LIGHT'J

STEINIGKE

INTUITIVE LIGHTING CONTROL

User Guide

The most intuitive
light controlling app
you have ever seen.

**YOU'RE WELCOME,
MANKIND.**

Contents

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What is
LIGHT'*J* ?

Light'J is a really intuitive app for controlling light effect devices of all manufacturers. This fun app directly pitchforks light control into modern times. Until now, many light apps have only been remote controls, even graphically imitating real control panels. Until now! Now Steinigke's Light'J comes up – for iOS and Android.

Just add fixtures from the extensive library to your show and control them wirelessly. Adjust colors, strobe effect and brightness via faders. Generate cues to save scenes and retrieve them at any time. Several cues can be combined as chases, this way running lights and the like can easily be programmed. A smart group function enables you to control several devices at the same time.

Even moving heads can now be controlled via intuitive touch pad. For fog machines, blinders and effect devices AUX controls are provided, too. The app's online fixture library is continuously updated and already includes more than 300 Eurolite and Futurelight fixtures. As Light'J is open for all devices, you can easily add new (third-party) fixtures via the fixture profile editor.

The app uses a standard WiFi network to send the control signals to a compatible freeDMX interface, which transmits them to the DMX line via cable. Thanks to improved technology, it's now possible to integrate the latest interface model, the freeDMX_AP, into your existing WiFi— so you can stay connected to the internet while working with the app.

Save several shows for different setups und stay as flexible as you like. All that is now possible with a logical and easy-to-use surface! Ideal for DJs, solo entertainers, bands and artists who want to do without the transport and use of a standard DMX console.

1 Getting started

1.1 How to install Light'J

The first thing you need to do is download the app. Open the play store/app store and search for "**LightJ**". After installing the app, open your WiFi settings and connect your iPad/Android tablet to the freeDMX_AP interface.

Launch Light'J. You will now see the basic screen for creating scenes. Below the lamp icon, "**Connected**" should be indicated (this may take 2 or 3 seconds). If not, go to "**Settings**"> "**Setup**" and make sure you've selected the right freeDMX model.

Note: Please do not close the app while working with it. The app will not be able to send data if it's closed. Also, disable auto shutdown on your iPad/Android tablet. If the app is closed or on loss of the WiFi signal, the freeDMX_AP interface will send the last correct DMX data (configurable).

1.2 How to set up the WiFi connection

With model freeDMX_AP you will be able to connect to the interface and your WiFi network simultaneously. First, connect your iPad/Android tablet to the interface as described before. Then open a web browser and enter the IP address of the freeDMX_AP (192.168.4.1 by default). The setup page will appear. Go to the "**Network**" tab and select the network into which you want the freeDMX_AP to connect to. Make sure "**get automatically from DHCP**" is selected as IP address mode and tap "**Save configuration**" to finish your settings. The freeDMX_AP will now connect to the WiFi network.

Go back to the WiFi settings of your iPad/Android tablet and connect to the same WiFi network as the freeDMX_AP. Bring up the information page of the WiFi network and copy its IP address.

Now open Light'J. Go to "**Settings**" > "**Setup**" > "**Interface**" and tap the freeDMX_AP interface. Then tap "**Interface Setup**" in the upper right corner and paste your network's IP address into the upper entry field. Your iPad/Android tablet should now be connected to the internet and the freeDMX_AP interface. If the WiFi signal is too weak, this type of connection may not be possible.

1.3 How to create the first show

You can manage several fundamentally different shows with Light 'J. Under "**Settings**"> "**Setup**" you will find **"My first show"**. You can create further shows via the plus sign in the upper right corner. The latest show to be processed is highlighted in magenta. If another show should be selected, simply tap it and confirm.

1.4 How to choose the spotlight

Before you get started, you must first determine which spot you want to use. This is done again under "**Settings**" under sub-point "**Fixture**". However, since no spotlight data is available, this field is not completed. You can find the device data under "**Settings**"> "**Library**"[#]. With the "**Start Download**" function, you can download the latest data of most EUROLITE devices. The Library is continuously being expanded, so you should update this often. If you only work with EUROLITE devices from this library, you can skip the next steps and continue with point 2.0.

