 103-105**: Master Fade Tapsync 1-3

14.6. Sound Input

To set up Sound Input, open the **Setup** Screen, head over to the **Input Output** Page and select **Sound Input** from the Tabs shown in the center of the screen.

The Chimp provides 6 independently configurable Sound triggers.

Each trigger may have a frequency range set, a high and a low threshold.

<div align="right">
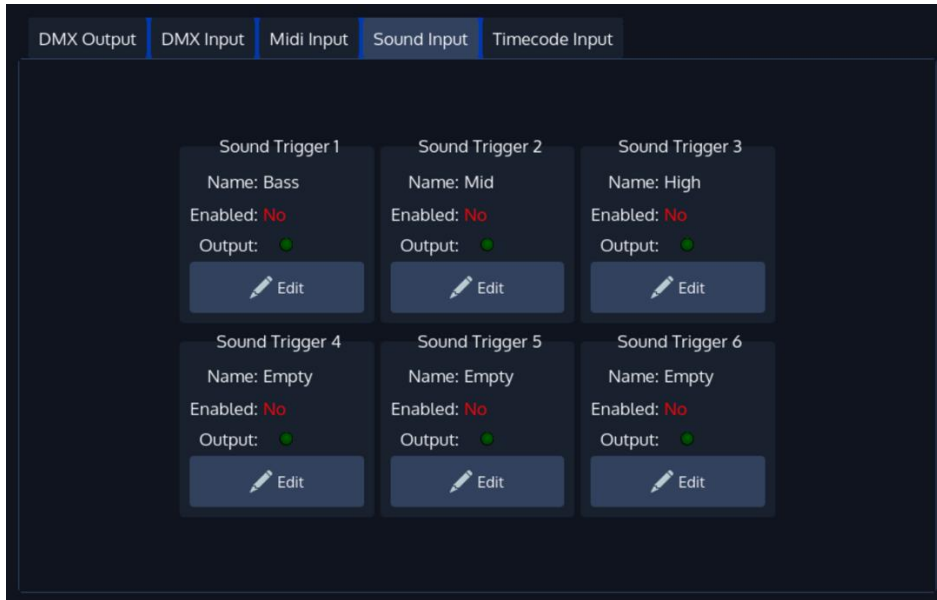
Fig. 77: Sound Input Settings

</div>

To setup one of the triggers, press the **Edit** Button found in the groupbox for each trigger. This will open the Edit Sound Trigger screen which shows a Graphical Analyzer of the incoming Audio signal.

<div align="right">
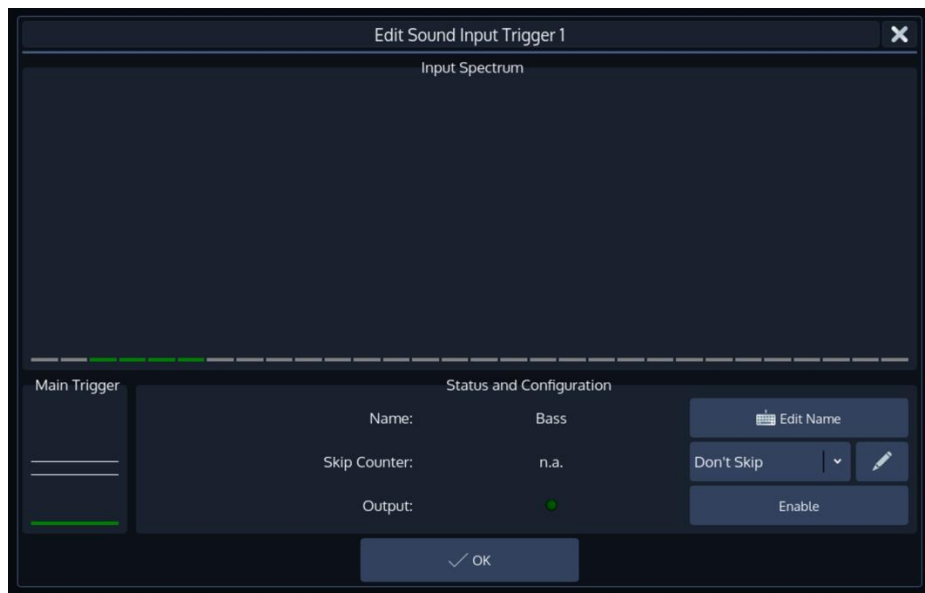
Fig. 78: Edit Sound Trigger

</div>

To be able to use this trigger, you need to enable it by checking the **Enable** button.

Addtitionally, you may set a Name for this trigger to be able to recognize it later on by clicking on Edit Name.

The **Skip Counter** lets this trigger skip beats, you could, for example configure it in a way it will only trigger after every second or fourth beat.

Furthermore, the encoders are used to specify the frequence range of the trigger, as well as sound level thresholds:

- **Min.Frequency**: This is the lower bound of the frequence range this trigger will listen to.
- **Max.Frequency**: This is the upper bound of the frequence range this trigger is active for.
- **Low Threshold**: This is the value the combined sound level needs to fall under after the trigger triggered before it will trigger again of the frequence range that is selected.
- **High Threshold**: This is the value the combined sound level needs to reach in order to have the trigger react to audio.

14.7. Timecode Input

To set up Timecode Input, open the **Setup** Screen, head over to the **Input Output** Page and select **Timecode Input** from the Tabs shown in the center of the screen.

Please note: You need a Peanut box to be able to use externally supplied (MIDI / LTC) timecode on the OnPC or Chimp 100 consoles.
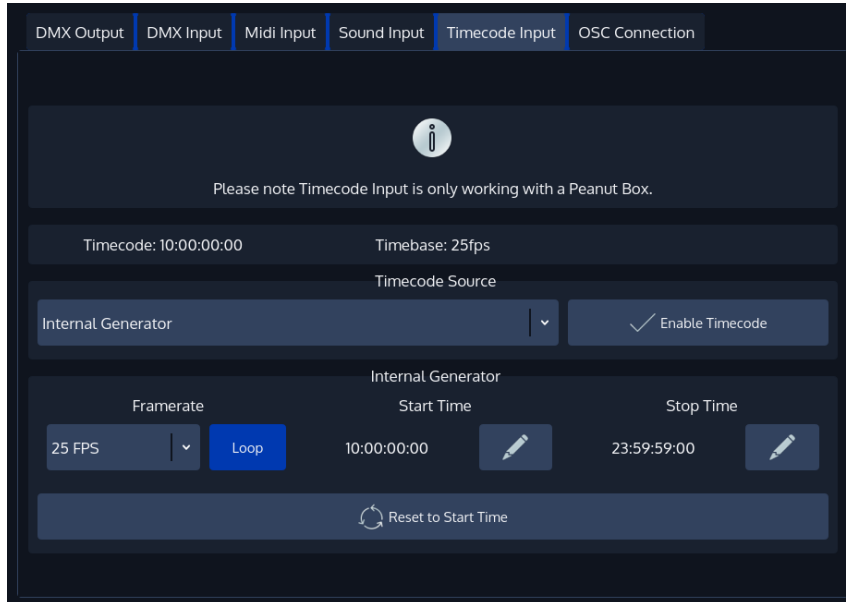
Fig. 79: Timecode Input

14.7.1. Timecode Setup

14.7.1.1.   Internal Timecode

Should you wish to use the internal Timecode, set the Timecode Source to **Internal Generator**. You may now define the **Framerate** and the **Start and Stop Time** of the internal timecode. The stop time is used to either stop the timecode as soon as it reaches set time or to loop (if enabled) the timecode. Looping the timecode will cause the timecode to jump back to the start time.

Generated Timecode will be Output using the MIDI Out connector.

To start the timecode generator, click on **Enable Timecode**. To disable it, click the button again.

14.7.1.2.   External Timecode Source

To use an external Source to trigger the Chimp Console, connect the Timecode source to the console - either using the **SMPTE (Linear Timecode)** connector on the back, or by connecting to the **MIDI In** for MIDI Timecode. After that, navigate to the *Timecode Input Configuration* window and select the appropriate source from the **Timecode Source** dropdown.

Please note that the console will auto-detect the framerate of the incoming signal, hence no further configuration is needed. Any received Timecode will be output through the MIDI Out connector. That means the console converts SMPTE Timecode to MIDI Timecode.

The console will always listen to timecode, however Cues are only triggered if the Timecode is enabled. To enable the Timecode, make sure the **Enable Timecode** button within the *Timecode Input Configuration* menu is highlighted.

14.7.2. Using Timecode

The defined Timecode Source may trigger Cues in Cuelists when their *Cue trigger* is set to Timecode.

Enabling / Disabling and Resetting the Timecode from the Top Toolbar

The top toolbar has several buttons that may be used to Enable or Disable the timecode input, to reset the internal generator and to show the status of the incoming timecode signal.
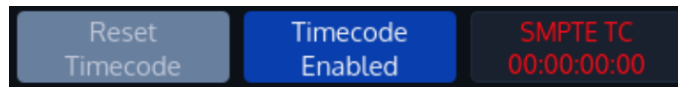
Fig. 80: Timecode Buttons in Top Menu Bar

14.8. OSC (Open Sound Control)

14.8.1. 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 Chimp Series. OSC will enable you to use OSC enabled controllers such as a synthesizers, electronic music instruments, production audio software, and mobile phone apps such as Touch OSC to remotely control your console.

14.8.2. 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 Wifi for show critical tasks for several reasons:

- Reliability: OSC uses UDP (User Datagram Protocol), which does not include error-checking. This means that the Chimp 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 WiFi may or may not work properly, or the speed might slow down.

14.8.3. How to Setup OSC

To set up OSC, open the **Setup** Screen, head over to the **Input Output** Page and select **OSC Connection** from the Tabs shown in the center of the screen.

Click on **Enable OSC Input** to enable or disable OSC.
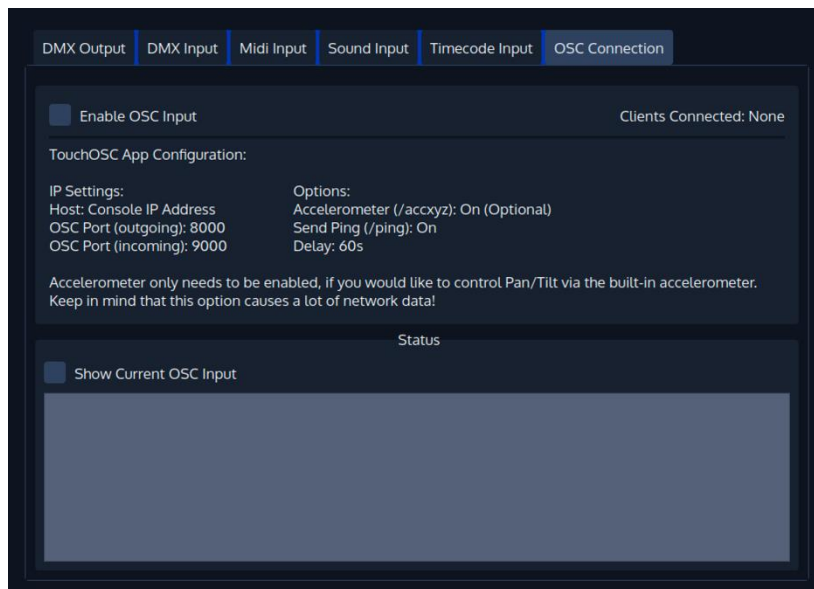
<div align="right">**Fig. 81: OSC Settings**</div>

14.8.4. 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 Chimp300 G2 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.

14.8.5. OSC Commands

OSC Command Path				Data
/chimp	/fader	/1-30	/go	0 = release, 1 = press
			/pause	0 = release, 1 = press
			/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]
	/master	/1-4	/flash	0 = release, 1 = press
			/value	0 < 1000 fader value
	/executor	/1-10	/flash	0 = release, 1 = press
			/name	[string]
		/page	/next	0 = release, 1 = press
			/previous	0 = release, 1 = press
			/template	0 = release, 1 = press
			/name	[string]
	/virtual_executor	/1-128	/flash	0 = release, 1 = press
			/name	[string]
	/programmer	/keypad	/record	0 = release, 1 = press
			/edit	0 = release, 1 = press
			/delete	0 = release, 1 = press
			/copy	0 = release, 1 = press
			/move	0 = release, 1 = press
			/name	0 = release, 1 = press
			/open	0 = release, 1 = press
			/select	0 = release, 1 = press
			/link	0 = release, 1 = press
			/load	0 = release, 1 = press
			/off	0 = release, 1 = press
			/skip	0 = release, 1 = press
			/goto	0 = release, 1 = press
			/time	0 = release, 1 = press
			/fixture	0 = release, 1 = press
			/group	0 = release, 1 = press
			/preset	0 = release, 1 = press
			/cuelist	0 = release, 1 = press
			/cue	0 = release, 1 = press
			/effect	0 = release, 1 = press
			/minus	0 = release, 1 = press
			/plus	0 = release, 1 = press
			/thru	0 = release, 1 = press
			/full	0 = release, 1 = press
/chimp	/programmer	/keypad	/at	0 = release, 1 = press
			/fw_slash	0 = release, 1 = press
			/backspace	0 = release, 1 = press
			/0	0 = release, 1 = press

OSC Command Path				Data
			/1	0 = release, 1 = press
			/2	0 = release, 1 = press
			/3	0 = release, 1 = press
			/4	0 = release, 1 = press
			/5	0 = release, 1 = press
			/6	0 = release, 1 = press
			/7	0 = release, 1 = press
			/8	0 = release, 1 = press
			/9	0 = release, 1 = press
			/dot	0 = release, 1 = press
			/enter	0 = release, 1 = press
			/shift	0 = release, 1 = press
			/home	0 = release, 1 = press
			/set	0 = release, 1 = press
		/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
			/random	0 = release, 1 = press
			/shuffle_selection	0 = release, 1 = press
			/invert	0 = release, 1 = press
		/feature	/select/intensity	0 = release, 1 = press
			/select/position	0 = release, 1 = press
			/select/color	0 = release, 1 = press
			/select/gobo	0 = release, 1 = press
			/select/beam	0 = release, 1 = press
			/select/shaper	0 = release, 1 = press
			/select/control	0 = release, 1 = press
			/select/special	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
/chimp	/programmer	/encoder	/1-4	/btn	0 = release, 1 = press
				/inc	-5 < 5 variable value
				/text1	[string]
				/text2	[string]
		/pan_tilt		0 < 1 XY Value
	/use_accel			0 = release, 1 = press
	/sync			0 = release, 1 = press

15. Working with Fixtures

15.1. Selecting Fixtures

Before you can start altering any values or programming, you need to select the fixtures you would like to work with. There are four different ways to select your fixtures.

15.1.1. Fixture Numbers

Fixture Numbers are based on the User Number given to them while adding the fixture.

On top of that, fixtures also have a second part of the User Number which is used to select a single or range of instances of one fixture which is assigned in the Fixture Library:

X.Y where X is the User Number assigned in the Patch and Y is the Instance ID assigned to an instance in the fixtures Library.

15.1.2. Selection Order

The selection order matters during programming (i.e for Effects and Fanning) and is recorded as part of groups but is not recorded in presets or cues.

The order in which you select fixtures determines how sub-selection and fanning are applied to them. For example, applying a fanned value or an odd sub-selection to them after selecting fixtures 1 thru 5 _will_ appear different than if you selected fixtures 1 + 3 + 2 + 5 + 4.

15.1.3. Selecting (whole) Fixtures using the Numberblock

To select fixtures including all their instances on the keypad, simply do so by typing their user IDs, omitting the instance ID.

You may use the [Thru], [+] and [-] keys to further extend your selection.

A few examples:

- [1] [Thru] [Enter] will select all fixtures following fixture 1 until a different fixture type starts, or a gap in the numbering scheme is detected.
- [1] [+] [2] [Enter] will select fixtures 1 and 2
- [1] [Thru] [10] [Enter] will select all fixtures from fixture 1 to 10
- [1] [Thru] [10] [–] [3] [Enter] will select all fixtures from fixture 1 to 10 except 3

Repeatedly pressing [Prev] or [Next] steps backwards or forwards through whole fixtures (including all instances) in the current selection, with the order determined by the Selection Order.

[Prev] [+] [Next] will bring you back to your original selection.

The keypad does also have special functions for extended fixture sub-selection, which can be applied on your current selection.

15.1.4. Selecting specific Instances of specific Fixtures using the Numberblock

To select specific fixture instances on the keypad, simply do so by typing their user IDs including the instance ID.

You may use the [Thru], [+] and [-] keys to further extend your selection.

A few examples:

- [1.1] [Thru] [Enter] will select all fixtures and instances following fixture 1 instance 1 until a different fixture type starts, or a gap in the numbering scheme is detected
- [1.1] [+] [1.2] [Enter] will select instance 1 and 2 of fixture 1
- [1.2] [+] [3.4] [Enter] will select instance 2 of fixture 1 and instance 4 of fixture 3

- [1.1] [Thru] [1.5] [Enter] will select all instances 1 thru 5 from fixture 1
- [1.1] [Thru] [1.10] [–] [1.3] [Enter] will select instances 1 to 10 except instance 3 of fixture 1.

Repeatedly pressing [Prev] or [Next] while pressing the [Infinity] key steps backwards or forwards through the instances in the current selection, with the order determined by the Selection Order.

[Prev] [+] [Next] will bring you back to your original selection.

15.1.5. Selecting specific Instances of the current selection using the Numberblock

To select specific fixture instances from fixtures that are currently selected on the keypad, simply do so by typing their user the instance ID preceeded by [.].

You may use the [Thru], [+] and [-] keys to further extend your selection.

A few examples:

- [.1] [Thru] [Enter] will select all instances following instance 1 from within the current selection
- [.1] [+] [.2] [Enter] will select instance 1 and 2 of all fixtures within the current selection
- [.1] [Thru] [.5] [Enter] will select instances 1 thru 5 from fixtures the current selection
- [.1] [Thru] [.10] [–] [.3] [Enter] will select instances 1 to 10 except instance 3 of all fixtures within the current selection.

15.1.6. Select and Deselect Fixtures using the "Fixture Pool" –window

Open a fixture split widget by clicking on the **Fixtures** button in any of the split widget side menus.

You may now select or deselect fixtures by simply clicking on them.

Fig. 82: Fixture Pool

15.1.7. Select Fixtures using a previously recorded Group

Open a fixture split widget by clicking on the Fixtures button in any of the split widget side menus.
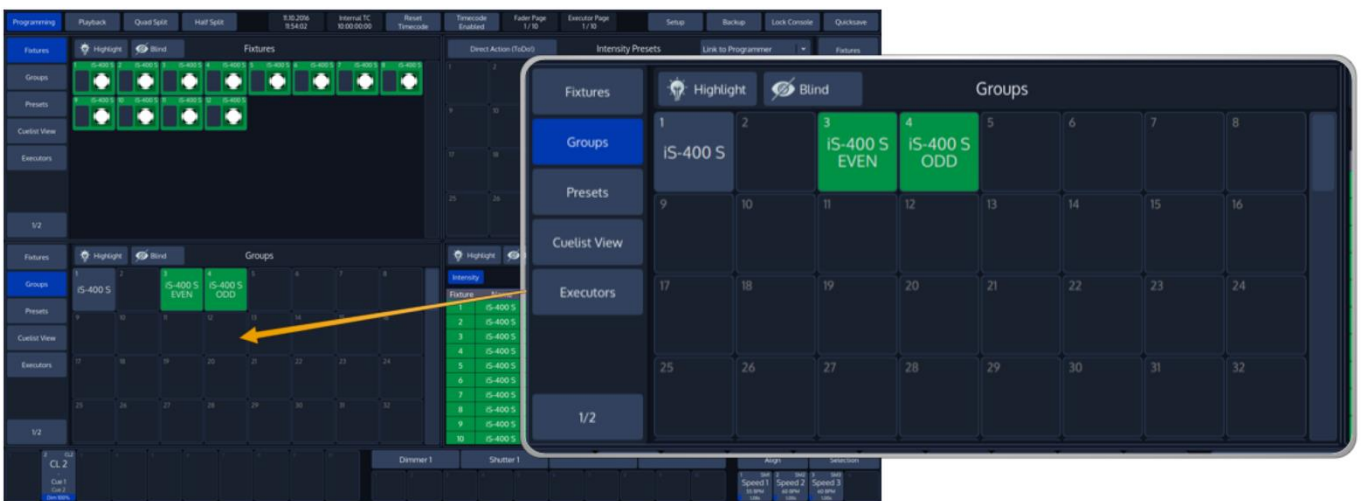
Fig. 83: Group Pool

Now you can simply select and deselect fixture groups by clicking on them. You may also select Groups using the Commandline Interface: [Group] [1] [Enter].

See "**Working with Groups**" for more information about working with Group Pools.

15.2. De-Selecting all Fixtures

To de-select fixtures, simply press the [0] –key on the keypad followed by [Enter].

You may also clear fixture selection by pressing the **Clear** button on the Fixture Selection Toolbar:.

15.3. Fixture Sub-Selection using the Selection Toolbar

All Sub-Selection functions are applied to your current Fixture selection.

If you do not have fixtures selected, the Fixture Sub-Selection will be applied to **all** fixtures instead. If you select any of the Sub-Selection functions, the console will remember the full selection that you have made and will apply all sub select functions to this "Sub-Selection" memory.

To open the Selection Toolbar, click on the button that reads **Selection** from within the bottom toolbar. Clicking the button again will close the toolbar.
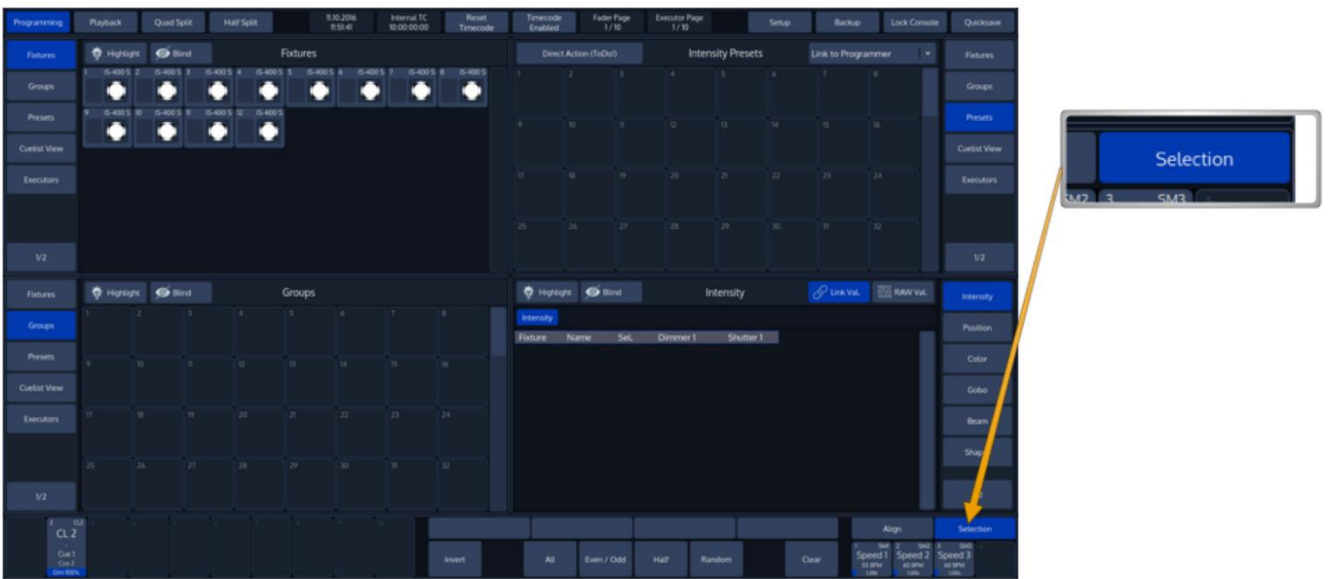
Fig. 84: Selection Button
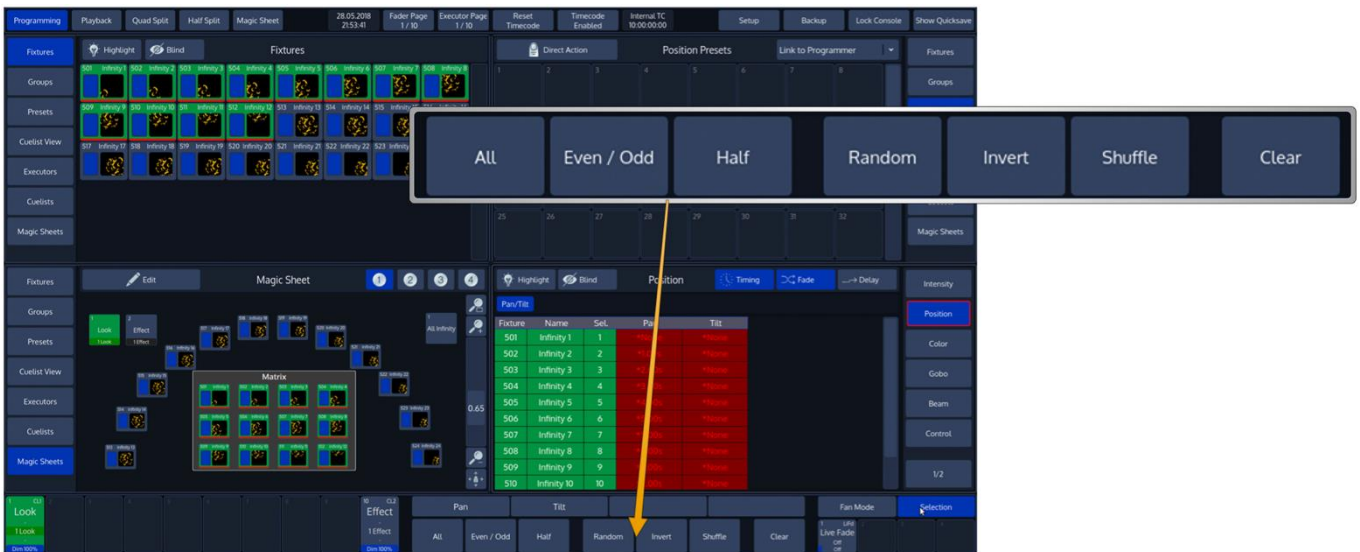
Fig. 85: Selection Toolbar

15.3.1. All Fixtures

If no "Sub Selection" has previously been made, this will select all fixtures contained in the showfile.

If you previously selected some fixtures and altered that selection using any of the available sub selection modes (like Even Odd, Half, etc) this will bring you back to your complete selection set.

If you press the [Infinity]-Key while pressing the **All**-button, all fixtures with values in the programmer will be selected, regardless of the sub-selection state.

15.3.2. Even / Odd

If no selection has previously been made, **Even / Odd** will, on the first press of the button, select all even numbered fixtures contained in the showfile.

The second press on the **Even Odd** button will select the odd numbered fixtures.

15.3.3. Half

If no selection has previously been made, **Half** will, on the first press of the button, select the first half of the selected fixtures contained in the showfile.

The second press on the **Half** button will select the other half of all fixtures contained in the showfile.

15.3.4. Random

If no Selection has previously been made, **Random** will make a random selection out of all fixtures contained in the showfile. If you previously selected fixtures using any of the selection methods, **Random** will be applied to the selected fixtures instead.

15.3.5. Invert Selection

Clicking on **Invert Selection** will invert the current selection.

Invert extends to either the previous selection set, or, if no fixtures have been selected before using any of the subselect features, extends to all fixtures contained in the showfile.

15.3.6. Shuffle Selection

Clicking on Shuffle will randomize the selection order of the current fixture selection.

15.3.7. Clear Fixture Selection

The **Clear** button will deselect all selected fixtures and clear the "Sub Selection" memory.

15.4. Stepping through fixtures using Previous & Next Fixture

Sometimes it is desirable to step through the fixtures one by one at a time, especially when used in combination with the "Highlight" function to be able to quickly and easily focus many lights in series.

This may be accomplished using the [Prev] or [Next] keys found on the console frontpanel.

Each press on one of the keys will sub-select a single fixture including all of its instances from within the current selection.

Repeatedly pressing [Prev] or [Next] steps backwards or forwards through the current selection, with the order determined by the selection order.

[Prev] [+] [Next] will bring you back to your original selection.

Holding the [Infinity] Key while pressing [Prev] or [Next] will step through individual instances.

15.5. Selecting X out of Y.

The console offers a built in modulo sub-selection function which will select every Xth fixture out of Y.

The syntax is quite easy: We use [/] for the "out of" part of the command.

In the following example, we are going to select every first fixture out of three:

- Select fixtures 1 to 12
- Type [1] [/] [3] [Enter] on the keypad.
- To select every second fixture out of three, type [2] [/] [3] [Enter]
- To select every third fixture out of three, type [3] [/] [3] [Enter]

Please note you may also combine the modulo function with more advanced functions:

- Select fixtures 1 to 12
- Type [1] [+] [2] [/] [3] [Enter] on the keypad. This translates into "Select each first and second fixture out of three".

Or:

- Select fixtures 1 to 12
- Typing [1] [thru] [3] [+] [5] [/] [5] [Enter] on the keypad translates into "Select each first through third and fifth fixture out of five fixtures".

Using the [Prev] or [Next] keys will advance through the current modulo subselection.

15.6. Assigning Names to Fixtures

You may decide between different ways should you wish to rename your fixtures to make them more identifiable within the Fixture Pool, programmer and fixture configuration dialogs:

15.6.1. Assign Name using the Fixture Pool

- Open a Fixture Split Widget.
- Press the [Name] key.
- Select the fixture you wish to rename from within the Fixture Pool.

15.6.2. Assign Name using the Command Line Interface

Type [Name] followed by the fixture selection, in example: [Fixture] [1] [Thru] [5] [Enter].

15.6.3. Using Fixture Groups

Another approach would be to use a Group to bulk rename all fixtures in the Group.

- Open a Group Pool.
- Press the [Edit] key.
- Now, select the group that contains the fixtures to be renamed by clicking on it.
- The Edit Group Screen will be shown.
- Now click on **Smart Name**.
- An on-screen keyboard which will rename both, the group and all fixtures in the group will be shown

15.6.4. Using the Edit Fixture Window

You may also use the "Edit Fixture" –Window to rename a fixture.

15.7. Edit Fixture Window

The "Edit Fixture" –Window may be used as a quick way to gather information about a fixture. It may also be used to set a Fixture instance's name, or to rename all instances of a fixture.

<div align="right">
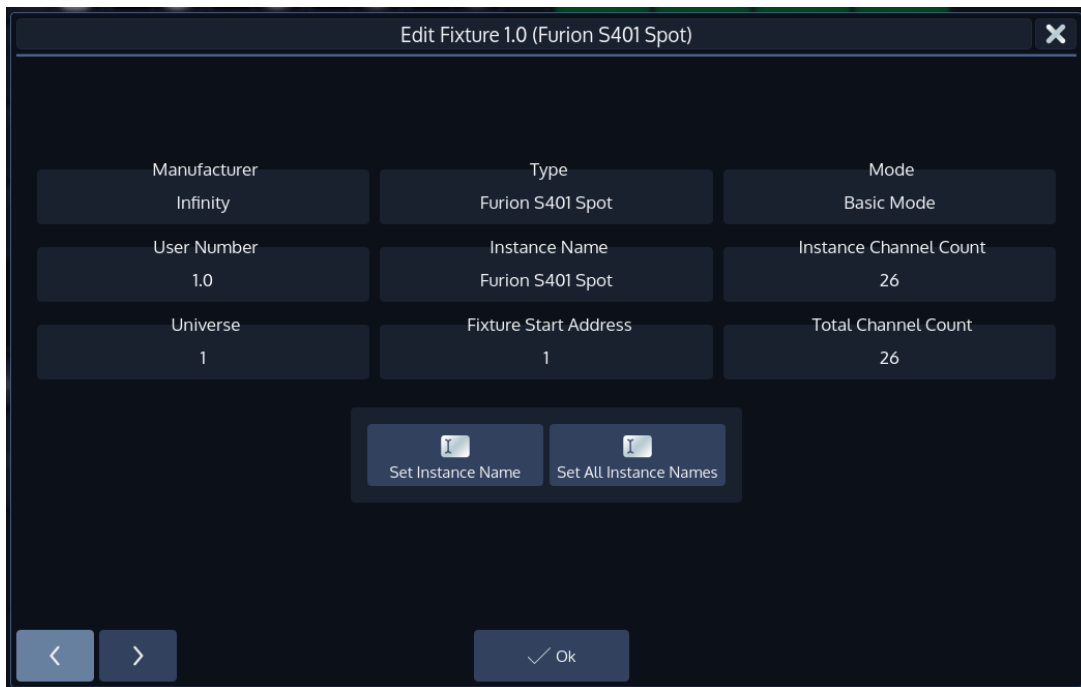
Fig. 86: Edit Fixture Dialog

</div>

To open the Edit Fixture Window, type [Edit] followed by the User ID.InstanceID of the fixture you would like to edit, ie. [Edit] [1] [.] [2]. Finish the command by pressing [Enter].

Alternatively, you may use the Fixture Split Widget to select the fixture:

Open a Fixture Split Widget. Press the [Edit] key and select the Fixture you would like to edit from within the shown Fixture Split Widget.

15.7.1. Set Instance Name

Clicking on the **Set Instance Name** button will open up an on-screen keyboard allowing you to rename this particular Fixture Instance.

15.7.2. Set All Instance Names

Clicking on the **Set All Instance Names** button will open up an on-screen keyboard allowing you to rename all of this Fixtures Instances.

15.8. Coloring Fixture Items

15.8.1. Applying a colored border to a Fixture Item

You may color code fixtures, which will be displayed by a thicker and colored border around the fixture item in pools and magic sheets.

● Press the [Name]-key twice. The command line will read **Appearance**.
● Now select the Fixture Item using the touchscreen or by using the numberblock.
● A dialog window asking for the color will be opened. Click on **Set Color** when done.

If you use the numberblock you may also color multiple Items at once using the [+], [-] and [thru] keys. Complete the numberblock command by pressing the [Enter]-key.
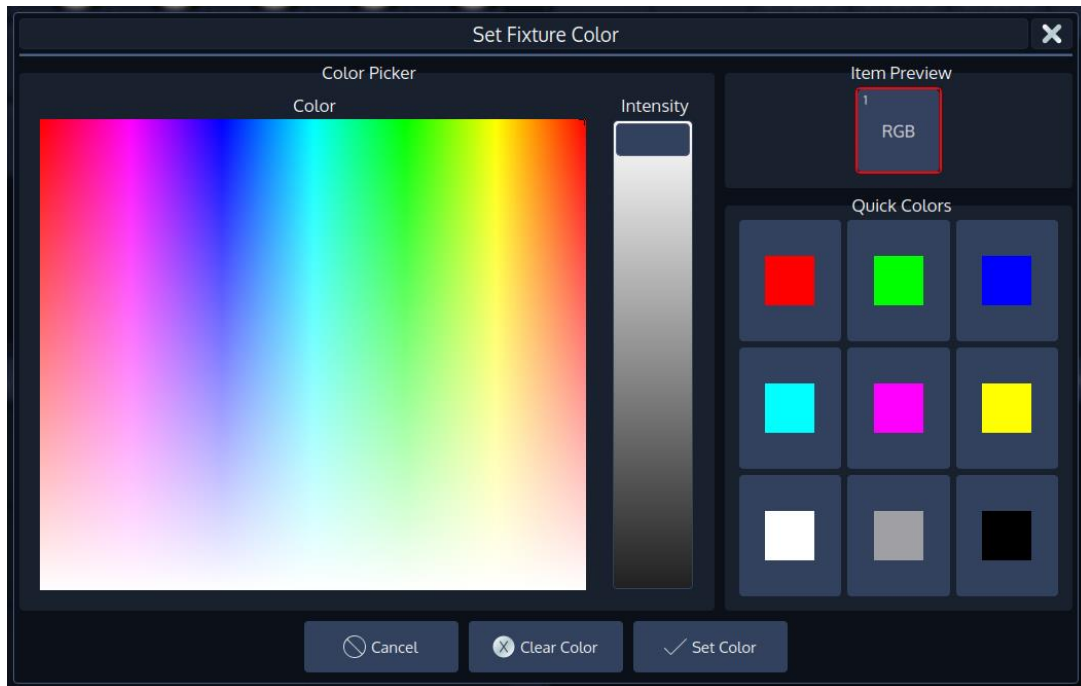
Fig. 87: Set Fixture Color Dialog

15.8.2. Resetting User Colors for a Fixture Item

● Press the [Name]-key twice. The command line will read **Appearance**.
● Now select the Fixture Item using the touchscreen or by using the numberblock.
● Click on **Clear Color** in the dialog window to reset the user colors.

If you use the numberblock you may also color multiple Items at once using the [+], [-] and [thru] keys. Complete the numberblock command by pressing the [Enter]-key.

16.   Working with Groups

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

The Group Pool is used to show and select fixture Groups.

Groups which are have been directly selected by the user will be shown with a light green background color, whereas groups which are implicitly selected (they contain fixtures which are selected but the group itself has not been directly selected) will be displayed with a darker background color.

If the group is used in the showfile (it is linked to a fader or displayed in a magic sheet), the number found in the top left corner of the item is displayed in a red color. Information about where a group is used may be found in the Edit Group menu.
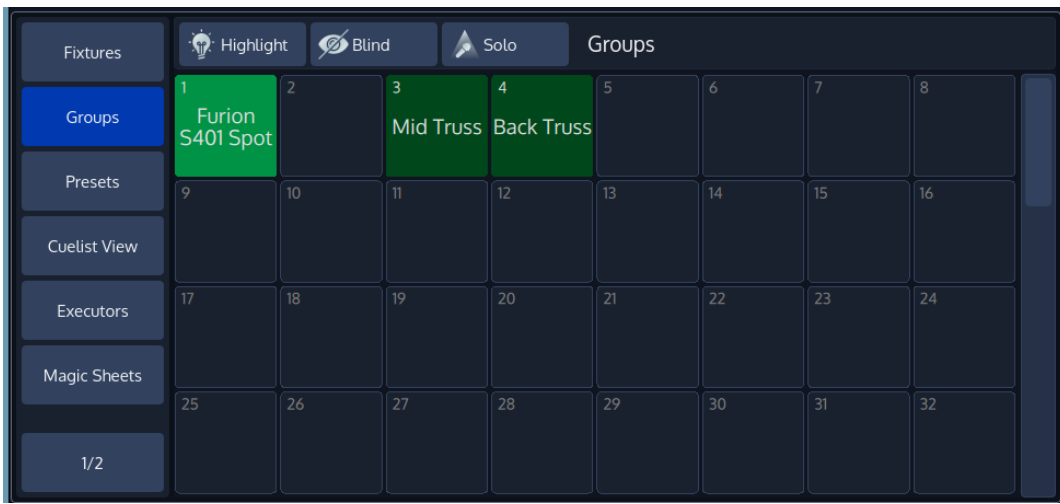
Fig. 88: Group Pool

16.1. Recording Fixture Groups

To record your first group, start out by selecting fixtures 1 through 12 by using the Keypad (refer to 15.1 Selecting Fixtures on page 88 for more information).

16.1.1. Storing a Fixture Group Using Group Split Widget

- Select the fixtures that shall be in the group
- Open a Group Split Widget by clicking on the Groups button in one of the side menus.
- Hit the [Rec] key. Select an empty item.
- Select the fixtures that shall be in the group

16.1.2. Storing a Group Using Command Line Interface

- Select the fixtures you wish to group together
- Press the [Rec] key
- Press the [Group] keypad button.
- Now, type the number of the item using the Numberblock
- Press [Enter]

For example: [Rec] [Group] [1] [Enter]

16.2. Merge (Add) Fixtures into Groups

Sometimes you may need to add some fixtures to a group that already exists.

The confirmation dialog may be omitted by selecting the **Merge** option from the record toolbar after pressing record.

