

User manual

LFX Master DMX



vaild from firmware version > 2.0

miE
movie-intercom®
LightingFX Tools

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Please be advised depending on the software version function may differ.

This user manual is valid for the LFX Master DMX from firmware version >2.0

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<http://www.movie-inter.com/en/support/downloads>

This user manual is also available in German language

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Chapter 1

Intended use

This product is for professional use only and has been designed for indoor use in dry environment.

Please read this manual carefully before operation and follow the safety information.

The LFX Master DMX lighting effect generator allows for control of lamps connected at the DMX-512 output.

The DMX-512 input allows for remote control of the unit or to extend the functions using an external dimmer console.

Chapter 2

Safety - PLEASE READ



It is important to read ALL safety and installation instructions to avoid any damage to the product and potential injury to yourself and others.

Only use this product if all cables, connectors and the product itself are undamaged.

The device must be used in accordance with local regulations only.

Do not operate the product if the ambient temperature exceeds 40°C / 104°F.

Exposure to moisture may cause damage to the product and will void your warranty.

Damage caused by inadequate cleaning or maintenance is not covered by the warranty.

Never connect the PSU and a battery or other power source at DC IN/OUT 1 and 2 at the same time!

Only use the power supply unit (PSU) delivered from movie-intercom LightingFX Tools.

DANGER

Risk of injury or death through epileptic seizure.

Do not use the effect near stairways, in corridors or near public exits. Provide advance notice that strobe lighting is in use. Display advisory notices on the set, at the point of ticket sales, on tickets if possible, in the program, and at the entrance(s) to the venue or studio.

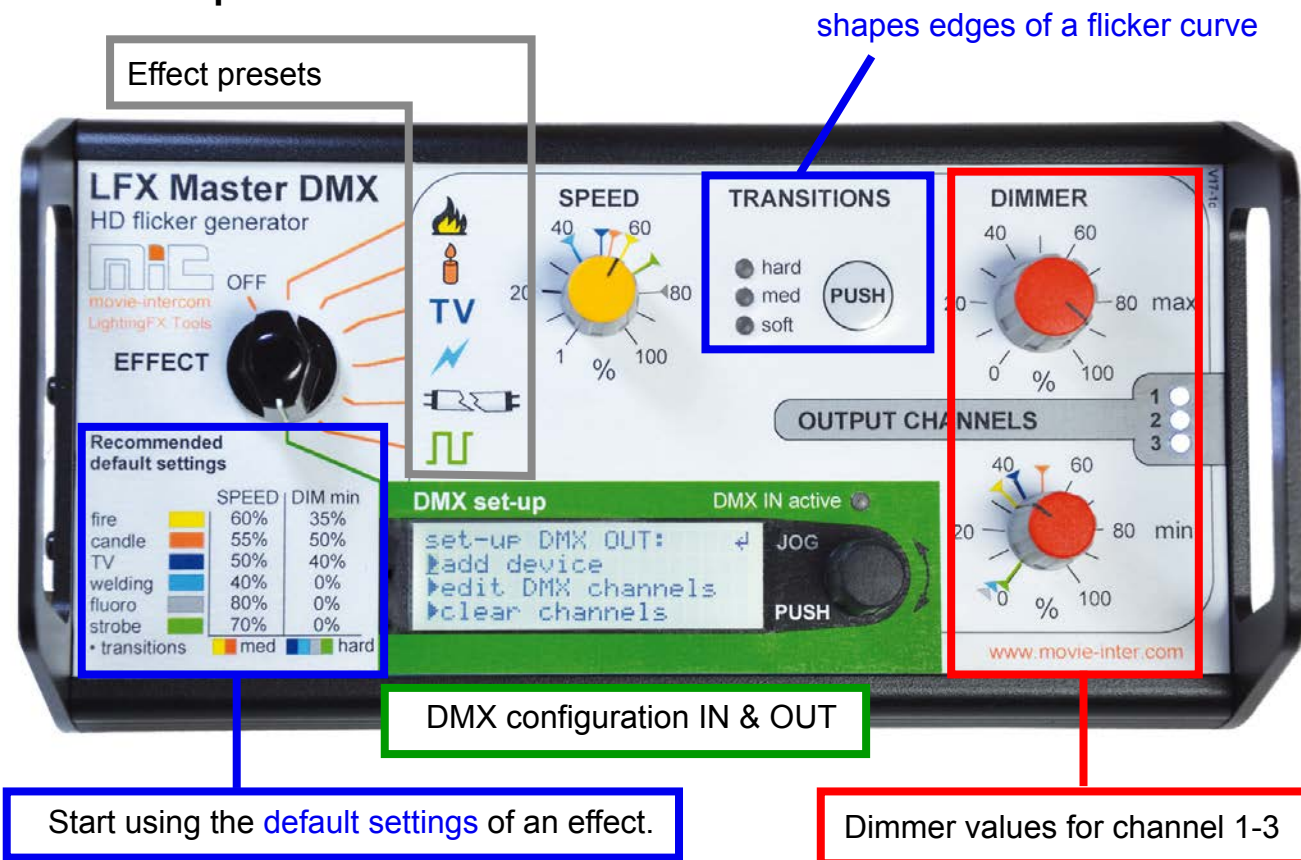
Avoid extended periods of continuous flashing, particularly at frequencies of 10 to 20 flashes per second. At flash rates below 5 flashes per second, it is estimated that only 5% of flicker-sensitive persons will be at risk of seizure.

Make sure that personnel at the venue are trained in the care of a person who is having an epileptic seizure and able to provide care if necessary. If strobes are in use and a person has a seizure, switch the strobes off immediately. Mount strobes as high above head height as practicable.

Chapter 3

General features

3.1 Control panel



A coloured label represents the recommended default settings - set SPEED, TRANSITIONS and DIMMER min to the corresponding coloured markers located on each scale.

Connections

Connect PSU 12 VDC here @ 1 or 2
 - 1 and 2 throughput
 - use second DC jack for powering an external device, e.g. wireless DMX transmitter or dimmer console
 The DC input is internally protected against short-circuit/polarity for the unit.

Caution: both DC-inputs are directly connected with each other!



DMX input

- connect dimmer console/existing DMX universe here
- use as an inline device in an existing DMX universe, auto-terminate

DMX OUT
connect device here

Power supply unit



Exclusively use the external PSU (Power supply unit) for operation, included in delivery.

Plug-in the mains connector to 100 - 240 VAC/ 50 to 60 Hz. Please replace the interchangeable adaptor plug for EU, US, UK, AU.

Connect the round DC-plug to the LFX Master DMX's DC input 1 or 2.

Alternatively use a battery (5 - 32 VDC) with a round standard 2.1mm power plug, center positive.

Or use the USB > Power cable to power it up.

3.2 Pre-programmed effects

Natural looking lighting effects







The unit is equipped with six pre-programmed effect presets. **Obey safety instructions!**

Each effect preset has a resolution of 24 fps at default values.



A coloured label on the control panel represents the recommended settings - set SPEED and DIMMER min to the corresponding coloured markers located on each scale.

TRANSITIONS is set automatically to the recommended mode after selection of an effect.

preset name		label application	hints
fire		single channel fire FX or use three lamps for fire with flickering shadows, torche	play with TRANSITIONS and DIMMER min, reduce DIMMER min if used with three channels
candle		a slidely flickering candle FX, oil lamp, lantern	choose a lamp with small light omitting surface, e.g. household type 60 W bulb
TV		flickering effect of a TV, RGB color shifts if used in RGB mode of LED fixture or with three lamps geled	set CCT to about 6500 Kelvin, set TRANSITIONS to "med" with LED
welding		effect of welding or a short-circuit	LED: set CCT to about 6500 Kelvin or above, for tungsten: small wattage (bulb inertia)
"broken" fluoro		"broken" fluoro will not come on, flickering tube LFX for LED or tungsten	let "tube" turn on live by turning DIMMER min to 100% rapidly
strobe		rectangle signal, neon signs, flasher, stroboscope, turn indicator; speed from 70 msec to 28 sec	use as sequencer with 3 channels CH2 & 3, each has 33% delay

3.3 Dimmer MAX & min

Each generated lighting effect can be dimmed.