[#]Note: This function requires an internet connection. If no concurrent connection is possible, you can connect directly to the internet. A connection to the interface is not required for this purpose.

1.5   How to create a new fixture yourself

If you want to create and configure fixtures from other manufacturers or "other exotics", then this is also done in the library. Tap "**My devices**" in the top right. Then tap on the plus sign to create a new fixture. Give the fixture a name. It then appears in your fixture library and you can select it. If you tap on the name, a function table appears which needs to be filled out with the values of the fixture.

Of course, not all values need to be entered but only those which are supported by the respective fixture and you want to control. The values can be obtained from the fixture's DMX table, which can be found in the documentation for the device. It is best to begin with the first control channel of the fixture, then set the fixture channel by channel. If a spot has various DMX modes and tables, you should choose one and then set it on the spot later. It is best to also indicate through the app name of the spot which mode is controlled.

Number of DMX channels

Enter the number of DMX channels that the spot needs to be controlled. If the spot needs 12 channels in the selected mode, so enter it here.

Color

If the fixture provides color mixing (RGB, RGBW, RGBA ...), enter it directly into the table. For color mixing, a separate channel is provided to control each color. Simply look in the DMX table to see which channel is responsible for red, and then enter the given value. In most cases, the color presides over the entire channel, meaning from 0 to 255 (255 is the highest value that DMX can represent). Do this with all the other colors that your spot may reproduce. The app supports the basic colors red, green, blue, amber (orange), white and UV. So (almost) every color mixing system is possible.

For example:
A spot with RGBW color mixing, in which red on channel 3, green on channel 4, blue on channel 5 and white on channel 6 is set, please see the following table:

Color	Channel	Value From	Value From
Red	3	0	255
Green	4	0	255
Blue	5	0	255
White	6	0	255
Amber			
UV			

Amber and UV simply remain "empty" in this fixture.

Color definition for the color wheel

Of course there are spots that have no color mixing. The colors are "controlled" by a single control channel. These can also be controlled with the app. For this, there is the function "**color definition for color wheel**". If you tap this button, 8 defined colors appear, which can be accessed directly via the color wheel of the app. You need to fill out this table with the color values from the DMX table of the spot. Most given values are from/to. Best is to take the average. Just tap each color, and then click "+" on the top right. You will be asked which control channel and which value you want to define. Do this for each color which you want to define. If there is no exact color assignment given in your DMX table, you can omit this. Later we will go into more detail as to how to control a channel directly and thereby also to determine the missing values.

If there is a color that the spot cannot produce, you have two options. If there is no value for this color and it is selected, the spot will remain on the last color. However, you can store the value of a similar color, or the value for white, then the spot will change to this color. If the spot has more colors than the app directly supports, that's no problem. Again, there is an option described later to use any color.

For example:
A moving head has the color wheel on control channel 5 with the following values:

Color	Channel	Value From	Value To
White (open)	4	0	15
Red	4	16	31
Green	4	32	47
Blue	4	48	63
Yellow	4	64	79
Purple	4	80	95
Cyan	4	96	111
Orange	4	112	127
Color wheel rotation	4	128	255

Enter these values in the app's table:

Color	Channel	Value
Red	4	25
Pink	4	90
Blue	4	55
Turquiose	4	105
Green	4	40
Yellow	4	70
Orange	4	120
White (Warm)		
White (Cold)	4	0

In this case, set purple for pink as these colors are very similar. Warm white remains open because it does not exist in the spot (but it could also be set equal to the normal white of the spot). You can create all these assignments according to your needs. To change or correct a value, you need to delete the old value. Tap the value to be deleted and drag it to the left. Then a delete option appears.

Color mixtures on the color wheel

It is also possible to assign color mixtures to the "virtual" color wheel of the app. Here, too, you have to tap the color definition of the color wheel, but then specify all the values for each of the colors. If you want to create red for an RGB spotlight, then you must not only tell the app that red has a value of 255, but also that green and blue have the value of 0. So, each color on the color wheel must have their color values assigned with their corresponding control channel.