Alternatively, you can also press [Infinity] while pressing [Rec] to cycle through the different record modes.

16.2.1. Merge Fixture(s) into Group using Group Split Widget

- Select the fixtures you would like to add to an existing group.
- Open a Group Split Widget by clicking on the Groups button in one of the side menus.
- Hit the [Rec] key on the consoles frontpanel.
- Select the Group you would like to merge the selected fixtures into.
- If you did not select an option from the Record-Toolbar, a dialog window asking you what to do will open.
- Click on **Merge**.

16.2.2. Merge Fixture(s) into Group using the Commandline Interface

- Select the fixtures you would like to add to an existing group.
- Press the [Rec] key, followed by the [Group] key.
- Now type the number of the group you would like to add the Fixtures to on the console's keypad, in example, [1] followed by [Enter].
- If you did not select an option from the Record-Toolbar, a dialog window asking you what to do will be shown. Click on **Merge**.

16.3. Remove Fixtures from Groups

The confirmation dialog may be omitted by selecting the **Remove** option from the record toolbar after pressing record.

Alternatively, you can also press [Infinity] while pressing [Rec] to cycle through the different record modes. To select Remove using this method, you need to press the [Rec] key twice while holding down [Infinity].

16.3.1. Remove Fixture(s) from a Group using Group Split Widget

- Select the fixtures you would like to remove.
- Open a Group Split Widget by clicking on the Groups button in one of the side menus.

- Hit the [Rec] key on the consoles frontpanel.
- Select the Group you would like to remove the selected fixtures from.
- If you did not select an option from the Record-Toolbar, a dialog window asking you what to do will open.
- Click on **Remove**.

16.3.2. Remove Fixture(s) from a Group using the Commandline Interface

- Select the fixtures you would like to remove.
- Press the [Rec] key, followed by the [Group] key.
- Now type the number of the group you would like to remove the Fixtures from on the console's keypad, in example, [1] followed by [Enter]
- If you did not select an option from the Record-Toolbar, a dialog window asking you what to do will open.
- Click on **Remove**.

16.4. Replace (overwrite) a Group

Replace will overwrite an entire group.

The confirmation dialog may be omitted by selecting the **Replace** option from the record toolbar after pressing record.

Alternatively, you can also press [Infinity] while pressing [Rec] to cycle through the different record modes. To select Replace using this method, you need to press the [Rec] key three times while holding down [Infinity].

16.4.1. Replace Fixture(s) from a Group using Group Split Widget

- Select the fixtures you would like to be in the group.
- Open a Group Split Widget by clicking on the Groups button in one of the side menus.
- Hit the [Rec] key on the consoles frontpanel.
- Select the Group in the Group Pool.
- If you did not select an option from the Record-Toolbar, a dialog window asking you what to do will open.
- Click on **Replace**.

16.4.2. Replace Fixture(s) from Group using the Commandline Interface

- Select the fixtures you would like to be in the group.
- Press the [Rec] key, followed by the [Group] key.
- Now type the number of the group on the console's keypad, in example, [1] followed by [Enter]
- If you did not select an option from the Record-Toolbar, a dialog window asking you what to do will open.
- Click on **Replace**.

16.5. Selecting and Deselecting Groups

16.5.1. Selecting Fixture Groups Using Group Split Widget

- Open a Group Pool Split widget by selecting **Groups** from a split widgets side menu.
- Now you can simply select and deselect fixture groups by clicking on them.

16.5.2. Selecting Fixture Groups Using Command Line Interface

- Press the [Group] key.
- Type the number of the group you would like to select via the console's keypad such as [1] followed by [Enter]. Please note that you may also use the [+], [-] and [Thru] keys to further extend your selection.

So, for example:

[Group] [1] [+] [12] will select group 1 and 12.

[Group] [1] [Thru] [4] [-] [2] will select group 1 through 4 but will not select group 2.

16.6. Naming Groups

16.6.1. Assign Name using the Group Split Widget

- Select **Groups** from a split widgets side menu.
- Press the [Name] key.
- Select the group you wish to rename.

16.6.2. Assign Name using the Command Line Interface

- Press the [Name] key.
- Then press the [Group] key, followed by the Group ID, in this case [1].
- Hit [Enter] to complete the command.

Please note you may also rename multiple Groups at once by using the [Thru], [+] and [-] modifier keys.

16.6.3. Assign Name using the Edit Group Window

You may also assign a Name to the group and its contained fixtures using the "Edit Group" Window.

16.7. Copying Groups

16.7.1. Copying Groups using the Group Split Widget

- Select **Groups** from a split widgets side menu.
- Press the [Copy] key.
- Select the Group you would like to copy
- Select the destination Item.

16.7.2. Copying Groups using the Command Line Interface

- Press the [Copy] key.
- Hit the [Group] key
- Enter the source Group ID, in this case [1]
- Now enter the desitnation Group ID, ie [5]
- Hit [Enter] to complete the command.

16.8. Moving Groups

16.8.1. Moving Groups using the Group Split Widget

- Select **Groups** from a split widgets side menu.
- Press the [Move] key.

- Select the Group you would like to move
- Select the destination Item.

16.8.2. Moving Groups using the Command Line Interface

- Press the [Move] key.
- Hit the [Group] key
- Enter the source Group ID, in this case [1]
- Now enter the desitnation Group ID, ie [5]
- Hit [Enter] to complete the command.

16.9. Deleting Groups

16.9.1. Deleting Groups using the Group Split Widget

- Select **Groups** from a split widgets side menu.
- Press the [Delete] key.
- Select the Group you would like to delete

Note: If you keep pressing the [Delete] key while selecting items to be deleted, the console will not ask for confirmation. This is a way to quickly delete multiple Items.

You may also hold [Shift] while pressing [Record] to cycle through the different delete modes.

16.9.2. Deleting Groups using the Command Line Interface

- Press the [Delete] key.
- Hit the [Group] key
- Enter the source Group ID, in this case [1]
- Hit [Enter] to complete the command.

Please note you may delete multiple groups by extending the selection using the [+], [-] and [Thru] keys.

16.10. Coloring Group Items

Applying a colored border to a Group Item

You may color code groups, which will be displayed by a thicker and colored border around the group item in pools and magic sheets by pressing the [Name]-key twice.

The command line will read **Appearance**.

Now select the Group Item using the touchscreen or by using the numberblock.

If you use the numberblock you may also color multiple Items at once using the [+], [-] and [thru] keys. Complete the numberblock command by pressing the [Enter]-key.

For example: [Appearance] [Group] [1] [thru] [10] [Enter]

A dialog window asking for the color will be opened. Click on **Set Color** when done.
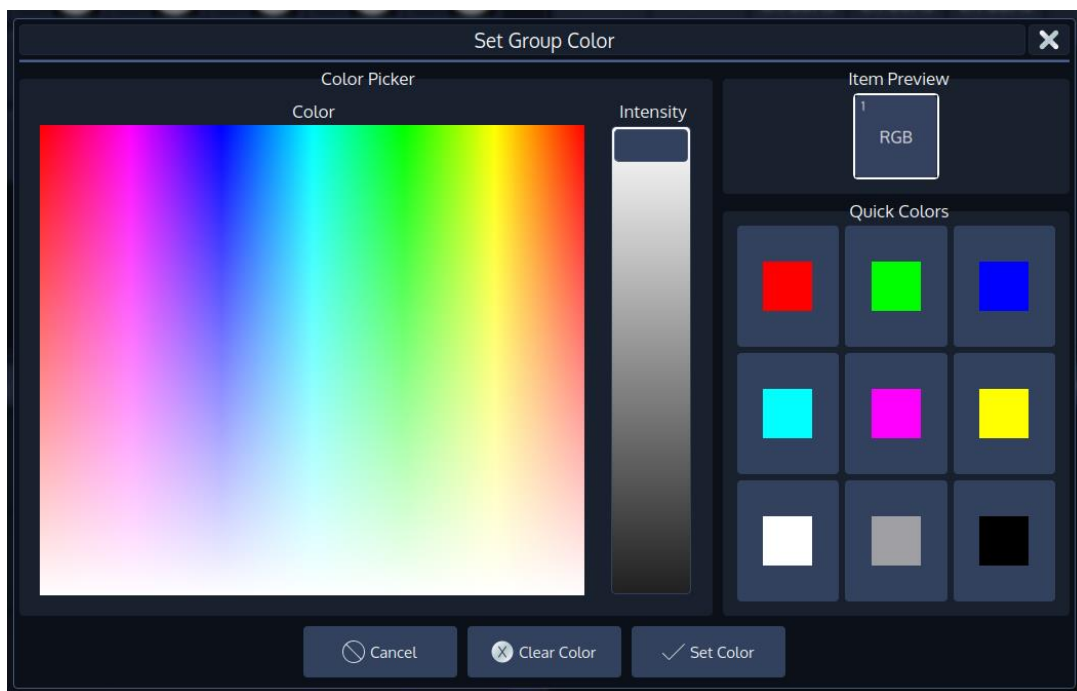
Fig. 89: Set Group Color Dialog

16.10.1.   Resetting User Colors for a Group Item

You may reset the user colors for one or multiple groups by pressing the [Name]-key twice. The commandline will read **Appearance**.

Now select the Group Item using the touchscreen or by using the numberblock.

If you use the numberblock you may also reset the color for multiple Items at once using the [+], [-] and [thru] keys. Complete the numberblock command by pressing the [Enter]-key.

Click on **Clear Color** in the dialog window to reset the user colors.

16.11. Create a Group Dimmer Master

Group Dimmer Masters allow you to limit the intensity of a specific fixture group. If the Group Master is at full, then the fixtures that this group contains will be at the level determined by the playbacks, Programmer, and so on. When the master's level is reduced, the contained fixtures intensity will be reduced in proportion to the master. For example, if you have the fixture at 80% intensity in a cue that is being output, and the master of the group is at 50%, a fixture intensity value of 40% will be output.

Multiple Group Dimmer Masters are compared HTP, so the highest master will take precedence.

There are two ways to assign a Group Dimmer Master:

16.11.1.   Using the Group Split Widget Window

- Select **Groups** from a split widgets side menu.
- Hit the [Link] key.

Now select the Group from within the Split Widget followed by the [Go], or [Pause/Back] key of the fader that should act as the Dimmer Master.

16.11.2.   Using the Command Line Interface

- Press the [Link] key
- Press the Group key and the appropritate ID of the group, in example: [Group] [1].
- Now select the [Go], or [Pause/Back] key of the fader that should act as the Dimmer Master.

16.12. Edit Group Window

The "Edit Group" –Window may be used as a quick way to rename a group and all the contained fixtures.

To open the Edit Group Window:

● Press the [Edit] –key
● Select the Group you would like to edit.

Or, using the Command Line Interface, type [Edit] [Group], followed by the ID of the group you would like to edit, eg. [31].

Finish the command by pressing [Enter].
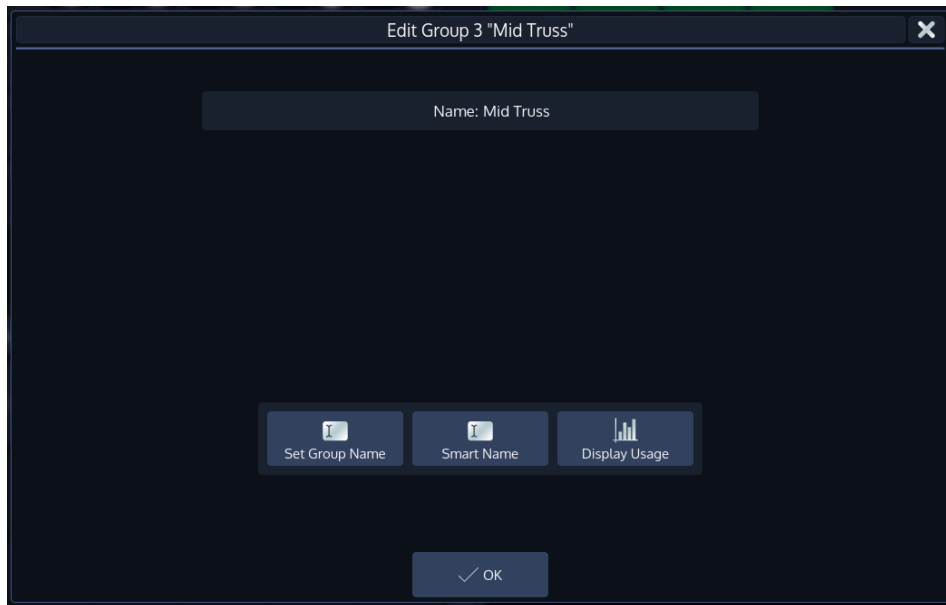
<div align="right">**Fig. 90: Edit Group Window**</div>

16.12.1. Set Group Name

Clicking on the **Set Group Name** button will open an on-screen keyboard allowing you to rename this Group.

16.12.2. Smart Name

Clicking on the **Smart Name** button will open an on-screen keyboard asking for a new group name. **Smart Name** will also rename contained fixtures using the same name that you enter for the group.

16.12.3. Display Usage

Clicking on the **Display Usage** button will open a dialog which indicates where and how this group is used throughout the showfile.

17.   Working with Fixture Values

Altering fixture parameter values is only possible from within the Programming Window.

The programmer is shown in the bottom right part of the screen. It behaves very similar to the group split widgets – it has buttons in the title bar and features a side menu for parameter selection.

The Chimp groups fixture parameters in a sense full way by dividing them into seperate groups like **Intensity**, **Position**, **Color**, **Gobo**, **Beam**, **Shaper** (Blades or Knifes in Profile Lights), **Control**, **Macro** and **Special**.

You'll see one more group called **Effects**, which is used to open the Shape Generator / FX Engine.
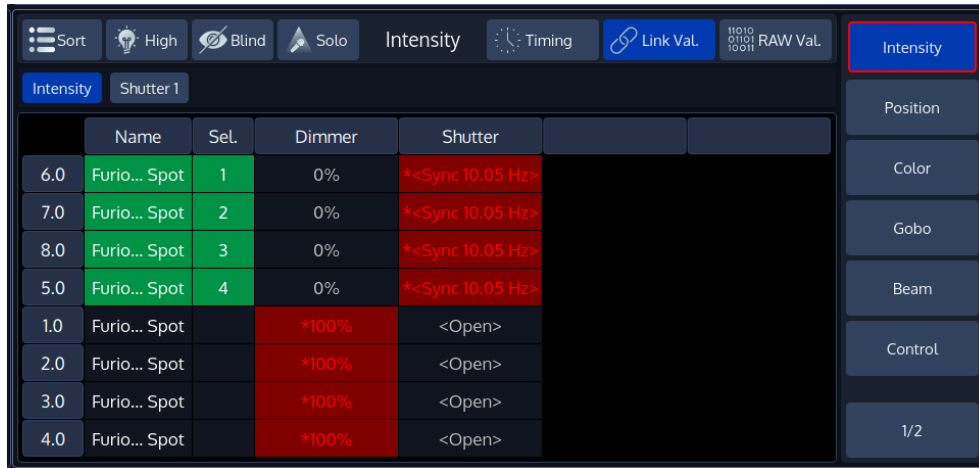
Fig. 91: The Programmer

What is the programmer?

The "Programmer" is the place where all the programming happens.

As soon as you modify a fixtures attribute value by using any of the value input methods described below, it will show up in the programmer.

The programmer always takes precedence over cuelists, this way you may always at any point in a show modify the look on stage.

17.1.1. Different states of fixture attribute 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 cuelists 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 cuelist output for the attributes with values in the programmer. However, these values would not be recorded.

This screenshot shows how the programmer looks like if you modified (touched) values of an attribute in the programmer. The programmer takes precedence over cuelist output for all attributes with values in the programmer. As soon as values are "touched" (indicated by red background color of the corresponding cell) they can be recorded.

The side menu of the programmer indicates which attribute groups have active (touched) values by using a red border color. Attribute groups with inactive colors will show an orange border color instead.

17.1.2. Emptying the Programmers „Content"

For all playbacks to re-gain control over the fixture attributes contained in the programmer, the programmer needs to be cleared.

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, [Infinity] + [Clear] will undo the last clear command.

You can also push and hold the [Clear] button for a short moment to clear the programmer completely.

17.1.3. Programmer Title Bar Buttons
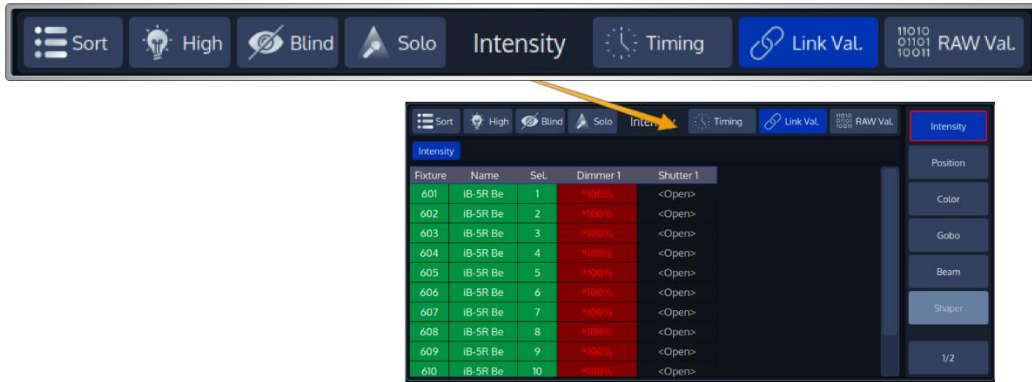
<div align="right">**Fig. 92: Programmer Title Bar Buttons**</div>

17.1.3.1.   Sort Function

The Sort button will sort fixtures by their selection order in the programmer. This function is just affecting the way the programmer information is displayed. If you prefer to have your fixtures displayed by user number, you may switch this function on and off at any time.

17.1.3.2.   Highlight Function

Pressing the [Highlight] key or Softbutton temporarily sets the selected fixtures to a "Full on, open white" state, and will set attributes like Gobo, etc to open. 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, and highlight has the third highest priority when the console determines an attribute's output value. Only Group and Fixture Masters and the Grandmaster have a higher priority.

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 [Prev] or [Next] key. Hightlights status is indicated by a LED above the key.

To see how the Highlight function works:

●   Select Fixtures 1 through 12
●   Press the [Highlight] key. The lights will keep their position on stage, but other attributes may change to the highlight value set in the library.
●   Hit the [Prev] or [Next] key to step through the fixtures.

17.1.3.3. Blind Function

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.

17.1.3.4. Solo Function

With **Solo** turned on, only selected fixtures will have dimmer values output on stage. All other, not selected, fixtures will output the values assigned in the "Blackout" column within the library on their parameters. Solo may be combined with highlight.

Solo may also be turned on and off by pressing the [Infinity] + [Highlight] keys at the same time.

17.1.3.5. Timing

Timing will switch the programmer into individual timing mode, which allows to assign and individual fade or delay time to each parameter of each fixture. This may be used to create staggered fade in looks in cues.

Please see the section "Working with individual Timings" on page 116 for more info.

17.1.3.6. Link Values

Link Values 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 not seeing any unwanted effects. This button is only shown when the programmer is in **Value** mode.

However, attribute linking may be turned of, if desirable. A good example would be independent control of Red, Green and Blue by using different faders.

17.1.3.7. RAW Val.

The **RAW Values** button will show the raw DMX Values being output instead of the captions of values that are defined in the library. If the value is output by a preset, the preset name will always be shown.

This button is only shown when the programmer is in **Value** mode.

17.2. Crossfading the programmer content on-stage

Quick manual crossfades during a live show without the need to pre-programing anything can be achieved with a special Master Fader type.

To make use of this function, assign a Master Fader called "**Programmer Live Fade**". This Fader allows to select a Fade time that will be used when values and presets are loaded into the Programmer or when a Attribute Value is set using the commandline.

The Live Fade Value define the fade time the Programmer Content is crossfaded with. Programmer Live can also be used in combination with the Blind function.

For more information on how to assign masters, please see "Linking a Global Master (Speed and Fade Time Masters)" on page 181.

17.3. Alter Fixture Parameters

17.3.1. Altering Intensity (Dimmer Values) Using Keypad

Dimmer Levels may be applied directly to selected fixtures using the keypad by typing [@] followed by either [Full] or the intensity value (in percent) followed the [Enter] key.

The syntax also allows for:

[@] [Full]	Will set the selected fixtures to 100%
[@] [@]	Will set the selected fixtures to 100%
[..]	Will set the selected fixtures to 0%
[@] [.] [Value]	Will set the selected fixtures Intensity DMX Value to [Value]
[@] [+] [Value]	Will increment the current value by [Value]
[@] [-] [Value]	Will decrement the current value by [Value]
[+] [+]	Will increment the Value by 10%
[-] [-]	Will decrement the Value by 10%
[Full]	Will set the selected fixtures to 100%
[Value A] [Thru] [Value B]	Will fan the Intensity for selected fixtures from [Value A] to [Value B] In Example: [0] [Thru] [100] with 3 selected fixtures will set fixture 1 to 0%, fixture 2 to 50% and fixture 3 to 100%.
[Value A] [Thru] [Thru] [Value B]	Will fan the Intensity for selected fixtures from [Value A] to [Value B] and back to [Value A]. In Example: [0] [Thru] [Thru] [100] with 5 selected fixtures will set fixture 1 and 5 to 0%, fixture 2 and 4 to 50% and fixture 3 to 100%.

17.3.2. Alter Parameters using the Encoders

To be able to alter fixture parameter values, Ie. set Dimmer values, you first need to select some fixtures.

For example, in order to adjust the Dimmer level, select **Intensity** from the side menu.

You may also press [Open] and [Preset] at the same time to cycle through the available attribue groups.

Fig. 93: Encoder Labels

To have the encoders control different features within the selected group (Ie. Gobo 3 and 4), simply press the the appropriate button within the programmer's menu bar.

Only attribute groups supported by the fixtures in the showfile are shown.

If you press on a Programmer Side Menu button repeatedly, the console cycles through the different sub-attribute groups of the selected attribute group.

You may also press [Infinity] [Open] [Preset] at the same time to cycle through the available sub-attribue groups.

Fig. 94: Attribute Selection

17.3.3. Alter Parameters using the ranges / slots defined in the Fixture Library

To select values directly from the library, press on the Encoder Label or the Encoder and select a value from the screen that popped up:
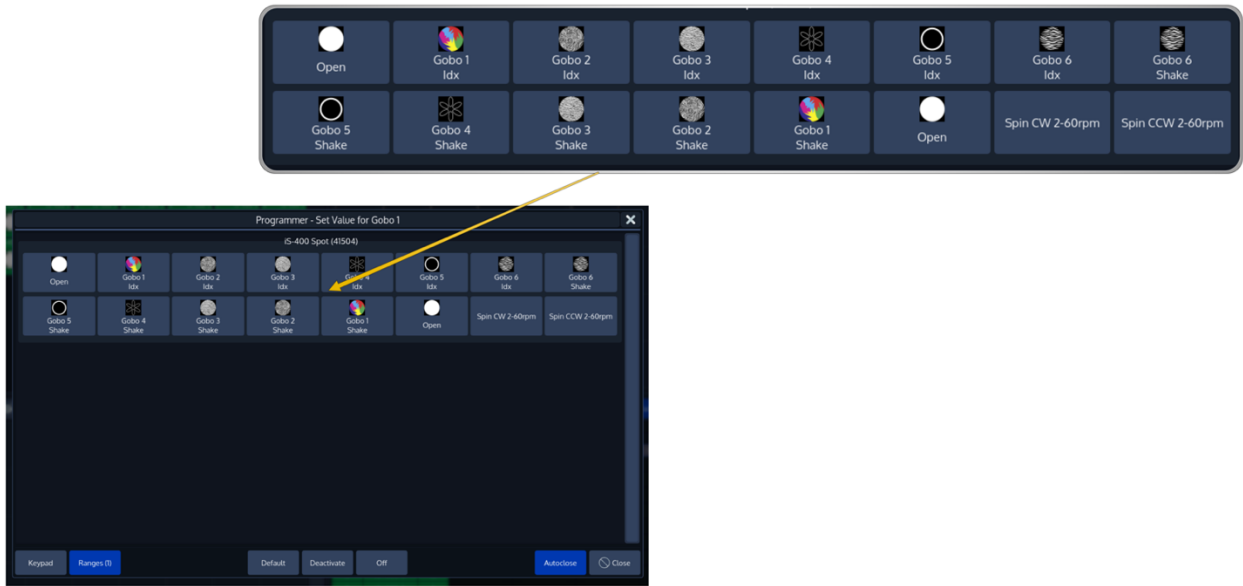
Note: When the **Autoclose** bottom found in the lower right corner is enabled, this window will automatically close after selecting one of the items.

17.3.4. Alter Parameters using the Keypad PopUp

To type in values directly from the library, press on the Encoder Label or the Encoder, switch to the **Keypad** on the by pressing the Keypad Button on the bottom left of the dialog and enter a value:
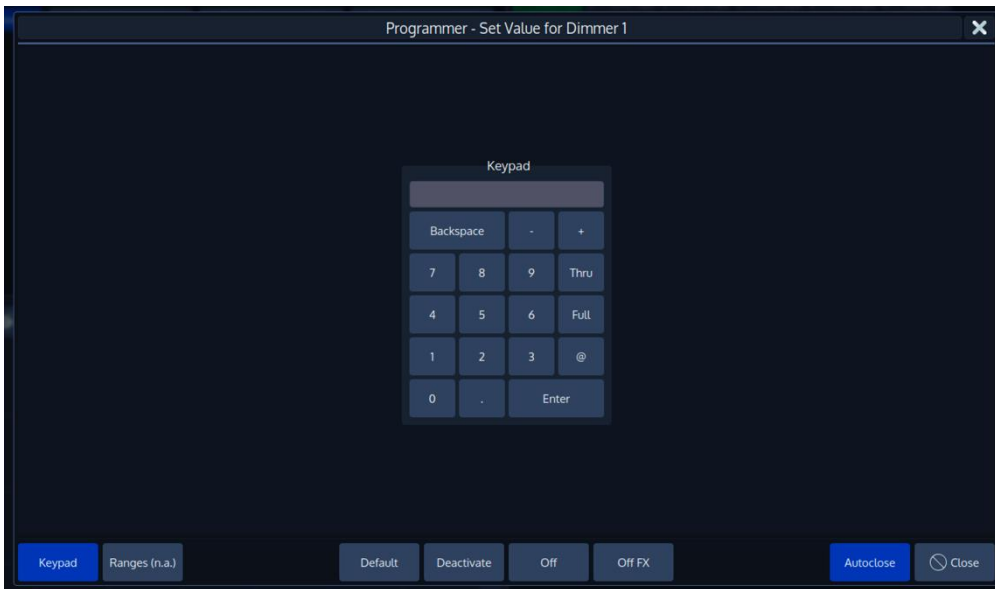
Note: Values entered here alre always entered in Percent. If you want to enter DMX Values, press the [.] Button before entering the Value, for Example **.255**

17.3.5. Alter Color-Values using the Color-Picker

To open the color picker, press the **Color** button found in the programmer side menu.

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

<div align="right">**Fig. 97: Color Picker**</div>

17.3.6. Alter Color-Values using Color Faders

To control color values using HSI or different faders (for RGB and CMY), no matter the color mixing system of the fixture, press the **Color** button found in the programmer side menu.

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

<div align="right">**Fig. 98: Color Faders**</div>

17.3.7. Alter Color-Values using Quick Colors

Quick Colors offer an easy way to pick colors you use often. It contains 40 predefined colors to choose from.

Press the **Color** button found in the programmer side menu and select **Quick Colors** from the menu bar.

<div align="right">
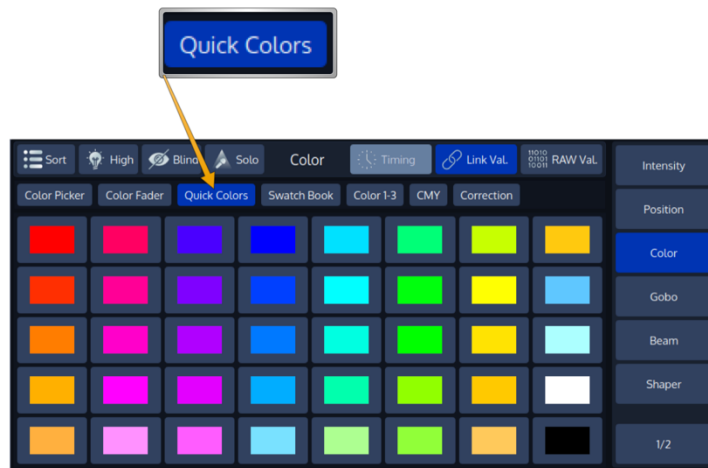
Fig. 99: Quick Colors

</div>

17.3.8. Alter Color-Values using the built in Swatch Book

The integrated Swatch books enables you to look up a Gel Number (such as L106) and use this Gel as the color for the selected fixtures.

Note: If a fixture does not support color mixing, but has fixed color wheels instead, the color that is closest to the selected color will be set.

<div align="right">
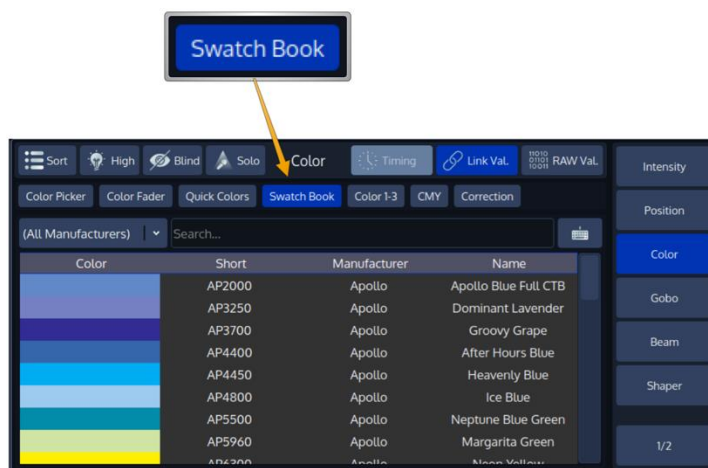
Fig. 100: Swatch Book

</div>

17.3.9. Setting All Fixture Attribute Values to the Fixtures default value

Sometimes it may be useful to set a fixture to its default values that are defined in the library and pull all values into the programmer.

In order to so press the [Home] key on the console's faceplate.

17.3.10.   Using Presets (as a reference)

You may also use a previously stored Preset to recall values that use the preset as a reference. Please see "Working with Presets" for more information.

17.3.11.   Using Values (instead of referencing) from a Preset

In case you do not wish to load a preset as a reference, but rather as hard values, please see "Working with Presets" for more information.

17.4. Loading Values from other sources

17.4.1. 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 [Infinity] key and press the [Load] key simultaneously.

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

In Example: Your fixture is programmed in a cue that is played back with an intensity of 100%, however you have a master dimmer set for this fixture at 50%. When you grab the fixtures values, the console will load the value at 100% into the programmer, since this is the playback engines value for the fixture.

17.4.2. 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 [Load] key and press the desired function groups softkey from the programmer side menu.

This will grab all values for the selected Fixtures for the selected attribute group from the console's playback engine, but before any Group or Fixture Master Dimmers are calculated.

In Example: Your fixture is programmed in a cue that is played back with an intensity of 100%, however you have a master dimmer set for this fixture at 50%. When you grab the fixtures "intensity" attribute group values, the console will load the value at 100% into the programmer, since this is the playback engines value for the fixture.

17.4.3. Loading all Values without Effects from Current Output

To grab all values that are currently being output for the selected fixtures, hold down the [Load] key and press the [Fixtures] key simultaneously.

This will grab all values from the console's playback engine, except the Effect Values.

17.4.4. Loading all Effects without Base Values from Current Output

To grab all values that are currently being output for the selected fixtures, hold down the [Load] key and press the [FX] key simultaneously.

This will grab all Effect values currently being output from the console's playback engine.

17.4.5. Loading Values from a Cuelist

You may load a stored cue to modify it. Please see working with Cuelists for more Info.

17.5. Working with individual Timings

By selecting the **Timing** button from the Programmers title bar, the programmer switches into Timing Mode. In timing mode you can select all attributes as usual and assign individual times to them just like any other value.

Individual Timings can also be fanned using the Fan function (also in conjunction with Grouping and Buddying).

Switching into Timing Mode inside the Programmer will automatically switch Fanning Mode to "Fan Left". Previous Mode will be restored when Timing Mode is turned off again.

Individual Fade and Delay times will override general Cue timings. For each value inside a Cue the timing will be determined in the following priorities:

Priority	
Highest	Individual Parameter Timings
	Parameter Group Timings (as defined in the Cuelist View)
Lowest	Cue Infade/Outfade Timing

In case of using MiB feature for values which have been programmed with individual Fade and Delay times these timing will not be replaced by MiB timings. MiB for these values will be applied using the individual Fade and Delay Timnings programmed.
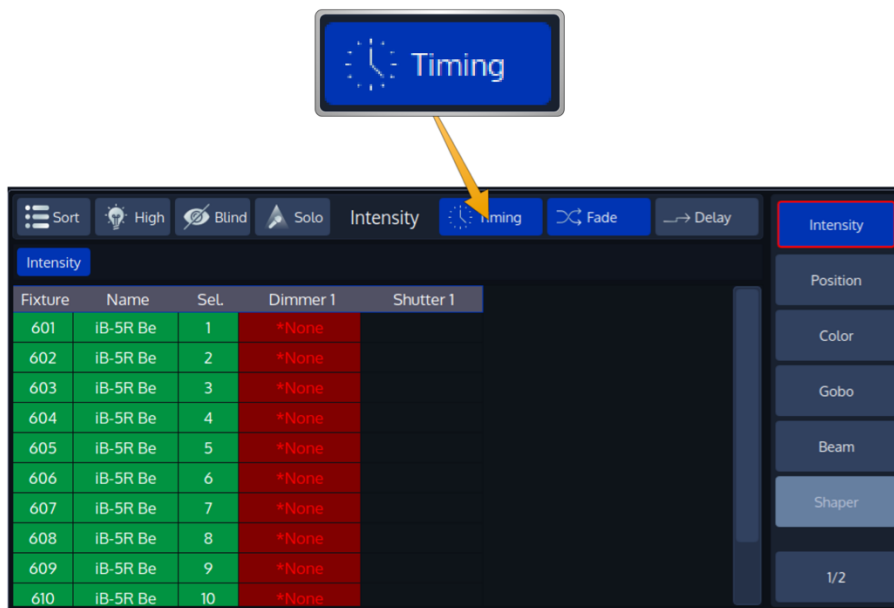
Fig. 101: Timing Button in Programmer Title Bar

17.5.1. Individual Fade Times

Individual fade times define the crossfade time for a specific parameter.

To set the Programmer to Individual Fade Times, first click on the Timing button in the title bar, then select the **Fade** button on the right-hand side of the programmers title bar.
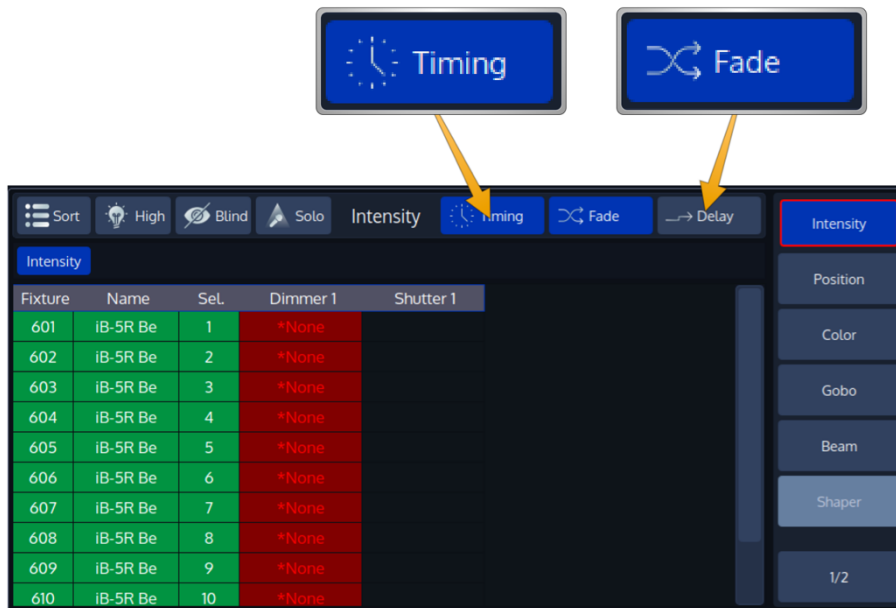
17.5.2. Individual Delay Times

Individual delay times define the delay from the start of the cue until this value will be faded in.

To set the Programmer to Individual Delay Times, first click on the Timing button in the title bar, then select the **Delay** button on the right hand side of the programmers title bar.
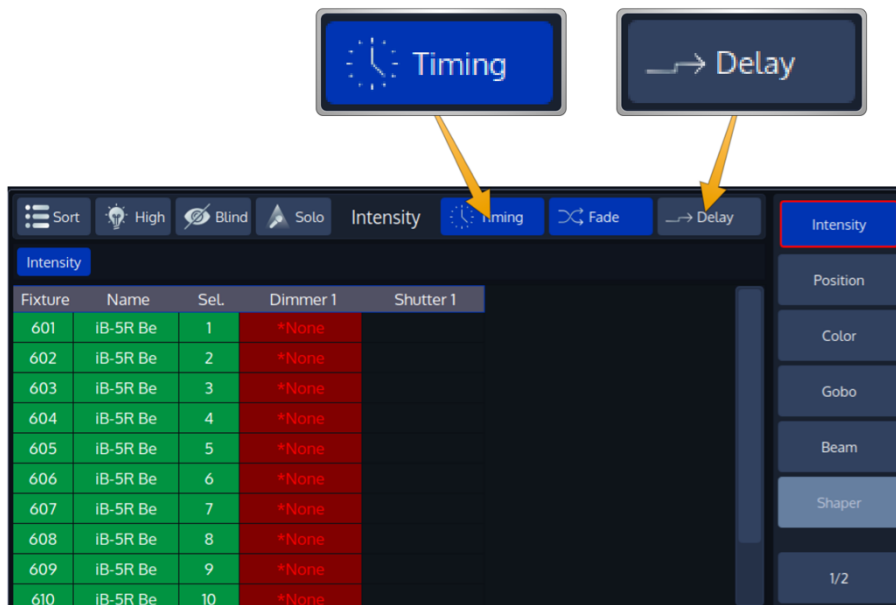
Fig. 103: Timing / Delay Button in Programmer Title Bar

17.5.3. Setting and removing Individual Timings

Once you chose the appropriate timing mode, you may either adjust the times by using the encoders or by clicking on the encoder label for the appropriate attribute.

To remove individual timings you may ether press the [Off] Key and select one of the attribute groups from the side menu or turn the encoder off the attribute you want to remove. Alternatively, you may click on the encoder label and click on the appropriate **Clear** button on the bottom of the keypad dialog.
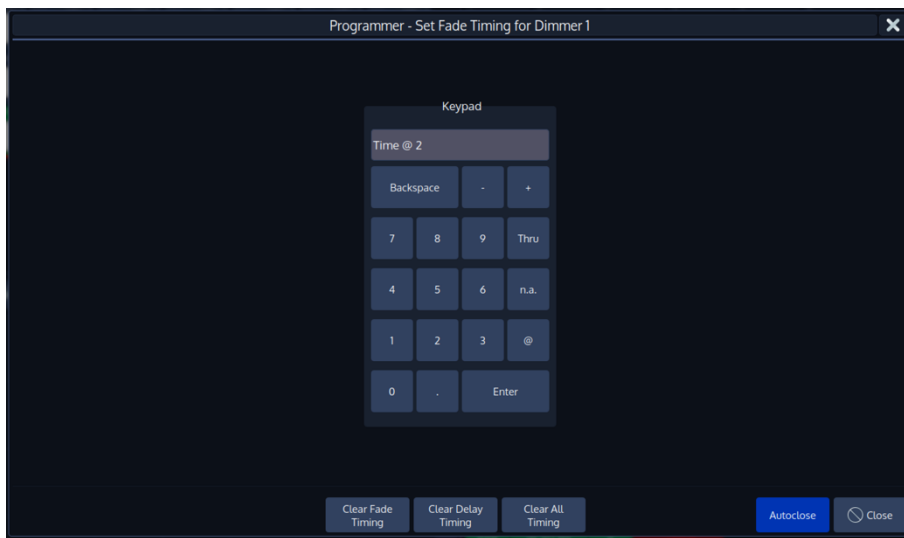
Fig. 104: Timing / Delay Keypad Dialog

17.6. Fanning Values (spreading values across different fixtures)

Fanning is a very useful function used to spread 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 consoles 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. For more information, please see "Selection Order".