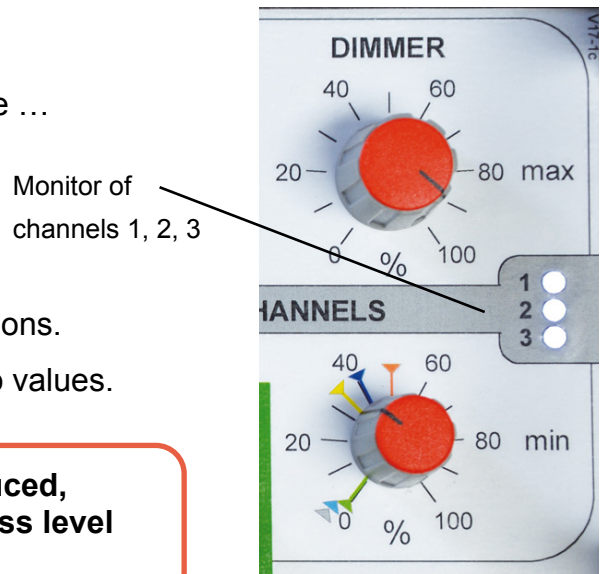
The LFX Master DMX provides the limitation of the ...

- upper ("max") brightness level
- lower ("min") brightness level.

"Dimmer min" defines the intensity of flicker variations.

The brightness level alternates between these two values.

If the maximum brightness level is reduced, at the same time the minimum brightness level will be decreased!



The "Dimmer max" knob dims all three channels.

Independent dimming of the channels

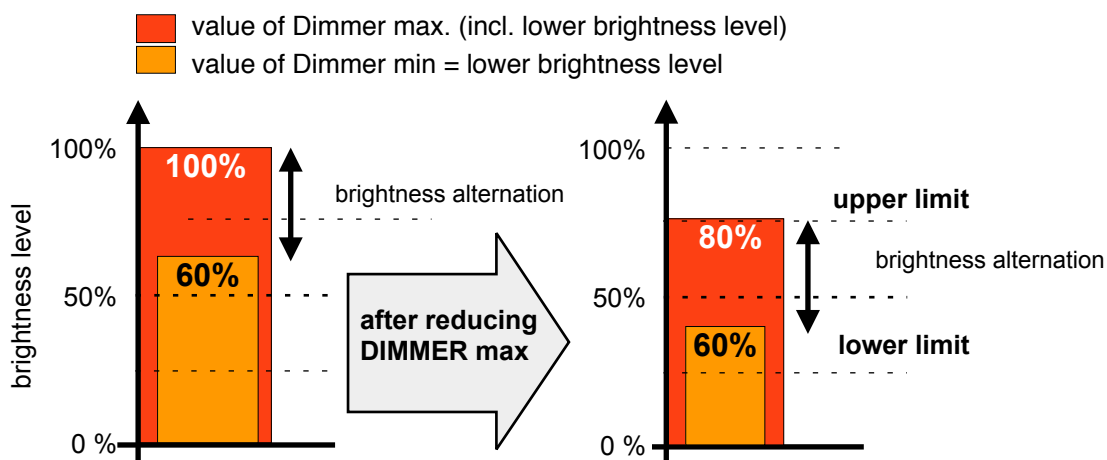
If you prefer to dim the three channels separately please use an external dimmer console connected at "DMX-IN" and use the DMX-IN preset "3xOUT separate dim".

A minimum of six DMX channels are required for the console. > page 26

Relation between DIMMER max opposite DIMMER min

The value of DIMMER min always depends on the value of DIMMER max.

We strongly recommend to adjust the upper brightness limit ("DIMMER max") **at first** and then adjust the value of DIMMER min.



In the DMX OUT configuration please select/edit effect channels DIM OUT 1, DIM OUT 2 or DIM OUT 3.

3.4 Three output channels

Original flames of a fireplace are in motion. The direction of the omitted light is changing.

Therefore a fire effect may look more realistic if it is created by lighting sources from different directions.

The 3 channel “fire” preset of the LFX Master DMX automatically alternates the dim levels of each channel the way a real flame would behave – flickering shadows.

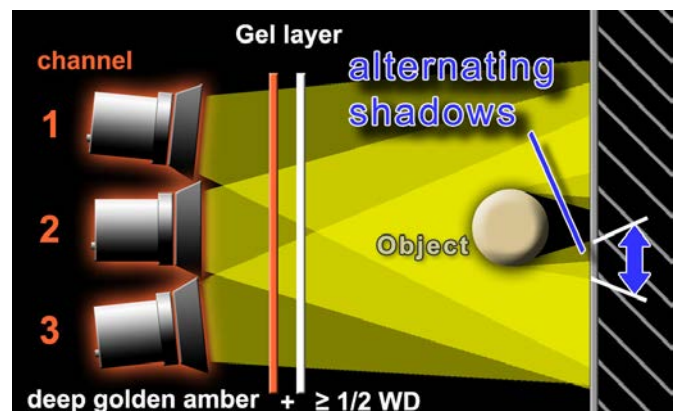
For TV effects with three channels even the colour changes if RGB lamp mode is chosen.

Realistic looking fire with 3 channels

As shown to the right three lamps – separately controlled by the LFX Master DMX – will initiate three different cast shadows of an object on a surface.

The suggested gel “deep golden amber” is used to adjust the colour temperature.

The attached 1/2 white diffusion softens the cast shadows of the three lamps, the effect looks more natural.



If you remove the object you will not see any flickering shadows.

If the projection surface is too far away from the object you will not see flickering shadows.

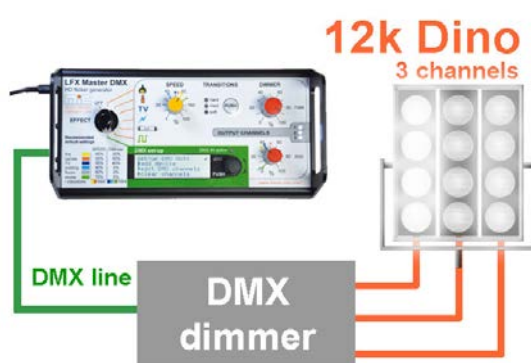
A single channel effect could have the same result, but, saves a lot of hardware set-up time.

Besides the adaptation to the filament inertia for tungsten the “Transitions” feature of the LFX Master DMX also modifies the transitions between the channels, keep in mind for LED.

Gel and parameter library

With LED fixtures: add a gel by adding a DMX channel with a fixed value, or even better: choose a gel from the gel library by gel name if set-up with an Arri or Kinoflo device preset. Attach the three fixtures close to each other. WD gel is not required cause source is soft anyway.

High power fire light



Choose the easy way to get a high power flickering fire light.

Let it burn with one or multiple dino lights!

You may use a DMX-512 based 3 x 5k dimmer hooked up at the DMX output of the LFX Master DMX flicker generator.

Select device preset "tungsten dimmer".

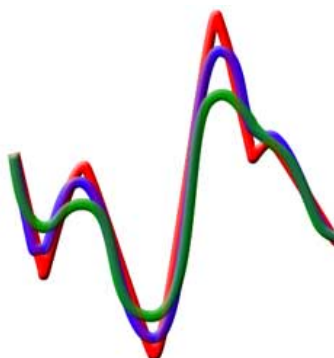
Choose "hard" transitions for this effect.

3.5 Transitions function

Use every type and size of tungsten lamps or LED.

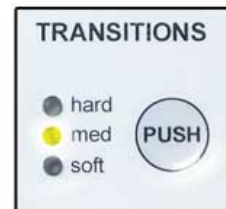
A result of an effect would look different with the same signal used at different lamp types/sizes, particularly if an LED lamp is used.

“Transitions” adapts effects to the duration of persistence of various types of filaments or to LED lamps.



“Transitions” shapes edges

deactivated
med transitions
soft transitions



The timing difference between the moment of electrical deactivation and the time of a completely extinguished light depends on the power of the bulb.

Choose the transition mode depending on the used type and size of lamp (bulb inertia).

Thus any lighting effect looks excellent – with a 10K, a redhead, a household type 60 W bulb, fluoros or LED. The “Transitions” feature of the LFX Master DMX also modifies the transitions between the channels

Also use “Transitions” for different styles of e.g. fire – from aggressive to smooth.

The Transition mode is automatically pre-selected if you turn rotary switch "EFFECT" to any effect symbol. For Strobe effects "Transitions" is deactivated.

recommended settings for "Transitions"

Effect	Tungsten			LED	
	60 W bulb	150-800 W	>1 kW	"smooth" off	"smooth" ON
Fire	med	med	hard	med	hard
Candle	soft	med	hard	soft	hard
TV	med	hard	hard	med	hard
Welding	hard	hard	hard	hard	hard
"broken" tube	hard	hard	hard	hard	hard
Strobe	-	-	-	-	-

Depending on the manufacturer of the lamp a LED fixture might have different DMX input signal processing. Some might "smooth" the signal, prefer to disable the "smooth" function.



3.6 mechanical mounting


Located on the rear bottom of the LFX Master DMX there is a 1/4" thread.

Use a standard brass pin for mounting, maximum length of the 1/4" screw must not exceed 8 mm.