Since each color mixture and each spot reacts with the colors slightly differently and every user has his distinct taste, there are no fixed values here. For orientation you can use the values on these tables as a guideline:

Color	RGB	RGBA	RGBW	RGBAW	RGBW+UV	RGBAW+UV
Red	R 255 G 0 B0	R 255 G 0 B 0 A 0	R 255 G 0 B 0 W 0	R 255 G 0 B 0 A 0 W 0	R 255 G 0 B 0 W 0 UV 0	R 255 G 0 B 0 A 0 W 0 UV 0
Pink	R 255 G 0 B 255	R 255 G 0 B 255 A 0	R 255 G 0 B 255 W 0	R 255 G 0 B 255 A 0 W 0	R 255 G 0 B 125 W0 UV 255	R 255 G 0 B 125 A 0 W 0 UV 255
Blue	R 0 G 0 B 255	R 0 G 0 B 255 A 0	R 0 G 0 B 255 W 0	R 0 G 0 B 255 A 0 W 0	R 0 G 0 B 255 W 0 UV 0	R 0 G 0 B 255 A 0 W 0 UV 0

Turquoise	R 0 G 255 B 255	R 0 G 255 B 255 A 0	R 0 G 255 B 255 W 0	R 0 G 255 B 255 A 0 W 0	R 0 G 255 B 150 W 0 UV 255	R 0 G 255 B 150 A 0 W 0 UV 255
Green	R 0 G 255 B 0	R 0 G 255 B 0 A 0	R 0 G 255 B 0 W 0	R 0 G 255 B 0 A 0 W 0	R 0 G 255 B 0 W 0 UV 0	R 0 G 255 B 0 A 0 W 0 UV 0
Yellow	R 255 G 255 B 0	R 255 G 255 B 0 A 255	R 255 G 255 B 0 W 0	R 255 G 255 B 0 A 255 W 0	R 255 G 255 B 0 W 0 UV 0	R 255 G 255 B 0 A 255 W 0 UV 0
Orange	R 255 G 125 B 0	R 255 G 150 B 0 A 255	R 255 G 125 B 0 W 0	R 255 G 150 B 0 A 255 W 0	R 255 G 125 B 0 W 0 UV 0	R 255 G 150 B 0 A 255 W 0 UV 0
White (warm)	R 255 G 170 B 50	R 255 G 190 B 90 A 255	R 255 G 155 B 0 W 130	R 255 G 155 B 0 A255 W160	R 255 G 155 B 0 W 130 UV 0	R 255 G 160 B 0 A 255 W 160 UV 0
White (cold)	R 255 G 255 B 255	R 200 G 200 B 255 A 255	R 255 G 255 B 255 W 255	R 200 G 200 B 255 A 255 W 255	R 255 G 255 B 255 W 255 UV 255	R 200 G 200 B 255 A 255 W 255 UV 255

1.6 Functions

Various functions of the fixture are assigned in this table.

Dimmer

The dimmer channel, if available, is assigned here. Simple white light spots may only have this channel.

Strobe

Here control channels for stroboscope and shutter functions can be set. When setting the shutter channel, one has to keep in mind, that many spots only generate light when the channel is open. So when controlling, you need to not only to advance the dimmer slider, but also the strobe channel.

Effect 1 / effect 2

Here various effects can be stored, which can otherwise not be applied anywhere else in the app. The prism of a moving head or a special effect function, for example.

SoundToLight

Many fixtures can also be controlled via DMX command in the SoundToLight mode. This should then be set here.

Speed

Some fixture functions have their own control channel for the speed. This can be set here (the movement speed of the spot is set at the movements themselves!).

1.7 Pan/Tilt

Here you can define the motion functions for fixtures. "**Pan**" is the horizontal movement, "**Tilt**" the vertical motion. Under "**Speed**", the movement speed can be set, as long as it is supported by the fixture, meaning, it has its own channel. If the fixture has two control channels per movement axis, meaning, an additional fine channel (16-bit resolution), then you can ignore it for control with the app and need not set it anywhere.