17.6.1. Fan any value using the Encoders:

Fanning using the Encoders for value entry will always use the current value that is output of a parameter as base point. All values will be fanned relatively from that base point.

To fan an attribute in the programmer, or any of the effect parameters in the effect programmer:

- Select fixtures 1 through 8 and set them to 50% intensity: [1] [Thru] [8] [@] [50] [Enter]:
- Hit the **Intensity** attribute group from the Programmer Side Menu until the first encoder controls the Dimmer attribute
- Press the [Fan] key to toggle the fan function, or hold down the [Fan] Key and slowly turn the Dimmer Encoder:

17.6.2. Fan Intensity Values using the Keypad.

Dimmer Levels may easily be fanned using the below syntax. Keypad fanning will also take grouping into account.

Make sure you have made your fixture selection before entering any of the commands below. Press the [Enter] key to execute each command:

[Value A] [Thru] [Value B]	Will fan the Intensity for selected fixtures from [Value A] to [Value B] In Example: [0] [Thru] [100] with 3 selected fixtures will set fixture 1 to 0%, fixture 2 to 50% and fixture 3 to 100%.
[Value A] [Thru] [Thru] [Value B]	Will fan the Intensity for selected fixtures from [Value A] to [Value B] and back to [Value A]. In Example: [0] [Thru] [Thru] [100] with 5 selected fixtures will set fixture 1 and 5 to 0%, fixture 2 and 4 to 50% and fixture 3 to 100%.

17.7. Adjusting how Fannings are applied using the Fan Mode Toolbar

The default Fan-Settings should have most situations covered, but they may be changed using the **Fan Mode Toolbar**.

To open the Fan Mode toolbar, hit the **Fan Mode** button from within the right hand side of bottom Menu Bar.
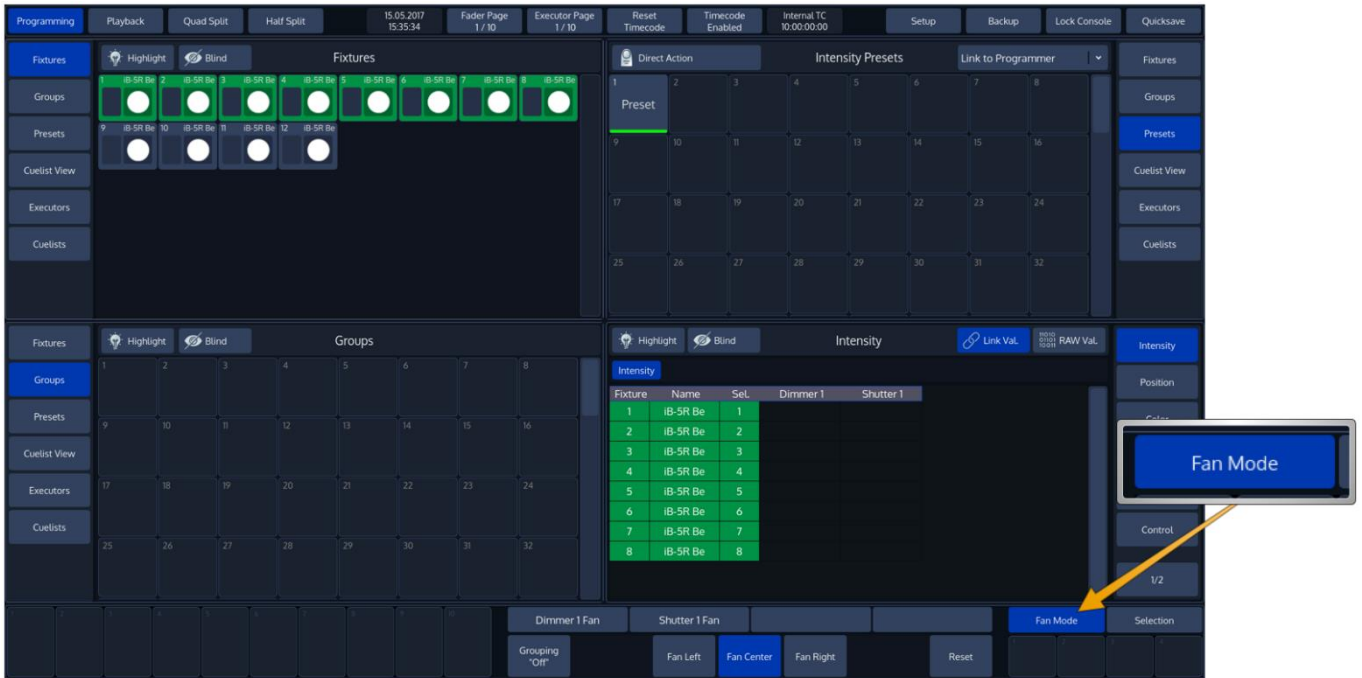
Fig. 105: Fan Mode Button

After doing so, the Fan Mode Toolbar will be shown.

17.7.1. Changing the Fan Direction

By default, fanning adjusts attribute values from the center of the fixture selection. You can specify the fan mode using the **Fan Mode** Toolbar.

17.7.1.1.   Left:

The first fixture in the selection order remains unchanged, while the values of the last fixture change the most:

Before Fanning:	50 %	50 %	50 %	50 %	50 %
After Fanning:	50 %	60 %	70 %	80%	90%
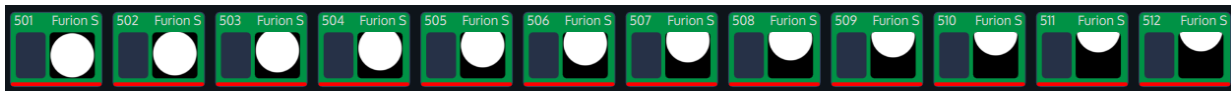
Fig. 107: Fan Example – Fan Left

17.7.1.2.   Center (default):

As described in section "Fan any value using the Encoders:", the middle fixture remains unchanged, while the values for the first and last fixtures' change most, in opposite directions. For example:

Before Fanning:	50 %	50 %	50 %	50 %	50 %
After Fanning:	10 %	30 %	50 %	70%	90%
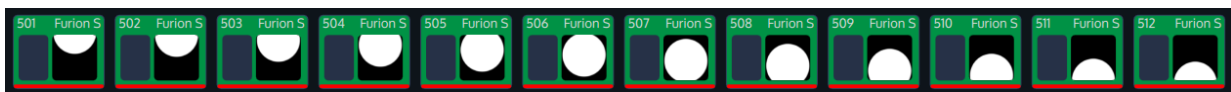
Fig. 108: Fan Example – Fan Center

17.7.1.3. Right

The last fixture in the selection order remains unchanged, while the first fixture's value changes the most:

Before Fanning:	50 %	50 %	50 %	50 %	50 %
After Fanning:	90 %	80 %	70 %	60%	50%
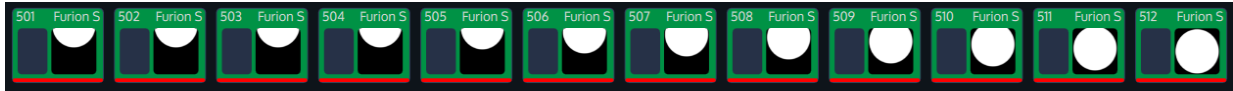
Fig. 109: Fan Example – Fan Right

17.7.2. Fanning with Groupings

Grouping allows you to control the way that attributes are fanned to make complex patterns.

Grouping defines the number of fixtures that are fanned before the fan is repeated.

For example, fanning a selection of twelve fixtures with Grouping set to three will generate four identical fan patterns, with three fixtures each:
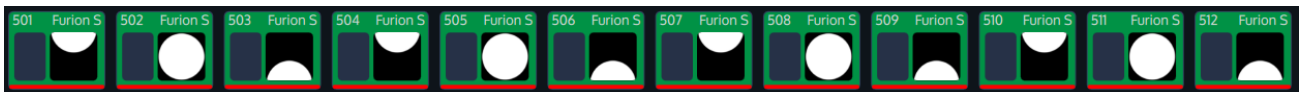
Fig. 110: Fan Example - Grouping

You may set the number of Groups from the Fan Mode toolbar.

Click on the button that reads **Grouping**. A new window will be shown, asking you for the number of groups.

A group size of zero will deactivate grouping.

Fig. 111: Grouping Button

17.7.3. Fanning with Buddying

Buddys also allow you to control the way that attributes are fanned to make complex patterns in additions to Groups. Grouping and Buddying may be combined.

Buddying is the number of fixtures that are treated as one fixture.

For example, fanning a selection of twelve fixtures with Buddying set to three will generate four identical fan patterns, with three fixtures each in the way that the first three fixtures have the same values, the second three have the same values and so on:

Fig. 112: Fan Example - Buddying

You may set the number of Buddys from the Fan Mode toolbar.

Click on the button that reads **Buddying**. A new window will be shown, asking you for the number of buddys.

A buddying size of zero deactivates buddying.

Fig. 113: Buddying Button

17.7.4. Randomizing a Fan

The **Randomize** option randomizes several internal fanning parameters during fanning. Each time Randomize is turned on/off or the fixture selection changes, internal parameters are changed again in order to create unique fanning results.

This function does not alter the selection order of the currently selected fixtures.
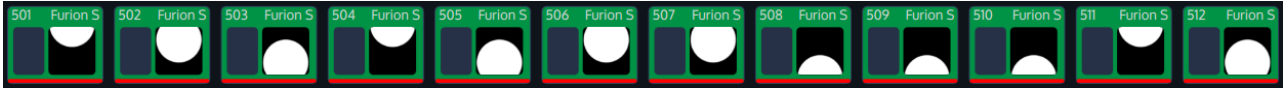
Fig. 114: Fan Example - Randomize

To activate the function, click on the button that reads **Randomize**.

Fig. 115: Randomize Button

17.7.5. Resetting Fan Mode Options

To reset all Fan Mode settings back to default, click on the button that reads **Reset**. Clearing the Programmer completely will also reset Fan Modes.

Fig. 116: Reset Button

17.8. Removing Values from the Programmer

17.8.1. Remove all attributes for a specific fixture from the programmer

To remove all attribute values for a specific fixture (ie. Fixture 1) from the programmer, press the [Off] key, followed by [Fixture] [1] [Enter].

It is also possible to enter the command for a range of fixtures:

[Off] [Fixture] [1] [Thru] [12] [Enter]

or

[Off] [Fixture] [1] [+] [10] [Thru] [12] [Enter]

You may also use a Fixture Split Widget for visual selection of the Fixture.

To do so, press the [Off] key and select the Pool-Item of the appropriate Fixture.

17.8.2. Remove a complete attribute group for the selected fixtures from the programmer

To remove a complete attribute group for selected fixtures, first select the appropriate fixtures.

After, press the [Off] key followed by the attribute groups soft button from the Programmer side menu, for example "Color".

17.8.3. Remove all attribute values for a fixture group from the programmer

To remove all attribute values for group of fixtures, (ie. Group 1) from the programmer, press the [Off] key, followed by [GROUP] [1] [Enter].

It is also possible to enter the command for a range of groups:

[Off] [Group] [5] [+] [6] [Enter]

You may also use a Group-Split Widget for visual selection of the Fixture. To do that, press the [Off] key and select the Pool-Item of the appropriate group.

17.8.4. Removing Individual attributes from the programmer

You can remove individual attributes from the selected fixtures in the programmer by holding the [Off] key and turning the relevant encoder at the same time.

Alternatively, you may press on the Encoder Label or the Encoder and select **Off** from the screen that popped up:

Fig. 117: Off Individual Parameter using the Ranges Dialog

Untouch / Deactivate Individual attributes in the programmer

This can be useful to have fixtures output a certain value on an attribute, but not record it into cues or presets.

To Untouch values for a certain attribute, press on the Encoder Label or the Encoder and select **Deactivate** from the screen that popped up:
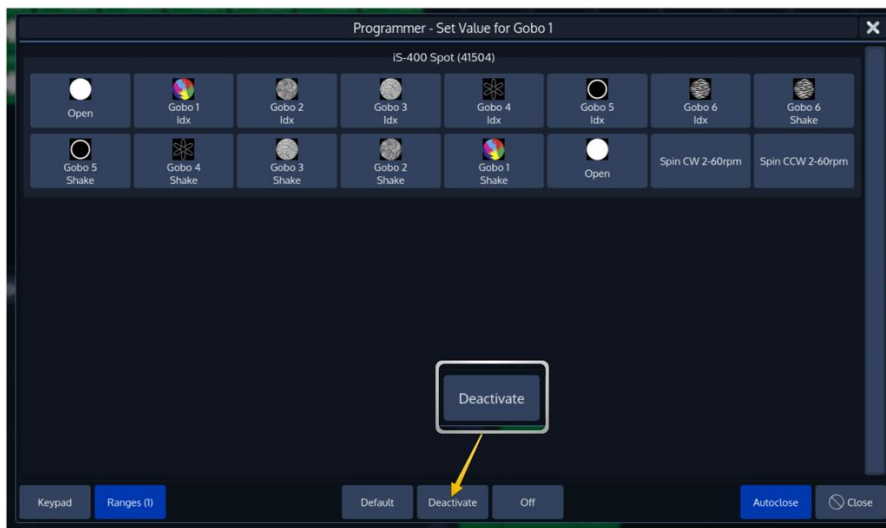
Fig. 118: Untouch / Deactivate Parameters using the Ranges Dialog

18. Working with Effects

18.1. Effect Basics

You can use effects to create a mathematical function that is used to alter attribute values in a repeating fashion.

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.

Each row in the effect programmer has the following effect attributes: Fixtures, Parameter, Mode, Type, Size Min, Size Max, Speed, Offset, Duty Cycle, Grouping, Buddying, Wings, Invert, Direction, Shots, Attack, Decay and InFade and InDelay.

Note that any effect can be relative to its attributes base level or absolute.

If relative, it will vary the value of the attribute to either side of its base level determined by either the current output, or the base value that is set in the programmer. You may combine any effect types applied to any fixture attribute. Within a Cue, each Parameter may have different effect tables applied to it. You can specify the negative and the positive size individually.

If an effect line is set to absolute, it alternates between the minimum and maximum size value. Both can also be a preset.

Effects created on the Chimp control console are stored into Cues. If a Cuelist contains multiple cues these effects will always be tracked through the cuelist in a similar fashion like regular values are.

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

18.1.1. Effect Synchronization

Keeping effects in sync is an important functionality, especially when different effect tables are combined over multiple parameters to create one "big" effect to create the desired result. Take the "Fly In" Effect that basically fades the lights tilt with intensity set to 100%up or down slowly – and will set the intensity to 0% as soon as the light reaches the tilt peak value and fade it back to the starting point as fast as possible.

The Chimp Series of Controllers therefore makes sure effects within a playback unit (Each Cuelist has its own playback unit, as has the programmer) always stay in sync. Let's have a look again at our Fly In Effect:

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. Chimp 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, if both Cues are in the same Cuelist.

The synchronization algorithm doesn't stop there. It will also make sure that Effects that are subsequently added to the Effects Programmer will also be in sync in relation to each other.

Another example is to stop an effect for one or more fixtures out of a larger fixture count in the second cue and adding them back to the effect in the later cue.

However, two separate Cuelists are not kept in sync. Its similar for the programmer. However, speaking of the effects programmer there are two exemptions from this rule:

The Programmer loads a Cue from a currently running Cuelist and no effect is running inside the effect Programmer. In this case the programmer will be synced to the cuelist, resulting in no visible jump to the effect on stage.

The programmer will be stored to a running cuelist that does not contain any effects that are being played back at the time of recording the cue. Then the programmer will transfer its sync information over to the cuelist now containing the effect. This will, in case the cue is running while the programmer is cleared, also not result in any visible jumps.

18.2. The Effects Programmer

To create, add or modify an effect, select the **Effects** button from within the Programmer Split Widgets side menu. Alternatively, you may press the [FX] Button on the console's faceplate.

Repeatedly pressing the Effects button will cycle through the different horizontal scroll positions in the effect programmer to change parameters easily. While scrolling, the encoders will also change to be able to adjust each of the parameters using the encoders.
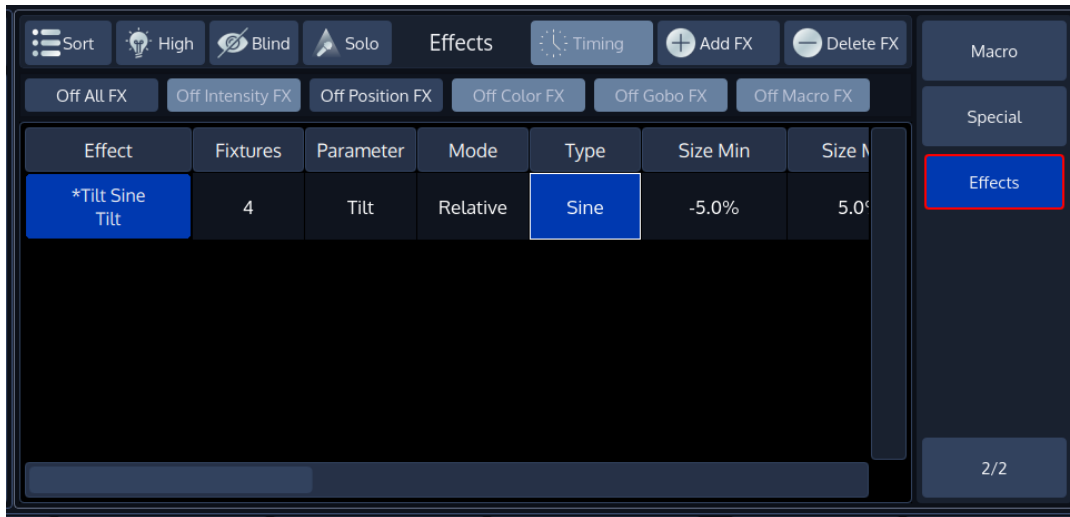
Fig. 119: FX Programmer Table

Please note that the effects Programmer will not show any effects that are being played back by cuelists.

18.2.1. Adding an Effect

To add an Effect to the effect programmer, simply select the fixtures you would like to be included in the effect and click on **Add FX** in the Effect Editors top toolbar.
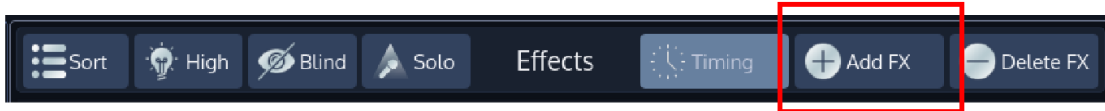
Fig. 120: Add FX Button

A dialog will be shown asking you if you would like to add an pre-created effect or a specific effect table operating on one of the parameters.

18.2.1.1.   Adding a Predefined Effect

Predefined effects aid in the quick creation of complex effects on stage.

They will add all nessecary effect rows operating on the parameters and will calculate the effect attribute values (offset, speed, duty cycle) automatically based on your fixture selection. However, you can always modify the settings based on your needs in the effect editor afterwards.

These may be selected from the first tab (**Predefined Effects**) of the Create New Effect Dialog.
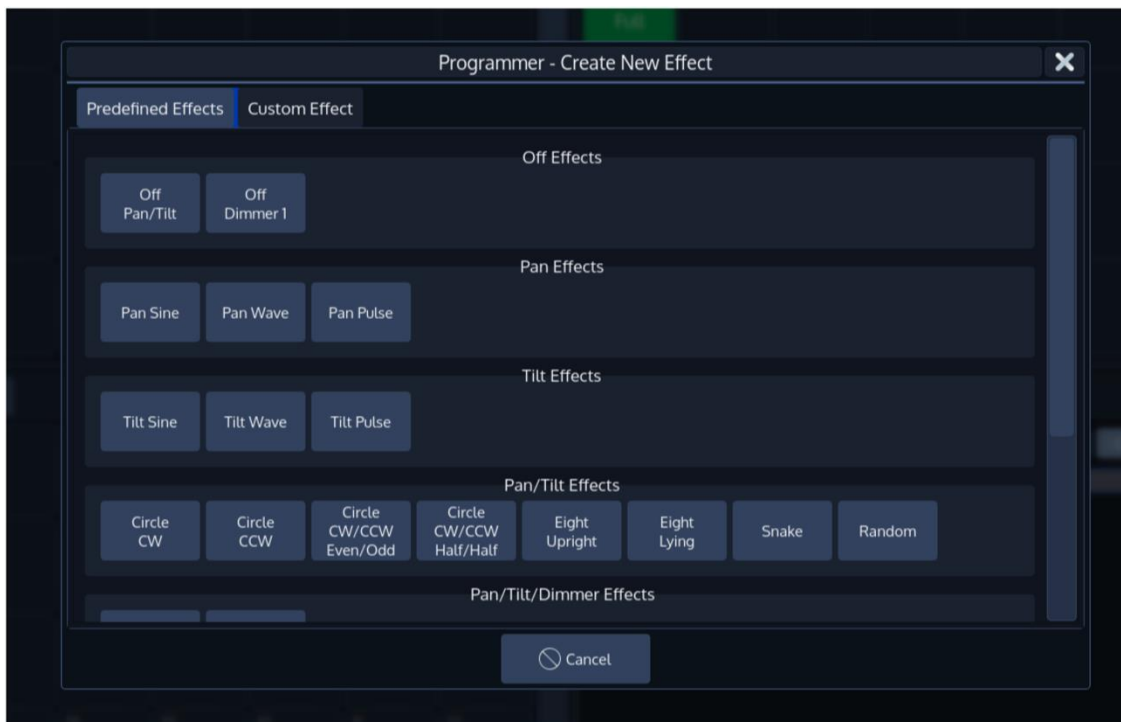
Fig. 121: Predefined Effects

18.2.1.2. Adding a Custom Effect

The second tab (**Custom Effect**) is used to create your own effects based on mathematical functions.

To add an effect, first select the Parameter from the list on the left hand side, and choose the effect table that should be used on this parameter.

Click on **Add Effect** when done.
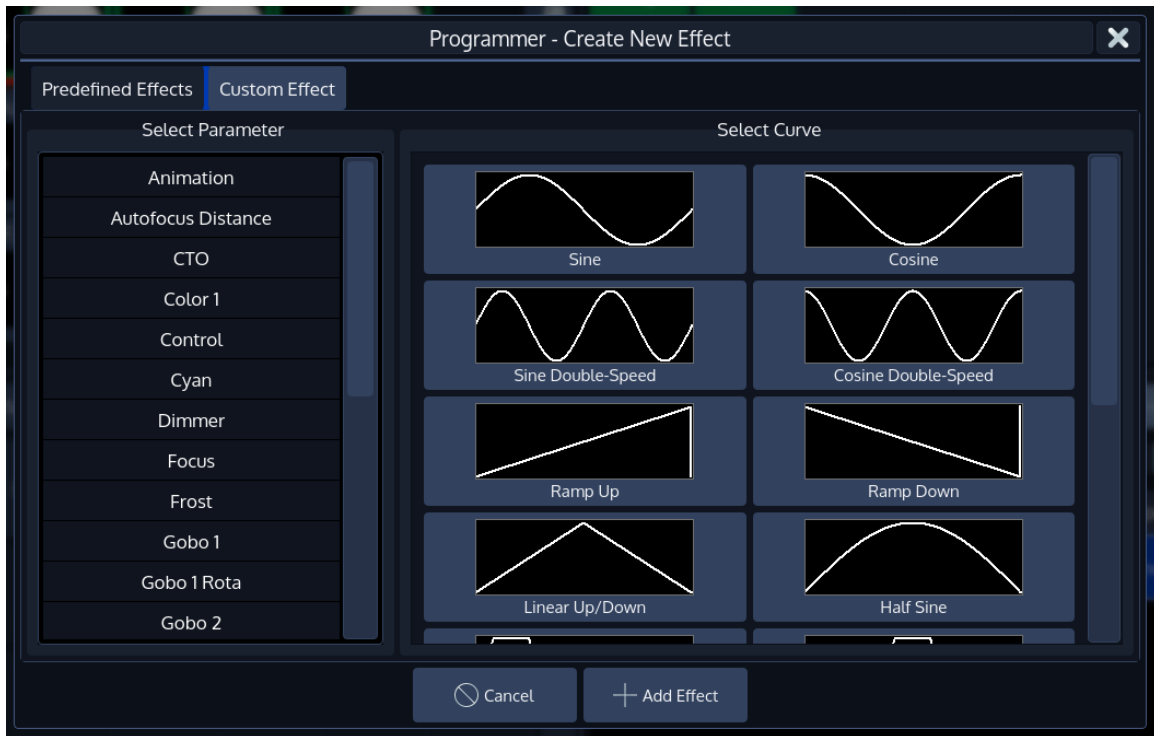
Fig. 122: Create Custom Effect

18.2.2. Deleting an Effect

To delete Effects from the effect programmer, simply select the effect(s) you would like to delete by toggling the button in the first column in the editor and click on **Delete FX** in the Effect Editors top toolbar.
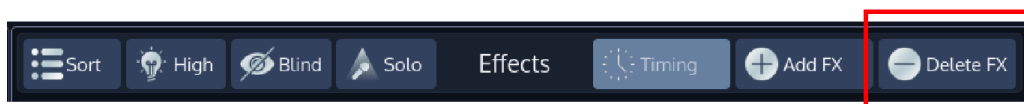
Fig. 123: Delete FX

Please note that deleting an Effect is not stopping the effect if it is already running in playback:

If you just created an Effect and recorded it into Cue 1 of a Cuelist, deleting the FX in the Editor and storing this to Cue 2 of the same cuelist does not stop the Effect. Add an Off Effect form for the Parameters in that Cue instead.

You may also delete effects for selected fixtures by pressing the [Off] key followed by either the Effects button in the side menu, or by pressing the [Fx]-key.

18.2.3. Modifying an Effect

For each effect row the effect attributes may be changed by selecting one of the cells and pressing the [Set] key, or by using the encoders.

When using the encoders all selected Effect Rows will be changed. Effect rows may be selected or deselected by toggling the button in the first column of the effect row.

Effect	Fixtures	Parameter	Mode	Type	Size Min	Size N
*Circle CW Pan	4	Pan	Relative	Cosine	-5.0%	5.0
*Circle CW Tilt	4	Tilt	Relative	Sine	-5.0%	5.0

Fig. 124: Select Row Button

18.2.4. Stopping an Effect

In order to stop an effect, you need to add an "**Off**" Effect Table for the desired parameters.

This may be done at any time (even if the effect is not being output) by selecting the fixtures you would like to stop the effect and clicking on **Add FX** in the Effect Editors top toolbar.
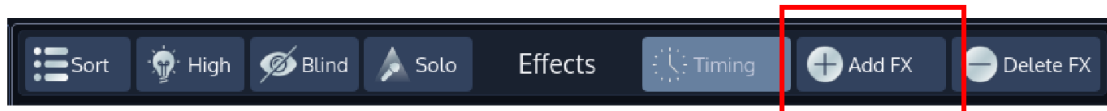
Fig. 125: Add FX Button

The "Add Effect" Dialog will be shown. Select the **Custom Effect** tab, select the appropriate parameter from the list on the left hand side and select the **Off Effect Form** on the right hand side.

18.2.4.1. Stopping an Effect while it is being played back by a Cuelist

If the Effect(s) you would like to stop are being output by a Cuelist, you may also use the Effects Programmer toolbar buttons to quickly add "Off" Effect Forms for all parameters (of the selected attribute group) for all selected fixtures:

- Select the Fixtures you would like to stop the Effect for

- Make sure the effect is being output on stage

- Hit the button containing the Attribute Group you would like to stop.
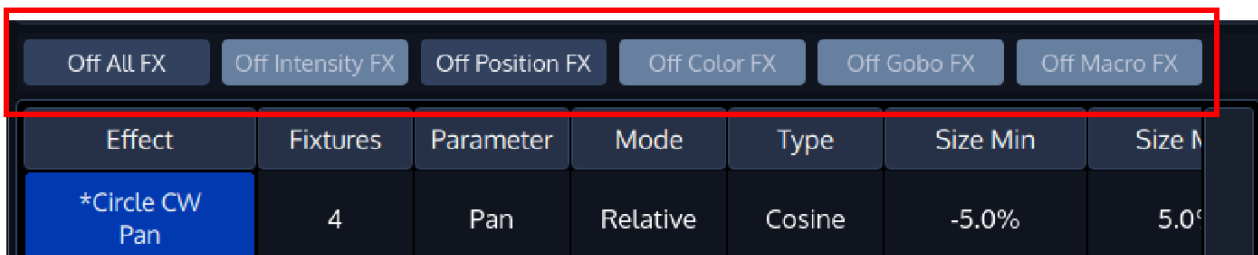
Fig. 126: "Quick Off FX" Toolbar

18.2.5. Loading an Effect from Output

You may load an effect from the current output of selected fixtures by pressing the [Load] key followed by either the Effects button in the side menu, or by pressing the [Fx]-key.

18.3. The Effect Attributes

18.3.1. "Fixtures" Effect Attribute

The **Fixtures** attribute is used to indicate how many fixtures are included in this effect row. Double clicking on this cell or selecting it and pressing the [Set] button will open the **Set Effect Fixtures** dialog.

<div align="right">
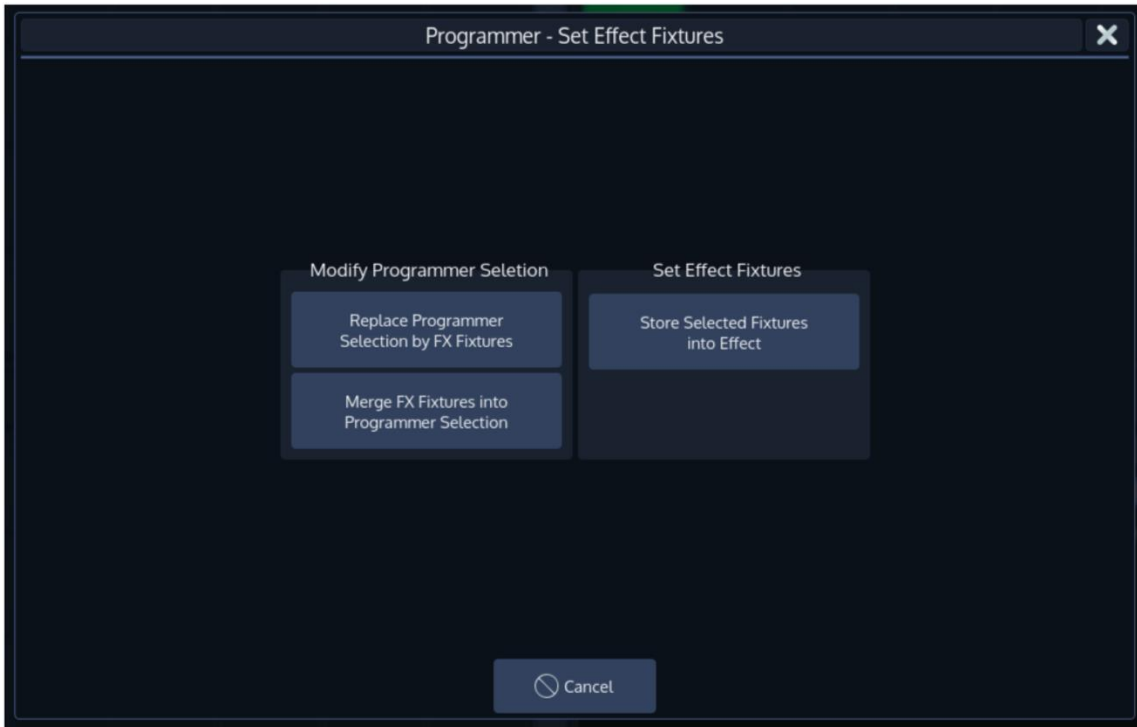
Fig. 127: Fixtures Attribute Options

</div>

Replace Programmer Selection by FX Fixtures will select the fixtures which are running the effect and deselect all fixtures currently selected.

Merge FX Fixtures into Programmer Selection will add the fixtures which are running the effect to the current fixture selection .

Store selected Fixtures into Effect will replace the fixtures running the effect by the ones that are currently selected.

18.3.2. "Parameter" Effect Attribute

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

18.3.3. "Mode" Effect Attribute

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%.

18.3.4. "Type" Effect Attribute

Listed below are all supported different effect shapes:

Fig. 128: Different Effect Forms

18.3.5. "Size Min" Effect Attribute

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 pressing [Set], 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 Frontpanel, or from within the dialog that opens when you double, right or long-click.

18.3.6. "Size Max" Effect Attribute

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 pressing [Set], 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 Frontpanel, or from within the dialog that opens when you double, right or long-click.

18.3.7. "Speed" Effect Attribute

The speed effect attribute defines how fast one complete cycle of the effect will be. Its format is CPM, Cycles per minute.

Adjusting the effect speed increases or decreases the number of cycles it completes per minute. When combining effects on different attributes, you can use the rate attribute to build a specific look. For example, if you create an effect where a fixture performs a up and down movement on the tilt – moving up during the first cycle of the effect, and down on the second, then the effect on the intensity parameter would need to be half of the speed on the tilt parameters to only have the fixture go out when it is changing directions of the movement.

Selecting the Speed Cell and pressing the [Set] key will open the **Set Effect Speed Paramete**r Dialog window, which can be used to further alter values of the size, for example to randomize or fan values.

18.3.8. "Offset" Effect Attribute

The "Offset" effect attribute shifts the start and end point for each fixture in the effect, so they can be spread.
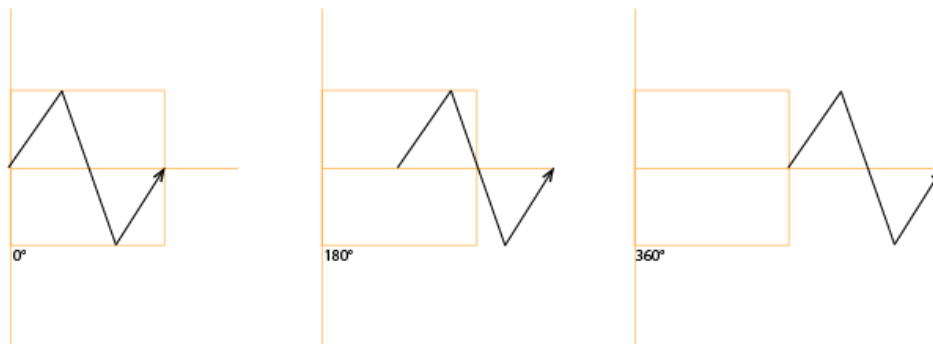
Fig. 129: Offset Effect Attribute

The effect offset is assigned in degrees, where 0° means the start and end points are not shifted, whereas 360° means they are shifted by a full duration of the effect.

It is used to, for example, generate a wave effect on the tilt by setting the spread to 0 to 360 degrees.

Selecting the Offset Cell and pressing the [Set] key or double, right or long clicking into it will open the **Set Effect Offset Paramete**r Dialog window, which can be used to further alter values of the offset, for example to randomize or fan values.

18.3.9. "Duty Cycle" Effect Attribute

The "Duty Cycle" attribute defines how long the duration of the effect within a cycle is. It is assigned as a percentage.
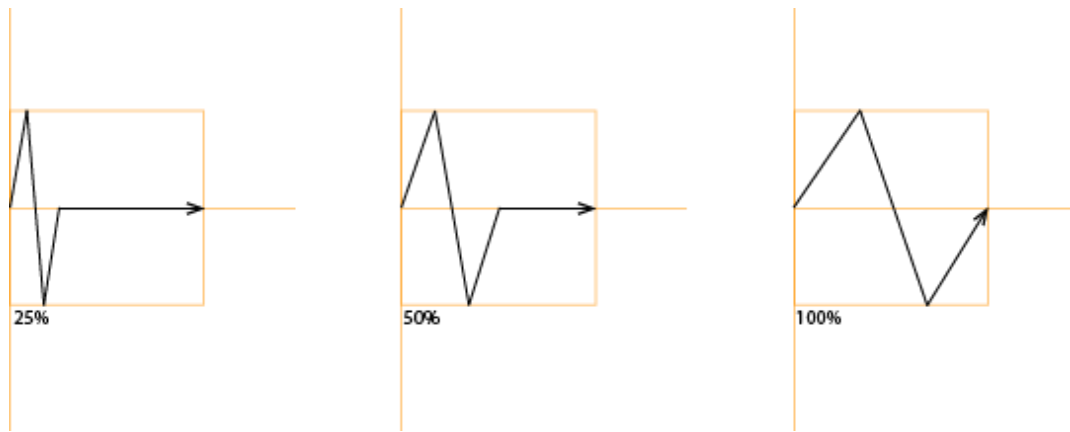
Fig. 130: Duty Cycle Effect Attribute

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.

Selecting the Duty Cycle Cell and pressing the [Set] key will open the **Set Effect Duty Cycle Paramete**r Dialog window, which can be used to further alter values of the duty cycle, for example to randomize or fan values.

18.3.10.   "Gouping" Effect Attribute

The "Grouping" attribute divides all fixtures running the effect into a specified number of groups.

For example, a tilt wave across 10 fixtures without grouping may look like this:

Fig. 131: Grouping Atrribute - No Grouping

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

Fig. 132: Grouping Attribute - Value of 3

As you can see, Fixtures 1, 4, 7 are being output with the same values, Fixtures 2, 5, 8 are as well, and so on.

Selecting the Grouping Cell and double, right or long clicking – or pressing the [Set] key will open the **Set Effect Grouping Paramete**r Dialog window, which can be used to define a Grouping.

18.3.11.   "Buddying" Effect Attribute

The "Buddying" attribute treats a given number of fixtures as if they were the same fixture.

For example, a tilt wave across 10 fixtures without buddying may look like this:

Fig. 133: Buddying Attribute - No Buddying

With Buddying set to a value of two, the effect will look like this:
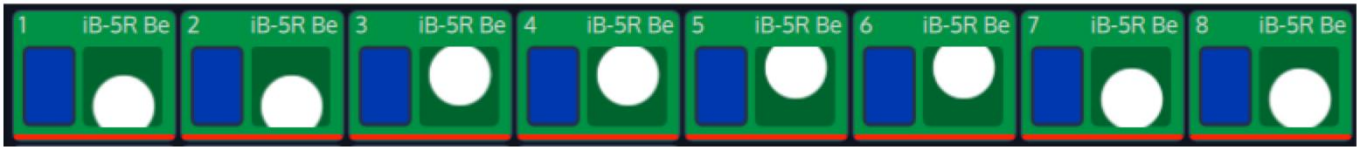
Fig. 134: Buddying Attribute - Buddying of 2

As you can see, Fixtures 1 and 2 are being output with the same values, Fixtures 3 and 4 are as well, and so on.

Selecting the Buddying Cell and and double, right or long clicking – or pressing the [Set] key will open the **Set Effect Buddying Paramete**r Dialog window, which can be used to define the number of fixtures that will become "buddies".