3.7 General set-up procedure

First of all choose the lamp(s) you would like to control.

Got through steps 1 to 3.

1	2	3
Power up @ DC-input 5-32 VDC 1 or 2 Connect a DMX device @ DMX OUT	Turn "EFFECT" to position "DMX set-up" Set-up the DMX communication with one or many lamps using DMX-OUT device presets or custom set-up	Turn "EFFECT" to any EFFECT position. Start with the default settings printed on the control panel.
WARNING  Never connect two power sources at the same time using DC IN/OUT 1 and 2! Risk of fire!	Choose a device preset or use the custom configuration	create lighting effect

For control of tungsten lamps one or many externally connected DMX-512 based dimmer packs are required.

LED fixtures normally does not require a dimmer pack and can be controlled directly.

Add as many LED devices as required using a device preset.

Chapter 4

Online configuration Tool

On www.lfxmaster.com you may configure any output setting using an arbitrary number of lights.

Enter the type and number of lamps, the set-up assistant will guide you through the settings.

Finally e-mail this step-by-step guide to your account.

This web site is permanently updated with new LED fixtures and features.

We would be very pleased if you would inform us about the successful use of a light not included in the DMX device list. We update the device list constantly - that helps other users!

A contact link can be found on this website.

Chapter 5

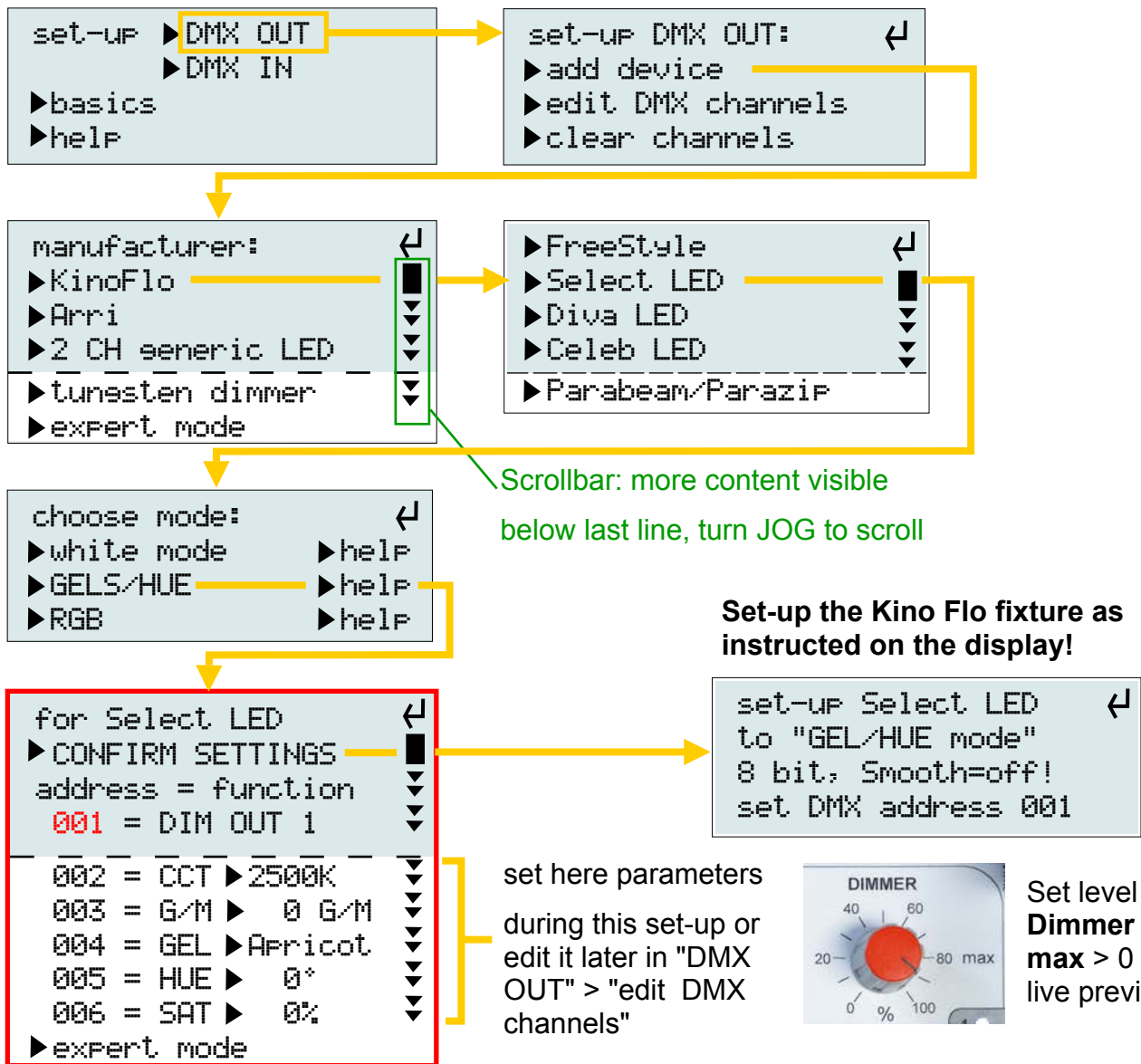
Quick start guide for DMX OUT

Example here:
KinoFlo "Select LED"

1. Connect a DMX device at DMX OUT
2. Turn "EFFECT" to position "DMX set-up".

Connect the "Select LED" via DMX @ DMX OUT

Turn/push the JOG for navigation through the menu.



Set **DMX start address** for DIM OUT 1.
 Optionally set values for Kelvin, G/M, GEL, ...
 AND **CONFIRM SETTINGS**.

Add other devices for LFX Master channel 2 & 3 for multi-channel LFX.

3. **Create an effect** > Turn "EFFECT" to any effect symbol.

Chapter 6

Product overview

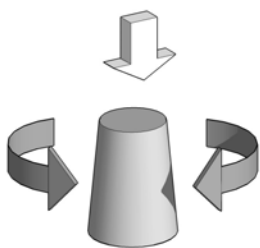
The main purpose of the display is the DMX configuration and it signals received DMX data when detected, then the green indicator "DMX IN active" is on.

Effects are set-up with all knobs (except "JOG") and the "Transitions" button.

The DMX OUT fixture library makes it very easy to set-up or edit existing values > page 16

Navigation with the JOG

Rotating the JOG allows for stepping through the menu items or adjusting selected values. A push on the JOG selects a menu item or submits an action.

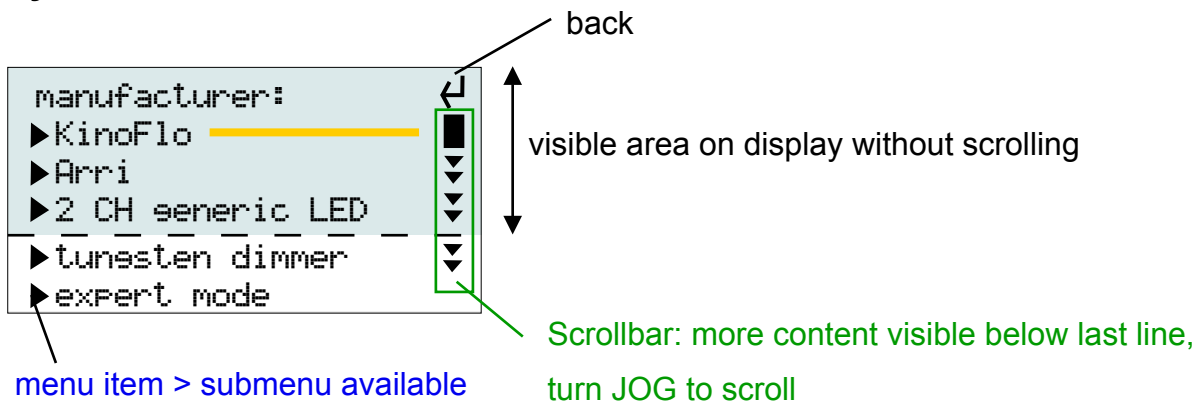


JOG: turn & push function

First level - knob EFFECT in position "DMX set-up"



Symbols within the menu




Related topics

- DMX OUT device library > page 16
- custom DMX OUT configuration > page 22
- DMX IN presets > page 24
- custom DMX IN patching > page 29

6.1 Menu map - table 1 of 2

Level 1	2	3	brand	device	choose mode	detailed config	instructions
set-up DMX OUT	add device	Manufacturer	KinoFlo	Freestyle	for each device	set-up list with all channels and functions	detailed set-up instructions for device
				Select LED	• White		
				Diva LED	• GELS/HUE	>CONFIRMATI-ON	
				Celeb LED	• RGB		
				Parabeam			
				Arri L5, 7, 10-C	• CCT • RGBW		
			Arri	Skypanel-C	• CCT • RGBW • GEL		
				Broadcaster 2+			
			2 CH generic LED tungsten dimmer				
	edit DMX channels	Expert mode DMX OUT (example) address > function 001 > Dim OUT 1 → 002 > fix 000 003 > fix 000		choose function	choose value	confirmation	
				• Dim OUT 1			
		add channel > choose function and values exit		• Dim OUT 2			
				• Dim OUT 3			
				• fix value	for fix: 0...255		
				• delete	DMX channel 0...255		
	clear channels						
							yes or no?