1.8 Gobos

In this table, the gobos are stored. It is important that the open position (meaning no gobo) is entered under number 1. If the gobos can rotate, then this function channel can be set under "**Rotation**" and the sharpness setting under "**Focus**".

1.9 How to save a new fixture

If all the functions are set, you can save your newly created fixture on the top right via "**Save**". On the top left via "**My Devices**" you come back to the fixture library. The fixture can be accessed and corrected or supplemented at any time. To delete fixtures in the list, tap on the name of the fixture and drag it to the left. On the right side the function "**Delete**" appears.

2 Patching fixtures

Now we are ready to tell the app which fixtures are to be controlled. To do so, exit the basic screen via "**Settings**" > "**Fixture**". Tap the plus sign on the top right. You should get a list of available fixtures, meaning not only the fixtures that you have downloaded via the library but also the fixtures that you have created yourself. If you want to add a fixture to your show, then simply select it. Then, a screen appears in which all control functions are listed again and you can enter a starting address in the text field. If you tap on this text field, you can scroll through the free DMX addresses. The system suggests the first free starting channel which provides enough space for the total number of DMX channels. Then go to "**choose address**". You can also change the name of the fixture at this stage. Then go to the top right to "**Save**" and "**Back**". For further fixtures repeat the procedure.

2.1 How to set spotlight systems

Spotlight systems, consisting of several individual spots, such as our KLS systems for example, can also be controlled. But if all four lights should be controlled individually, they must be installed as four individual spotlights. In the library, four individual KLS spots (KLS-Spot 1-4) are available. The first controls the basic functions and the first spot, the others the further spots. It is important to make sure that the DMX addresses are assigned without gaps. For the KLS-1001 with its 15 channels, it would mean the following: The first spot has 3 basic control channels and the 3 color channels, meaning a total of 6 channels. Each additional spot has 3 color channels each. If the KLS is set at starting channel 101, this is indicated for the first spot, the second spot would then have to have starting channel 107, the third 110 and the fourth 113.

2.2 How to set the spotlights

The start addresses set in the app must also be set on the spotlights. If the spot has several DMX modes (for example a 5-channel and 12-channel mode) you must also set the appropriate mode on the spot.

## 2.3 How to select spotlights and create groups

From the basic screen on the left side you will find your chosen spotlights. If they are "hidden" on the edge, they can be brought into view or "hidden" again with a small wipe. Several spots can be grouped together. Simply select all the spots which are to be included in the group and then tap "**Add group**". Give the group a name. The group is then added above and when you tap on the name, all the spots of the group can be selected or deselected. If a group is to be deleted, simply tap and hold the group name. Alternatively, you can manage the groups under "**Settings"> Groups**". To delete spotlights from the list, go to "**Settings**" then "**Fixture**" and wipe the spot to be deleted to the left and then tap the appearing "**Delete**".

2.4   How to set up auxiliary channels

There are spots or fixtures that are not stored as part of a scene, but are to be controlled individually. For this purpose Light 'J has auxiliary channels. These can be controlled independently from the called up light programs. They can be set up via "**Settings**"**>** "**Aux**". A small table appears, on which four DMX channels can be entered per aux channel. For example, if you have two white-light spots for some front light, then you can put these on your aux channels. Even DMX fog machines, or lighting effects which can only be turned on and off or other applications are possible. If an aux channel is activated later on, a slider then controls all set DMX channels from 0 to 255.