18.3.12. "Wings" Effect Attribute

The "Wings" attribute will divide the effect into multiple groups, whereas each group is mirrored to one another. If a Pan effect is running, its direction will also be mirrored automatically per group.

For example, a tilt wave across 10 fixtures without wings may look like this:
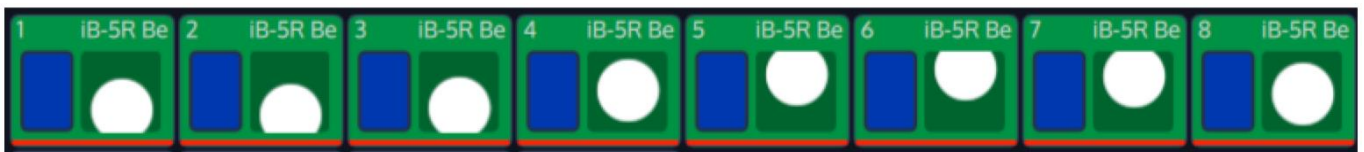
Fig. 135: Wings Attribute - No Wings

With two Wings, the effect will be mirrored in the center and look like this:

Fig. 136: Wings Attribute - 2 Wings

Selecting the Wings Cell and and double, right or long clicking – or pressing the [Set] key will open the **Set Effect Wings Paramete**r Dialog window, which can be used to define the number of Wings.

18.3.13. "Invert" Effect Attribute

The Invert effect attribute will invert the effects min and max values. It may be changed by double, right or long clicking – or pressing the [Set] key in an invert cell.

18.3.14. "Direction" Effect Attribute

The "Direction" specifies the direction of the effect.

Forward and **Reverse** will result in a continues effect in either direction.

Forward Bounce and **Reverse Bounce** will result in an effect that starts with the specified direction, alternating directions with each cycle.

Selecting the Direction Cell and and double, right or long clicking – or pressing the [Set] key will open the **Set Effect Direction Paramete**r Dialog window, which can be used to define the playback direction of the effect.
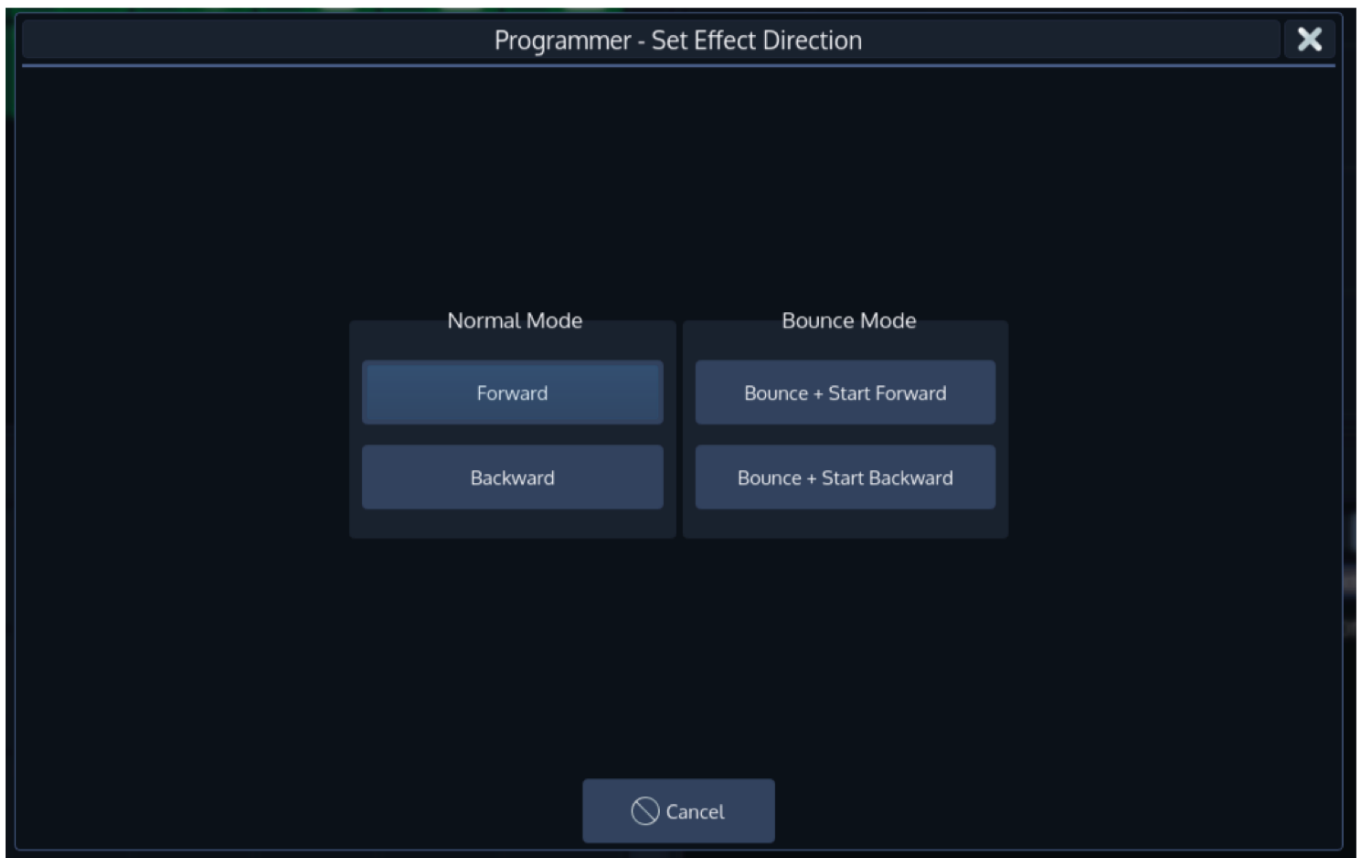
<div align="right">**Fig. 137: Set Direction Dialog**</div>

18.3.15. "Shots" Effect Attribute

The "Shots" attribute specifies how many times the effect is run.

Double, right or long click – or pressing the [Set] key will open the **Set Number of Shots** Dialog window, which can be used to define the number of shots.

18.3.16. "Attack" and "Decay" Effect Attribute

The "Attack" and "Decay" effect attributes softenes the effect curve at the beginning and end respectively. It only works with the PWM effect type.

Each parameter attributes for half of the effect duration – so setting i.e., Attack to a value of 100% will soften half of the pulse width. Setting Attack and Decay to a value of 100% will give you a "triangular" effect shape, similar to the linear effect curve.

Double, right or long click – or pressing the [Set] key will open the **Set Attack / Decay** Dialog window, which can be used to alter the attack and decay values.

18.3.17. "Infade" and "Indelay" Effect Attribute

The "Infade" and "Indelay" effect attributes can be used to add a fade or delay time to this effect line which will be taken into consideration when starting the effect.

Double, right or long click – or pressing the [Set] key will open the **Set Infade / Set Indelay** Dialog window.

19. Working with Presets

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 cues.

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 cues 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 allow parameters to be recorded to be easily accessible during programming and live operation. Presets are divided into different pools, wheras each Pool type will filter attributes stored into the presets by its equivalent type: An All Preset Pool will store all attributes, whereas a Color Preset Pool will only store color attributes.

Presets are only applicable to fixtures that had values set while storing 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 also be recalled for fixture 1 and 4 only.

Like fixtures and groups, presets may be found in the split widget side menu by pressing the **Presets** button.

19.1. Using Presets using the Numberblock

You can address Presets using the Numberblock using the following syntax:

[Preset] Pool Number [.] Preset Number

So in example

[Record] [Preset] 0 [.] 1

Would record All-Preset 1.

19.1.1. Preset Pool Numbers

Pool	Number
All	0
Intensity	1
Position	2
Color	3
Gobo	4
Beam	5
Shaper	6
Control	7
Macro	8
Special	9

19.2. The Preset Split Widget

Once you selected the **Presets** button in one of the Split Widget Menus, this particular split widget will change to "Preset" mode.

Fig. 138: Preset Split Widget

Preset Items will also show some extended information once fixtures are selected:
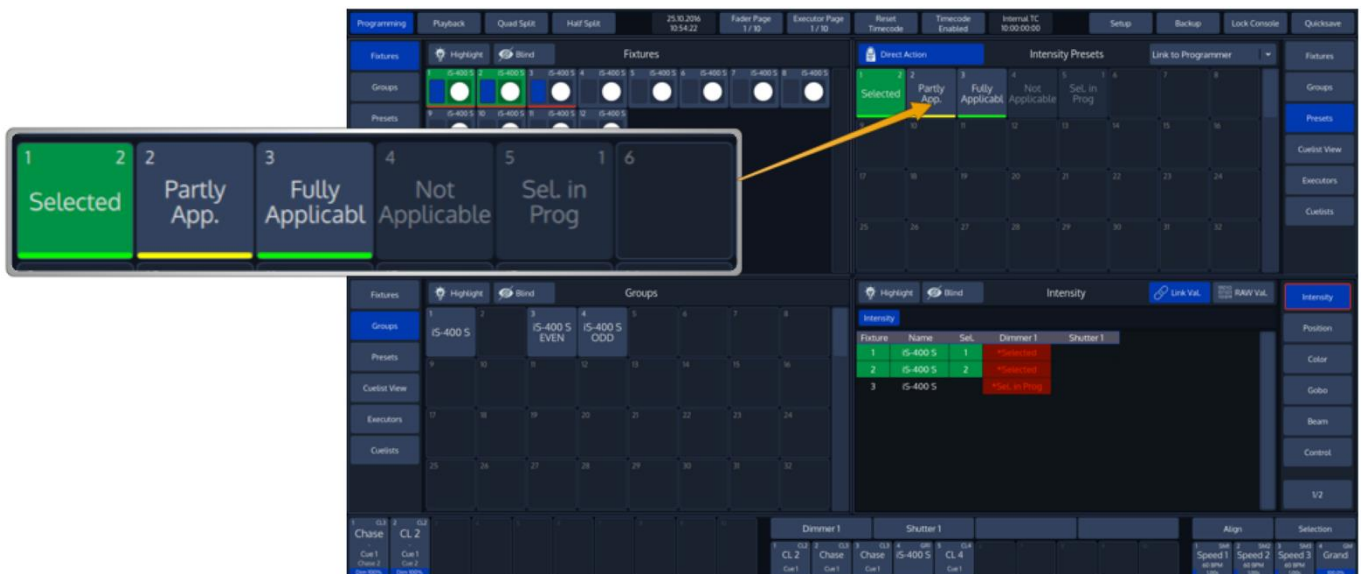
Fig. 139: Preset Pool Item Status Indication

The green or yellow bar in the bottom area of the item indicates if this item may be applied to all of the fixtures selected (green bar) or only to a part of them (yellow bar).

If a preset is selected for a part of the current selection only, but could be applied to all selected fixtures, the presets background color will be yellow.

Presets that are displayed with a darker background color may not be applied to the current selection set at all. However, it might be this preset is already selected for other fixtures in the programmer, which are not actively selected. If this is the case, the preset will show the count of fixtures it is applied to in the upper right corner.

If the Preset is used somewhere in the show file, the number of the preset will be shown in red. When this is the case, you can check how the preset is used from within the Edit Preset Dialog.

By default, the preset widget will only show presets of the attribute group that is selected in the programmer. However, you may change this behaviour by selecting a specific Preset Type from the dropdown menu in the widgets title bar:

Fig. 140: Attribute Group Selector

19.3. Automatic Generation of Presets

Chimp can assist you in generating Presets by using the Information entered in the Ranges in the Fixtures Library.

To automatically generate Presets for the selected fixtures and the selected Attribute Group Pool, click on **Auto Generate** found in the Preset Pool title bar.

Fig. 141: Auto Generate Button

Presets can be generated multiple times for one or more Fixtures. If no suitable Library Range Information is available, then no Presets will be generated.

If a color or Icon is set in the appropriate Range in the library, it will automatically be added to to the Preset Item.

Presets will be organized by Fixture Types and Parameter Type. In Example, Presets from Color Wheel 1 and Color Wheel 2 are added after one another.

19.4. Editing a Presets Gobo and Color Icon

You may define Color and Gobo Icons for a Preset using the Edit Preset Window. For more information, please see "Edit Preset Window" on page 149.

19.5. Recording Presets

If you record a preset into any of these preset pools within the preset widget, the console will only record values for the appropriate attribute group. This way, Position Presets only contain position information, and Color Presets only contain color information.

In case you would like to store a preset that contains parameters spread across different parameter groups, record an "All" Preset.

19.5.1. Record a Preset using the Preset Split Widget

Once you have made a look you would like to store as a preset, Press the [Rec] key found in the programming section of the frontpanel and select an empty item from a Preset Split Widget.

Please note Chimp will only store values for the fixtures that have been touched – so if you recorded a color preset for one fixture, this particular preset may not be recalled using a different fixture.

The record toolbar contains a button called **Name It!** – If this button is active, the console will automatically ask for a name after you stored the Item.

If you decide to turn this function off, you may label any item by pressing the [Name] key on the faceplate of the console. The commandline will read "Name". Now select the Item you would like to label.

19.6. Selecting Presets

As soon as you select fiixtures, Chimp will figure out which of your presets can be applied to all or only some of your fixtures, and which can not be applied as well. This will be presented by the preset pool in an appealing way.

Presets that can not be applied at all will fade into the background. Those who can only be applied to a part of your selection will have a little yellow bar at the bottom. And presets that may be applied to all of your selected fixtures will show a green bar.

If this preset has been applied to fixtures in the programmer, it will show how many fixtures it is applied to in the top right corner.
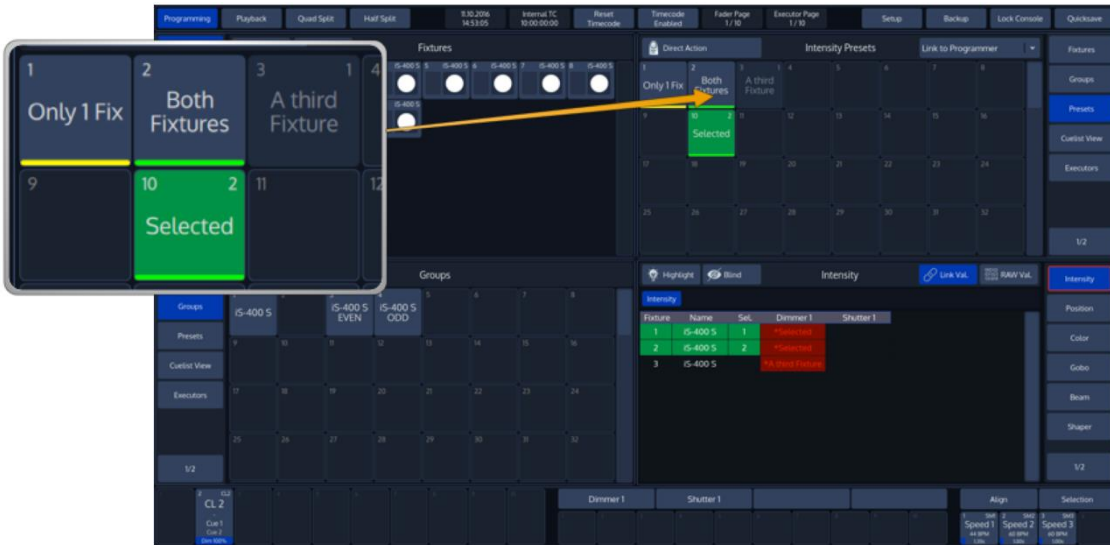
Fig. 142: Preset Split Widget - Different States of Items

19.6.1. Selecting Presets as a Reference

After making sure you have fixtures selected, you may select and deselect presets by clicking on them.

19.6.2. Recalling a Preset as a 'Hard Value'

If you select Presets this way, they will be recorded into Cues as a 'hard' value, rather than being referenced by the Cue.

To select a Presets "Hard Value", press and hold the [Infinity] button while selecting the preset.

19.6.3. Selecting a Preset 'Live' without a fixture selection

You may also directly select presets while running a show for all fixtures contained in the preset as soon as the Split Widget is in "Direct Action" mode.

Direct Action mode may be toggled by clicking on the **Direct Action** button found in the title bar of the split widget.

<div align="right">

Fig. 143: Direct Action Button

</div>

19.6.4. Deselecting ("Knocking Out") a preset

To deselect a Preset, click on it again or press the [Off] Key followed by the Preset.

19.7. Naming a Preset

You may label any item by pressing the [Name] key on the faceplate of the console. The commandline will read "Name". Now select the Item you would like to label either from the pool or using the command line.

The **Enter Preset Name** On-Screen Keyboard will be shown.

19.8. Merging contents into a Preset (Or: Updating a Preset)

In case you wish to update a preset to just adjust some values, in example for a preset that is containing the position of the lead singer of the show you tour with, the "merge" function is what you are looking for.

- Change the fixture values to your needs
- Press the [Rec] key
- Select the preset you would like to update from the Split Widget or using the command line interface, i.e. **Preset 1**.
- A window asking you what to do will be opened. Select **Merge** to update the presets content with the touched attributes.

Alternatively, you may also select **Merge** from the Record toolbar after hitting the [Rec] Key.

Or you can press and hold [Infinity] while pressing [Rec] to cycle through the different record modes. To select Merge using this method, you need to press the [Rec] key three times while holding down [Infinity].

19.9. Removing Contents from a Preset

Sometimes it is necessary to remove unwanted content from a Preset

- Touch the attributes you would like to remove from a previously stored preset
- Press the [Rec] key.
- Select the preset you would like to remove values from within the preset split widget or using the command line interface, in example **Preset 1**.
- A window asking you what to do will be opened. Select **Remove** to remove touched attributes from the preset.

Alternatively, you may also select **Remove** from the Record toolbar after hitting the [Rec] Key.

Or you can press and hold [Infinity] while pressing [Rec] to cycle through the different record modes. To select Remove using this method, you need to press the [Rec] key twice times while holding down [Infinity].

19.10. Replacing a Preset

Sometimes it may be more convenient to replace a Preset than merging and removing attributes.

Replacing a preset may break cue references, and hence may break cues that have been already programmed with this preset.

- Change the fixture values
- Press the [Rec] key.
- Select the preset you would like to replace within the preset widget or using the command line interface, i.e. **Preset 1**.
- A window asking you what to do will be opened. Select **Replace** to replace the entire presets content with the touched attributes in the programmer.

19.11. Copying Presets

- Press the [Copy]-key
- Select the Preset you would like to copy from the pool or by using the command line interface.
- Select the destination Item.

Copying a Preset will create a new preset, wheras the new preset has no reference to the source preset. Changing the copy will not change the original Item and vice versa.

19.12. Moving Presets

- Press the [Copy]-key
- Select the Preset you would like to copy from the pool or by using the command line interface.
- Select the destination Item.

19.13. Deleting Presets

- Press the [Delete] key.
- Then select the first Preset from the Preset Pool.

You may easily delete multiple Presets at once by using a mix of the GUI and the Numberblock:
- Press the [Delete] key followed by [Preset].
- Then select the first Preset from the Preset Pool.
- Now you may use the [+], [-] and [Thru] keys to further extend the preset selection
- Finish the command by pressing [Enter].

Note: If you keep pressing the [Delete] key while selecting items to be deleted, the console will not ask for confirmation. This is a way to quickly delete multiple Items.

You may also hold [Shift] while pressing [Record] to cycle through the different delete modes.

19.14. Coloring Preset Items

19.14.1.   Applying a colored border to a Preset Item

You may color code Presets, which will be displayed by a thicker and colored border around the Preset item in pools and magic sheets.

● Press the [Name]-key twice.
● The commandline will read **Appearance**.
● Now select the Preset Item using the touchscreen or by using the numberblock.
● Complete the numberblock command by pressing the [Enter]-key.

If you use the numberblock you may also color multiple Items at once using the [+], [-] and [thru] keys.

For example: [Appearance][Preset][1][.][1][thru][1][10] [Enter]

A dialog window asking for the color will be opened. Click on **Set Color** when done.
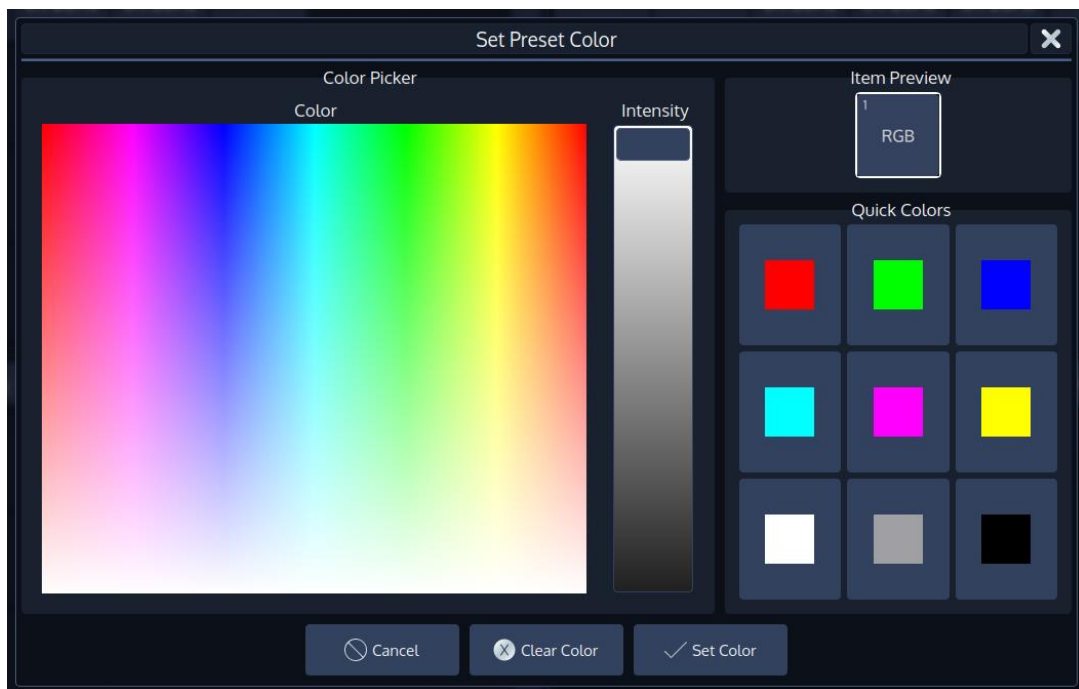
Fig. 144: Set Preset Color Dialog

19.14.2.   Resetting User Colors for a Preset Item

You may reset the user colors for one or multiple Presets to not show a colored border around the item.

- Press the [Name]-key twice.
- The commandline will read **Appearance**.
- Now select the Preset Item using the touchscreen or by using the numberblock.
- Complete the numberblock command by pressing the [Enter]-key.
- Click on **Clear Color** in the dialog window to reset the user colors.

If you use the numberblock you may also color multiple Items at once using the [+], [-] and [thru] keys.

For example: [Appearance][Preset][1][.][1][thru][1][10] [Enter]

19.15. Edit Preset Window

The **Edit Preset** –Window may be used as a quick way to rename a preset or to load its values to the programmer. It is also used to set its Icon and icon color or to display the usage of the Preset.

To open the Edit Preset Window, type [Edit] and select the Preset you would like to edit.
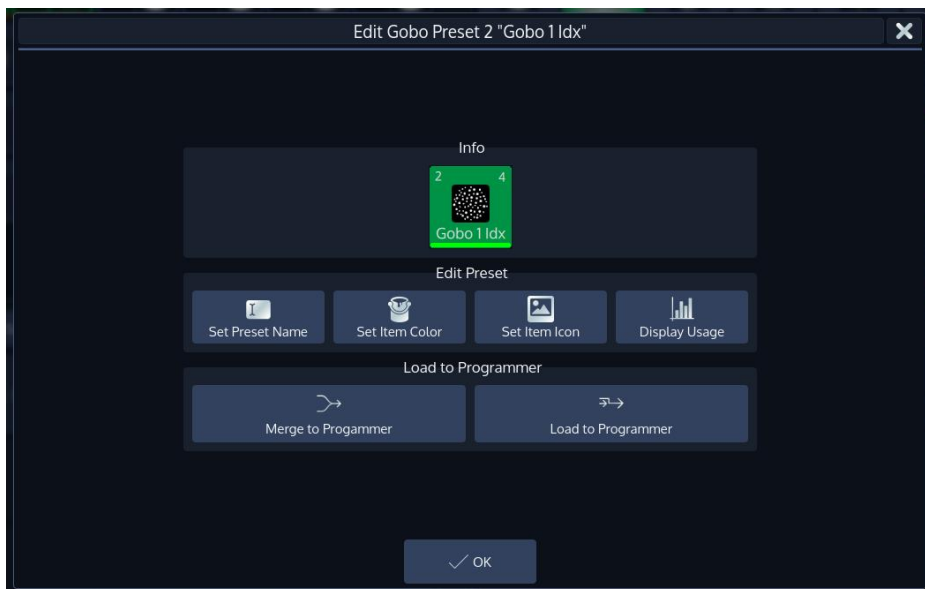
Fig. 145: Edit Preset Window

19.15.1.   Set Preset Name

Clicking on the **Set Preset Name** button will open up an on-screen keyboard allowing you to rename this particular Preset.

19.15.2.   Set Item Color

Clicking on the **Set Item Color** button will open up a dialog allowing you to set a color Icon or color a Gobo Icon for this preset.

Click on **Set Color** when done.

To reset the Item Color click on **Reset Color**.

<div align="right">
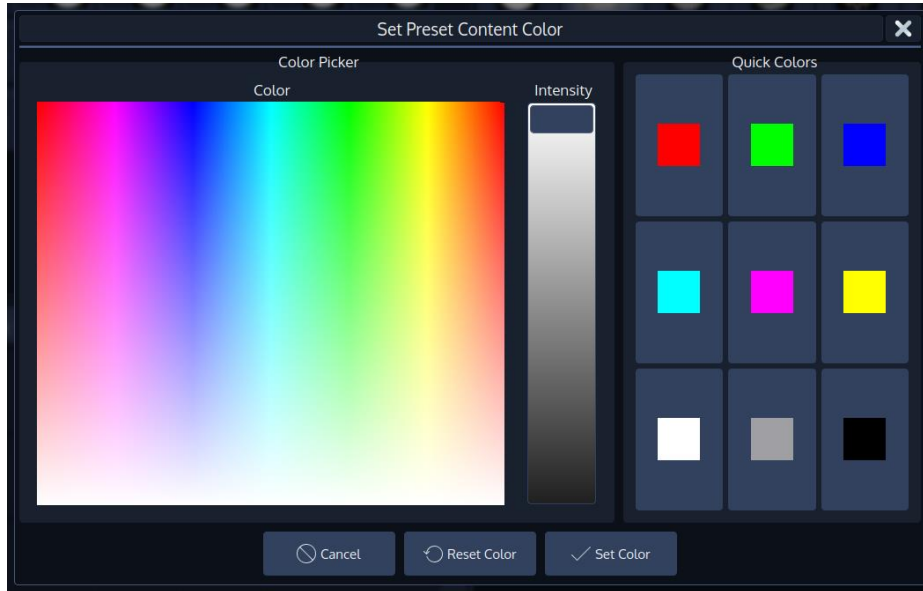
Fig. 146: Set Preset Icon Color

</div>

19.15.3.   Set Item Icon

Clicking on the **Set Item Icon** button will open a dialog allowing you to set an Icon for this preset.

To reset the Item Icon, click on **Clear**.

<div align="right">
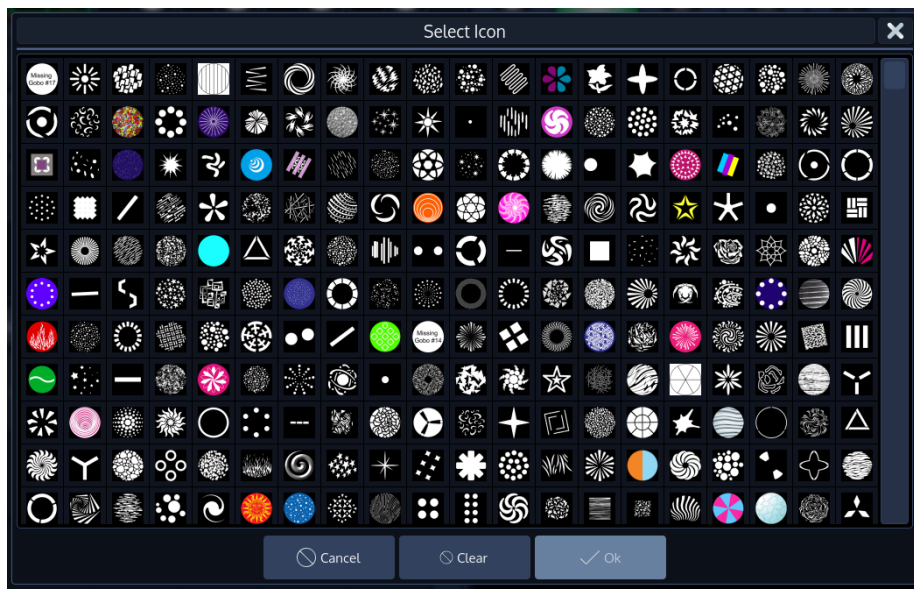
Fig. 147: Set Preset Icon Color

</div>

19.15.4.   Display Usage

Clicking on the **Display Usage** button will open a dialog showing you information about how and where this preset Is used.

19.15.5.　　　Merge to Programmer

Clicking on the **Merge to Programmer** button will load the presets contents without referencing to the preset into the programmer. Content that already exists in the programmer will only be overridden if the preset contains any information for the same attributes. This will load values for all fixtures the preset contains values for and will select all these fixtures.

19.15.6.　　　Load to Programmer

Clicking on the **Load to Programmer** button will load the presets contents without referencing to the preset into the programmer. Content that already exists in the programmer will be deleted and replaced by the presets content. This will load values for all fixtures the preset contains values for and will select all these fixtures.

20. Working with Cuelists

20.1. The Cuelist Pool Split Widget

The cuelist pool split widget may be opened from within the side menu in any split widget. Cuelist Pool Items have a status indicator that shows the current Cue (or, if the Cuelist is not running, the Cue that would be started) and status of the Cuelist. Also, the current crossfade status of the cues is be displayed in the status indicator.
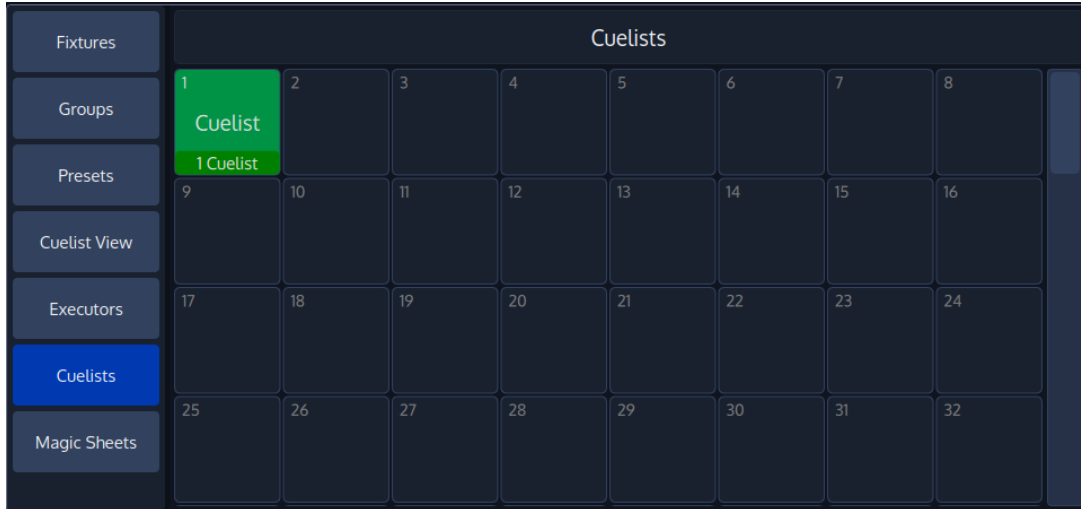
Fig. 148: Cuelist Pool

Cuelist Items of cuelists that are played back are displayed using a green background color, items for paused cuelists are displayed with a red background color and cuelist items which are switched off and outfading are displayed with a yellow background color.

If a cuelist is used in the showfile (it is displayed in a magic sheet or linked to a fader) the number in the top left of a cuelist item is shown in red.

The color of the status indicator indicates the different cuelist states:

Background Color	State
	The cuelist is running
	The cuelist is in a paused state
	The cuelist has been switched off and is outfading
	The cuelist is in learn Timing / Timecode mode or Manual X-Fade.
	The cuelist is not running.

20.2. What is a Cuelist

Cuelists are the backbone of your programming and show. They may contain one or more cues, whereas each cue might have a different fade and wait time applied.

Faders, Executors and Virtual Executors all rely on Cuelists.
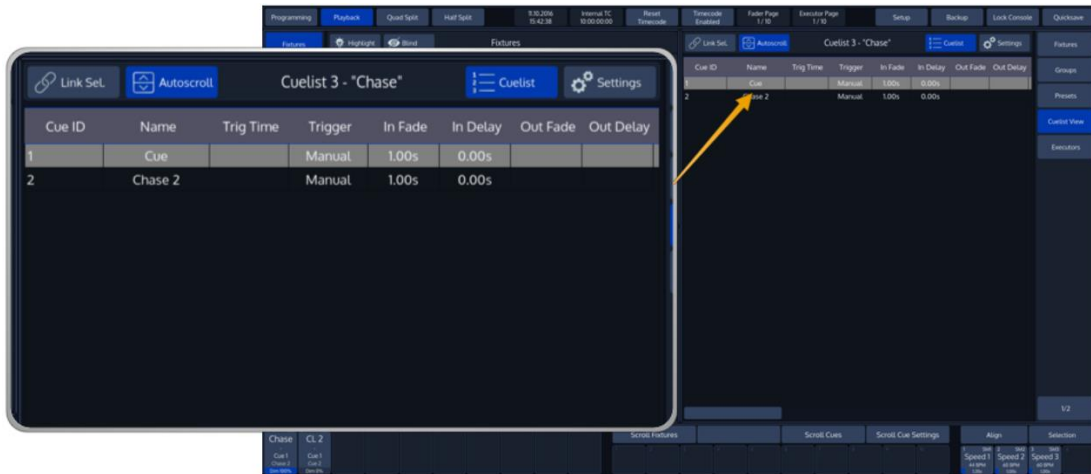
Each Cuelist has its own settings that define the behavior of the Cuelist.

20.3. Storing Cues in a Cuelist

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

20.3.1. Storing a Cuelist to a Master or Executor Button

After setting up a look, press the [Rec] -key followed by the either a faders [Go], [Pause/Back] or an [Exec] - key Or just select a virtual Executor from an Executor Split Widget.

If you store a Cuelist that way, it will be stored to the first free spot in the Cuelist Pool and will be automatically assigned to the selected Fader or Executor.

20.3.2. Storing a Cuelists using Cuelist Split Widget

Once you created a look and wish to store it as a cue, open a Cuelist Split Widget from the side menu and press the [Rec] key. Select a cuelist to store the cue.

20.3.3. Storing a Cue using Command Line Interface

After creating a look, press the [Rec] key followed by the [Cuelist] key. Type the number of the cuelist you would like to record the cue to - i.e., [1] followed by [Enter] in to the command line.

20.3.4. Storing a second Cue to a Cuelist

To store another cue into the same Cuelist, simply press the [Rec] key again, followed by the Cuelist you would like to add the cue to. If the Cuelist only contains one Cue, a window will pop up asking you what to do. Select **Append As New Cue**.

20.4. Additonal Options while recording a Cue

20.4.1. Store a Cue including timing

You may also use addiditonal command line options to store a Cue including Timing, or to give a Cue a specific Cue Number by typing.

The Cue Number may also be a point Number such as 1.12. These point Numbers are stored in Decimal values. For instance, if you record cues:

Cue 1.1 is the same as Cue 1.10 and Cue 1.100. Cue 1.01 will be inserted before Cue 1.10 and Cue 1.11 will be inserted after Cue 1.1.

Timings are optional. Time will be used as a fade time, whereas Time Time will be used as the delay time of the cue.

20.4.1.1.   Recording a Cue (with Timings) to the currently selected Cuelist

[Record] [Time] [1] [Time][Time] [2] [Enter]

20.4.1.2.   Recording a Cue (with Timings) using the Master or an Executor Button

[Record] [Time] [1] [Time][Time] [2] [Masters Go / Pause Button]

20.4.1.3.   Directly recording to a specific Cuelist and Cue using the Numberblock

[Record] [Time] [1] [Time][Time] [2] [Cuelist] [1] [Cue 4] [Enter]

20.5. Modifying the Cuelist itself

20.5.1. Naming a Cuelist

you may label any item by pressing the [Name] key on the faceplate of the console. The commandline will read "Name". Now select the Item you would like to label.

You may also name the Cuelist using the Command Line:

[Name] [Cuelist] [1] [Enter]

20.5.2. Copy a Cuelist

Press the [Copy] key and select the Cuelist you would like to copy, followed by the destination Item.

Copying a Cuelist will create a new preset, wheras the new Cuelist has no reference to the source Item. Changing the copy will not change the original Item and vice versa.

You may also copy the Cuelist using the Command Line:

[Copy] [Cuelist] [1] [Cuelist] [10] [Enter]

20.5.3. Move a Cuelist

- Press the [Move] key.
- Select the Cuelist you would like to move
- Select the destination Pool Item.

You may also move the Cuelist using the Command Line:

[Move] [Cuelist] [1] [Cuelist] [10] [Enter]

20.5.4. Delete a Cuelist

- Press the [Delete] key.
- Make sure **Delete Object** is selected on the delete Toolbar.
- Now select the Cuelist you would like to delete.

You may also delete the Cuelist using the Command Line:

[Delete] [Cuelist] [1] [Enter]

Note: If you keep pressing the [Delete] key while selecting items to be deleted, the console will not ask for confirmation. This is a way to quickly delete multiple Items.

You may also hold [Shift] while pressing [Record] to cycle through the different delete modes.

20.6. Coloring Cuelist Items

20.6.1. Applying a colored border to a Cuelist Item

You may color code Cuelists, which will be displayed by a thicker and colored border around the Cuelist item in pools and magic sheets.

● Press the [Name]-key twice. The command line will read **Appearance**.
● Select the Cuelist Item using the touchscreen or by using the numberblock. Alternatively, you can also select an executor or fader that is linked to this Cuelist.
● A dialog window asking for the color will be opened.
● Click on **Set Color** when done.

If you use the numberblock you may also color multiple Items at once using the [+], [-] and [thru] keys. Complete the numberblock command by pressing the [Enter]-key.