6.1 Menu map - table 2 of 2

Level 1	2	3	instructions	choose function	choose value
set-up DMX IN	load preset	<ul style="list-style-type: none"> • 3x out separate dim • full remote control • optocal sensor IN 	info screen what function is used		
		Expert mode DMX IN (example) address > function 001 > Patch 004  002 > fix 000 ... list of DMX channels & its function, value ...	<ul style="list-style-type: none"> • MAX OUT 1 • min OUT 1 • MAX OUT 2 • min OUT 2 • MAX OUT 3 • min OUT 3 • Effect • Speed • Transitions • Enable NEW • Patch • delete 	for fix: 0...255 DMX channel 0...255	
Basics	clear channels	add input channel	calls expert mode, adds next available DMX channel		yes or no?
	factory reset	deletes all input channels			yes or no?
help	software version	info screen			
	www.lfxmaster.com	general information screen how to set-up			

6.2 configuration of DMX OUT overview

There are two ways to configure DMX OUT:

1			2
The most easy way: Use a device preset from the fixture library			Expert mode: customize DMX OUT configuration
If the connected device is present in the preset list it is advisable to use this preset. You may edit this preset later in the expert mode.			modify existing settings <i>or</i> manually add a DMX channel > allocate a function:
Available device presets	Mode	allocated DMX channels	DIM OUT 1, DIM OUT 2, DIM OUT 3 or a fixed DMX value
Kino Flo: Freestyle	White	3	arbitrary configuration of all DMX channels for more details > page 22
	GELS/HUE	6	
	RGB	6	
Select LED	White	3	
	GELS/HUE	6	
	RGB	6	
Diva LED	White	3	
	GELS/HUE	6	
	RGB	6	
Celeb LED	White	3	
	GELS/HUE	6	
	RGB	6	
Parabeam/Parazip		1	
Arri: L5-C	CCT	7	
	RGBW	9	
L7-C	CCT	7	
	RGBW	9	
L10-C	CCT	7	
	RGBW	9	
Skypanel-C	CCT	7	
	GEL	17	
	RGBW	9	
Broadcaster 2+		4	
2 channel generic LED		2	
tungsten dimmer		12	

Device library

The LFX Master DMX provides a pre-programmed device library for easy set-up of most Arri and KinoFlo LED fixtures and some others.

A device preset automatically sets-up all required DMX output channels due to the fixture mode shown on the following pages.

Instead of DMX displaying parameters as DMX values the device presets for Arri/Kinoflo show "real" values like "2500" Kelvin or Hue Angle in degrees, gels by gel name.

The LFX Master DMX will convert these entries to DMX values not visible for the user.

After confirmation of the suggested settings you will see instructions on the screen of the - LFX Master DMX how to set-up the connected device.

If you prefer to see the DMX value instead of the "real" fixture parameter please use the "expert mode" > page 22

Recommended LED fixture modes

Before you choose a device preset please be aware which mode is most suitable for the lighting effect.

Recommended LED fixture modes

	Effect	Fire	Candle	TV	Welding	"broken" fluoro	Strobe
Brand	fixture mode						
Kino Flo	White	X	X	X	X	X	X
	GELS/HUE	X	X	-	X	X	X
	RGB	-	-	X	-	-	-
Arri	CCT	X	X	X	X	X	X
	GEL	X	X	-	X	X	X
	RGBW	-	-	X	-	-	-

6.2.1 Kinoflo device library

valid for all LED fixtures using 8 bit resolution

White mode

CCT = 2700 ... 6500K

```

for Kinflo LED
▶ CONFIRM SETTINGS
address = function
001▶DIM OUT 1
002=CCT 2500K
003=G/M 0 G/M
▶ expert mode
    
```

Note: In order to control the Gels, the G/M channel needs to be set 0 G/M.

In order to control HUE and Saturation set G/M: 0, AND GEL: -NO GEL-

GELS/HUE mode

CCT = 2500 ... 9900K

```

for Kinflo LED
▶ CONFIRM SETTINGS
address = function
001▶DIM OUT 1
002=CCT 2500K
003=G/M 0 G/M
004=GEL ▶ Apricot
005=HUE 0°
006=SAT 0%
▶ expert mode
    
```

RGB Mode

CCT = 2500 ... 9900K

```

for Kinflo LED
▶ CONFIRM SETTINGS
address = function
001▶DIM OUT 1
002=CCT 2500K
003=G/M 0 G/M
004▶R DIM OUT 1
005▶G DIM OUT 2
006▶B DIM OUT 3
▶ expert mode
    
```

6.2.1 Kinoflo device library (continued)

Gel library

listed in alphabetical order for GELS/HUE mode

- NO GEL-
 Alice Blue
 Apricot
 Bastard Amber
 Bright Blue
 Bright Pink
 Bright Red
 Bright Rose
 Chocolate
 Chrome Orange
 Congo Blue
 Cosmetic Peach
 Dark Amber
 Dark Blue
 Dark Green
 Dark Lavender
 Dark Magenta
 Dark Pink
 Dark Salmon
 Dark Steel Blue
 Dark Y Green
 Daylight Blue
 Deep Amber
 Deep Blue
 Deep Gld Amber
 Deep Lavender
 Deep Orange
 Deep Straw
 Deeper Blue
 English Rose
 Fern Green
 Fire
 Flame Red
 Flesh Pink
 Follies Pink
Gold Amber (default)
 Gold Tint
 Just Blue
 KF 20K Blue Sky

KF Blue Screen
 KF Candle Flame
 KF Flo Cool White
 KF Flo Warm White
 KF Green Screen
 KF LP Sodium Vpr
 KF Mercury Vpr
 Lagoon Blue
 Lavender
 Lavender Tint
 Leaf Green
 Light Amber
 Light Blue
 Light Lavender
 Light Pink
 Light Red
 Light Rose
 Light Salmon
 Lighter Blue
 Lilac Tint
 Lime Green
 Loving Amber
 M Bastard Amber
 Magenta
 Marine Blue
 Mauve
 Med Blue-Green
 Medium Amber
 Medium Blue
 Medium Pink
 Medium Red
 Medium Yellow
 Middle Rose
 Mist Blue
 Moonlight Blue
 Moss Green
 Orange
 Orange
 Palace Blue

Pale Amber Gold
 Pale Blue
 Pale Gold
 Pale Green
 Pale Lavender
 Pale Navy Blue
 Pale Red
 Pale Rose
 Pale Salmon
 Pale Violet
 Pale Yellow
 Paler Lavender
 Peacock Blue
 Pink
 Primary Green
 Primary Red
 Rose Pink
 Rose Purple
 Rosy Amber
 Scarlet
 Sky Blue
 Slate Blue
 Smokey Pink
 Sp Steel Blue
 Special Lavender
 Special M Blue
 Spring Yellow
 Steel Blue
 Straw
 Straw Tint
 Summer Blue
 Sunset Red
 Surprise Peach
 Surprise Pink
 True Blue
 Violet
 White Flame
 Yellow
 Zenith Blue

6.2.2 Arri device library

valid for LED fixtures using 8 bit resolution

L5-C, L7-C, L10-C

CCT, mode 2

CCT = 2800 ... 10000K

```

for L5-C
▶ CONFIRM SETTINGS
address = function
001▶DIM OUT 1
-----
002=CCT 2800K
003=G/M 0 G/M
▶ expert mode
  
```

RGBW, mode 4

```

for L5-C
▶ CONFIRM SETTINGS
address = function
001▶MAS fix 255
-----
002▶R DIM OUT 1
003▶G DIM OUT 2
004▶B DIM OUT 3
005=WHT fix 000
▶ expert mode
  
```

Skypanel-C

CCT, mode 2

CCT = 2800 ... 10000K

```

for Skypanel-C
▶ CONFIRM SETTINGS
address = function
001▶DIM OUT 1
-----
002=CCT 2800K
003=G/M 0 G/M
004=FAN fix 000
005=PRE fix 000
006=RES fix 000
007=RES fix 000
▶ expert mode
  