3 Controlling and programing light

Now you're ready to control your connected fixtures. On the home screen you have the created fixture list and in the middle seven control symbols:
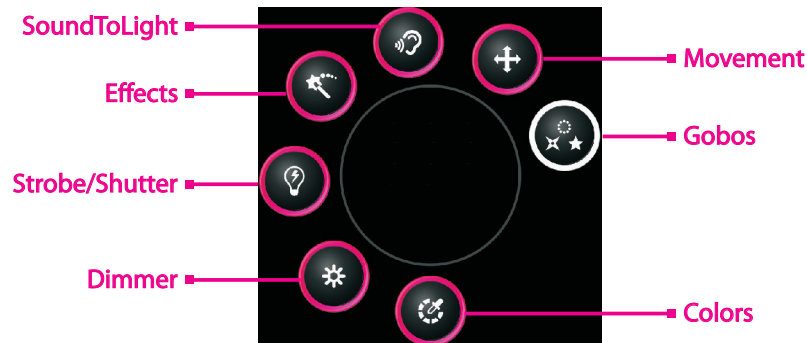
When you select a fixture, all supported functions are framed in magenta. The currently selected control function is surrounded by a thick white ring. Now you can select one or several fixtures and carry out the desired settings. If a function or individual controls are not displayed, it is because this feature is not supported by the selected fixture. If several different spots are selected and then a control function is selected that is only supports a few spots, of course only these fixtures will execute the function.

3.1 How to set the light color

Tap on the color icon with which you would like to set the light color. The "virtual" color wheel in the center allows the direct selection of colors. With fixtures which you've created yourself, these would be the colors you have set via the "color wheel" function. On the right side you will see a slider for spots with color mixing. The number of sliders is determined by the number of colors of the selected fixtures. In this manner, a myriad of possible color shades can be produced steplessly.
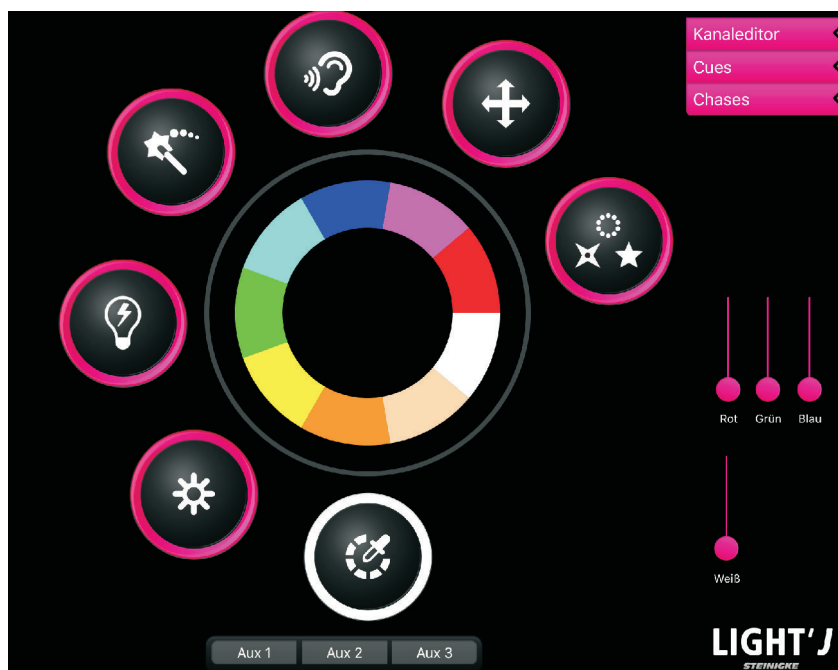
3.2 How to dim

A simple slider is hidden here to adjust the brightness of the fixture. If a fixture has this function, the dimmer must be open of course, so that it can emit light.
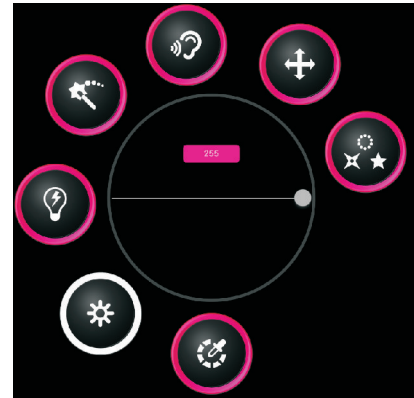
3.3 How to use the shutter