For example: [Appearance] [Cuelist] [1] [thru] [10] [Enter]
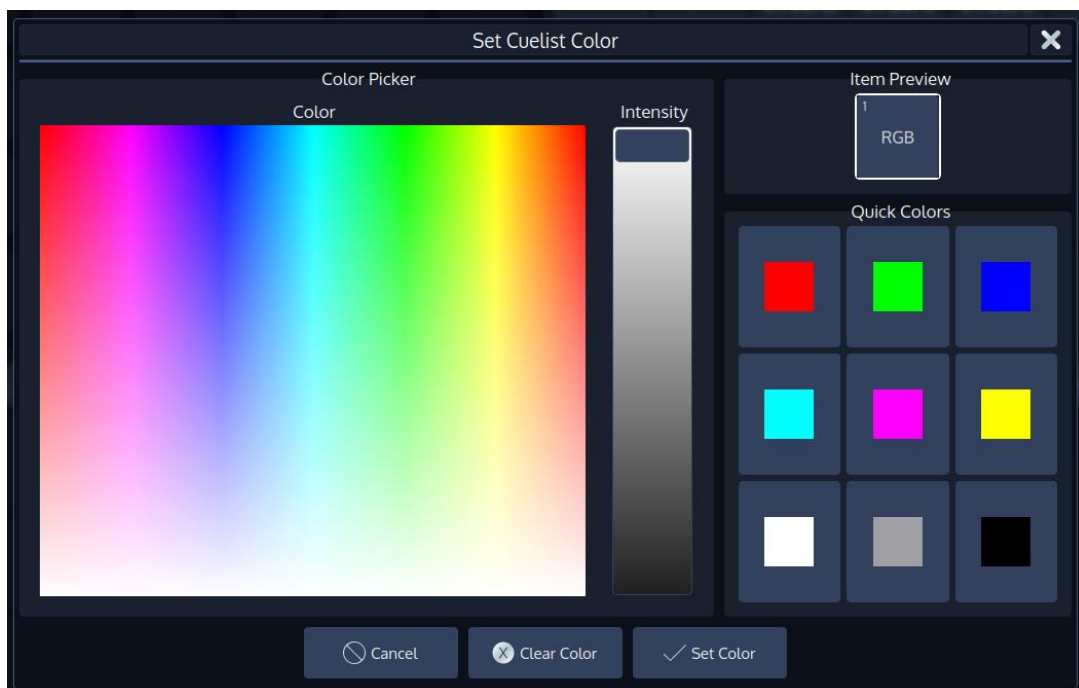
Fig. 150: Set Cuelist Color Dialog

20.6.2. Resetting User Colors for a Cuelist Item

● Press the [Name]-key twice. The command line will read **Appearance**.
● Select the Cuelist Item using the touchscreen or by using the numberblock. Alternatively, you can also select an executor or fader that is linked to this Cuelist.
● A dialog window asking for the color will be opened.
● Click on **Clear Color** when done.

If you use the numberblock you may also color multiple Items at once using the [+], [-] and [thru] keys. Complete the numberblock command by pressing the [Enter]-key.

For example: [Appearance] [Cuelist] [1] [thru] [10] [Enter]

20.7. Updating Cues in a Cuelist

Sometimes it is necessary to update previously recorded cues by adding (merging) or removing content.

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

20.7.1. Updating / Mergin data into a Cue

Make sure the the **Merge** option from the record toolbar after pressing [Rec] is selected.

Alternatively, you can also press [Infinity] while pressing [Rec] to cycle through the different record modes.

20.7.1.1. Merge / Add content to a Cue using the User Interface

- Set the values you would like to change
- Press the [Rec] key
- Make sure the the **Merge** option from the record toolbar is selected.
- If the cuelist only contains one Cue, the action will be executed right away. If the Cuelist contains more than one Cue a window will be opened asking you to select the Cue you would like to update.
- Click on **Merge** after selecting the appropriate Cue.

20.7.1.2. Merge data into a cue using the commandline

- Set the values you would like to change
- Press the [Rec] key
- Make sure the the **Merge** option from the record toolbar is selected.
- Press the [Cuelist] key.
- Type the number of the cuelist you would like to update a cue from to - i.e., [1].
- Press the [Cue] key.
- Type the number of the cue you would like to update - i.e., [1].
- Press [Enter] to execute the command.

If the cuelist is selected, you can simply:

- Set the values you would like to change
- Press the [Rec] key
- Make sure the the **Merge** option from the record toolbar is selected.
- Type the number of the cue you would like to update - i.e., [1].
- Press [Enter] to execute the command.

20.7.2. Removing content from a Cue

Make sure the the **Remove** option from the record toolbar after pressing [Rec] is selected.

Alternatively, you can also press [Infinity] while pressing [Rec] to cycle through the different record modes.

20.7.2.1.   Remove content from a Cue using the User Interface

● Touch the attributes you would like to remove
● Press the [Rec] key
● Make sure the the **Remove** option from the record toolbar is selected.
● If the cuelist only contains one Cue, the action will be executed right away. If the Cuelist contains more than one Cue a window will be opened asking you to select the Cue you would like to remove the Information from.
● Click on **Remove** after selecting the appropriate Cue.

20.7.2.2.   Remove content from a Cue using the Command Line

● Touch the attributes you would like to remove
● Press the [Rec] key
● Make sure the the **Remove** option from the record toolbar is selected.
● Press the [Cuelist] key.
● Type the number of the cuelist you would like to update a cue from to - i.e., [1].
● Press the [Cue] key.
● Type the number of the cue you would like to update - i.e., [1].
● Press [Enter] to execute the command.

If the cuelist is selected, you can simply:

● Touch the attributes you would like to remove
● Press the [Rec] key
● Make sure the the **Remove** option from the record toolbar is selected.
● Type the number of the cue you would like to update - i.e., [1].
● Press [Enter] to execute the command.

20.7.3. Replacing a Cue

Make sure the the **Replace** option from the record toolbar after pressing [Rec] is selected.

Alternatively, you can also press [Infinity] while pressing [Rec] to cycle through the different record modes.

20.7.3.1.   Replace content from a Cue using the User Interface

● Touch the attributes you would like to replace
● Press the [Rec] key
● Make sure the the **Replace** option from the record toolbar is selected.
● If the cuelist only contains one Cue, the action will be executed right away. If the Cuelist contains more than one Cue a window will be opened asking you to select the Cue you would like to replace the Information from.
● Click on **Replace** after selecting the appropriate Cue.

20.7.3.2.   Replace content from a Cue using the Command Line

● Touch the attributes you would like to replace
● Press the [Rec] key
● Make sure the the **Replace** option from the record toolbar is selected.
● Press the [Cuelist] key.
● Type the number of the cuelist you would like to update a cue from to - i.e., [1].
● Press the [Cue] key.
● Type the number of the cue you would like to update - i.e., [1].
● Press [Enter] to execute the command.

If the cuelist is selected, you can simply:

- Touch the attributes you would like to remove
- Press the [Rec] key
- Make sure the the **Replace** option from the record toolbar is selected.
- Type the number of the cue you would like to update - i.e., [1].
- Press [Enter] to execute the command.

20.7.4. Inserting a Cue

Make sure the the **Insert** option from the record toolbar after pressing [Rec] is selected.

Alternatively, you can also press [Infinity] while pressing [Rec] to cycle through the different record modes.

20.7.4.1. Insert a Cue in between other cues using the User Interface

- Touch the attributes you would like to record
- Press the [Rec] key
- Make sure the the **Insert** option from the record toolbar is selected.
- A window will be opened asking you to select the Cue you would like to insert the new one in front of.
- Click on **Insert** after selecting the appropriate Cue.

20.7.4.2. Insert a Cue in between other cues using the Command Line

- Touch the attributes you would like to record
- Press the [Rec] key
- Press the [Cuelist] key.
- Type the number of the cuelist you would like to insert a cue into - i.e., [1].
- Press the [Cue] key.
- Type the number of the new cue - i.e., [1.5].
- Press [Enter] to execute the command.

If the cuelist is selected, you can simply:

- Touch the attributes you would like to remove
- Press the [Rec] key
- Type the number of the new cue., [1].
- Press [Enter] to execute the command.

20.7.5. Copying Cues

20.7.5.1. Using the Cuelist View

You may easily copy cues using the cuelist view by pressing [Copy] and clicking and dragging a cues sort icon while is Copy is shown in the command line:

Fig. 151: Cuelist sort icon

Alternatively, you may press [Copy] and simply click on the cue which you would like to copy. The new cue will be added to the end of the list.

20.7.5.2. Using the Command Line approach:

[Copy] [Cuelist] [1] [Cue] [5] [Cue] [10] [Enter]

or

[Copy] [Cuelist] [1] [Cue] [5] [Cuelist] [2] [Cue] [10] [Enter]

or

[Copy] [Cuelist] [1] [Cue] [1.5] [Cuelist] [2] [Cue] [10.1] [Enter]

or

[Copy] [Cuelist] [1] [Cue] [1.5] [Cuelist] [2] [Cue] [11] [Enter]

20.7.6. Moving Cues

20.7.6.1. Using the Cuelist View

You may easily move cues using the cuelist view by clicking and dragging a cues sort icon:

Fig. 152: Cuelist sort icon

20.7.6.2. Using the Command Line approach:

[Move] [Cuelist] [1] [Cue] [5] [Cue] [5.4] [Enter]

or

[Move] [Cuelist] [1] [Cue] [5] [Cue] [2] [Enter]

20.7.7. Deleting Cues

Make sure the the **Delete Cues** option from the record toolbar after pressing [Del] is selected.

Alternatively, you can also press [Infinity] while pressing [Del] to cycle through the different delete modes.

20.7.7.1. Delete a Cue using the User Interface

- Touch the attributes you would like to record
- Press the [Del] key
- Make sure the the **Delete Cues** option from the record toolbar is selected.
- A window will be opened asking you to select the Cue you would like to delete.
- Click on **Delete Cue** after selecting the appropriate Cue.

20.7.7.2. Delete a Cue in between other cues using the Command Line

- Press the [Del] key
- Press the [Cuelist] key.
- Type the number of the cuelist you would like to delete a cue from - i.e., [1].
- Press the [Cue] key.
- Type the number of the cue - i.e., [1.5].
- Press [Enter] to execute the command.

If the cuelist is selected, you can simply:

- Press the [Del] key
- Type the number of the cue., [1].
- Press [Enter] to execute the command.

20.8. Loading a Cue to the Programmer

Sometimes it is desirable to load a complete cue into the programmer to edit it.

20.8.1. Load a Cue using the User Interface

- Press the [Load] key on the keypad.
- Now select the appropriate Cuelist by the either a master's Play or Pause / Back Key, or by selecting the Cuelist in a Cuelist Split Widget. Alternatively, you may click on the cue displayed in a cuelist view.
- A window will be opened asking you to select the Cue to be loaded. Click on **Load** after selecting the Cue from the list.
- If the cuelist only contains a single cue, this cue will be loaded automatically.

20.8.2. Load a Cue using the Command Line

- Press the [Load] key on the keypad.
- Press the [Cuelist] key.
- Type the number of the cuelist you would like to load a cue from - i.e., [1].
- Press the [Cue] key.
- Type the number of the cue - i.e., [1.5].
- Press [Enter] to execute the command.

If the cuelist is selected, you can simply:

- Press the [Load] key
- Type the number of the cue., [1].
- Press [Enter] to execute the command.

20.9. Assigning Cuelists to Masters

20.9.1. Assigning a Cuelist to a Master / Executor Using Cuelist Split Widget

To assign a Cuelist (in the Cuelist Pool) to a Master:

- press the [Link] key
- Tap on the Cuelist you would like to assign to the master
- Press the master's Play or Pause / Back Key or an Executor Button

20.9.2. Assigning a Cuelist to a Master / Executor Using Command Line Interface

- Press the [Cuelist] key
- Type the number of the Cuelist, you would like to assign i.e., [1].
- Then press the desired master's or Pause / Back Key or an Executor Button.

20.10. The Cuelist View (Cue Sheet) Window

The Cuelist window is used to alter Cue Timings and other. The Cuelist View may also be used as a Cue Sheet, indicating the current, previous and next cues.

It also displays the state of running crossfades and delays in the name column, as well as the state of each individual time in the corresponding column.

	Sort	Cue ID	Name	Trig Time	Trigger	In Fade	In Delay	Out Fade
		1	Intro		Manual	1.00s	0.00s	1.00s
		2	Clean Guitar		Manual	1.80s	0.00s	1.80s
		3	Rock Bridge		Manual	0.50s	0.00s	0.50s
		4	Verse		Manual	1.00s	0.00s	1.00s
		5	Chorus		Manual	0.50s	0.00s	0.50s
		6	Bridge		Manual	0.50s	0.00s	0.50s
		7	Verse		Manual	0.50s	0.00s	0.50s

Fixtures — Groups — Presets — Cuelist View — Executors — Magic Sheets — 1/2

Link Sel. — Scroll — Cuelist 1 - "Song 2" — Usage — Cues — Settings

Select — Assert — Skip- — Skip+ — Off — Pause/Back — Go

Fig. 153: Cuelist View

20.10.1. Opening the Cuelist View Window

20.10.1.1. Open the Cuelist View Window Using Cuelist Pool

Press the [Open] key and select a Cuelist from within the Cuelist Split Widget.

20.10.1.2. Open Cuelist View Window Using Command Line Interface

Press the [Open] key followed by the Cuelist key. Now type the number of the cuelist followed by [Enter]

For example: [Open] [Cuelist] [1] [Enter].

20.10.1.3. Open Cuelist View Window Using Masters or Executors

To open the cuelist window for a Cuelist that is assigned to a Master, press [Open] followed by the Play or Pause / Back Key or simply hit the Executors Button.

20.10.1.4. Open Cuelist View Window Using the fader label

You may quickly open up a cuelist view and settings dialog for any cuelist assigned to a fader by clicking into its fader label.

20.10.2. Cuelist View Window – Title Bar Buttons
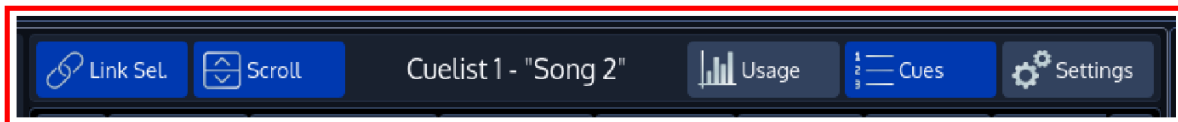
Fig. 154: Cuelist View - Title Bar Buttons

Link Selected links the Cuelist shown in the Cuelist view to the selected Cuelist.

Scroll automatically scrolls the windows contents if the current Cue is advancing the end of the active display area.

The **Usage** Button is used to display a dialog that indicates where this cuelist is used in the showfile.

The **Cuelist** Button is used to show the Cue Sheet for this Cuelist.

The **Settings** Button is used to show and alter the Settings of this Cuelist.

20.10.3.   Cuelist View Window – Playback Bar Buttons

Fig. 155: Cuelist View - Playback Bar Buttons

Select will select the Cuelist shown in the Cuelist View.

Assert issues an assert to the shown Cuelist and brings it on top of the priority stack.

Skip+ is used to jump to the next cue without any timings.

The **Skip-** Button is used to move to the previous cue ignoring any timings.

Off will switch the Cuelist off.

Pause/Back will pause or issue a back command (Go to the previous Cue including timings).

The **Go** Button is used to issue a go command to the next Cue in the list.

20.10.4.   Cue Crossfade Status Display

The Cuelist View Window also shows live status information in the background of the columns for running Cues. Live Status Data includes Fade and Delay information for Cue In- and Out- Timing and wait time countdown for starting of the next Cue.

Fader and Executor as well as the Cuelist Pool Items show a summarized timing information for the visible Cues inside their Cue Information rows. For running Cues the summarized timing of In- and Out- Timing will be displayed. Fader items show a countdown to the next Cue in the last row, if available.

Sort	Cue ID	Name	Trig Time	Trigger	In Fade	In Delay	Out Fade	Out Delay	In Snap
🖐	1	Cue		Manual	10.00s	0.00s	10.00s	0.00s	0%
🖐	2	Cue		Manual	10.00s	0.00s	10.00s	0.00s	0%
🖐	3	Cue		Manual	10.00s	0.00s	10.00s	0.00s	0%
🖐	4	Cue		Manual	10.00s	0.00s	10.00s	0.00s	0%
🖐	5	Cue		Manual	10.00s	0.00s	10.00s	0.00s	0%
🖐	6	Cue		Manual	10.00s	0.00s	10.00s	0.00s	0%

Fig. 156: Cuelist View – Crossfade Status

If multiple Cues are active simultaneously then timing will be diplayed in multiple rows as well.

The timing is always calculatd based on the values inside each Cue. Empty Cues (Cues without Values) will not display any status information. The timing information also takes MiB into account.

20.10.5. Background Colors and their meanings

The Cuelist View uses background colors to emphasize the state of a Cue:

Background Color	State
	This is the Cue that will be run when the Cuelist is switched on.
	This is the current Cue and the Cue is in active state and running.
	This is the current Cue, but the Cuelist is paused.
	This is the next cue that will be run when the Cuelist is in "Learn Timing" state.
	This Cue is currently in "Outfading" state because the Cuelist has been switched off.

20.11. Changing Cue Names, Timings and other Settings

To change Cue Names and Timings, you first need to open up a Cuelist Window as described previously. As soon as the Cuelist View for the appropriate Cuelist has been opened up, select the cell with the value you would like to change.

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

Press the [Set] key (or double / long click into a cell) and enter the desired value.

Sort: This column is used to drag / drop move or copy the cue.

Cue ID: This column indicates the Cue number, which may be changed using the "Move Cue" functionality

Name: This is the Name of the Cue, which may be modified to provide a brief description of the Cue

Trig Time: This is the time that needs to pass until this cue will be started, use however depends on the trigger selected for this Cue. In case the trigger is set to "Follow", it may also be set to a negative time.

Trigger: Defines how this cue is started

In Fade: This is the duration of the crossfade for all fixtures increasing dimmer values.

In Delay: This is the delay that needs to pass for this cue to start any in fade after it has been started.

Out Fade: 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

Out Delay: This is the delay that needs to pass for this cue to start any out fade after it has been started.

In Snap: This is the percentage of the overall cue time after all parameters that are set to be a "Snap-Channel" (in the fixture library) will snap to their new value.

Comment: This is a column that may be used for additional comments. It is only shown in the Cuelist View

MiB: This column specifies which Cue or option should be used to preset this Cue and automatically Move the light while its programmed dimmer value is 0.

MiB Fade: This specifies the fade time for the Move in Black that happens in this particular Cue.

MiB Delay: This is the Delay time for the Move in Black that happens in this particular Cue. This is useful for tungsten fixtures with scrollers that may still be glowing.

MiB Error: Indicates any reasons or errors of why MiB may not be able to be executed for this cue.

CMDs: CMDs are commands to start other Cuelists or execute a certain set of actions when this cue is run.

CMD Delay: CMD Delay specifies a Delay time after all the commands of this Cue will be executed.

Intensity Fade, Intensity Delay and so on: These fields can be used to easily adjust individual fade or delay times for a certain parameter group.

Parameter Timing: This column shows "Yes" if the cue contains individual timings. Selecting it and pressing set will ask you to remove these timings for the whole Cue.

20.11.1. The different Trigger types that are available per Cue

Each Cue might have different triggers that may or may not affect how the Trig Time Column is used. This section will provide you with an overview of these triggers.
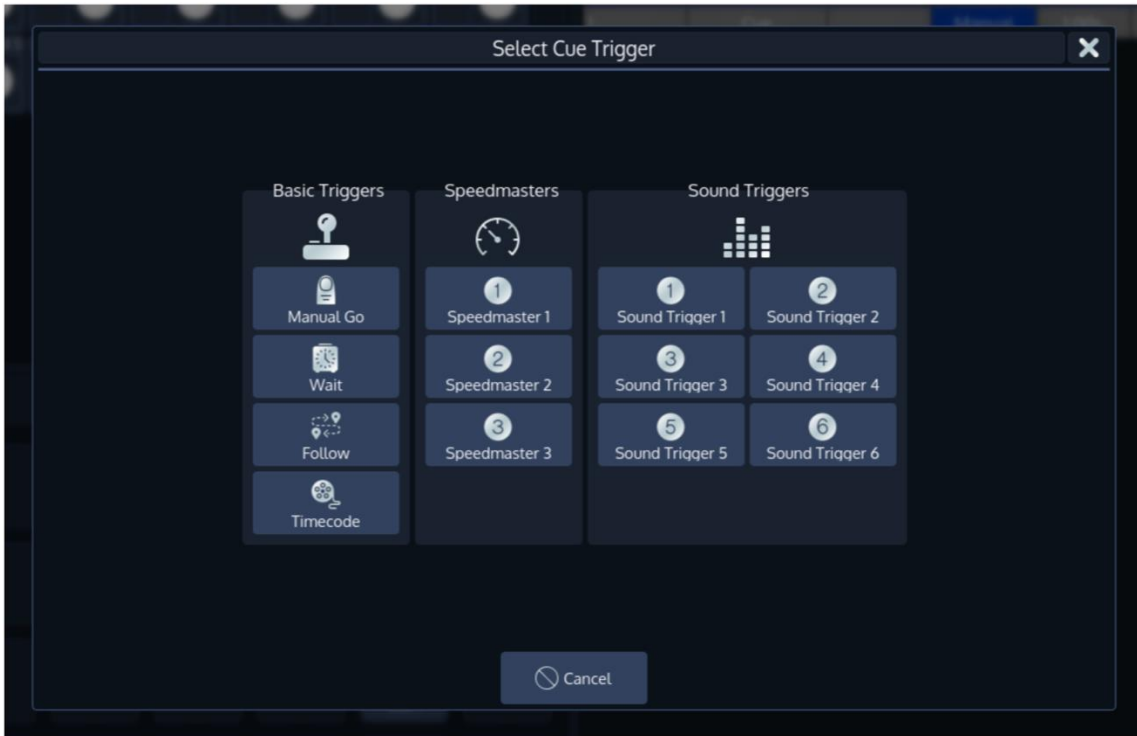
20.11.1.1. Basic Triggers
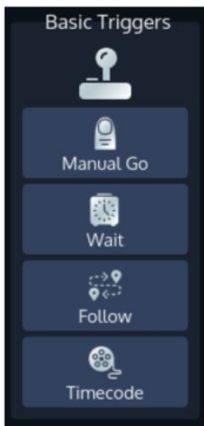
Manual Go: This Cue will not playback automatically. The Trig Time column is unused.

Wait: This Cue will wait until the Trig time has passed after the previous cue was started until it will automatically be run.

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 'Timecode Mode'. Please see the section about Cuelist settings for more Information on triggering a Cuelist by Timecode.

20.11.1.2. Speedmasters

Speed Master Faders are used to synchronize Chasers to a given Master Speed clock. The console supports up to 3 Speed Master Faders. They may either be set to BPM or Seconds (see "Show Wide Settings – Setting Timing Defaults").

For Cuelists individual Cues have their own trigger settings. If a Cue is set to trigger on a Master Speed Fader Event then the Cue will trigger whenever the next tap event from a Master Speed Fader is generated. If all Cues of a Cuelist are set to trigger on a Master Speed then the Cuelist will stay in sync with the Master Speed. If multiple active Cuelists are configured this way then all these Cuelists will stay in sync with each other and with the Speed Master.

20.11.1.3. Sound Triggers

When a Cues trigger is set to be one of the Sound Triggers, then this Cue will be played back as soon as the Sound Trigger reaches its trigger threshold and the Cue with the trigger is the next one after the current Cue.

20.11.2. Move in Black

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.

MIB is enabled on a cue-per-cue basis, by giving the MIB-property of the cue a value which tells the console when it should do the prepositioning for the cue in which MiB is defined.

Default MiB Fade and Delay Times can be set in the **Show Settings - Timings** Widget.

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 "MarkZero" 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: Gobo	0%			
#4: Gobo and Color	100%		Gobo 1	Cue 3

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 setting set to a specific Cue.

As in Cue 3 the Dimmer value is set to 0%, the Gobo wheel will already be set to Gobo 1, so that when the light comes on when Cue 4 is run, the gobo will not fade in or snap visibly.

20.11.2.1.   How to set a Cue to be moved in Black

In order to have a cue moved in black, open a Cuelist View and scroll to the MiB column. Select the cell of the Cue you want to be preset.

Press the [Set] button.

A dialog window will be shown, asking you to set MiB to one of the following options:

None: If None is selected, this Cue will not be Moved in Black

Early: If this option is selected, the appropriate Cue will be pre-set as early as possible.

Late: If this option is selected, the Cue will be pre-set as late as possible.

Specific Cue: If this option is selected you may pick a cue from the list below. The Cue will be pre-set in the selected cue if possible.

When you are done with your choice, press the **OK** button.

Set MiB Mode				✕
Move in Black Mode				
⊖ None	≪ Early	≫ Late	◇ Specific Cue	
Move in Black Cue				
Cue ID	Name	Comment	Trig Time	Trigger
1	Cue			Manual
2	Cue			Manual
3	Cue			Manual
4	Cue			Manual
5	Cue			Manual
6	Cue			Manual
	⊘ Cancel	✓ OK		
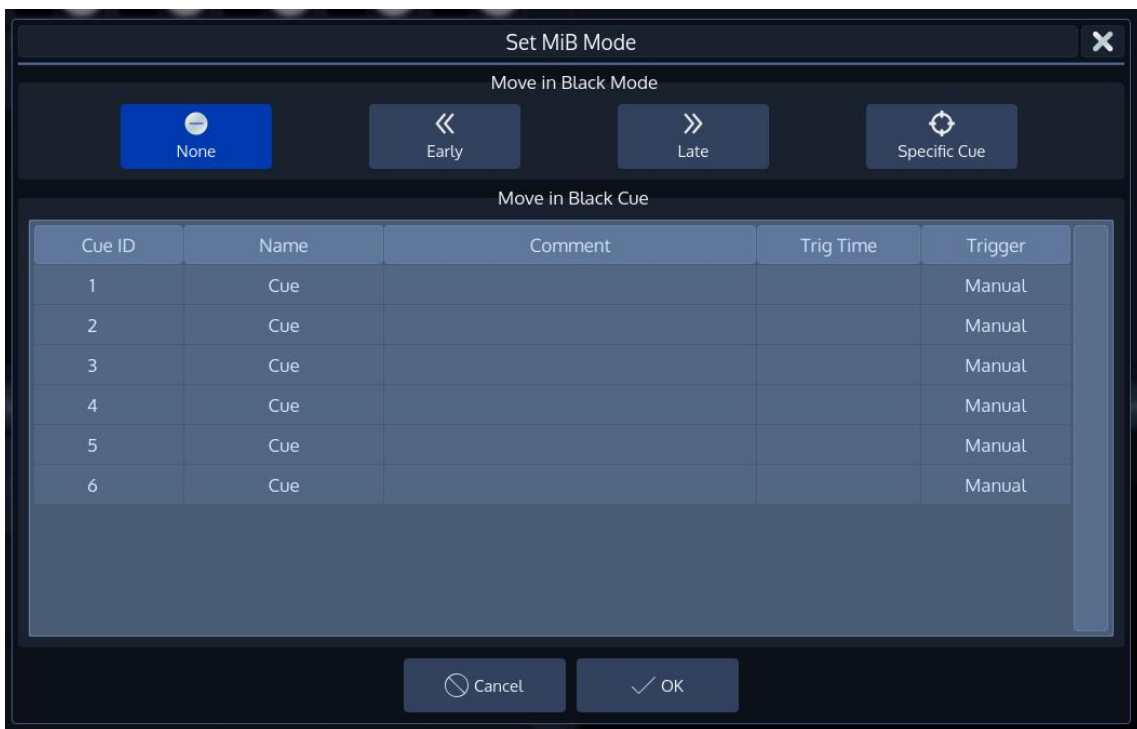
Fig. 158: Select MiB Dialog

20.11.3.   Commands

Commands may be used to trigger other actions when a cue containing one or more commands is executed. The commands may be delayed after the start of a cue using the **CMD Delay** column.

20.11.3.1.   How setup and remove Cue Commands

To setup a command to be executed when a Cue is run, open a Cuelist View and scroll to the CMDs column. Select the cell of the appropriate Cue and press the [Set] button.

A dialog window will be shown, asking you further define the actions that will be executed when this Cue is run.
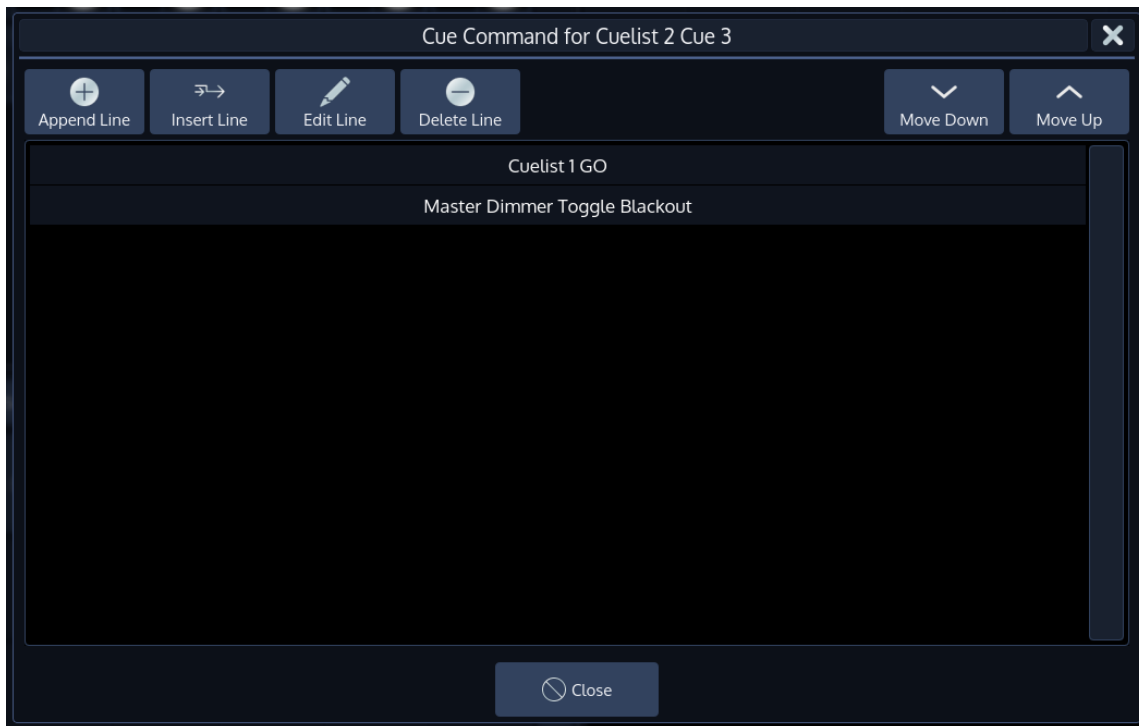
Fig. 159: Select Cue Command Dialog

20.11.3.2. Adding a Command

To add a command to the list, click on the **Append Line** button. Alternatively, to insert a Command in front of an existing one, select the existing command and click on **Insert Line**.

An editor window will be shown. The different types and actions are explained below.
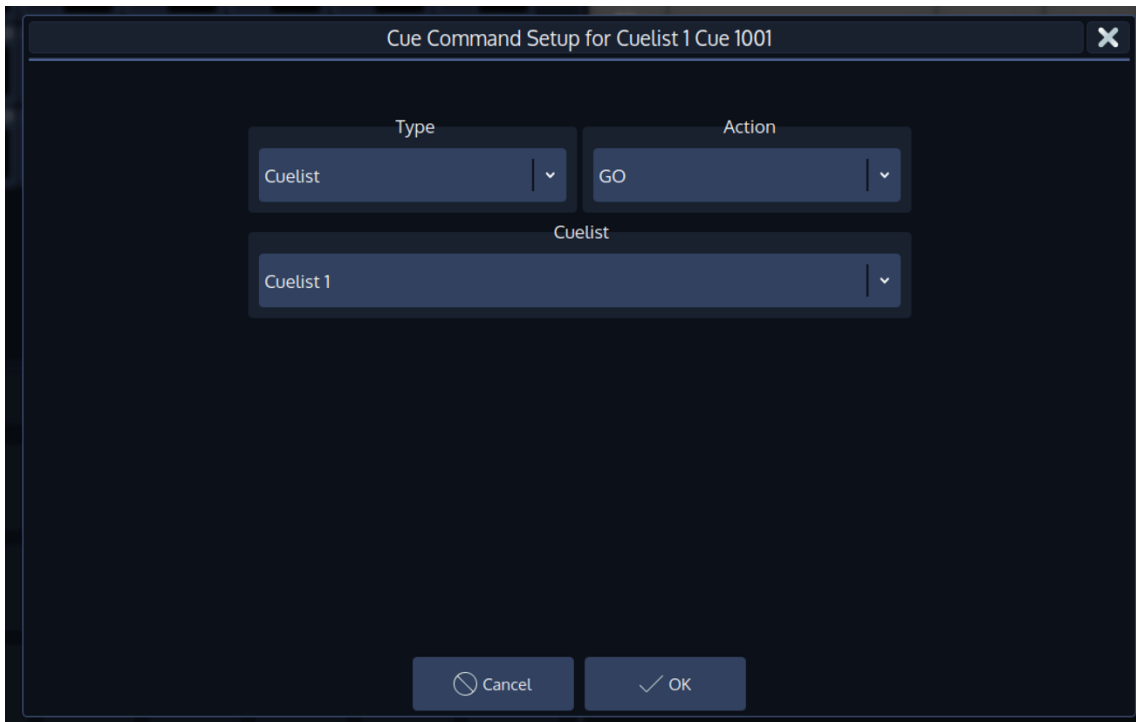
Fig. 160: Cue Command Setup Dialog

Editing an existing Command

In order to modify an existing command, select it from the list of commands and click on the **Edit Line** Button. The editor window (described in the "Add a Command" section) will be shown.

Deleting a Command

To delete a command from the list, simply select it and click on the **Delete Line** button.

Order in which Commands are executed

Commands will be executed in the order shown in the window, with the first command in the list being executed first. To change the position of an item in the list, select it and click on the **Move Down** and **Move Up** buttons accordingly.

20.11.3.3. List of possible actions

Cuelists

Action	Explanation
Toggle	Will toggle the Cuelist state between on and off.
Go	Will issue a go command to the Cuelist
Pause / Back	Will pause, or if the cuelist is paused go one step back
Skip+	Will jump to the next cue and ignore timings
Skip-	Will jump to the previous cue and ignore timings
Off	Will switch the cuelist off.
Instant Off	Will switch the cuelist off ignoring timings
Assert	Will bring the cuelist on top of the Cuelist Stack

Master Dimmer (Grandmaster)

Action	Explanation
Toggle Blackout	Will toggle between grand master blackout on / off

Master Speed

Action	Explanation
Tapsync	Measures the time between taps and sets the Speed Master to that amount.
Increase Time	Adds the amount of time entered in the Combobox.
Decrease Time	Substracts the amount of time entered in the Combobox.
Multiply Time	Multiplies the time of the Speed Master by the given amount.
Divide Time	Divides the time of the Speed Master by the amount entered in the Options Combobox.
Manual Go	Will issue a "Go" Command to all Cuelists listening to this Speedmaster. It only applies to Cuelists that are already running.
Toggle Enabled	Will Pause / Unpause the Speedmaster
Enable	Will unpause the Speedmaster
Disable	Will pause the Speedmaster

Master Fade

Action	Explanation
Tapsync	Measures the time between taps and sets the Fade Master to that amount.
Increase Time	Adds the amount of time entered in the Combobox.
Decrease Time	Substracts the amount of time entered in the Combobox.
Multiply Time	Multiplies the time of the Fade Master by the given amount.
Divide Time	Divides the time of the Speed Master by the amount entered in the Options Combobox.

Timecode

Action	Explanation
Toggle Enable	Enables or disables the timecode input or generator
Enable	Enables the timecode input or generator
Disable	Disables the timecode input or generator
Reset Generator	Resets the timecode generator to its start time.

20.12. Edit Cuelist Window

Probably the most convenient way to open the Cuelist Settings window is by clicking on the Fader Label of this cuelist and selecting **Cuelist Settings**.

To open the Edit Cuelist Window using the command line, type [Edit] [Cuelist], followed by the ID of the Cuelist you would like to edit the options of, eg. [1]. Finish the command by pressing [Enter].

Alternatively, you may press the [Edit] key and select the Cuelist you would like to edit from a Cuelist Split Widget.

Another way to access the Edit Cuelist Window is to open a Cuelist View and to press the **Settings** Button in the title bar of the Cuelist View.
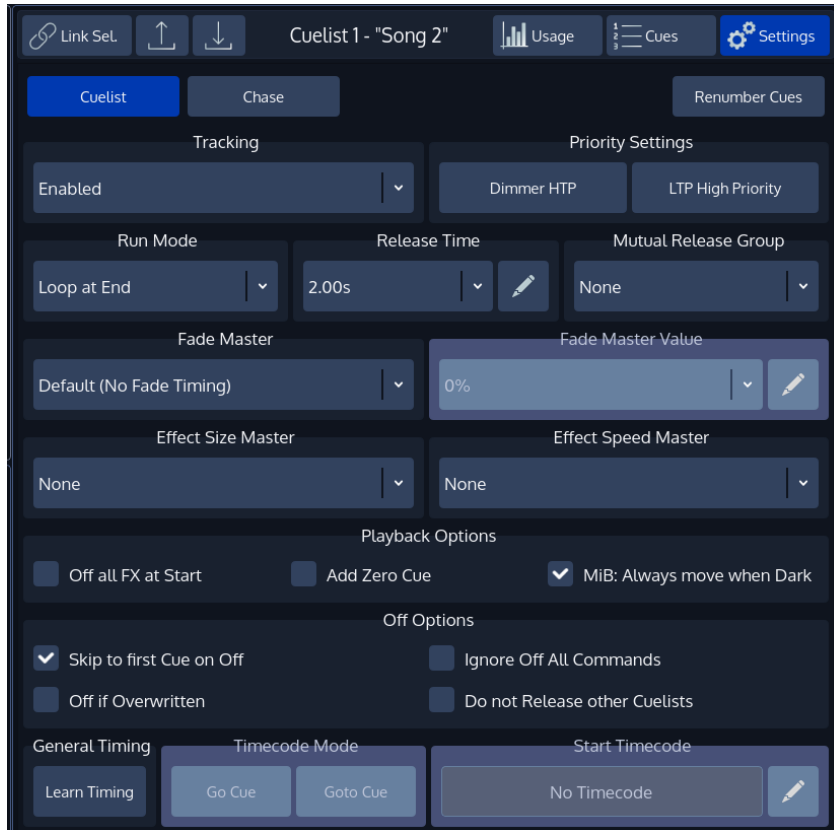
Fig. 161: Edit Cuelist Window

20.12.1. Saving Options as Default

Specified Options may be saved as default for new Cuelists by pressing the **Save Default** button.
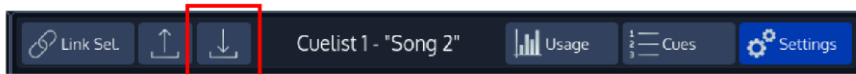
Fig. 162: Save Default Button

20.12.2. Loading Options from Default

Cuelist Options may be loaded from the default state by clicking onto the **Load Default** button.

20.13. Altering Cuelist Options

In order to alter Cuelist settings like Off-Time, Priority, Playback order, etc, you need to open the "Edit Cuelist" window as described in "Edit Cuelist Window".

20.13.1. Renumbering all Cues in the Cuelist to whole numbers

You may rename all Cue numbers in a Cuelist to full numbers (1,2,3, etc) by clicking on the **Renumber** button.

20.13.2. Setting the Cuelist Playback Mode

Cuelists may be set to two different modes, **Cuelist** or **Chase** which may be selected by the appropriate buttons from within the Edit Cuelist Window.

Chasers offer a reduced functionality and behave differently in some several cases compared to Cuelist.

A Chaser will:

- Disable Cue Timings such as In/Out Fade and Delay Timings. All timings will be replaced with global Fade and Snap Timings which are part of the Chaser configuration options.

- Disable Cue Trigger configuration. Instead global Chaser Trigger Options from the Edit Menu will be used.

- Ignore Timecode and Learn Timing Functions and hide Timecode Options for the Cuelist.

- Enable Chase Master Trigger Selection and Sync Functions

- Enable Chase Fade and Snap Settings

- Enable different options for Chase Playback Order

20.13.3. Settings shared between Cuelists and Chases

20.13.3.1. Tracking

This dropdown menu allows you to enable or disable tracking for this cuelist. You may also enable the Cuelist to track from the last to the first cue. By default, tracking is set to **Enabled**.

20.13.3.2. Priority

The priority setting will change the playback priority as to your setting. The default setting if nothing else is selected is **LTP**.

For more information on priorities, please see "Priority Overview".

The other different priority settings are:

Dimmer HTP - All values being stored in that cuelist 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 Cuelist set to HTP with the highest dimmer level will be output.