```

GEL, mode 16

```

for Skypanel-C
▶ CONFIRM SETTINGS
address = function
001▶DIM OUT 1
-----
002=CT1 3200K
003=CM1▶BestColor
004=GB1 LEE
005=GC1 ColorFilt
006=GE1▶Gd Amber
007▶XFA 100: 0
008=CT2 3200K
009=CM2▶BestColor
010=GB2 LEE
011=GC2 ColorFilt
012=GE2▶Li Red
013=GXT▶Direct
014=FAN fix 000
015=RES fix 000
016=RES fix 000
017=RES fix 000
▶ expert mode
  
```

RGBW, mode 4

```

for Skypanel-C
▶ CONFIRM SETTINGS
address = function
001▶MAS fix 255
-----
002▶R DIM OUT 1
003▶G DIM OUT 2
004▶B DIM OUT 3
005=WHT fix 000
006=FAN fix 000
007=RES fix 000
008=RES fix 000
009=RES fix 000
▶ expert mode
  
```

HINT

Fire effect with shifting colors in Gel mode

Set channel 007/XFA (Cross-fade between gel 1 and 2) to function "DIM OUT 3"

6.2.3 Arri device library (continued)

Broadcaster 2+

CCT = 2800 ... 6500K

```

for Broadcaster 2+ ↵
▶CONFIRM SETTINGS █
address = function ▼
001▶DIM OUT 1 ▼
-----
002=CCT 2800K ▼
003=G/M 0 G/M ▼
004=RES fix 000 ▼
▶expert mode

```

Gel library Skypanel

listed in alphabetical order for GEL mode 16 (**default shown bold**)

Alice Blue
 Apricot
 Bastard Amber
 Bright Pink
 Bright Red
 Bright Rose
 Chocolate
 Dark Amber
 Dark Green
 Dark Lavender
 Dark Magenta
 Dark Pink
 Dark Salmon
 Dark Steel Blue
 Dark Yellow Green
 Daylight Blue
 Deep Amber
 Deep Blue
 Deep Golden Amber
 Deep Lavender
 Deeper Blue
 English Rose

Evening Blue
 Fern Green
 Fire
 Flame Red
 Flesh Pink
Gold Amber
 Gold Tint
 Golden Amber
 Just Blue
 Lavender
 Lavender Tint
 LEE Green
 Light Amber
 Light Blue
 Light Lavender
 Light Pink
Light Red
 Light Rose
 Light Salmon
 Lilac Tint
 Lime Green
 Loving Amber

Magenta
 Marine Blue
 Medium Amber
 Med. Bastard Amber
 Medium Pink
 Medium Yellow
 Middle Rose
 Mist Blue
 Moss Green
 No Color Blue
 No Color Straw
 Palace Blue
 Pale Amber Gold
 Pale Blue
 Pale Gold
 Pale Green
 Pale Lavender
 Pale Navy Blue
 Pale Rose
 Pale Salmon
 Pale Violet
 Pale Yellow

Paler Lavender
 Peacock Blue
 Pink
 Primary Red
 Rose Pink
 Rose Purple
 Scarlet
 Sky Blue
 Slate Blue
 Smokey Pink
 Special Lavender
 Spring Yellow
 Steel Blue
 Straw
 Straw Tint
 Summer Blue
 Sunset Red
 Surprise Peach
 Surprise Pink
 True Blue
 Yellow
 Zenith Blue

6.2.3 Other device libraries

2 channel generic LED preset for other LED fixtures

```

for 2CH generic ←|
▶CONFIRM SETTINGS █
address = function ▼
 001▶DIM OUT 1 ▼
-----
 002=CCT fix 000 ▼
▶expert mode

```

Tungsten: for 12 channel tungsten dimmer

```

for tungsten ←|
▶CONFIRM SETTINGS █
address = function ▼
 001▶DIM OUT 1 ▼
-----
 002▶DIM OUT 2 ▼
 003▶DIM OUT 3 ▼
 004▶DIM OUT 1 ▼
 005▶DIM OUT 2 ▼
 006▶DIM OUT 3 ▼
 007▶DIM OUT 1 ▼
 008▶DIM OUT 2 ▼
 009▶DIM OUT 3 ▼
 010▶DIM OUT 1 ▼
 011▶DIM OUT 2 ▼
 012▶DIM OUT 3 ▼
▶expert mode

```

Please see the according user manual of the DMX device for more details.

PRO - CONTRA modes

Mode	PROS	CONS
White/CCT	simple config, requires less DMX channels	adjustment of Kelvin and dim level only
GEL/HUE	opposite "White/CCT" mode additionally add a gel, green/magenta, hue	requires at least 6 DMX channels
RGB/RGBW	separate control of red green and blue channel > TV effects	requires at least 6 DMX channels

6.2.4 Device preset set-up

If a device preset is added the LFX Master DMX automatically looks for the next available continuous DMX channel block required. Alternatively choose an arbitrary DMX start address.

Example here:
with Kino Flo "Select LED" in GELS/HUE mode

1. Turn "EFFECT" to position "DMX set-up"
2. Navigate to DMX OUT > add device > KinoFlo > Select LED > GELS/HUE

Set-up the Kino Flo fixture as instructed on the display!

set DMX start address > click on value

Optinally edit values for Kelvin, G/M, GEL, ...
 AND **CONFIRM SETTINGS** > channels, labels & parameters will be copied to the expert mode

Add additional devices for LFX Master channel 2 & 3

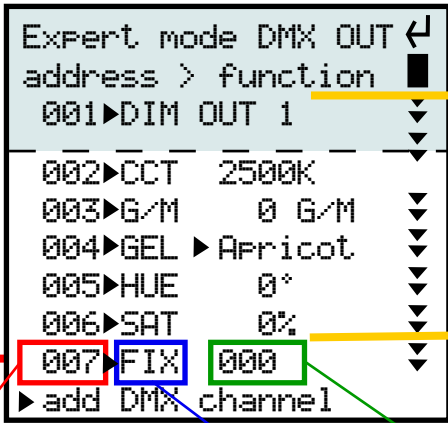
3. Turn "EFFECT" to any effect position to view a lighting effect

You are done.

Hint If you click on "expert mode" before you have confirmed the settings the intructions how to set-up the fixture will not show up.

6.2.5 Customize DMX-OUT channels in "Expert mode"

1. Turn "EFFECT" to position "DMX set-up"
2. Navigate to "DMX OUT" > "edit DMX channels"



Copied parameters from a device preset.
 Click on DMX channel, ► function or ► parameter to edit.
Show DMX values 0...255
 Delete the channel > add a new one with function "FIX", same DMX channel

DMX channel function fixed value (0...255)

3. click on "add DMX channel" (or use the JOG to edit existing channels, functions & values)

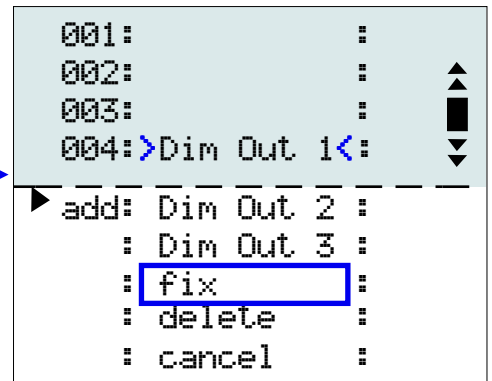
A new line is inserted, the next available DMX channel is automatically added.

- **Edit the DMX address** if required.

Push JOG to change DMX address, push to confirm

4. Turn JOG: select **function** > push JOG
 Turn JOG to select a function (within arrows)
 Push JOG to confirm

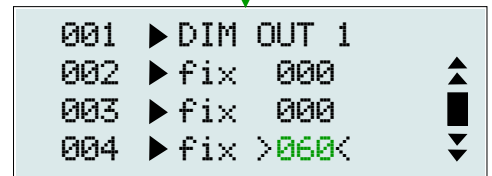
select function of a DMX channel



5. Turn & push JOG: choose the **value**

e.g. set the Kelvin value here

set value



6.2.6 Delete a DMX channel

1. Navigate to DMX OUT > edit DMX channels
2. select the channel you would like to delete by clicking on the **function**.
3. scroll & choose "delete" & click JOG

6.2.7 Function overwrite a DMX channel

This function simplifies the configuration if DMX input channels and output channels are used.

DMX channels in a DMX universe are unique.

For that reason it would be a conflict if you try to use a DMX channel as an output channel and input channel.

To avoid unnecessary manual deleting of a DMX output channel and manually adding it again to the DMX input the overwrite function prompts a question how to proceed with this channel.