Even with the shutter a slider is available. Many fixtures do not produce light if the shutter is set to 0 and shine when it is set to 255. The values in between access different flash speeds or flash programs. On the other hand, with other spots the slider must be set to 0 for normal light and all values above this generate a flash.
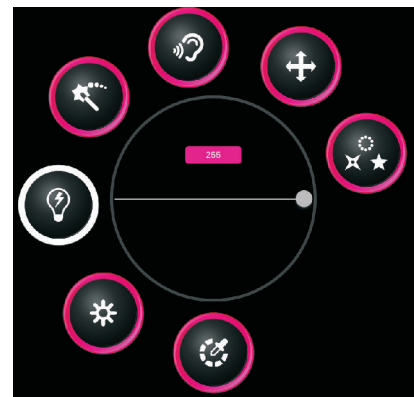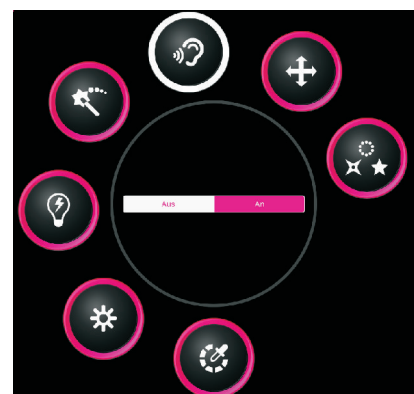
3.4 How to use effects

Here you will find up to three sliders which can be used to set the stored effects as well as their speed.
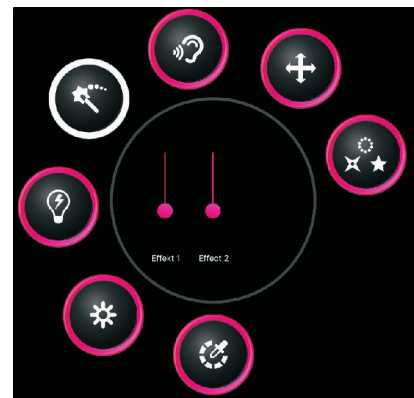
3.5 How to use SoundtoLight

If this function is possible on a fixture, then here you can turn it on and off.

3.6 How to control movements

In the "motion field", the motion position of a fixture can be controlled. This can be done by using the horizontal and vertical sliders at the edges of the coordinate field or by directly typing in the field. Also, in the number fields you can enter values manually. The speed slider controls the speed of movement, insofar as it is supported by the fixture. This is especially useful later in light programs with multiple positions, so that the fixture makes quiet, slow runs.
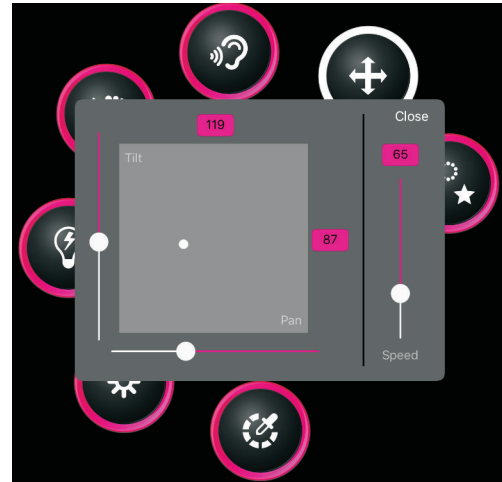
3.7 How to adjust gobos

Here, up to 9 gobos can be selected directly. With the two sliders on the right side (if available) the focus and gobo rotation can be adjusted.
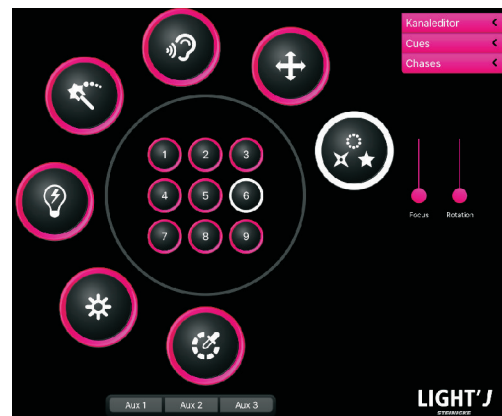
3.8 How to control devices outside the function structure