LTP High Priority - All values being stored in that cuelist will be compared to others by the "Latest takes Precedence" principle. That means that values will override values, which have been output previously. This setting will always override values contained in "LTP" priority lists, even if those have been started after the List set to "High Priority".

20.13.3.3. Run Mode

Use this dropdown menu to define how the cuelist should behave if reaching the end. The default is **Loop at End**.

Settings are:

Loop at End - The Cuelist will wrap around and jump back to the first cue after hitting go while the last cue is played back.

Release at End - The Cuelist will release (Switch off) itself after hitting go another time while the last cue is being output.

Stop at End - The Cuelist will stop at the last cue and pressing the "Go" Button again does not show any effect.

20.13.3.4. Release Time

This is the amount of time the cuelist will fade out for when it is switched off, providing a smooth transition instead of just "snapping" fixtures to their default or other output values. The default Outfade time is **2 Seconds**.

20.13.3.5. Mutual Release Group

Adds this cuelist to selected Mutual Release Group, which may only contain one active cuelist. When starting a new cuelist within a Mutual Release Group, the previously running cuelist will be turned off as soon as the new cuelist completed its infade.

20.13.3.6. Fade Master

This will tell the cuelist which *Fadetime Master* it should listen to.

Fade Master Fader are used to modify the crossfade behavior from Cue to Cue within a Cuelist or Chaser. Chimp supports up to 3 Fadetime Masters. They can be configured to either be relative or absolute (see "Show Wide Settings – Setting Timing Defaults").

It is important to note that the behavior of a Fadetime Master differs for Chasers and Cuelists. Behavior also differs based on the type of Fade Master: Relative or Absolute.

In general, **absolute** *Fadetime Masters* will replace or set the default Fadetime (In-Fade) of a Cue to a fixed value.

Relative *Fadetime Master* will scale a given Value according to a reference value. The reference Value will be different for Cuelists and Chasers:

For a Cuelist the reference Value is the given Cue Timing.

For A Chaser the reference Value is set by the Chasers Master Trigger.

20.13.3.7. Effect Speed Master

The Effect Speed Master Combobox select the global Effect Speed Master for this Cuelist. Use this function to scale the Effect Speed according to one of the 3 global Effect Speed Master Faders. "None" disables the Effect Speed Master Function.

The Speed of all Effects within the Cuelist will be scaled according to the Speed Master Value.

Please not that the Effect Speed will also depend on other Faders such as the Cuelist Speed Master.

20.13.3.8. Effect Size Master

The Effect Size Master Combobox select the global Effect Size Master for a Cuelist. Use this function to scale the Effect Size according to one of the 3 global Effect Size Master Faders. "None" disables the Effect Size Master Function.

All Effects within the Cuelist will be scaled according to the Size Master Value. Please note the the Size of the Effect will also depend on other parameters such as the current Infade Fader (if configured), Dimmer Fader (if Effect is Dimmer Effect) or current Crossfade Status.

20.13.3.9. Playback Options

Off all FX at Start

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

Add Zero Cue

Automatically adds 0% Dimmer Values to the first cue unless there are different values programmed. Useful for use with MiB.

MiB: Always move when Dark

MiB will always be executed, even if there are values programmed in dark cues (which would otherwise stop MiB from being applied).

20.13.3.10. Off Options

Skip to first cue on Off

On by default. This cuelist will skip to the first cue, when it is switched off.

Ignore Off All Commands

Off by default. This cuelist will not listen to "All Off" commands, in example to the "Off all Cuelists" command in the off menu. This may be useful for work lights.

Off if Overwritten

This cuelist will switch itself off, when all of its values have been overridden by different cuelists. This is not available when the Cuelist is set to HTP Priority.

Do not Release other Cuelists

This cuelist will not switch other cuelists off that are set to "Off if Overwritten", even if it overrides all of the other cuelists.

20.13.4. Settings for Cuelists only

20.13.4.1. Learn Timing Button

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.

20.13.4.2. Timecode Mode

The **Go Cue** Button sets this cuelist into a "protective" mode, which is very useful when mixing different triggers in a cuelist. The console will only go Cues with Timecodes, if the Cue before the timecoded cue is output.

The **Goto Cue** Button causes the cuelist to always trigger the cue that matches the received timecode, which might cause the console to jump in the cuelist depending of the received timecode time.

20.13.4.3. Start Timecode

The **Start Timecode** Text field can be used to quickly offset all timecode timings within a cuelist.

20.13.5. Settings for Chasers only

20.13.5.1. Chase Go Trigger

Speed Master Faders are used to synchronize Chasers to a given Master Speed clock. The console supports up to 3 Speed Master Faders. They may either be set to BPM or Seconds (see "Show Wide Settings – Setting Timing Defaults").

For Chasers there are no individual Cue trigger settings. Instead the Chaser has a global Trigger source for all Cues which can be selected in the Chaser Setup Menu. If a Chaser is set to trigger on a Master Speed then each time a Cue has been started the Chaser will update the timing of the next Cue with the current Master Speed Trigger Time. So in essence the Chaser will run with the same speed as the Master Speed, but won't sync to it. If multiple Chasers are being run which trigger on the same Speed Master then these Cuelist will all run with the same speed, but will be offset depending on the time they have been started.

The Chaser behavior intentionally differs from Cuelists behavior regarding Speed Masters. If the user whishes to change the Chaser behavior to match the Cuelist behavior, then it is also possible to configure a Chaser to Sync to its trigger source. The Chaser therefore has a custom setting "Sync to Source" to brigde the gap between Cuelist and Chaser trigger behavior.

20.13.5.2. Playback Order

This defines the Playback order of the cues in the Chaser. **Forward** is used as the default.

Settings are:

Forward - The Chaser will be played forwards.

Backward - The Chaser will be played back in reversed order.

Random - The Chaser will be played back with the Cues in random order, using an algorithm which assures that no cue will be shown twice during each cycle of the chase.

20.13.5.3. Chase Snap Value

This defines at which percentage of the crossfade parameters that are set to "Snap" in the library will snap to the new value.

20.14. Playing back Cuelists

Cuelists or Chasers may not be played back from the Cuelist Split Widget, instead they must be assigned to a Master or (Virtual) Executor.

20.15. Selecting Cuelists

Cuelists or Chasers may be selected from the Cuelist Split Widget by simply clicking on them, or by pressing the [Select] key followed by a Master or (Virtual) Executor.

20.16. Switching Off Cuelists

20.16.1. The Off Key

Cuelists may be switched off by pressing the [Off] key followed by a master's Go or Pause button or (Virtual) Executor.

20.16.2. The Off Toolbar

Pressing the [Off] key will also show a toolbar offering several options to switch off or reset masters.

Fig. 164: Off Toolbar

20.16.3. The Off Window

The *Off Window* may be used to easily switch off running cuelists and to get an overview of the current Playback state.

Cuelist	Name	Trigger	Status	Current Cue	Cue Name
2	Cuelist	Cue	Running	1	Cue
1	Song 2	Cue	Running	3	Rock Bridge

Off Menu — Cuelists — Cancel — Off Selected
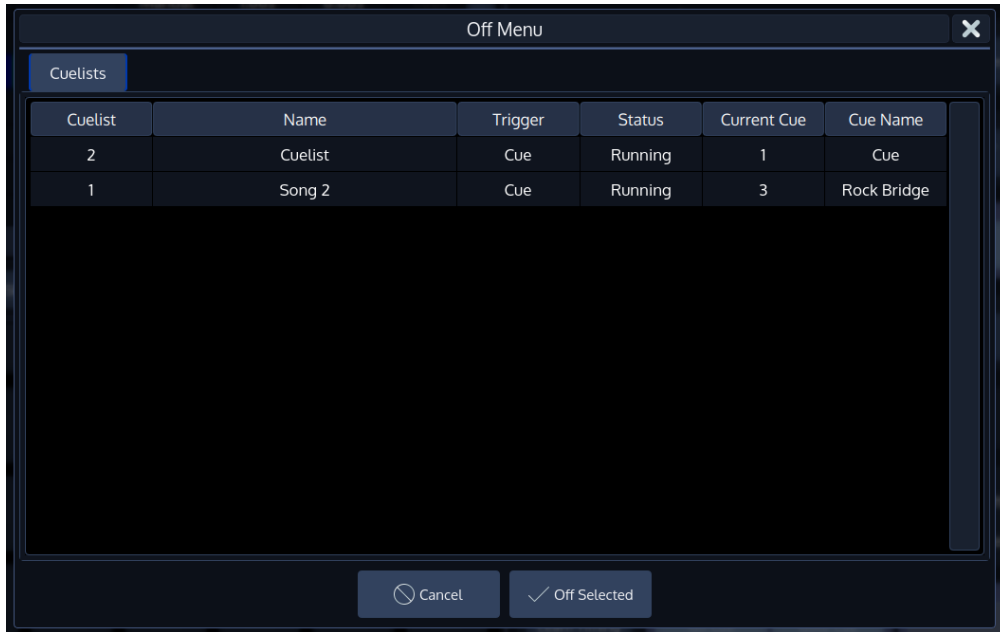
Fig. 165: Off Window

To open the *Off Window,* press the [Off] button and select **Off Window** from the *Off Toolbar*.

Off Window

Off Window — Reset Group Fader — Reset Cuelist Fader — Off All Playbacks — Release Everything
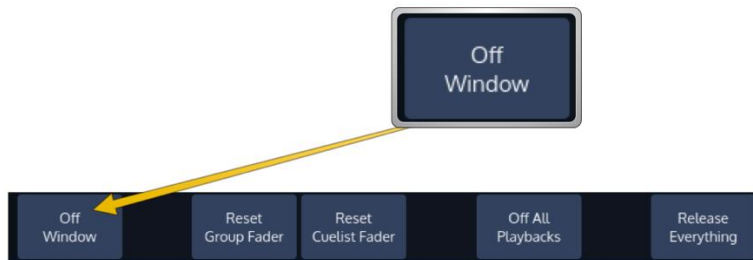
Fig. 166: Open Off Window button

To switch off a Cuelist, select it from the List and press the **Off Selected** button.

21. Working with Masters and Executors

21.1. Basics

"Masters" and Executors work like remote controls – you may assign different objects to Masters and configure them independently in terms of Button and Fader configuration. These assignments are stored for each master and are not linked to the Object the master is connected to. That means you may assign the same single Cuelist to multiple masters and configure each master differently.

21.1.1. Difference between Masters and Master Faders

The 10 Masters on the left side of the console may be connected to any item that is supported to be used on a Fader. These masters may be connected to any of the Global Masters, be used as Group Dimmer Masters or for Cuelists.

The 4 Master Faders on the right side of the console may only be used for Global Masters and Group Dimmer Masters.

21.2. Linking Objects to a Master

You can easily open the Link Fader Dialog by tapping into the appropriates Fader Info Item of an empty fader in the touchscreen.

Alternatively, you may press the [Link] key followed by the appropriate Masters Go or Pause / Back key.
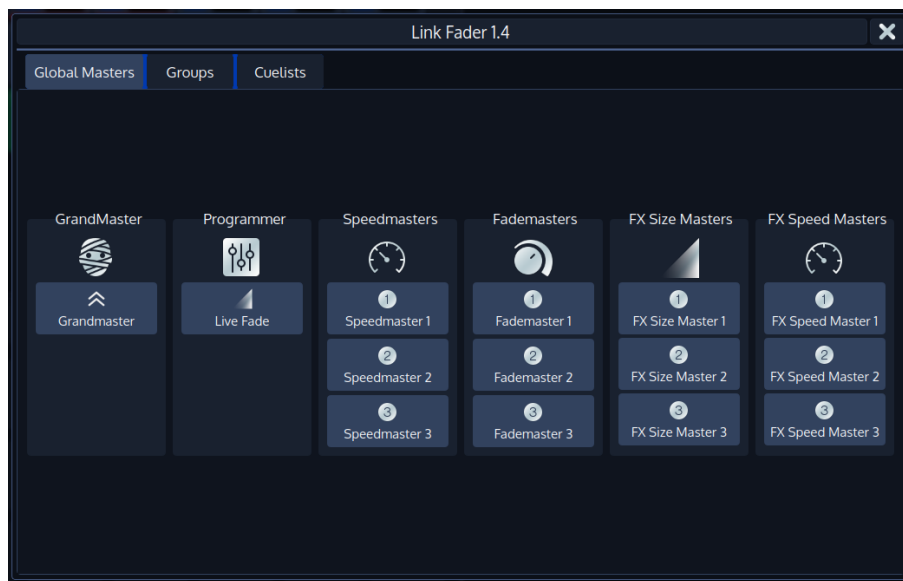
Fig. 167: Link Master Dialog

21.2.1. Linking a Global Master (Speed and Fade Time Masters)

To assign any of the Global Masters (Speed Masters, Grand Masters, etc) to any of the faders, press the [Link] key, followed by a Masters Go / Pause Button.

A window will open, asking you which object to assign. Make sure the **Global Masters** Tab is selected and select the appropriate item for this master.

21.2.2. Linking Groups (Creating a Group Dimmer Master)

Group and Dimmer Masters are compared HTP, so the highest master will take precedence.

To assign any of the Fixture Groups to any of the faders, press the [Link] key, followed by a Masters Go / Pause Button.

A window will open, asking you which object to assign. Make sure the **Groups** Tab is selected and select the appropriate item to this master.

21.2.3. Linking Cuelists

To assign any Cuelist to any of the faders, press the [Link] key, followed by a Masters Go / Back Button.

A window will open, asking you which object to assign. Make sure the **Cuelists** Tab is selected and select the appropriate item to this master.

21.3. Moving a Master

To Move a Masters assignment to a different Master, press the [Move] key. Now, press the [Go] or [Pause / Back] key of the Master you would like to Move followed by the [Go] or [Pause / Back] key of the destination Master.

21.4. Deleting a Master

21.4.1. Deleting a Master only

To delete a Master only:

- Press the [Del] key.
- Make sure **Delete Object** is selected on the delete Toolbar.
- Now, press the [Go] or [Pause / Back] key of the Master you would like to delete.

To delete both, a Master and the attached object (like a Cuelist or Group):

- Press the [Del] key.
- Make sure **Delete All** is selected from the delete Toolbar.
- Now, press the [Go] or [Pause / Back] key of the Master you would like to delete.

21.5. Configuring Fader and Button functions

Each fader and button function may be customized on a "per master" basis in order to provide maximum flexibility when it comes to operating a show.

To edit a masters Go, Pause / Back and fader function, press [Edit] followed by the [Go], or [Pause/Back] key of the master you would like to customize. A window allowing you to adjust each function will be shown.

Alternatively, you may click on the Fader or Executors label.
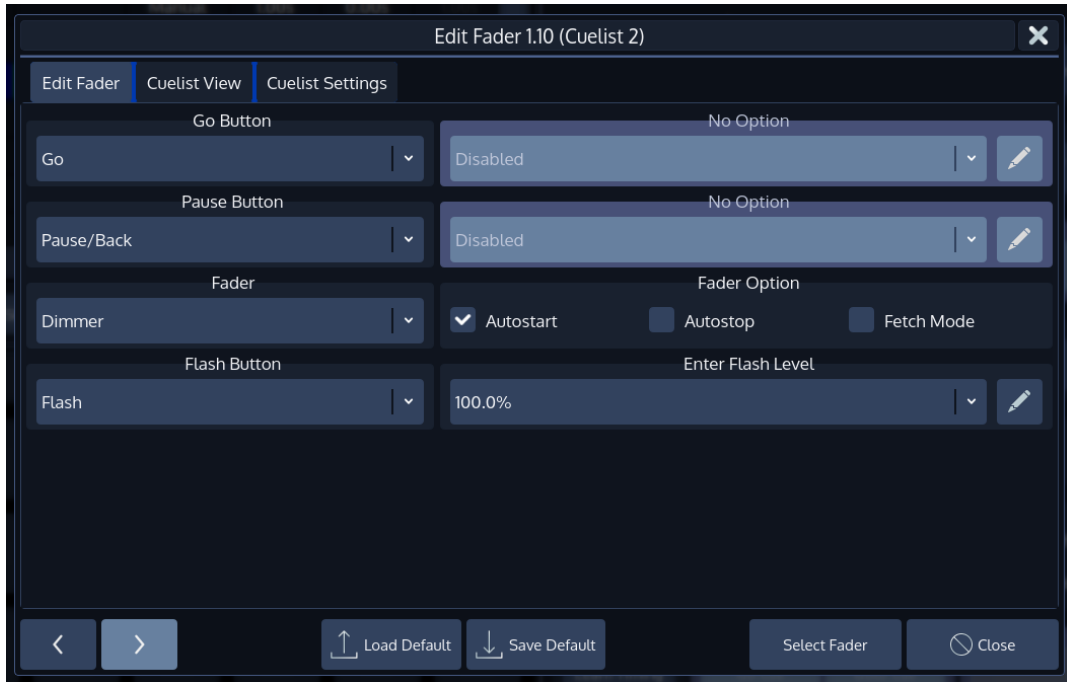
Fig. 168: Edit Fader Dialog

Many Fader and Button options allow for further customization by using dropdown boxes that allow to specify individual options like the flash value or multiplications of timings (for speed masters).

21.5.1. Common Settings

21.5.1.1.   Autostart

The Autostart option will only shown for Cuelists. Enabling it will cause the Cuelist to be started when the Fader is pulled up from 0%.

21.5.1.2.   Autostop

The Autostop option is only shown for Cuelists. Enabling it will cause the Cuelist to be stopped as soon as the Fader reaches the 0% value.

21.5.1.3.   Fetch-Mode

Fetch Mode is especially useful if more than one Fader Page is used. When **Fetch-Mode** is enabled for a fader, the console will save the current faders value when changing the fader page. When you change back to the page where this Object resides on the fader, you will have to reach this value before any fader movement is recognized.

Example without Fetch Mode:

You are on Page 1 and Master 1 contains a Group Master that has the fader set to 48%. You change to Fader-Page 2, where a different object is assigned to Master 1, and move the fader to 100%. You switch

to Fader-Page 1 again and move the Fader of Master 1 (which physically is now at 100%, while the value of the Group Master still resides at 48%), the Group Masters value will jump to the new value instantly.

Example With Fetch Mode:

You are on Page 1 and Master 1 contains a Group Master that has the fader set to 48%. You change to Fader-Page 2, where a different object is assigned to Master 1, and move the fader to 100%. You switch to Fader-Page 1 again and move the Fader of Master 1 (which physically is now at 100%, while the Value of the Group master still resides at 48%), nothing will happen to the Group Masters value until the Fader physically reached the value of 49%. It will apply new values only if it has been "Picked up" or "Fetched" at the previous value.

21.5.2. Button and Fader functions

21.5.2.1.   Grandmaster

Button Function	Action on Button Press
Disabled	
Blackout	All Fixture attribute will be set to their Blackout Values, as defined in the Library.

Fader Function	Action on Button Press
Disabled	
Grand Master	The fader acts as a Master Dimmer Fader for all fixtures.

21.5.2.2.   Groups

Button Function	Action on Button Press
Disabled	
Select Fixtures	Selects the fixtures contained in the Group
Flash	Will flash the Master-Dimmer Level of that Group to 100%, which means that the dimmer value of contained fixtures is determined by the Cuelist output & the programmer.

Fader Function	Action on Button Press
Disabled	
Group Submaster	The fader acts as an Inhibitive Dimmer Fader for the appropriate Group.

21.5.2.3.   Cuelists

Button Function	Action on Button Press
Disabled	
Select Cuelist	Selects the Cuelist.
Toggle On / Off	The first press on the Button will start the Cuelist, the second press will switch it off.
Go	Issues a Go command to start the cuelist, or, if it is already running, advances through the different cues of the Cuelist.
Pause / Back	The first press on the button will pause the cuelist including all ongoing fades. The second press will advance through the Cuelist in reversed order.
Skip +	Skips to the next cue in the Cuelist without switching it on. If the Cuelist is running it will skip to the next cue, ignoring all fade times.
Skip -	Skips to the previous cue in the Cuelist without switching it on. If the Cuelist is running it will skip to the previous cue, ignoring all fade times.
Flash	Will flash the Masters fader value to 100% without Switching the cuelist on or off.
Flash + Go	Will flash the Masters fader value to 100% and switch on the Cuelist. The Cuelist stays "On" after releasing the Button.
Flash + Go + Off	Will flash the Masters fader value to 100% and switch on the Cuelist. The Cuelist will be switched "Off" when releasing the Button.
Flash + Off	Will flash the Masters fader value to 100% and switch off the Cuelist when releasing the Button. It will not start the Cuelist.
Off	Switches off the Cuelist using the Off time to fade out given in the Cuelist options.
Instant Off	Switches off the Cuelist ignoring the Off time set in the Cuelist options.
Assert	Will bring the Cuelist "Up Front" in the priority stack but does not advance through the Cuelist.
Tap Sync (Chaser)	If this Cuelist is set to "Chaser" Mode and not linked to a Speed Master, this Button may be used to "Learn" (control) the speed of the Chase.

Fader Function	Action on Button Press
Disabled	
Dimmer	The fader acts as a Dimmer Master for the Cuelist Contents. Only Dimmer channels are effected.
Speed	The fader controls Cuelist (Next, Fade and Snap Timings) and Effect speed of the contained Cuelist. 100% is equivalent to the speed programmed.
FX-Size	The fader controls Effect Size of effects contained in its Cues.
FX-Speed	The fader controls Effect Speed of effects contained in its Cues.
Infade	The fader will fade all parameters contained in the cuelist, even channels set to Snap within the Fixture Library.
X-Fade	The fader will crossfade between the current and the next cue allowing for manual crossfades.

21.5.2.4. Speed Masters

Button Function	Action on Button Press
Disabled	
Time Increase	Adds the amount of time entered in the Combobox.
Time Decrease	Substracts the amount of time entered in the Combobox.
Time Multiply	Multiplies the time of the Speed Master by the given amount.
Time Divide	Divides the time of the Speed Master by the amount entered in the Options Combobox.
Tap Sync	Measures the time between taps and sets the Speed Master to that amount.
Manual Go	Will issue a "Go" Command to all Cuelists listening to this Speedmaster. It only applies to Cuelists that are already running.
Toggle On / Off	Will Pause / Unpause the Speedmaster

Fader Function	Action on Button Press
Disabled	
Master Speed	The fader controls the Speed in a range of 0.10s to 10s

21.5.2.5. Fade Masters

Button Function	Action on Button Press
Disabled	
Time Increase	Adds the amount of time entered in the Combobox.
Time Decrease	Substracts the amount of time entered in the Combobox.
Time Multiply	Multiplies the time of the Fademaster by the given amount.
Time Divide	Divides the time of the Fademaster by the amount entered in the Options Combobox.
Tap Sync	Measures the time between taps and sets the Speed Master to that amount.

Fader Function	Action on Button Press
Disabled	
Master Fade	The fader controls the Fadetime of assigned Cuelists in a range of 0.10s to 10s

22. Working with Magic Sheets

22.1. About Magic Sheets

Magic Sheets can be used to visually position and select fixtures on the screen by using the new full-screen and quad split Magic Sheet Windows. Magic Sheets can contain Fixtures, Groups, Presets and Cuelists as well as labels. There is a total of 4 Magic Sheets available.

Another good use for Magic Sheets is to build some kind of a "Virtual Executor Page", which is a magic sheet consisting of labels and cuelists.

Similar to Pool Windows all Magic Sheet Items will display their current status and update themselves automatically. Labels have an edit dialog which allows to define appearance (Color, Border Size and Radius) as well as if clicking inside the backgroud of a Label may be set to select all Fixtures contained in the label.

22.1.1. Opening a Magic Sheet View

You may either switch to a fullscreen Magic Sheet by clicking on the **Magic Sheet** button found in the top toolbar or by selecting **Magic Sheets** from a Split Widgets Side Menu.

Fig. 169: Magic Sheet Button in Top Toolbar

Fig. 170: Magic Sheets Button Side Menu

22.2. Magic Sheet Split Widget Titlebar

The Magic Sheet Titlebar contains the main buttons used to edit and switch between one of the four different Magic Sheets.

Fig. 171: Magic Sheet Titlebar

22.2.1. Edit Magic Sheet Button

You can enter Edit Mode by clicking on the button that reads **Edit Magic Sheet**. The chimp will show a second level toolbar that you may use to add, edit, delete and further modify selected Magic Sheet Items. Magic Sheet may only contain every fixture once per Magic Sheet. When not in edit mode, the selection rectangle will only select Fixture Items.

Fig. 172: Edit Magic Sheet Button
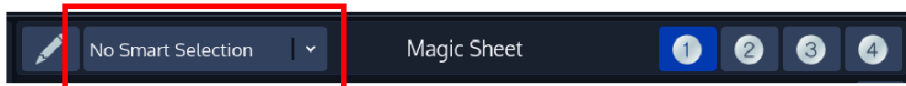
22.2.2. Smart Selection

Fig. 173: Smart Selection drop down

Smart Selection may be used to alter how items in the sheet may be selected.

22.2.2.1.   No Smart Selection

To select (or trigger the chosen action for Cuelist) Items, you can either click on an item or draw a selection rectangle by pushing and dragging your finger across the Magic Sheet area.

When drawing a selection rectangle, selection order will differ based on click&drag direction (left to right vs. right to left; top to bottom vs bottom to top). Selection order is displayed by a tool tip in the bottom of the Magic Sheet.

Holding [Infinity] while dragging a selection rectangle will invert the current selection.

Holding [Infinity] while clicking on a label that is set to select contained fixtures will invert the selection within the label.

22.2.2.2.   Draw Selection

Draw Selection allows you to visually draw a selection with the selection order specified by the order in which you "touch" Items.

To draw a selection enable Draw Selection and click and hold your finger on the first Item. Now you may move your finger across the screen to touch and select other fixture items.

22.2.2.3.   Circle Detection

Circle Detection allows you select fixtures that are arranged in a circular arrangement more easily. When enabled, the chimp will autodetect circular arrangements and start the selection order from the Fixture that is first touched by the selection rectangle. Fixtures will be ordered according to the selected Circle Detection Mode.

Circle Detection CW will select fixtures in Clockwise direction, whereas Circle Detection CCW will select fixtures in counter clockwise order.

22.2.3. Selecting a Magic Sheet

To select one of the four available Magic Sheets, select the Magic Sheet number from the title bar of the Split Widget.

Fig. 174: Magic Sheet Selection

22.3. Navigating in a Magic Sheet

A persistent overlay on the right hand side of the Magic Sheet area can be used to Zoom Fit, Zoom in, Zoom Out and to activate the Viewport Drag mode which allows the user to select the area of interest in the sheet.

For each Magic Sheet Zoom Factor and Position can be individually set and will be recorded inside the showfile.
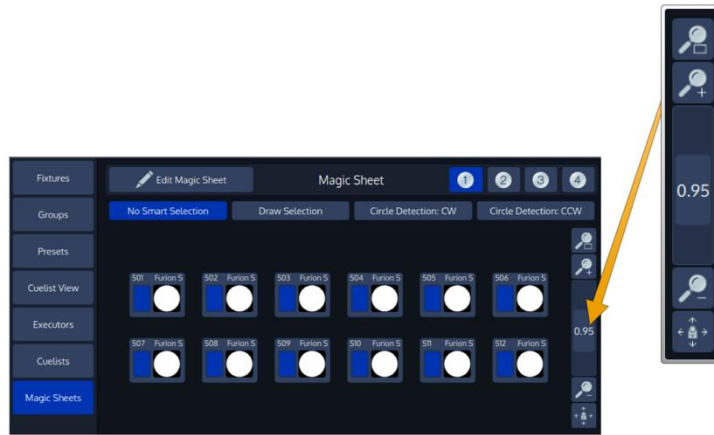
Fig. 175: Magic Sheet Navigation Overlay

- **Zoom Fit** will set the Zoom and the Viewport so you can see every Item in this Magic Sheet.

- **Zoom +** will zoom into the Magic Sheet, meaning you will see the Items larger.

- The **Vertical Scroll Bar** determines the Zoom level.

- **Zoom –** will zoom out of the Magic Sheet, meaning Items get smaller.

- The **Viewport Drag** button allows you to move the Viewed Area around.

22.4. Deselecting Items in a Magic Sheet

The selection may be cleared at any time using the **Deselect All Items** button in the bottom right.

Fig. 176: Deselect All Items Button

22.5. Creating / Modifying a Magic Sheet

To start creating or editing a Magic Sheet, click on the **Edit Magic Sheet** Button, indicated by a pen Icon.

The Edit Mode toolbar will be shown.
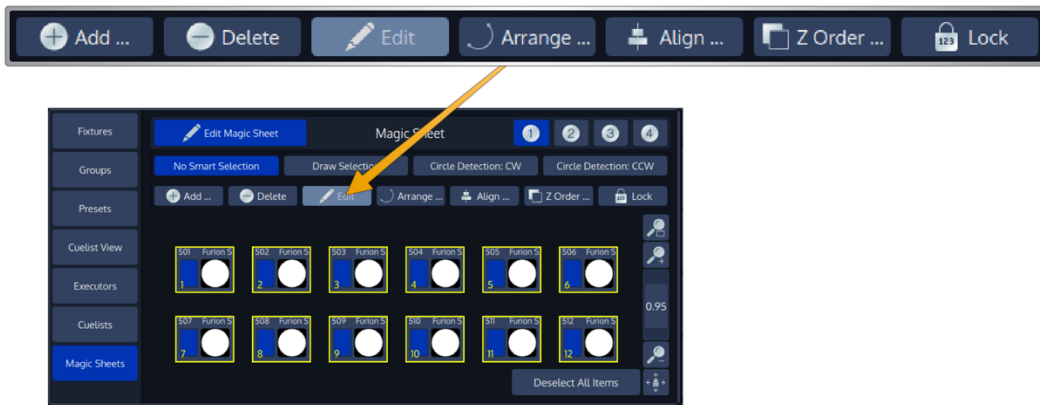
Fig. 178: Edit Mode Toolbar

Each action displays a tool tip on the bottom of the Magic Sheet displaying additional information for advanced functions and actions.

22.6. Adding Items to the Magic Sheet

To add Items to the Magic Sheet, click on the **Add** Button found in the Edit Mode toolbar. A menu, asking you what type of Item you would like to add will appear.

Fig. 179: Add Items Menu

Fixtures, **Groups**, **Presets** or **Cuelists** will open a Dialog asking you to select the Items you would like to add.

Selected Fixtures will add the currently selected fixtures to the Magic Sheet.

Label will add a Label to the Magic Sheet. When inserting a label, the console asks you to "draw" the label in the Magic Sheet.

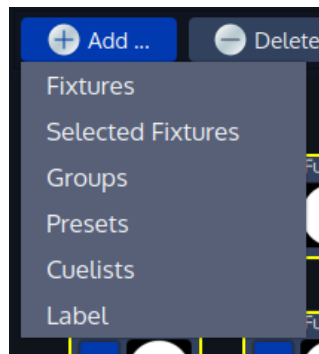## 22.7. Deleting Items from the Magic Sheet

To delete Items from the Magic Sheet, simply select them and click on the **Delete** Button found in the Edit Mode toolbar.

22.8. Editing

To change the behaviour and appearance of Labels and Cuelists, select them and click on the **Edit** Button found in the Edit Mode toolbar. You may do this for multiple Items at once.

22.8.1. Edit Dialog for Cuelist Magic Sheet Items

The Edit Dialog for Cuelists lets you select what should happen when you press on the Item when the Magic Sheet is not in Edit Mode.
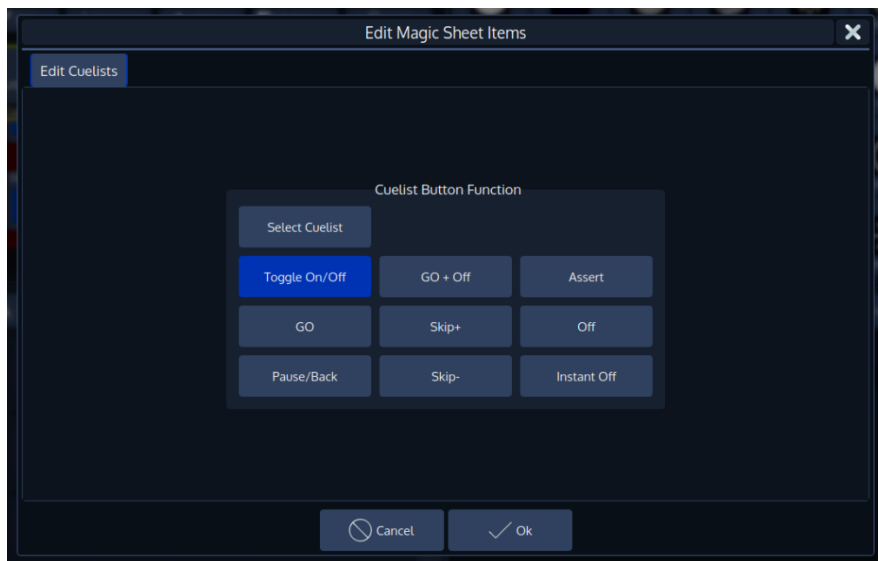
Fig. 180: Edit Cuelist Magic Sheet Item

22.8.2. Edit Dialog for Label Magic Sheet Items

The Edit Dialog for Labels lets you adjust the appearance and behaviour of a or multiple labels. You may define a labels Text (an empty text is possible too), border thickness and radius, as well as the labels color. You can also specify of clicking on the Label should select the contained fixtures.
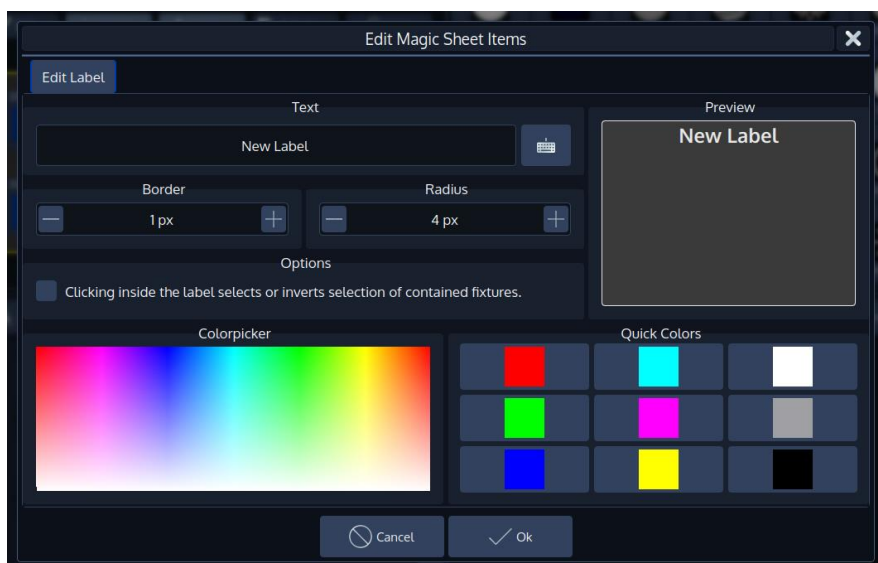
Fig. 181: Edit Cuelist Magic Sheet Item

22.9. Arranging / Moving Items in the Magic Sheet

You may move Items around by simply clicking on them and dragging them to the desired position. Alternatively, you may use the Arrange and Align functions provided in the Edit Mode toolbar.
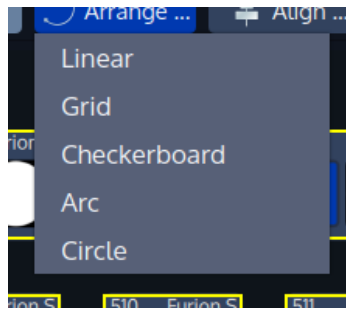
Fig. 182: Arrange Items Menu

When arranging Items, the handles will snap to multiples of 45 degrees when dragging a handle. Holding [Infinity] while dragging the handles disables the snap function.

22.9.1. 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.

When you are happy with the arrangement, click on **Apply** found in the bottom right corner.

Fig. 183: Arrange Linear

22.9.2. Arrange Grid

Arrange Linear will rearrange all Items in a line, 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.

When you are happy with the arrangement, click on **Apply** found in the bottom right corner.
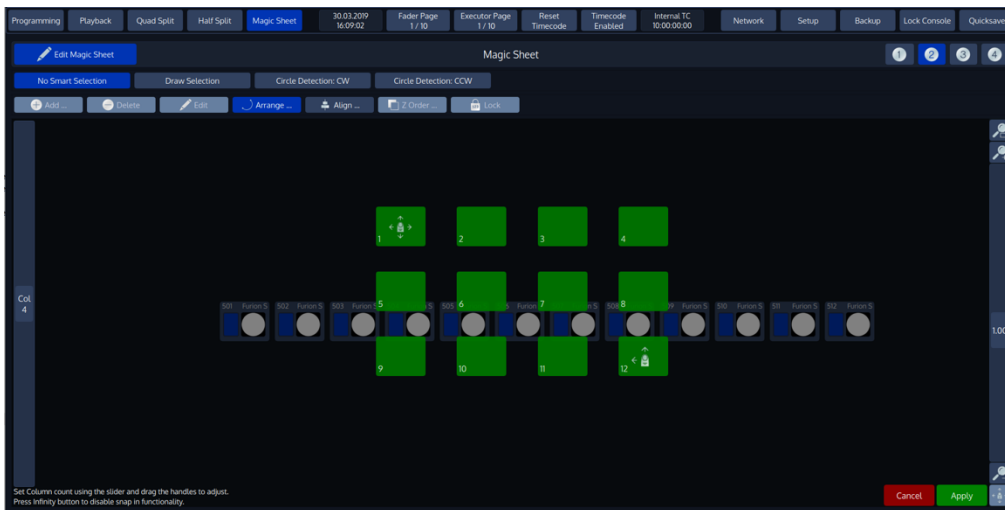
Fig. 184: Arrange Grid

22.9.3. Arrange Checkerboard

Arrange Checkerboard will rearrange all Items in a Checkerboard grid style, 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.

When you are happy with the arrangement, click on **Apply** found in the bottom right corner.

Fig. 185: Arrange Checkerboard

22.9.4. Arrange Arc

Arrange Arc will rearrange all Items in an Arc, asking you to specify the start point, radius and endpoint using drag handles.

When you are happy with the arrangement, click on **Apply** found in the bottom right corner.

Fig. 186: Arrange Arc

22.9.5. Arrange Circle

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

When you are happy with the arrangement, click on **Apply** found in the bottom right corner.
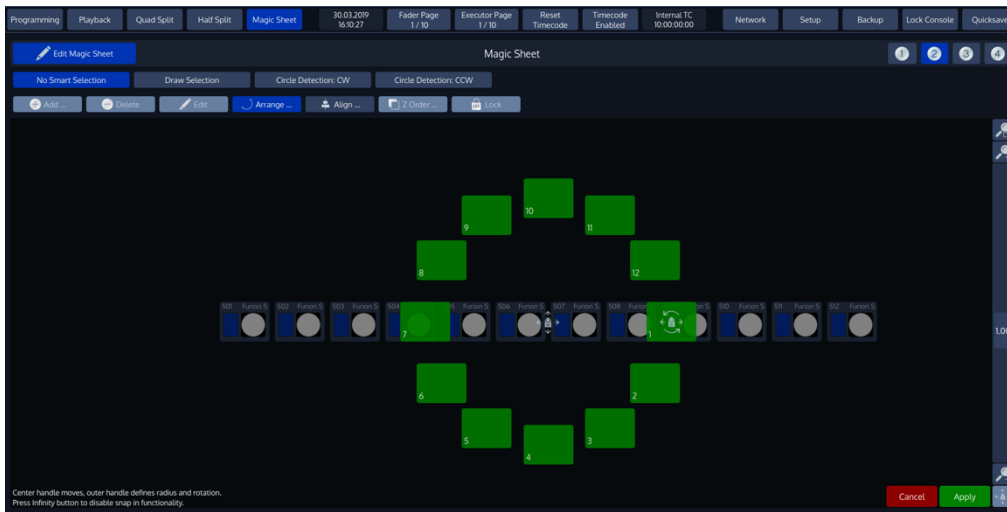
Fig. 187: Arrange Circle

22.10. Aligning Items in the Magic Sheet

The Align Functions found when clicking on the **Align** button may be used to align manually dragged items to each other.
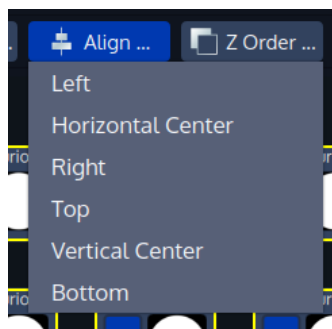
Fig. 188: Align Items Menu

22.11. Z-Order

If Items are overlapping and you would like to change the display order of them being displayed, the Z-Order Menu is here to help you. Labels will always be displayed behind other Items.