The "Overwrite"-function works in both directions, DMX IN>OUT and DMX OUT>IN

Example

As shown in chapter "6.3.4 DMX in patching" we intend to put the DMX output channel on an externaly connected dimmer console for live adjustment of the gel.

given DMX OUTPUT configuration

```

Expert mode DMX OUT  ⬅
address = function
▶add DMX channel
  010 = DIM OUT 1
-----
  012 = fix  000
  013 = fix  000
  014 = fix  000
  015 = fix  000
  016 = fix  000
  
```

We add an DMX input channel using DMX channel 14 for live GEL adjustment

```

Expert mode DMX IN  ⬅
address > function
▶add input channel
▶001: Patch 014
-----
▶exit
  
```

The fixed value of OUTPUT 014 e.g. sets the gel

would be a conflict, DMX channel cannot be allocated twice

1. In the expert mode of **DMX IN** select (or add a new channel) for DMX input channel 001 > patch to DMX channel 014.
2. Because channel 014 is already used by DMX OUT an alert comes up:

3.

```

DMX address 014 in  ⬅
use: fix
▶choose different
▶overwrite
  
```

```

This will delete
the correspondine
setting. Proceed?
▶OK ▶cancel
  
```

4. If "OK" is chosen the **DMX OUT** channel 014 will be deleted. Instead **DMX IN** channel 014 will be inserted as a patch for fader #1 (DMX channel 001) of the dimmer console.
5. Now you can adjust the GEL with fader #001 live.

Chapter 6.3

Configuration of DMX IN/-presets overview

available options

HINT: configure FIRST DMX OUT, then DMX IN

DMX IN preset		custom configuration (Expert Mode)
3x OUT separate dim control	full remote control	
remotely control dim levels (MAX & min) of all three output channels separately requires at least a 6-channel dimmer console	remote control all EFFECTS using 9 DMX channels Control of: - all Dim levels (6 ch) - EFFECT preset (1 ch) - speed (1 ch) - transitions (1 ch)	Patch any function or DMX IN address to any DMX output channel in the expert mode . all options available
<i>Example:</i> - Put the dimmer settings on six faders of the console for separate dim control of the three LFX Master DMX output channels (also use as RGB separate adjustment for TV effects)	<i>Control all effects of the LFX Master DMX with a remote dimmer console</i>	<i>Examples:</i> - Put the colour temperature settings for a LED fixture on a fader of the console. - Put speed setting of the LFX Master DMX on a second fader.

Basics

1. Turn rotary switch "EFFECT" to position "DMX set-up"
2. With JOG go to "DMX IN"

```

set-up DMX IN
▶ load preset
▶ edit DMX channels
▶ clear channels
    
```

```

▶ 3xOUT separate Dim
▶ full remote control
▶ optical sensor IN
▶ expert mode
    
```

Note: DMX IN preset "optical sensor IN" is reserved for future products

Delete a channel by calling its function > scroll down > select "delete" > push JOG

list of input channels

```

Expert mode DMX IN
address > function
▶ add input channel
▶ 001: Patch 004
▶ exit
    
```

list of functions

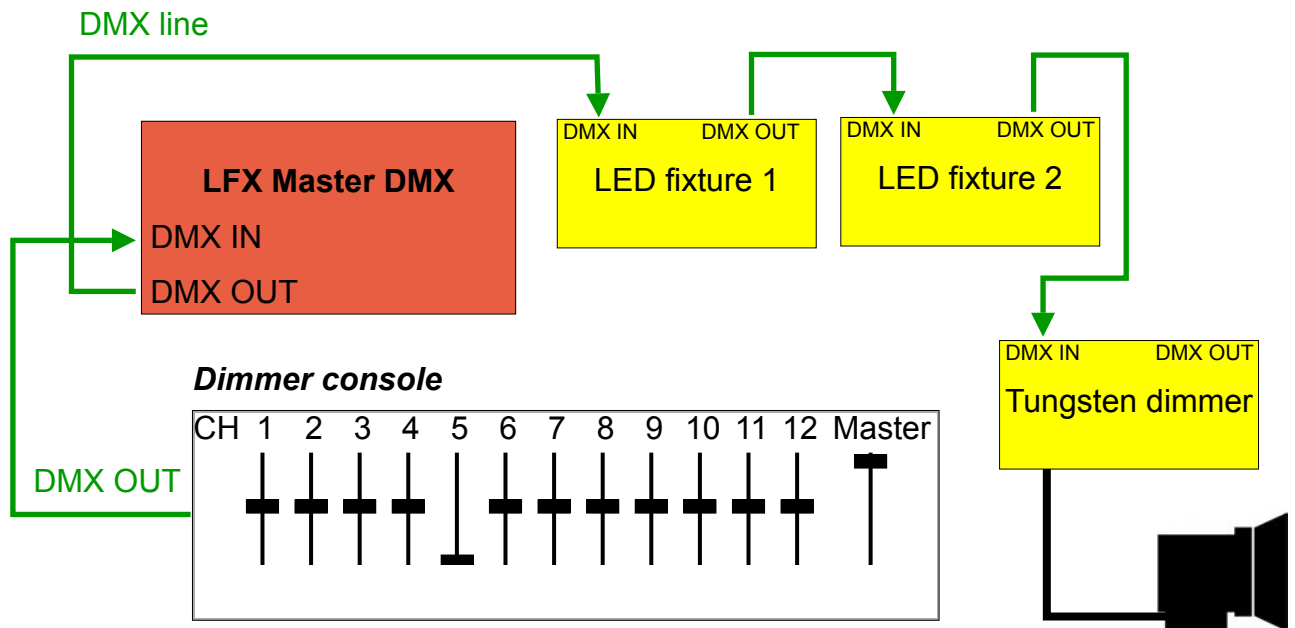
```

: MAX OUT 1
: min OUT 1
: MAX OUT 2
: min OUT 2
: MAX OUT 3
: min OUT 3
: EFFECT
-----
Espe: Speed
addr: Transitions
001: Enable
002: >Patch< 004
▶ add: delete
    
```

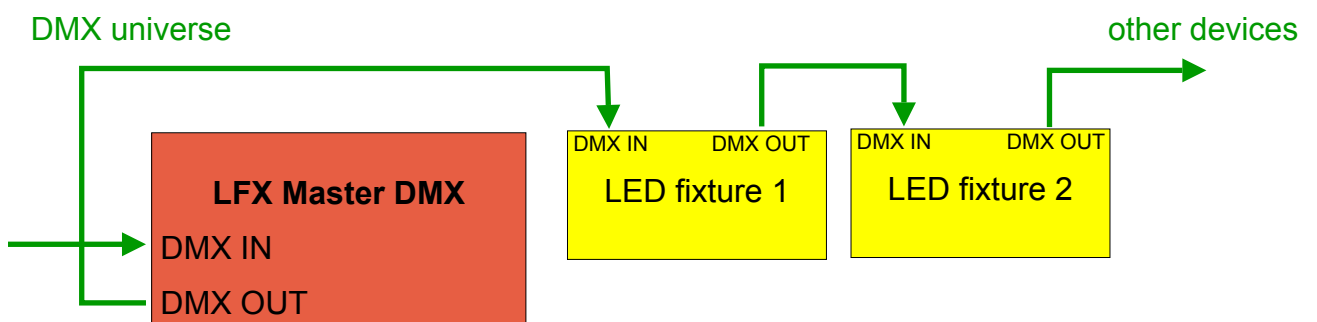
6.3.1 Use of an external dimmer console

With an external dimmer console you can extend the functionality of the LFX Master DMX. We recommend to apply a simple 12 channel DMX console. See more details > next page

Use LFX Master DMX with a dimmer console.

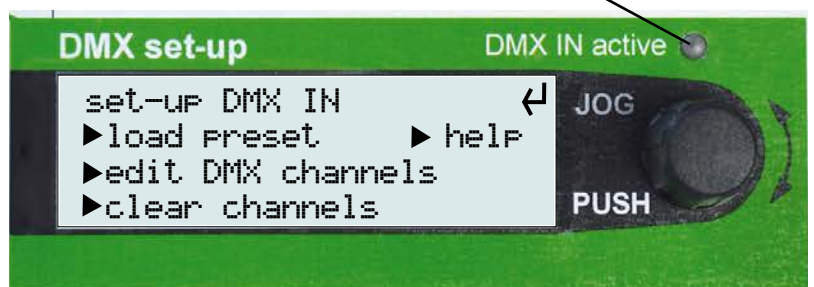


Use LFX Master DMX with an advanced dimmer console in an existing DMX universe



If a valid DMX signal is detected at DMX IN this green indicator comes on

DMX IN is disabled if switch "EFFECT" is on position "DMX set-up"!