What about features that cannot be controlled via the basic app structure? What should I do if I have more colors or gobos, which cannot all be called up directly? For this purpose there is the Channel Editor. You can access it via the menu on the top right. If it is opened, you can tap the fixtures and a fader view of all channels appears. You can hereby control the fixture with all its functions as with a conventional lighting console. This also makes it possible to find out unknown DMX values for colors. Simply select the slider for the color wheel and search for the corresponding colors. The corresponding DMX values are then displayed directly above. You can then add these to the values of the color wheel, as described in point 1.5.
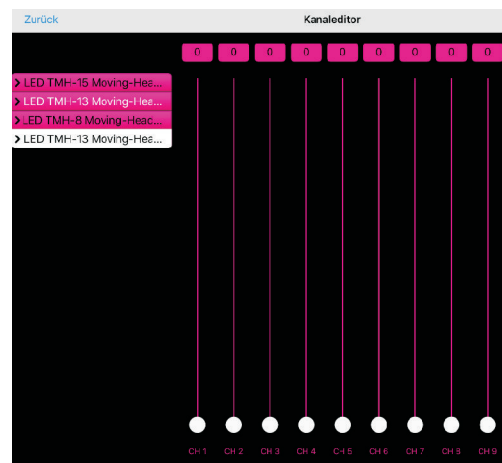
3.9 Blackout

The symbol with the crossed-out lamp, which can be found on all show levels on the left or right, is Blackout. When edged in white, then blackout is active and all fixtures are dark; when edged in magenta the fixtures shine.

4 Programming light

4.1 How to program cues

But how can I now program my lighting? As described in the previous chapter, you initially create a scene with your fixtures. Now go via the right-hand menu to "**Cues**". Here you will find a screen with 24 round buttons. These are the memory locations. A gray button means that this memory location is empty. Select an empty memory location and make a long tap so that will change to orange. The scene is stored. Magenta colored memory locations are already occupied. But you can override this, you just have to create a new scene and make a long tap on this memory location. Via the function "**Edit Title**" you can name the cues and get a clear overview.

If you go back to the basic screen, the scene just created will remain active. You can therefore change it to create another scene or to store it for further positions of movement. If all settings should be reset to 0 in order to create a new scene, please refer to the command "**Stop Show**" under "**Settings**".

4.2 How to program chases

You can create chases under "**Chases**". A chase is basically nothing more than a series of individual lighting scenes. Hence the cues already created can serve as the basis for our chases. For example, if you want to generate a simple chase with three colors, then you need as a basis three cues with these colors. Or a movement between two points consists of two cues with the outermost points of desired movement. When the cues are created, you can go to the chases. These are accessible from the basic screen via the menu on the top right. Select an empty chase (again a gray allocation) or a chase, you want to edit. Then click on the top right "**Edit Steps**". After that, tap on the plus sign on the top right and you have a list of all created cues. You may now click on them and via "**Choose cue**" load them into the chase. Via + any number of steps can be added. If a cue should be deleted from the program, just click in the steps editor on the minus in front of the cue name. If you have saved at least one cue under a cue memory location, it will now appear in magenta. Via "**Edit Title**" you can label these and all other chases.

To start the chase, you must switch from "**Edit**" to "**Live**" at the bottom of the chase screen. Thereafter you can call up the chases. You can specify the desired timing of the light show via the magenta button by double-tapping. If you want to program more scenes, be sure that you reactivate the "**Edit**" function.

5 Calling up programms

After you have created different scenes and chases, you can call them up directly from the cue or chase window. In the chase section, it is important that you set the switch on the bottom to "**Live**". A mixture of different chases and scenes is not possible.

If you only work with scenes (meaning no chases), you can remain on the cue level. If you want to work with chases, you should bring everything, including scenes, onto the chase level. A chase can consist of one single cue and thus could be a scene. Otherwise, the most recently selected will be called up and has a white background. If a new cue or chase is selected, then this will run. You can stop a chase also. All you have to do is to tap again on the currently highlighted white chase button. If tapped once more, the program will start again from the beginning. If the light should go dark, tap on the light bulb symbol at the bottom right.

You can control additional spots, fog machines or other fixtures regardless of the stored scenes and chases. These must be assigned to one or more auxiliary channels, as described in section 2.4, have. Simply tap the aux path which is to be controlled and move the slider to the desired value.