Fig. 189: Z-Order Menu

22.12. Lock

In order to prevent accidental movement of Items, you may **Lock** them. This is especially useful for labels. Locked Items will display a little lock Icon in Edit Mode.

23.   Working with Fader and Executor Pages

23.1.   About Pages

Pages store all assignments of Cuelists, Fixture- and Groupmasters, to enable them to be quickly recalled later. Pages do not store Levels of the faders and Cuelist states.

To open the Fader Page Directory, press the Fader or Executor Page Buttons on the top menu bar.

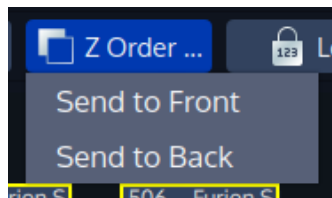These buttons also show the current Page for the Faders and Executors.

Fig. 190: Fader Page Indicators

23.2.   Changing Fader Pages

Faderpages may be changed at any time by pressing the [F-], or [F+] buttons on the front panel of the console.

Executor pages may be changed at any time by pressing the [E-], or [E+] buttons on the front panel of the console.
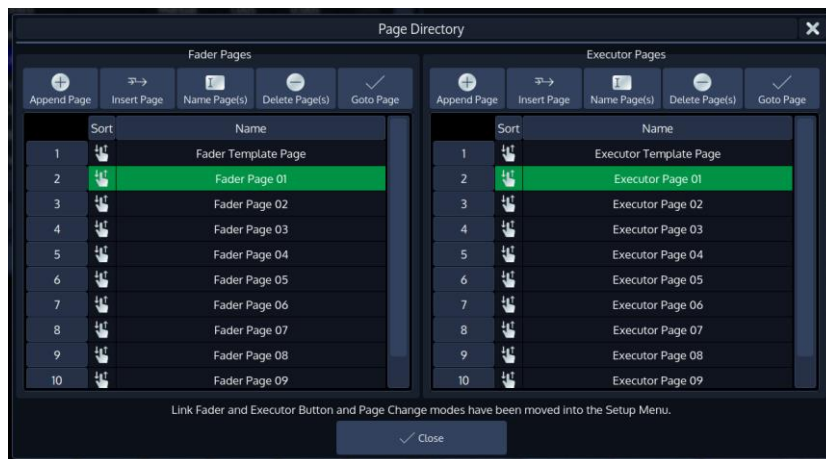

Fig. 191: Page Directory

Alternatively, you may change Pages from within the Page Directory Window by selecting the Page you would like to change to and pressing the **Goto Page** button.

Fader Page change settings may be adjusted from within the **Show Settings** Menu. Please see the Chapter "11.1 Fader / Executor Page Change Settings" on Page 58 for more information.

23.3. Template Page

Assignments on the Template Page will show on all other pages. This is especially helpful if you want to have the same assignment on every page for some Cuelists or Groupmasters. Key or audience lighting is a good use case for this function.

To be able to set your page to the template for setup purposes, please press the [Temp] button on the Frontpanel of the console, or open up the Cuelist Directory window and select **Template Page** from the list of pages and press the **Goto Page** button.

23.4. Editing Fader-Pages

23.4.1. Adding Pages

Open the Fader Page Directory window and click on **Append** to add a new page behind the last one or click on **Insert** to insert a page in front of the one you have selected in the directory window.

23.4.2. Moving Pages

You may move pages around to be sorted in the right order when you step through pages using the [Next Page] and [Previous Page] buttons:

Open the Fader Page Directory window and simply click and drag the sort icon of the page you would like to move.

23.4.3. Deleting Pages

To delete one or more pages, go on as follows:

Open the Cuelist Directory window, select the page(s) you would like to delete in the directory window and click on the **Delete** button.

23.4.4. Naming one or more Pages

Pages may be named for organization purposes:

Open the Cuelist Directory window, select the page(s) you would like to set a Name for in the directory window and click the **Name Pages** button. An on-screen Keyboard dialog will be shown.

Page Names are shown in the Status Buttons in the Top Menu bar.

24. Using the Output Window

The Output Window is a useful tool to troubleshoot data or programming Issues, or simply to double check which channels are being output at which value and from which source.

You may open the Output View window by clicking on the **Output View** button on the second page of any split widget side menu.

The list of fixtures and values may be sorted and filtered using the title bar buttons.

<div align="right">

Fig. 192: DMX Output

</div>

24.1. Color Coding

The Output View color's have the following meanings:

	State
100%	The value comes from within the programmer
100%	The value is output from a cuelist
100%	The value is output with the highlight value
100%	The value is output with the default value

24.2. Title Bar Buttons

<div align="right">
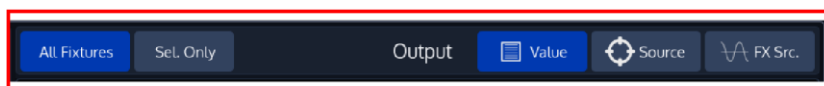
Fig. 193: Output View Titlebar

</div>

The Output Views title bar consists of multiple buttons which are useful for further filtering of the information provided.

24.2.1.   All Fixtures / Selected Only

24.2.1.1.   All Fixtures

When All Fixtures is chosen, the output view displays all fixtures that exist in the Showfile.

24.2.1.2.   Selected Only

When Sel. Only is chosen, the output view displays only fixtures that are selected.

24.2.2. Value

When Value is selected, the Output View will show the current fixture values that are being output.

24.2.3. Source

When Source is selected, the Output View will show the (base) source of the value by number and name.

24.2.4.   Fx Source

When Fx. Src is selected, the Output View will show the source of the effect being output for the value by number and name.

25. 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 **DMX Output** button on the second page of any split widget side menu.

The DMX Universe may be selected using the drop-down menu in the title bar.
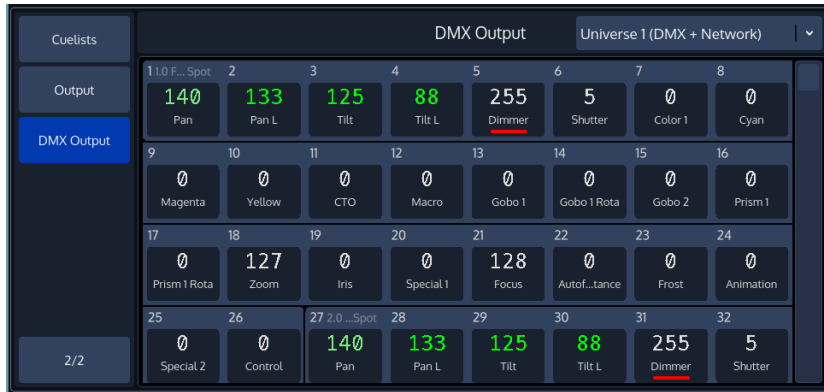
Fig. 197: DMX Output

26. Multi Console Networking

26.1. What is Multi Console Networking

You may network together up to two Chimp consoles. As of software version 2.0 consoles of different types may be networked (as well as on-pc); however, DMX Output on each console is limited to the number of universes supported and unlocked by each console.

This will automatically create a tracking backup session. The Backup Console will download the Show from the master console and disable its own DMX and ArtNet output while in Backup mode. The Backup Console will mirror all actions taken on the master console.

If the Master console fails, the Backup console will enable its DMX outputs and take over and act as a standalone console continuing from where the master failed.

The **Network** Screen is accessible from the User Interfaces top toolbar:

Fig. 198: Network Screen

26.2. Known Limitations

Multi Console Networking has the following known limitations:

- When establishing a network session playback data (running cuelists, etc) from the Master console is not synced with the Backup Console. For playback data to be in sync between both consoles, the Master Console will switch off all running playbacks when the network session is initiated.
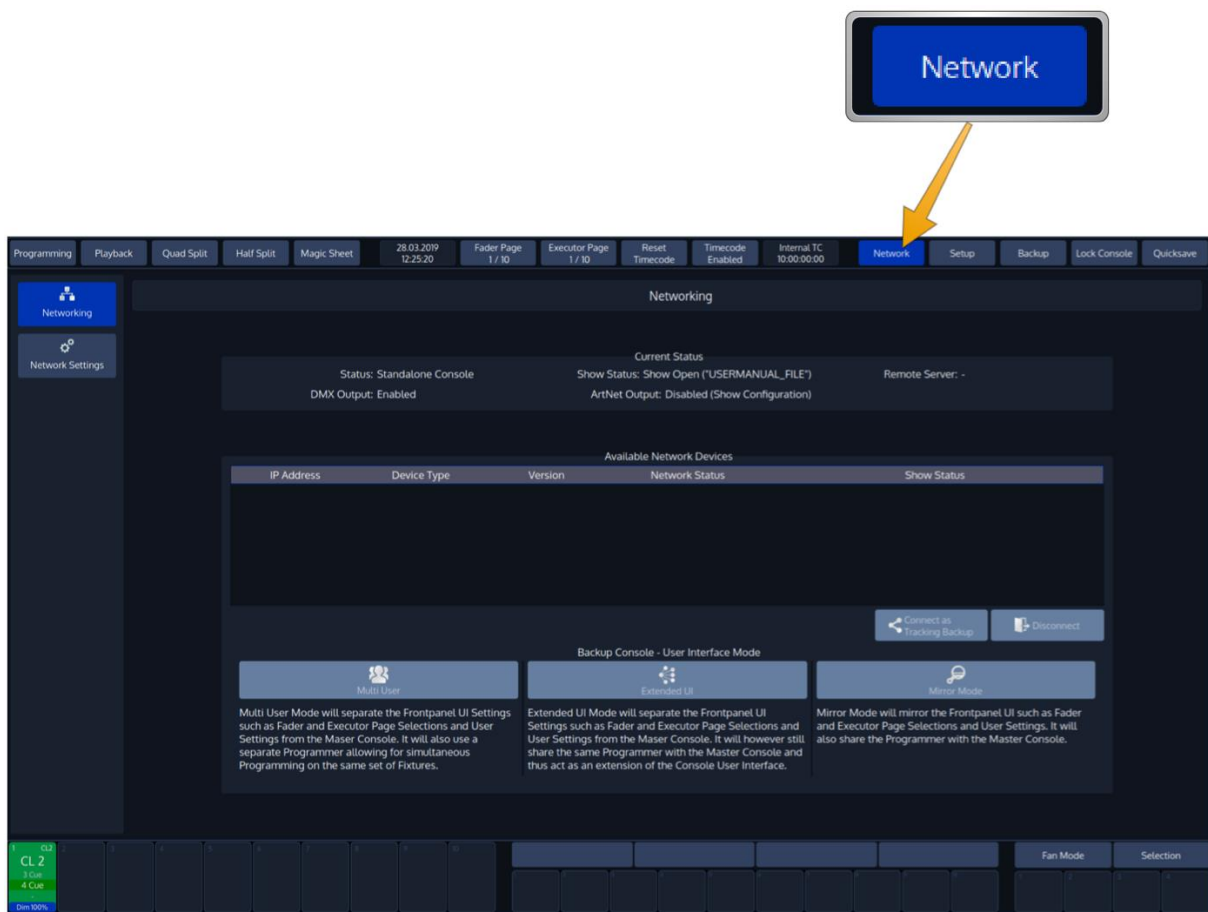- While in a network session, fixtures can not be added or deleted. This needs to be done on the Master Console before establishing the network session. Fixture Settings (including Patch) however can be changed during a network session.
- Midi/Sound/Timecode/DMX Input are not transmitted on the network from the Master Console to the Backup Console. You need to make sure that the Backup Console is receiving the same data on its hardware inputs as the Master Console. Otherwise Show data might differ (for example learn timecode might not work as expected).
- The functions "Open", "Save As" and "Delete" are disabled in the Backup Menu during a network session.
- If different console types are used, ie. Chimp 100 and Chimp 300 the number of universes output depends on each console type. This means that the Chimp 100 will still only output 2 universes, while the chimp 300 may output all 4 universes. You may increase the universe count using the Dongle, Sidekick or Peanut box.
  It is recommended that all consoles in a network session are capable of outputting the same amount of universes.

26.3. Requirements for establishing a Tracking Backup Session

The following requirements must be met to run a network session:

- Both Consoles need to be running the same software version.
- Both Consoles have set IP addresses and must be on the same subnet (e.g., 10.0.0.1 and 10.0.0.2; both subnets 255.0.0.0).
- Both Consoles are linked with Gigabit Ethernet (100MBit or Wifi might connect but will not work reliably!).
- They can be linked using a direct cable connection between both consoles and through a network switch (Also, the switch must be a Gigabit Switch.
- Make sure to use properly shielded Cat5 or Cat6 network cable!
- The Master Console has a show open

26.4. Creating a Tracking Backup Session

To connect to a Network Session, open the **Network** Screen on the Backup Console.

Now, connecting is as simple as selecting the Master Console from the **Available Network Devices** shown in the list and clicking the **Connect** button.
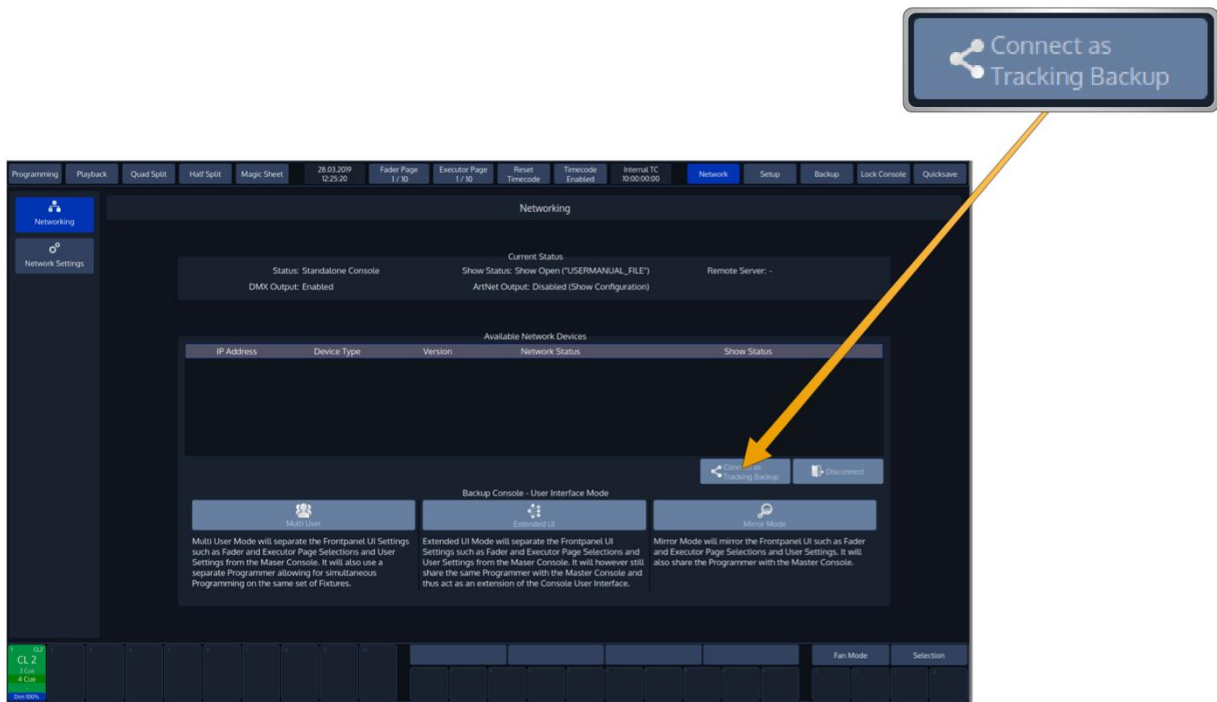
Fig. 199: Network Screen – Connect as Tracking Backup

Please remember that the Master Console will switch off all running playbacks when the network session is initiated.

Backup Console Operation Modes

While in a tracking backup session the the Backup console can be running in one of the following 3 User Interface modes:

Multi User seperates both consoles User Interfaces. The Backup console can be on a different Fader or Executor Page and has a seperate programmer, meaning you may program a show with more than one user.

Mirror Mode will cause the Backup Console to mimic the Master Console.

Extended UI will still share programmer with the Master, but Page Selection and other show settings are independent. Thus, Extended UI is extendending the consoles physical user interface with double the amount of faders and executors.

To select the desired mode, change to the **Network Screen** on the Backup Console and select it from the **User Interface Mode** groupbox on the bottom of the screen.
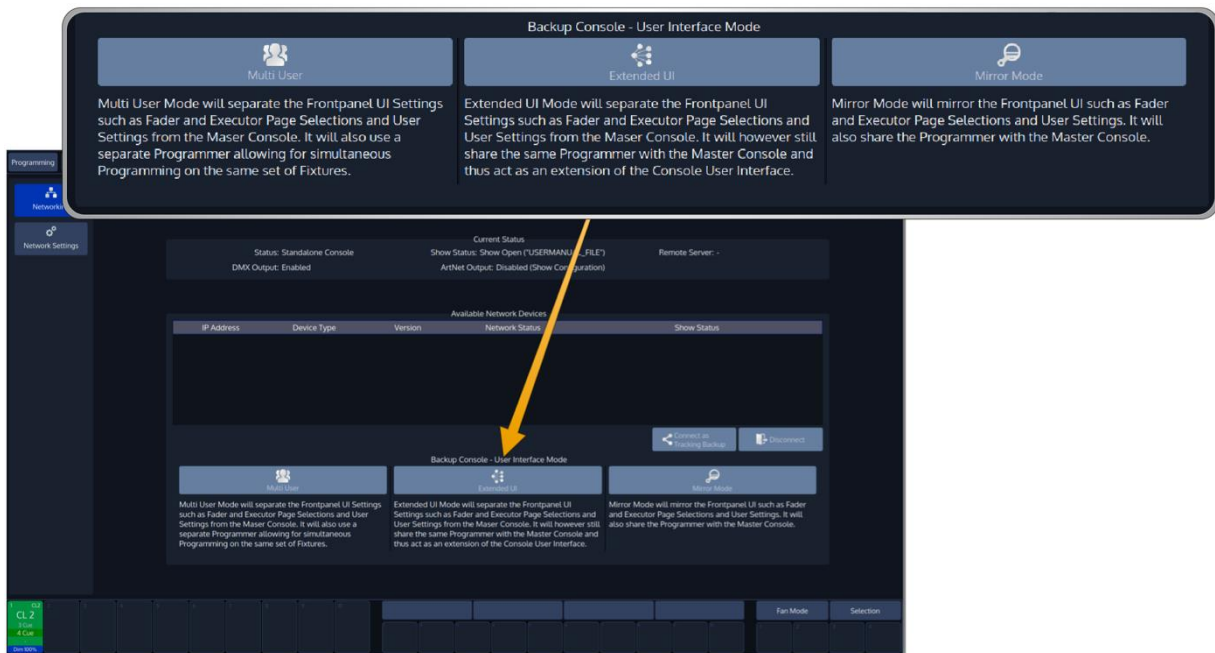
Fig. 200: Network Screen –Backup Console User Interface Mode

27.   Configure system-wide settings

Before you start using the console, it is advised to make sure all basic settings are setup to your liking. This includes the USB Keyboard Layout, Time and Date as well as Network Settings. These settings are system-wide, and not saved within a show-file.

System Wide Settings are defined in the **Setup** Screens Show Settings hierarchy.
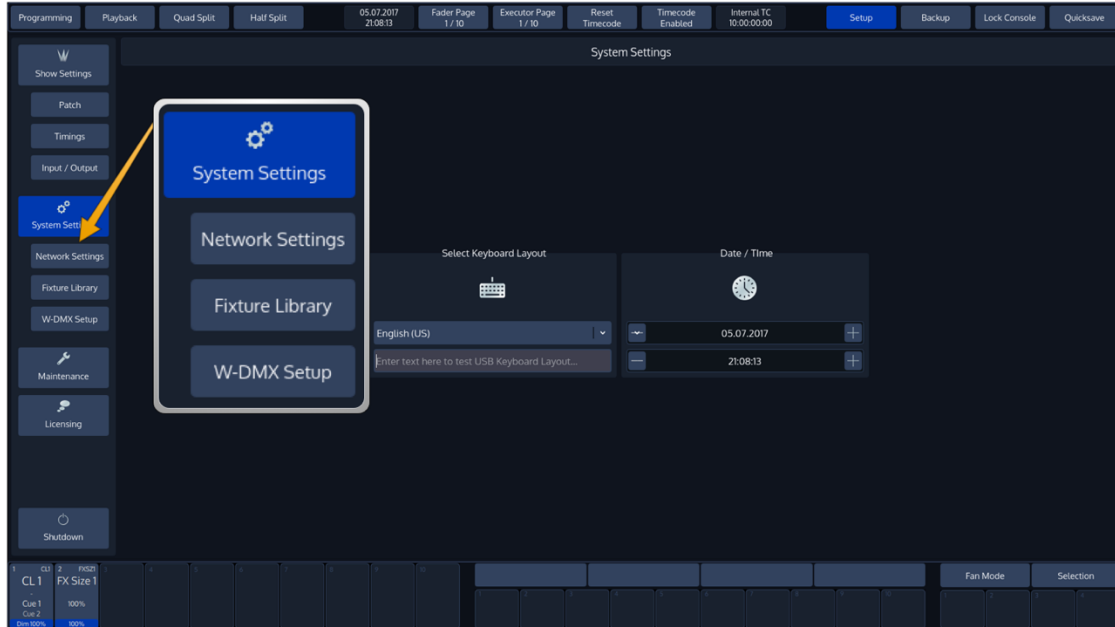
Fig. 201: System Settings

The Setup Menu is not available when no Showfile has been started.

27.1. Change the USB-Keyboard Locale

From within the System Settings Page, you may change the systems locale to match your USB-Keyboard. Select the appropriate locale from the dropdown box. You may use the "Test" –Textfield to test the new locale.
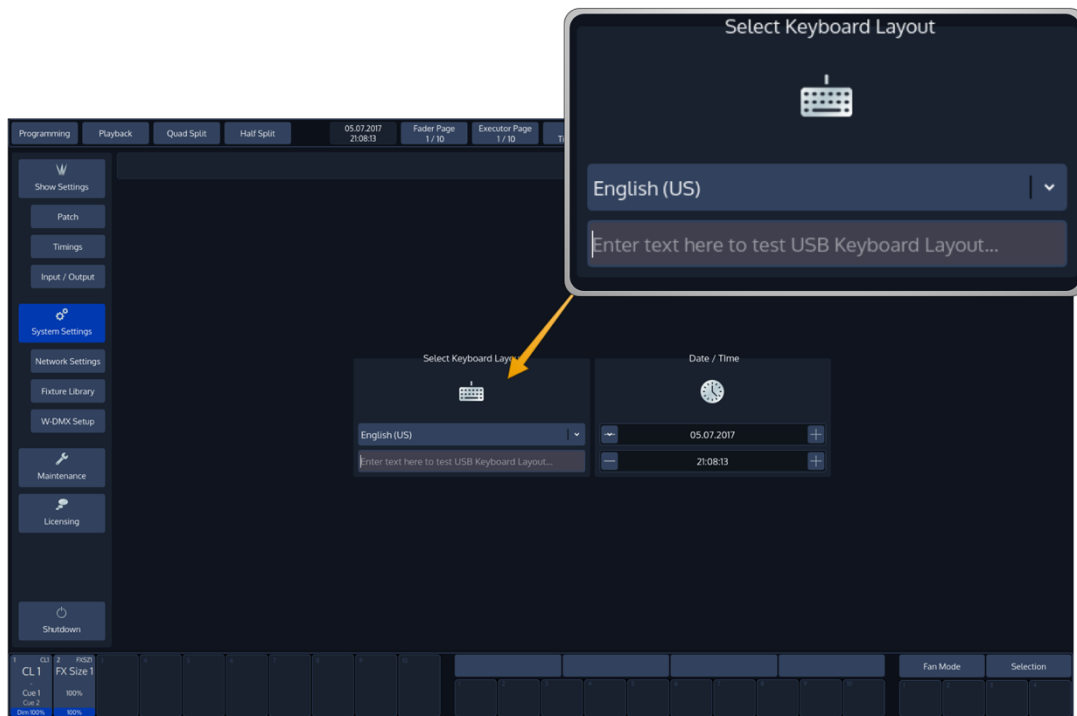
Fig. 202: USB Keyboard Locale

27.2. Set Date and Time

You may set Date and Time from within the System Settings Page.

Click on one of the numbers and use the plus and minus button to adjust accordingly.
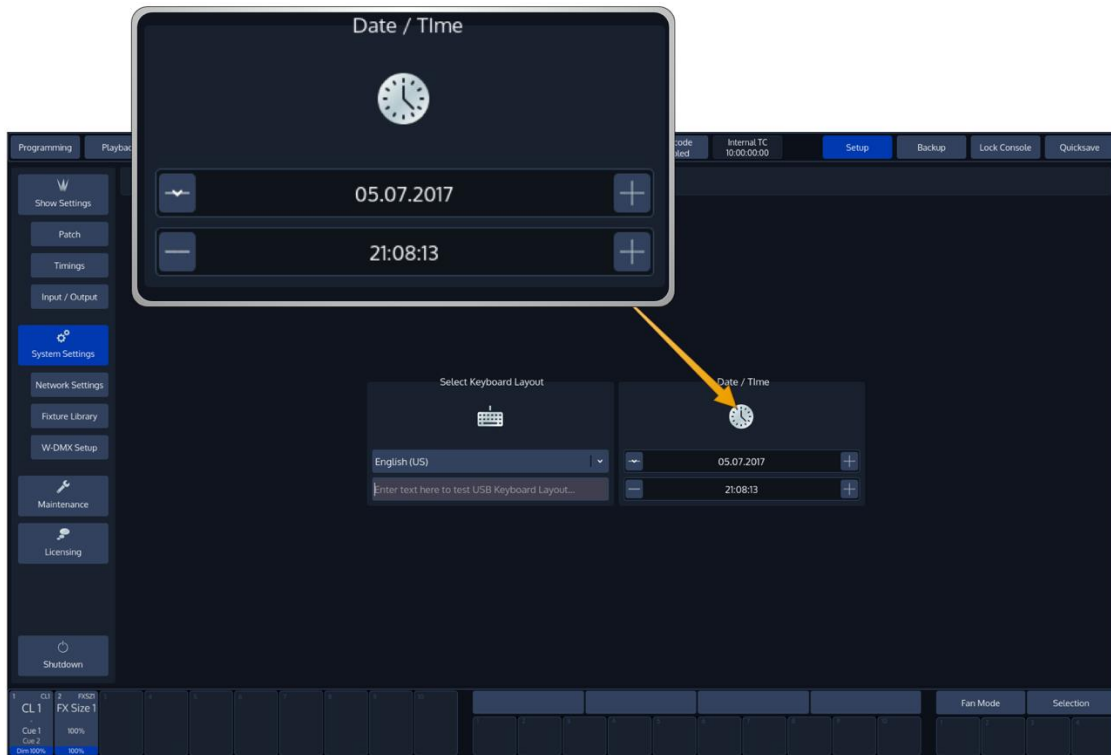
Fig. 203: Set Date and Time

27.3. Network Settings

From within the Setup screen, select **Network Settings** to open the "Change Network Settings" Page.

You may now change IP-Address Settings and test if the console has access to the World Wide Web. This is particularly useful for the built-in online software update function.
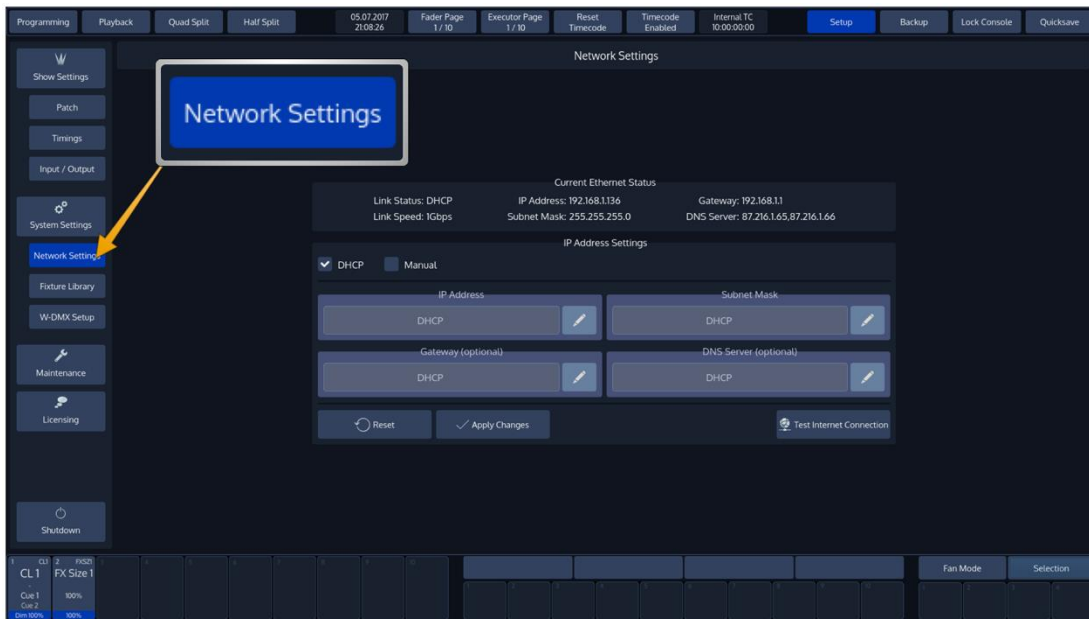
Fig. 204: Network Settings

27.3.1. Changing the IP Address

27.3.1.1.　　DHCP or Manual

Here you may set if the Chimp should get its IP Address settings from a **DHCP** Server on the LAN, or if you wish to assign IP Addresses manually. IP Address and Subnet Mask are mandatory if set to **Manual**.

27.3.1.2.　　IP Address

This text-field will display the IP-Address of the console if manual configuration has been selected above. Use the **Edit** button on the right of the text field to set the IP Address.

27.3.1.3.　　Subnet Mask

This text-field will display the Subnet Mask of the console's Ethernet port if manual configuration has been selected. Use the **Edit** button on the right of the text field to set the Subnet Mask.

27.3.1.4.　　Gateway

This text-field will display the Gateway-Address of the Ethernet port if manual configuration has been selected. Use the **Edit** button on the right of the text field to set. The Gateway is only needed should you wish to connect your console to the Internet.

27.3.1.5.　　DNS Server

This text-field will display the DNS Server of the console's Ethernet port if manual configuration has been selected. Use the **Edit** button on the right of the text field to set. The DNS Server is only needed should you wish to connect your console to the Internet.

Click on **Apply Changes** to apply the changes and store the settings permanently. Click on **Cancel** to revert to your previous configuration.

27.3.2. The current Ethernet Status

The "Current Ethernet Status" groupbox shows basic information about the current status of the Ethernet port, like IP Address, Link Speed and more.

The Link Status row indicates if the IP Address has been set manually, or if it has been obtained from a remote DHCP Server.

Link speed will show the current network connections speed.

IP Address shows the consoles current IP Address and the Subnet Mask row displays the current Subnet Mask. Additionally, the console shows the Gateway and DNS Server addresses.

The button **Test Internet Connection** is useful to test if the console has access to the Internet, which may be used to update the consoles software version.

27.4. Configure (optional) WDMX Transmitter

If you have a WDMX Transmitter installed in your console, you may trigger the Link / Unlink functions from within the Setup Screen.
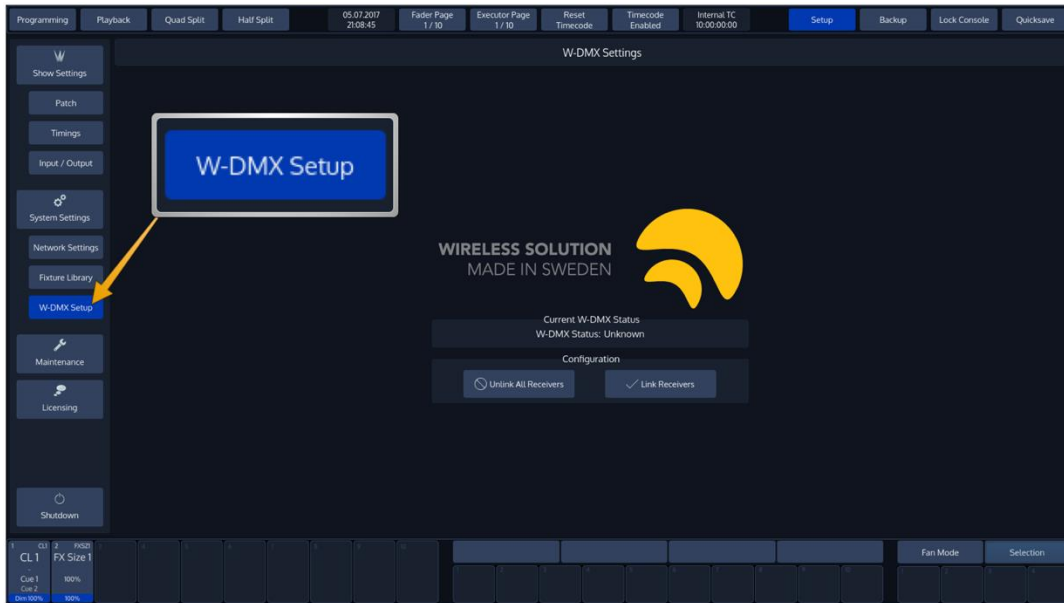

Fig. 205: Link / Unlink WiFi Receivers

28. Edit the Fixture Library

This chapter is set to help you, should you wish to change a fixture type's dmx footprint or default values, or in case you create a new fixture that is not yet contained in the library.

To edit the fixture library, press the **Setup** button found in the top toolbar, and select the **Fixture Library** page.
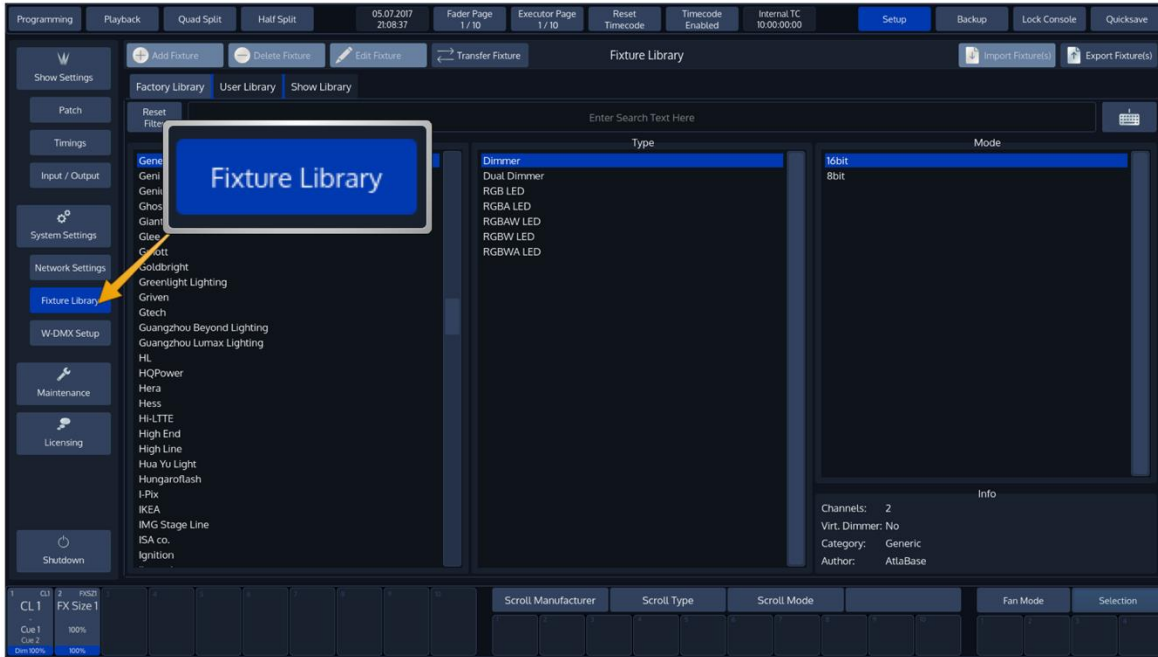

<div align="right">**Fig. 206: Setup - Fixture Library**</div>

28.1. The Fixture Library Concept

The consoles Fixture Library is divided into three parts: A **System Library**, a **User Library** and the **Show Library**. Fixturetypes may easily be transferred between Libraries. 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 Library Editor using the Tabs found in the top part of the Fixture Library page.

28.1.1. System Library

The System Library gets replaced with every Software Update. It contains around 17500 Fixtures and is maintained by Atlabase. It is not editable by the user.

28.1.2. 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.

28.1.3. Show Library

The show library resides within the Showfile. Before a fixture can be patched, it needs to be added to the Show Library. The Show Library is stored within the Showfile and hence will be exported with the Showfile if a backup 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.

28.2. The Library Editor

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

The Library Editor consists of four different Pages, which we will explain in this section.

<div align="right">
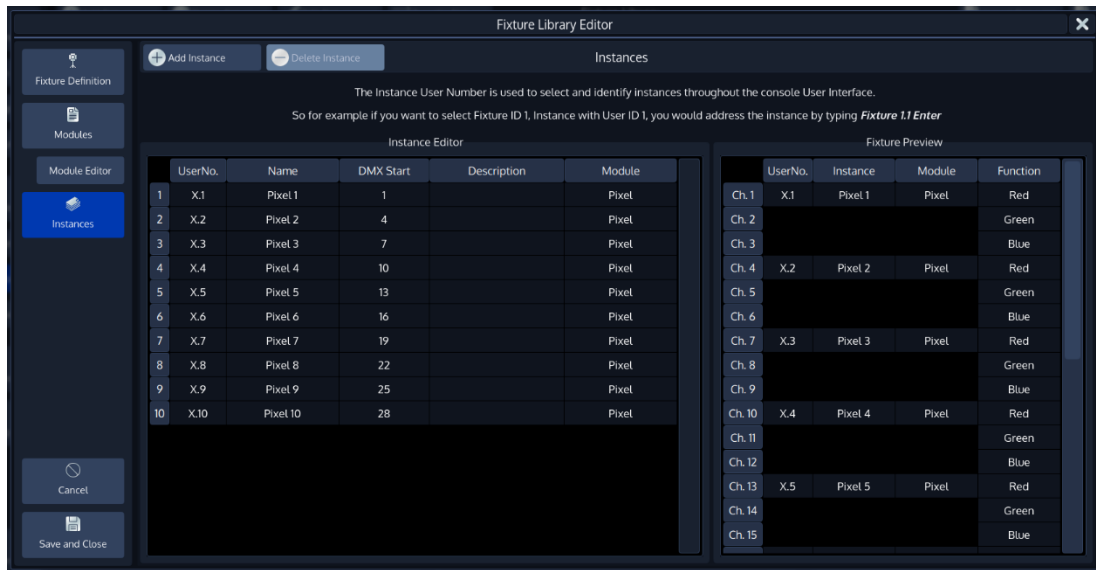
Fig. 207: Fixture Library Editor

</div>

28.2.1. 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.