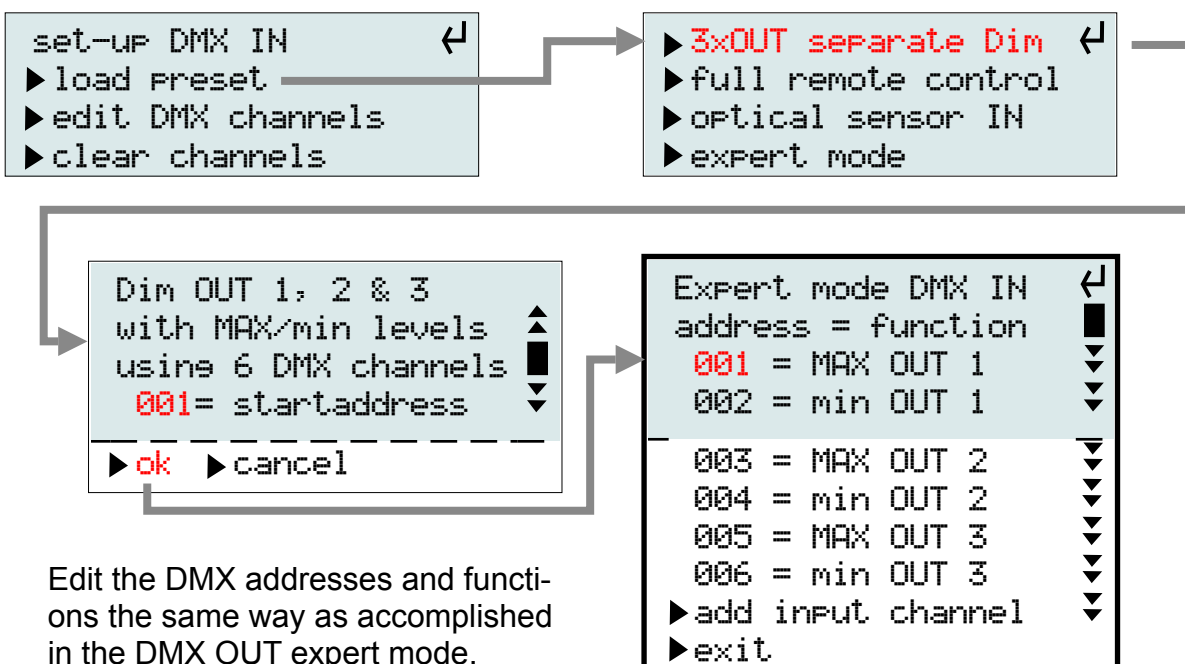
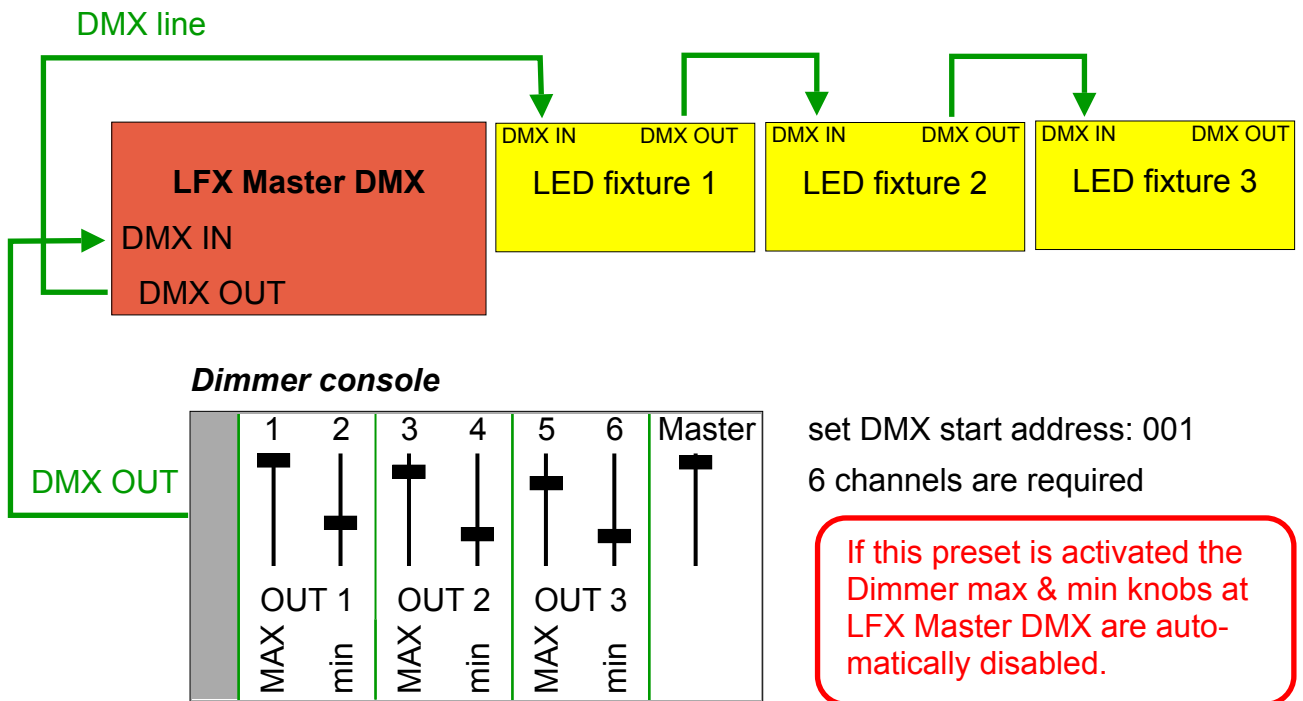
6.3.2 DMX IN preset "3x OUT separate dim control"

This preset allows for separate control of the three output channels of the LFX Master DMX.

If selected the input DMX channels are allocated to the dim functions of the flicker box.

Applications:

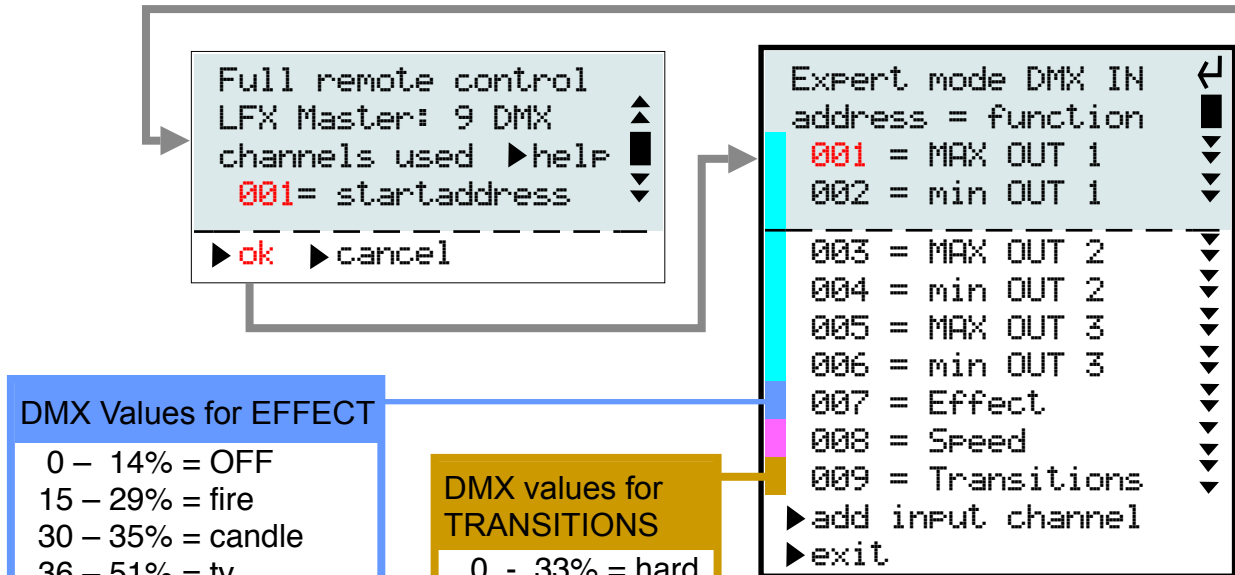
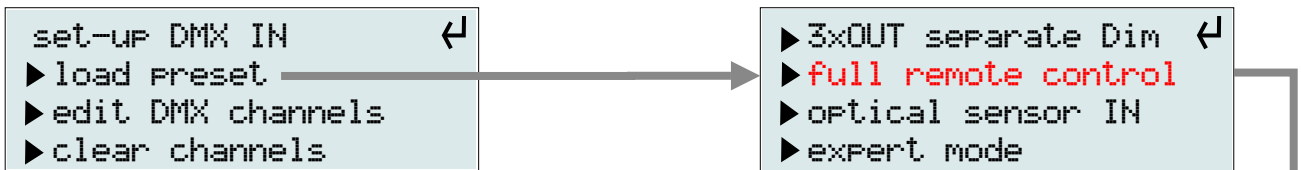
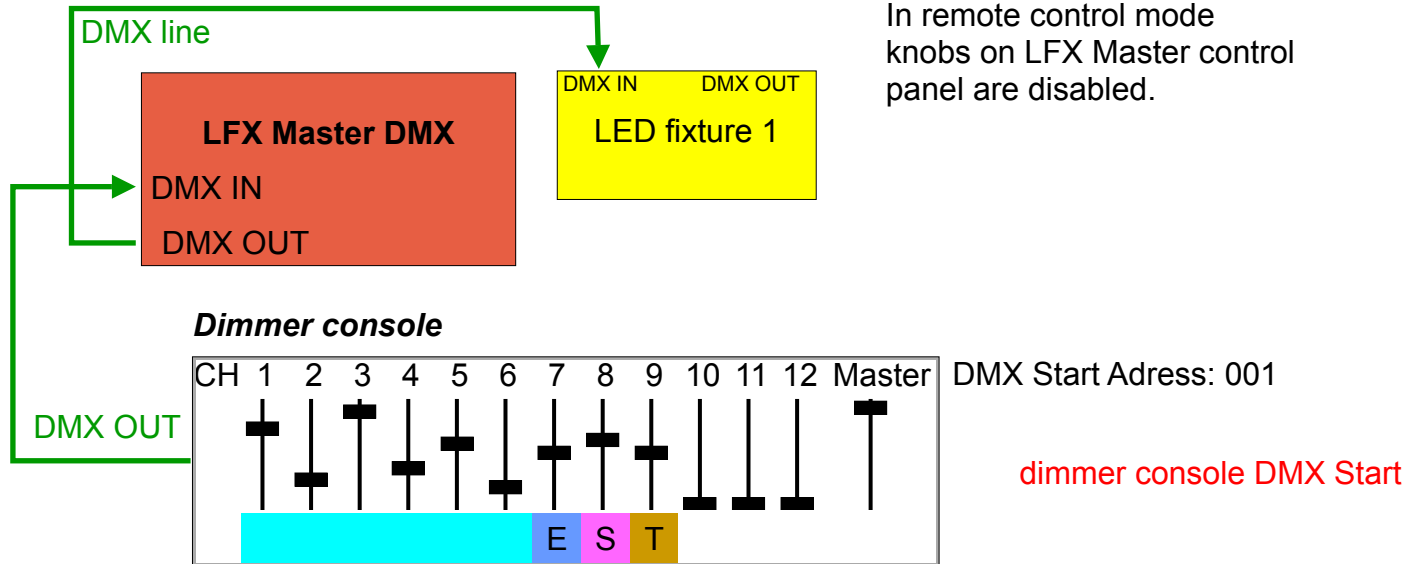
- for fire effects with flickering shadows using different lamps with different dim levels.
- TV effects with shifting colors: precisely define the color intensity and variation of red, green and blue