Looking at the screenshot above you may see that 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.

28.2.2. Fixture Definition Tab

The Fixture Definition tab contains text fields to enter the Fixture Manufacturer, Category (such as LED or Movinglight), Type (Fixture Name), Beam Type, Mode, Author and Description.

The Manufacturer, Type and Mode can not be changed if the fixture is inside the Show Library.
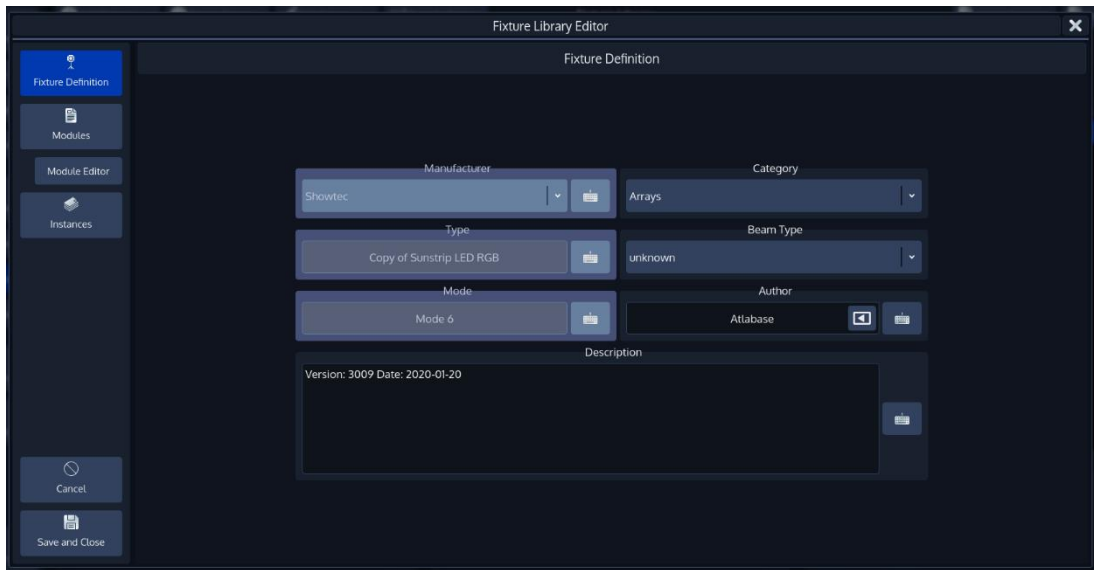
Fig. 208: Edit Fixture – Fixture Definition Tab

28.2.3. Modules Tab

The Modules Tab is used to manage modules, which hold the actual information about how channels are used.

<div align="right">
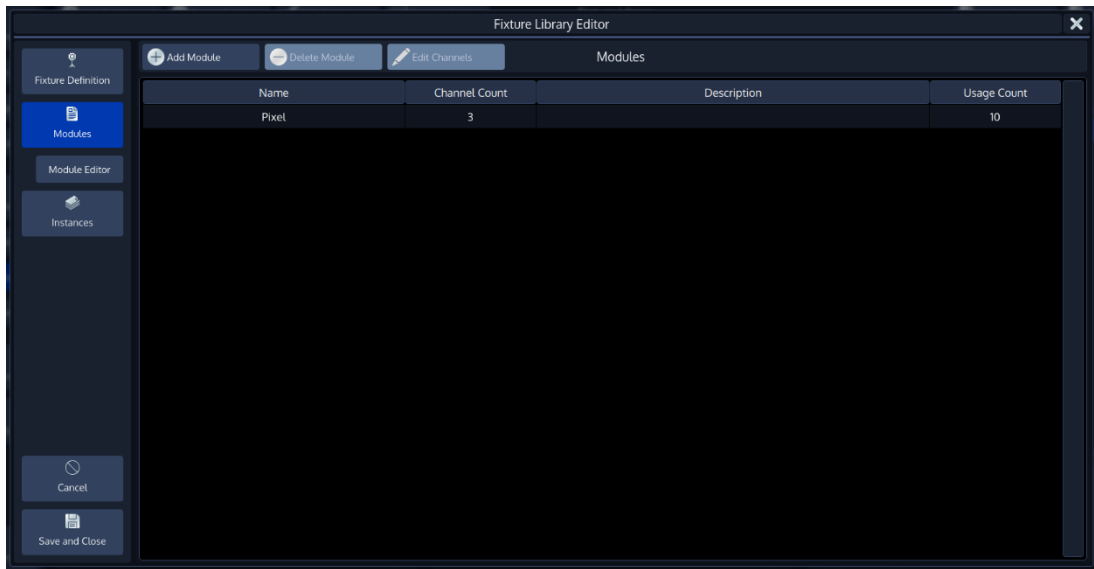
Fig. 209: Edit Fixture – Modules Tab

</div>

28.2.3.1.   Adding a new Module

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

<div align="right">
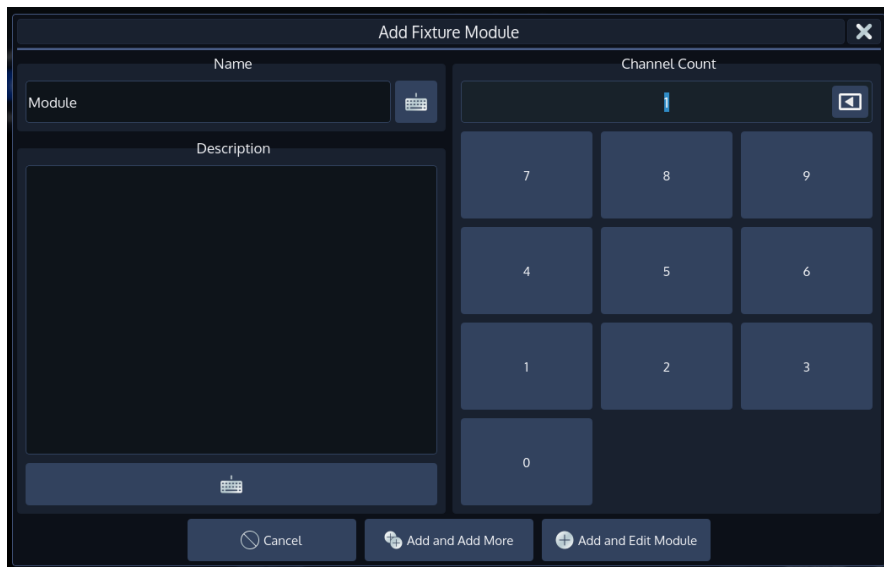
Fig. 210: Add Module Dialog

</div>

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.

28.2.3.2.   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.

28.2.3.3.   Editing a Module

You may edit a module's channels by selecting it from the list and clicking on the **Edit Channels** button from within the Modules tab.

The Module Editor will be shown.

28.2.4. Module Editor

In the module editor, the first row of buttons contains the **Channels** and **Definition** buttons, as well as a drop-down menu on the right-hand side to select the module to be edited.

The **Channels** button causes the module editor to show the list of channels for given module, whereas the **Definition** button may be used to change the name and description of the module.

The second row of buttons is used to append or insert new channels, clear a channel's mapping or to delete a channel completely.

Additionally, it may be used to add a **Virtual Dimmer** to the Fixture, if Color Mixing (RGBxxxx, CMY or HIS) attributes are present.

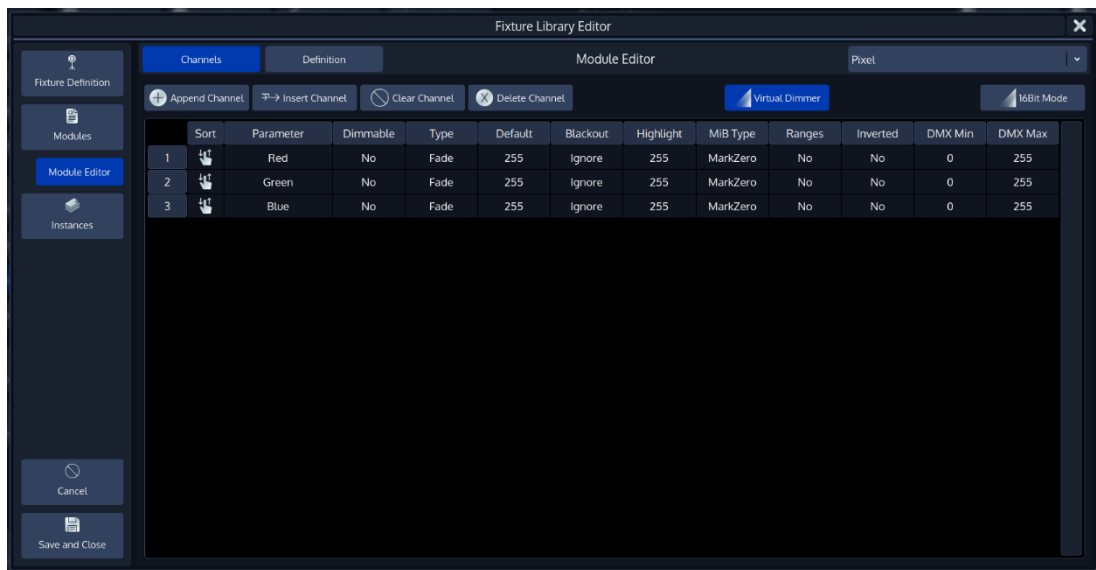The **16 bit Mode** button may be used to show dmx values as 16 bit.

Fig. 211: Fixture Library Module Editor - Channels Page

Within the Channels page, a table showing the mapping of the DMX Channels of a Fixture to the Fixtures Parameters is shown.

28.2.4.1. Module Editor Columns

Select the cell with the value you would like to change. Press the [Set] key or double, right or long-click and enter the desired value.

Vertical Header

Indicates the DMX Channel number, which may not be changed. You may append or Insert channels using the Menu Bars **Add Channel** or **Insert Channel** Button.

Sort

Can be used to re-arrange channels within the module.

Parameter

This is the parameter that is mapped to this channel. To open the Parameter Selection Screen, select this cell and press the [Set] key.

When selecting the parameter cell over two rows, pressing the [Set] key will automatically assing the first channel as coarse, the second as fine for the Parameter selected from the PopUp.

Dimmable

This column defines if this parameter will be dimmed by Dimmer Faders and the GrandMaster.

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

The Chimp will output Default Values for a fixture if no other values that is output has been set by the Playback or the Programmer.

Blackout

Blackout Values will be output once the Grand Master of the Console has been set to 0%.

Highlight

Highlight Values will be output when the Highlight Button on the Consoles frontpanel is active. Usually Highlight temporarily sets the Dimmer Channel to 100% and removes all color and gobo information from a fixture.

MiB Type

This determines if and how the channel should be moved in black. If set to none (**-**) the channel will not be pre-positioned. If set to **Mark** the channel will be pre-set using the fade time entered; if set to **MarkZero** the attribute will be moved in black with a time of zero seconds. The MiB Delay entered in the Cue of a Cuelist will be used in any case, no matter if the channel is set to Mark or MarkZero.

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.

Inverted

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

This is the minimum DMX Value for this parameter that can be output.

DMX Max

This is the maximum DMX Value for this parameter that may be output.

28.2.4.2. Select Parameter Dialog

The **Select Parameter Dialog** is then used to define the parameter this channel is mapped to.
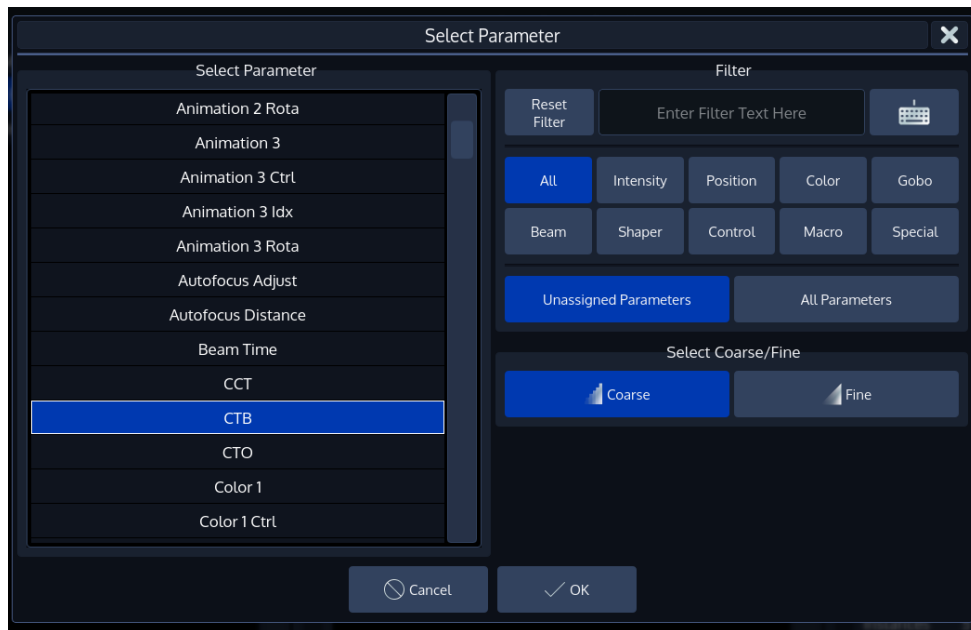
Fig. 212: Fixture Editor - Select Parameter

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 right part of the screen. You may further define the search by filtering by attribute groups.

Additionally, you may select to be shown **Unassigned Parameters** only, or you may select to 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.

Click on **OK** when done.

28.2.4.3.   Edit Ranges Menu (Add icons / names)

The **Edit Ranges Menu** 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 selecting the Ranges cell from within the Module Editor tab for the parameter followed by pressing the [Set] key from within a range cell.
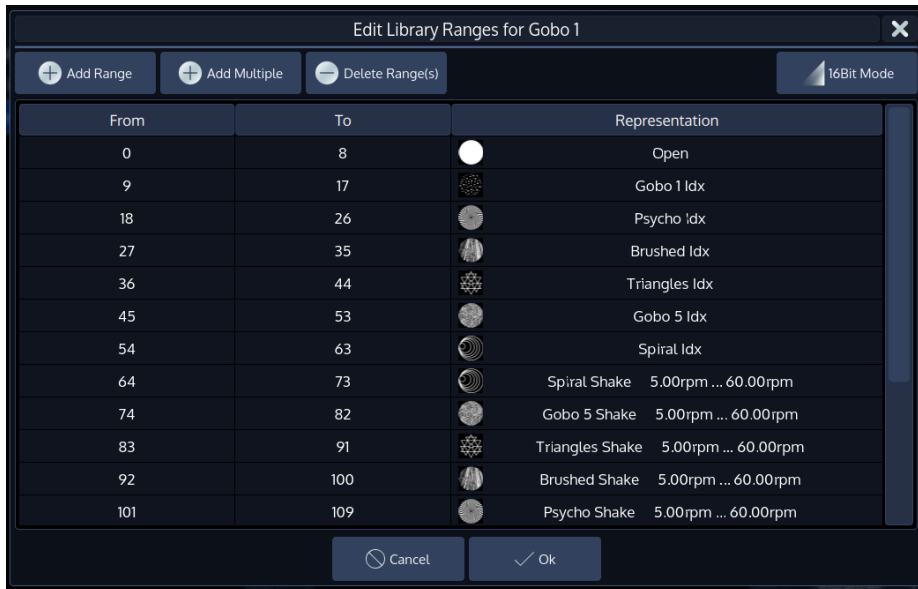

<div align="right">**Fig. 213: Range Editor**</div>

Adding a 'Range'

To add a Range to the list, click on the **Add Range** button.

A new screen will be shown allowing you to specify information about this range.
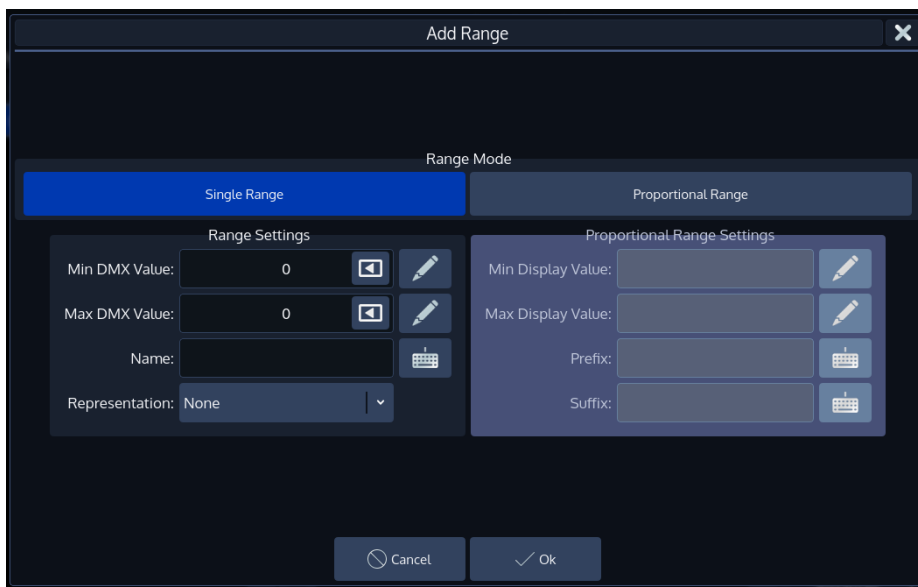

<div align="right">**Fig. 214: Range Editor - Add Range**</div>

Single Range

A range which indicates a certain function on a channel.

Fig. 215: Range Editor - Add Range – Single Range

The range displayed in the screenshot is taken from a fixtures gobo channel. It indicates that Gobo 1 idx function starts at a dmx value of 9 and ends at a value of 17.

Besides the name, it also has an icon set for representation in the fixture item and the programmer table.

The name and icon are also used for the Auto-generate Presets function.

Proportional Range

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

Fig. 216: Range Editor - Add Range – Proportional Range

In the screenshot above (taken from a Pan channel), we can see that this range spans across dmx value 0 to dmx value 255 (the whole channel) and the name of the Range is Tilt. It does not have an icon set.

On the right side of the screenshot minimum and maximum display value, prefix and suffix text field are shown.

The **Min Display Value** and **Max Display Value** equal the read-out in the programmer or output table for the Min and Max DMX Value respectively. When the channel is at value 0, the readout will be -135, when the channel is at 255 (100%), then the readout will be 135. 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 absolutely possible and can be very helpful to combine these different range types when building a fixture library.

Adding Multiple Ranges

To add multiple ranges at once, click on the **Add Multiple Ranges** button. The following dialog will be shown.
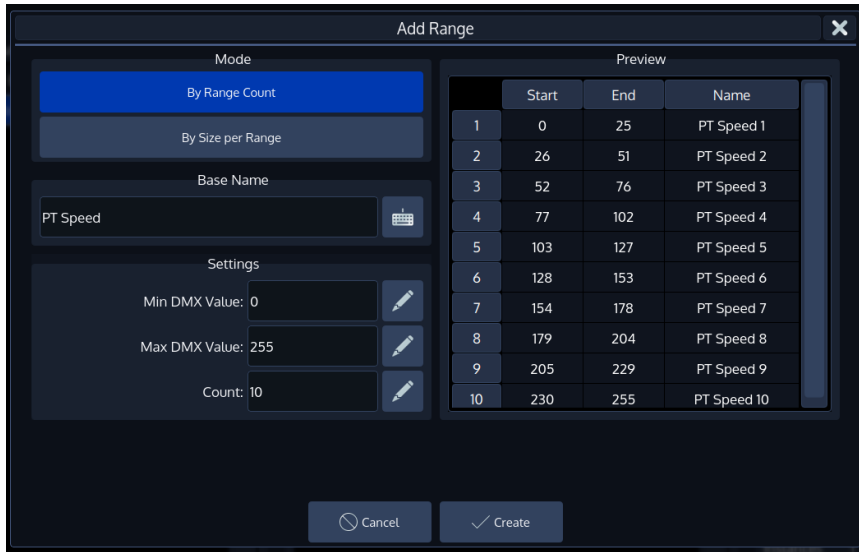

<div align="right">

Fig. 217: Range Editor - Add Multiple Ranges

</div>

Deleting a Range

To delete a Range, select it from the list of Ranges and click on the **Delete Range(s)** button.

28.2.5. Instances

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

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

On the left side of the tab you can see the instance editor, which is used to define the Instance User Number (The part on the right side of the "." of the fixture number), a Name, DMX Start of this instance in relation to the whole fixture, Description and the Module itself.

The right side shows a preview of the full fixture.
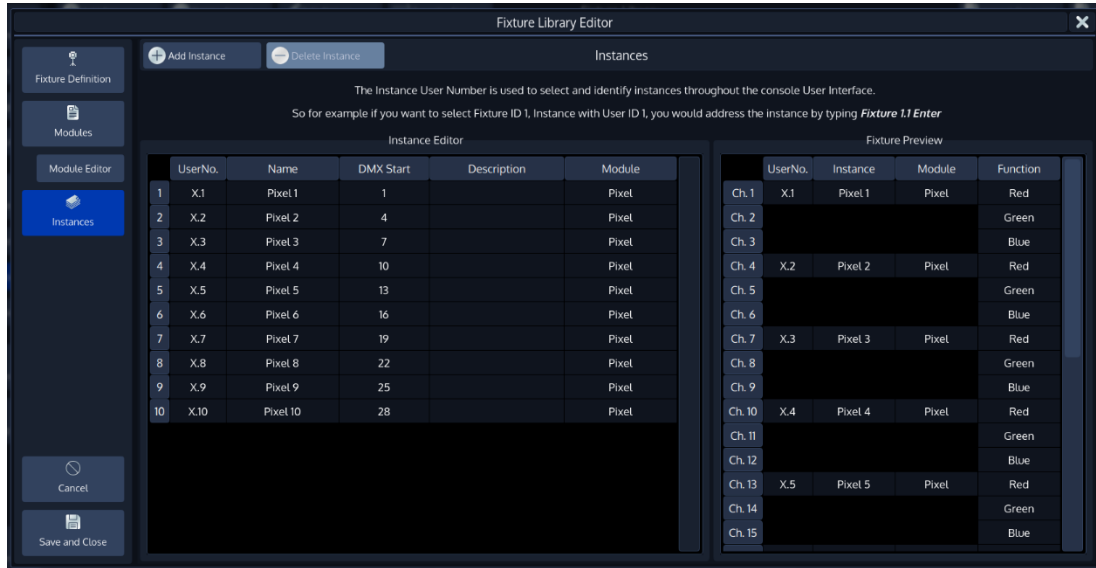
Fig. 218: Edit Fixture – Instances Tab

28.2.5.1. Adding Instances

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

<div align="right">
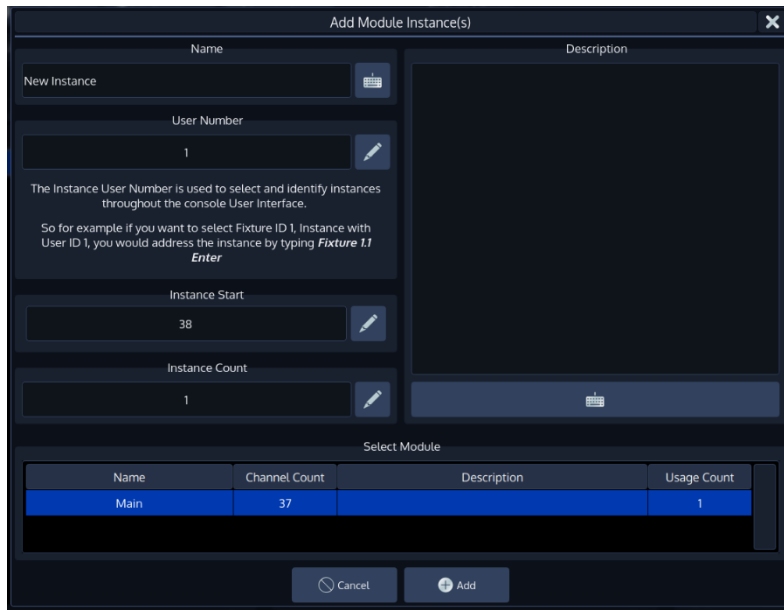
Fig. 219: Edit Fixture – Instances Tab – Add Instance

</div>

You may enter a Name, the User Number, the Instance Start (DMX Start), the count of instances to be added and a Description.

The list on the bottom is used to select which module you would like to use with this instance.

28.2.5.2. Deleting Instances

To delete an instance, simply select it from the list and click on **Delete Instance**.

28.3. Edit existing Fixture Libraries

To edit an existing fixture library, first select the fixture type in the User or Show library and click on **Edit Fixture** found in the menu bar of the Fixture Library Screen.

Please note that the system library is read-only. If you would like to edit a fixture that is contained in the system library, you first need to transfer it to the user library. See "Transfering fixtures between libraries" for more details.

The Library Editor will be shown allowing you to make changes to the fixture type.

Click on **Save and Close** when done.

If you edit a Fixture 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. In order to carry over the changes, replace the fixture type in the Show Library by the appropriate Fixture Type from the User Library.

28.4. Add a new Fixture to the Library

To add a new fixture to the User or Show library, first pick the library type from the Fixture Library Page by selecting the appropriate tab. Click on **New Fixture** contained in the Menu Bar of the Window. You may now choose to start a fixture from scratch, or to use an existing fixture as a Template.

28.4.1. Start a Fixture from scratch

A screen asking a few questions regarding the new fixture will be shown. You need to specify the Manufacturer, Type, and Fixture DMX Mode. Category, Beam Type, Author and Description are optional but recommended.

In order to create a fixture from scratch, make sure **Create Empty Fixture** is selected.
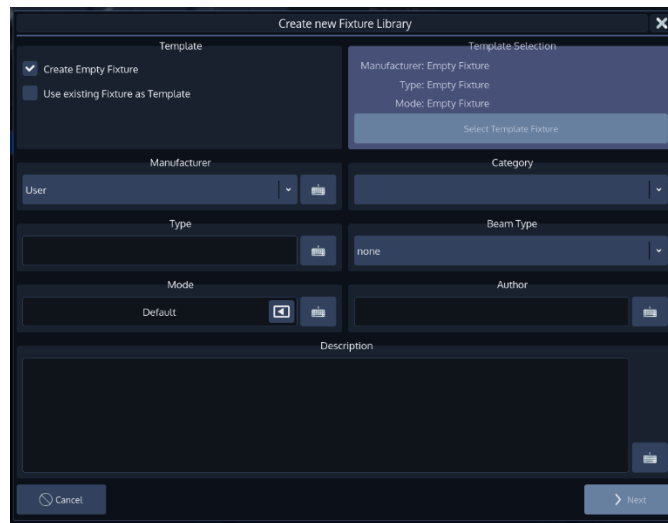
Click on **Next** when done.

Fig. 220: Create new Fixture Library

A screen asking you to enter the number DMX Channels for the first module (usually the main module with User ID 0) is shown. When done, click **Create**.
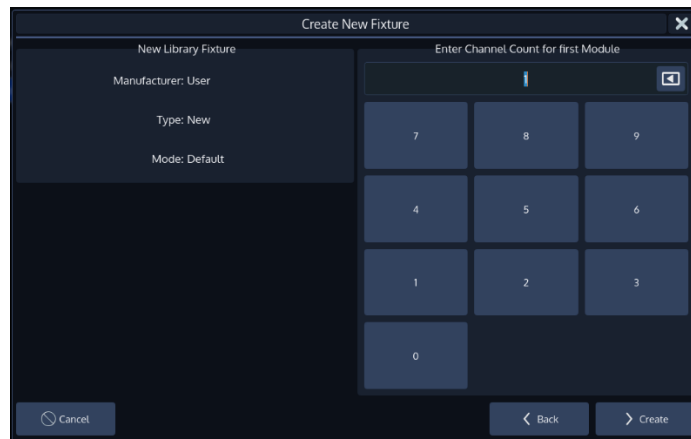

Fig. 221: Select Channel Count

The Library Editor will be shown allowing you to make changes to the fixture type.

Click on **Save and Close** when done.

28.4.2. Start a Fixture using an existing Fixture Type as a template

A screen asking a few questions regarding the new fixture will be shown. You need to specify the Manufacturer, Type, and Fixture DMX Mode. Category, Beam Type, Author and Description are optional but recommended.

In order to start using an exisiting fixture as a template, select **Use Existing Fixture as Template** and hit the **Select Template Fixture** button.

Fig. 222: Use existing as Template

A menu that allows you to pick a fixture type will appear.

You may search for fixtures using the filter field shown in the top part of the screen. Alternatively, you may select the fixture by selecting the Manufacturer, Type and Mode.

Click on **Ok** when done.

The **Create New Fixture Library** screen is shown again. Make sure you entered a Manufacturer and Name for the new Fixture Type and hit the **Next** button when done.

The Library Editor will be shown allowing you to make changes to the fixture type.

Click on **Save and Close** when done.

28.5. Transfer Fixtures between libraries

Sometimes the need to transfer fixtures between the different library types may arise. In order to do so, head to the **Fixture Library** Page within the Setup Menu, select the fixture type you would like to transfer between libraries and hit **Transfer Fixture.**

A screen asking for the destination Library of the Fixture type is shown. Select the desired Library and click on **Transfer**.

A dialog asking for confirmation will be shown. If all is good, click on **Yes**.

28.6. Delete a Fixture Type

Do delete a fixture type, head to the **Fixture Library** Page within the Setup Menu, select the fixture type you would like to transfer between libraries and hit **Delete Fixture.**

Please note you may not delete fixtures from the System Library.

A dialog asking for confirmation will be shown. If all is good, click on **Yes**.

29. Hotkeys

29.1. General Hotkeys

[Infinity] + [Temp] = Opens Page Directory

[Infinity] + [Open] + [S1] = Calibrate Internal Screen

[Infinity] + [Open] + [S2] = Calibrate Secondary Screen

[Infinity] + [Open] + [S4] = Restart User Interface

[Infinity] + [Skip] = Skip Backwards (In Selected Cuelist)

[Infinity] + [Select] = Clears current Selection

[Infinity] + [Off] = Releases all Cuelists

[Infinity] + [Fpg+] = Sets Fader Page to 1

[Infinity] + [EPg+] = Sets Executor Page to 1

[Infinity] + [Highlight] = Toggles Solo

[Infinity] + [Clear] = Brings back the last programmer content from before clearing

[Infinity] + [Load] = Loads all Output for currently selected fixtures

[Infinity]+ [Next] = Next's through Multi-Instance fixtures' instances

[Infinity]+ [Prev] = Prev's through Multi-Instance fixtures' instances

[Prev] + [Next] = Selects all fixtures from original selection set

[Infinity] + Encoder Turn = Sets Fine Values for this Attribute

[Infinity] + [Edit] + Fader Go / Pause Button = Opens the Settings Tab for the Cuelist

[Infinity] + [Edit] + Executor Button = Opens the Settings Tab for the Cuelist

[Infinity] + Cuelist Item in Cuelist Pool: Deselects the Cuelist

[Infinity] + Preset Item in Preset Pool: Loads the Presets Values for selected fixtures instead of a reference to the preset.

29.2. Programmer

[Open]+ [Preset] = Cycles through attribute groups

[Infinity]+ [Open] + [Preset] = Cycles through sub attribute groups

29.3. Tables

[Infinity] (Or Shift on Keyboard) + Clicking in a Multiselect Table will select multiple Cells

[Infinity] (Or Shift on Keyboard + Arrow Keys on Keyboard will allow to make a multi selection

29.4. Toolbars

[Infinity]+ [Rec] = Cycles through record modes

[Infinity]+ [Del] = Cycles through record modes

29.4.1. Selection Toolbar

[Infinity] + All = Selects all fixtures with values in programmer

29.4.2. Off Toolbar

[Infinity] + Reset Group Master Button = Resets all Groupmasters to 100% without asking for confirmation

[Infinity] + Reset Cuelist Fader Button = Resets all Groupmasters to 100% without asking for confirmation

[Infinity] + Off All Playbacks Button = Offs all Cuelists without asking for confirmation

[Infinity] + Release Everything = Resets / Offs EVERYTHING without asking for confirmation

29.5. Dialogs

29.5.1. Shutdown / Reboot Dialog

[Infinity] + Reboot Button in Dialog = Quit / Restart Application Only

[Infinity] + Shutdown Button in Dialog = Quit / Restart Application Only

29.6. Fixture Library Editors

29.6.1. Add Multiple Ranges Dialog

[Infinity] will show all values in 16bit

29.6.2. Add or Edit Ranges Dialog

[Infinity] will show all values in 16bit

29.6.3. Module Channel Editor

[Infinity] will show all values in 16bit

29.7. Output View

[Infinity] will show all values in 16bit

29.8. MagicSheets

[Infinity] during Rectangle Selection: Selection will be inverted

[Infinity] during Arrange: Snapping will be disabled

30. Maintenance

30.1. USB folder structure

The Chimp will need a specific folder structure to be setup on the USB key; which you may either create by yourself, or let the Chimp do it when you plug in a usb key.

When creating the folder structure yourself, make sure it is spelled in lowercase letters.
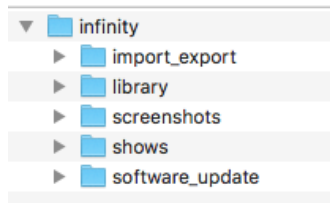
Fig. 223: Usb Folder Structure

The main folder "infinity" needs to be in the root directory of the USB Key. This directory is containing the following folders:

import_export: Reserved for later use.

library: Library exports will go in here. If you would like to import libraries, make sure to copy them into this directory.

screenshots: Screenshots taken by pressing the F9 or F10 Key on an USB Keyboard will be stored in this folder.

shows: Showfiles backed up to USB will be saved in the "shows" folder. This is the folder the Chimp is looking out for shows to import as well.

software_update: Software update files need to go into here.

factory_library_update: Factory Library update files need to go into here.

30.2. Update Software

Before Updating the Chimps OS, make sure you have made backups of all important show and library files.

30.2.1. Update via USB

In order to update the software on the Chimp, make sure you have downloaded the appropriate software from the Highlite Infinity website. Copy the downloaded file (with the file extension .swu) into the folder "infinity\software_update" on your USB Key.

Now, plug the USB Key into one of the Chimps USB Ports and head over to the **Setup** Menu. Select **Maintenance** from the Side Menu.

Click on **USB Update** from within the Operating System group-box.

Fig. 224: Setup Menu – Maintenance –USB Software Update

The Chimp will present you with a list of available software updates found on your USB Key. Select the appropriate file and click on **Select**.

A wizard will lead you through a few steps and will ask you to reboot the console when done.

Do not loose power or switch off the Chimp during the update process. This may render the Chimp un-bootable!

30.2.2. Update Online

In **Setup** menu click on **Maintenance** from the Side Menu **and c**lick on **Online Update** from within the Operating System group-box.

Fig. 225: Online Software Update

The select software update popup-screen will appear.

Click on **Refresh List** to check for the latest software updates.

Online Release Notes shows you the release notes before updating.
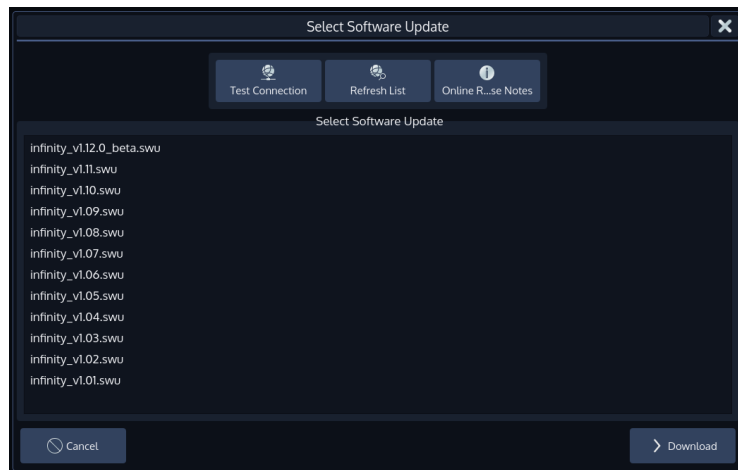

Fig. 226: Select Update From List

Select a Software Update and start the process by clicking on the **Download** Button.

A wizard will lead you through a few steps and will ask you to reboot the console when done.

Do not loose power or switch off the Chimp during the update process. This may render the Chimp un-bootable!

30.3. Update Fixture Libraries

30.3.1. Update via USB

In order to update the factory library on the Chimp, make sure you have downloaded the appropriate file from the Highlite Infinity website.

Copy the downloaded file (with the file extension .faclib) into the folder "infinity\factory_library_update" on your USB Key.

Now, plug the USB Key into one of the Chimps USB Ports and head over to the **Setup** Menu. Select **Maintenance** from the Side Menu.

Click on **USB Update** from within the Factory Fixture Library group-box.

Fig. 227: Setup Menu – Maintenance –USB Library Update

The Chimp will present you with a list of available library updates found on your USB Key. Select the appropriate file and click on **Select**.

A wizard will lead you through a few steps and will ask you to reboot the console when done.

Please note that updating the factory library does not affect fixtures used in shows or in the user library.

30.3.2. Update Online

In **Setup** menu click on **Maintenance** from the Side Menu **and c**lick on **Online Update** from within the Factory Fixture Library group-box.

Fig. 228: Online Library Update

The select library update popup-screen will appear.

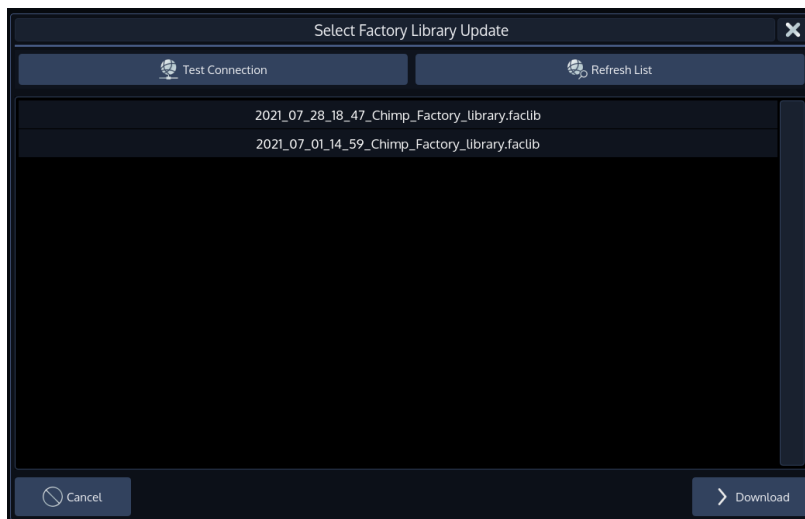Click on **Refresh List** to check for the latest software updates.

Fig. 229: Select Update From List

Select a Software Update and start the process by clicking on the **Download** Button.

A wizard will lead you through a few steps and will ask you to reboot the console when done.

Do not loose power or switch off the Chimp during the update process. This may render the Chimp un-bootable!

30.4. Calibrate Touchscreen(s)

In **Setup** menu click on **Maintenance** from the Side Menu**.**

Click on **Calibrate Internal** or **Calibrate External**.

In case your screen calibration is off by too much, you may use the shortcut [Infinity] + [Open] + [S1] to calibrate the internal screen, or [Infinity] + [Open] + [S2] to calibrate the external.

Fig. 230: Setup Screen - Calibrate Internal Touchscreen

Fig. 231: Setup Screen - Calibrate External Touchscreen

30.5. 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.

30.6. 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.

30.6.1. 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.

30.7. 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.

31. Deinstallation, Transportation and Storage

31.1. 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.

31.2. 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".

31.3. Storage

- Clean the device before storing. Follow the cleaning instructions found above.
- Store the device in the original packaging, if possible.

32. 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.

33. Approval

CE

Check the respective product page on the website of Highlite International (www.highlite.com) for an available declaration of conformity.