6.3.3 DMX IN preset "full remote control"

This preset loads all required settings for remote control of the LFX Master DMX via DMX.

Remote control is disabled if switch "EFFECT" is on position "DMX set-up".



DMX Values for EFFECT

0 – 14% = OFF
15 – 29% = fire
30 – 35% = candle
36 – 51% = tv
52 – 68% = welding
69 – 84% = fluoro
85 -100% = strobe

DMX values for TRANSITIONS

0 - 33% = hard
34 - 66% = med
67 -100% = soft

You need to add the "Enable"-function manually. It's not included in this DMX IN preset.
> next page

Edit the DMX addresses and functions the same way as done in the DMX OUT expert mode.

6.3.4 DMX IN "Enable"-function

This function adds a trigger function to the LFX Master DMX.

If the DMX value for this input channel is < 5% all DIM OUT channels will be disabled, if the value is > 5% the selected effect will be used.

Most likely this function is added to the "full remote control" DMX IN preset. You may also use the "Enable"-function without the "full remote control" DMX IN preset.

You may use this function to trigger e.g. a welding effect with just a single DMX channel.

1. Set rotary switch "EFFECT" to position "DMX set-up"
2. With JOG navigate to DMX IN > "edit DMX channels" >

```

3. Expert mode DMX IN
   address = function
   001 = MAX OUT 1
   002 = min OUT 1
   -----
   003 = MAX OUT 2
   004 = min OUT 2
   005 = MAX OUT 3
   006 = min OUT 3
   007 = Effect
   008 = Speed
   009 = Transitions
   ▶ add input channel
   ▶ exit
  
```

"disabled" status shown on display

disabled	Speed	72%
OUT	1	2
MAX:	100%	82%
min:	25%	37%

Click on "add input channel"

```

4. 008 ▶ Speed
   009 ▶ Transitions
   010 ▶ Patch > 002
   add input channel
  
```

Click on "▶Patch"

```

5. 008: Speed :
   009: Transitions:
   010>Enable <
   ▶add:Patch :
  
```

change function to "Enable"

```

007▶Effect
008▶Speed
009▶Transitions
010▶Enable
  
```

if required change the DMX channel here

6.3.5 Custom DMX IN patching (Expert Mode)

With this feature you are able to individually "outsource" every DMX channel along with its according function to a dimmer console.

given DMX OUTPUT configuration

```

for Select LED
▶ CONFIRM SETTINGS
address = function
011 = DIM OUT 1
012 = CCT fix 000
013 = G/M fix 000
014 = GEL fix 000
015 = HUE fix 000
016 = SAT fix 000
▶ expert mode
    
```

Example here:
Kino Flo Select LED in mode "GELS/HUE"

We would like to control the gel using a fader on the dimmer console.

DMX channel 014 is the gel of fixture 1.

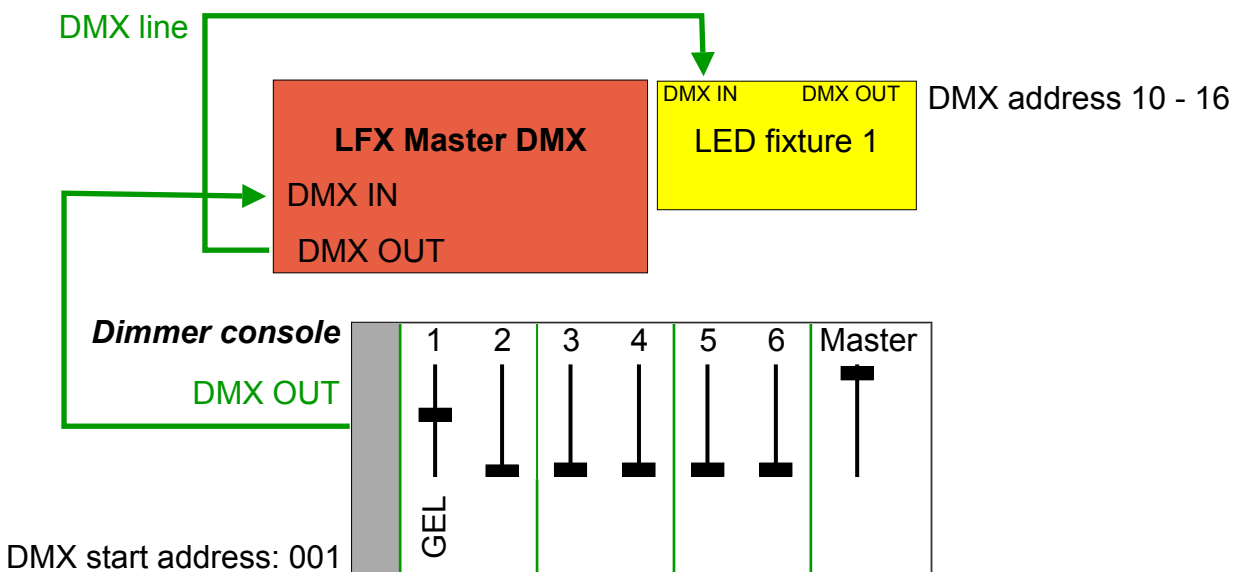
As shown in the example you can add any other patch of a connected device or LFX Master DMX function to a console.

How to set-up

1. Go to "DMX set-up" > "DMX IN" > "edit DMX channels" > "add channel"
2. With JOG choose address 001 (the first fader on the console)
3. choose function "patch" →
4. choose the DMX address you want to patch (DMX channel 014 of fixture 1)
5. Confirm in the following alert to overwrite the channel (because it has been used by fixture 1). **Channel 014 of the DMX OUT config will be removed!**

```

Expert mode DMX IN
address > function
▶ add input channel
▶ 001: Patch 014
▶ exit
    
```

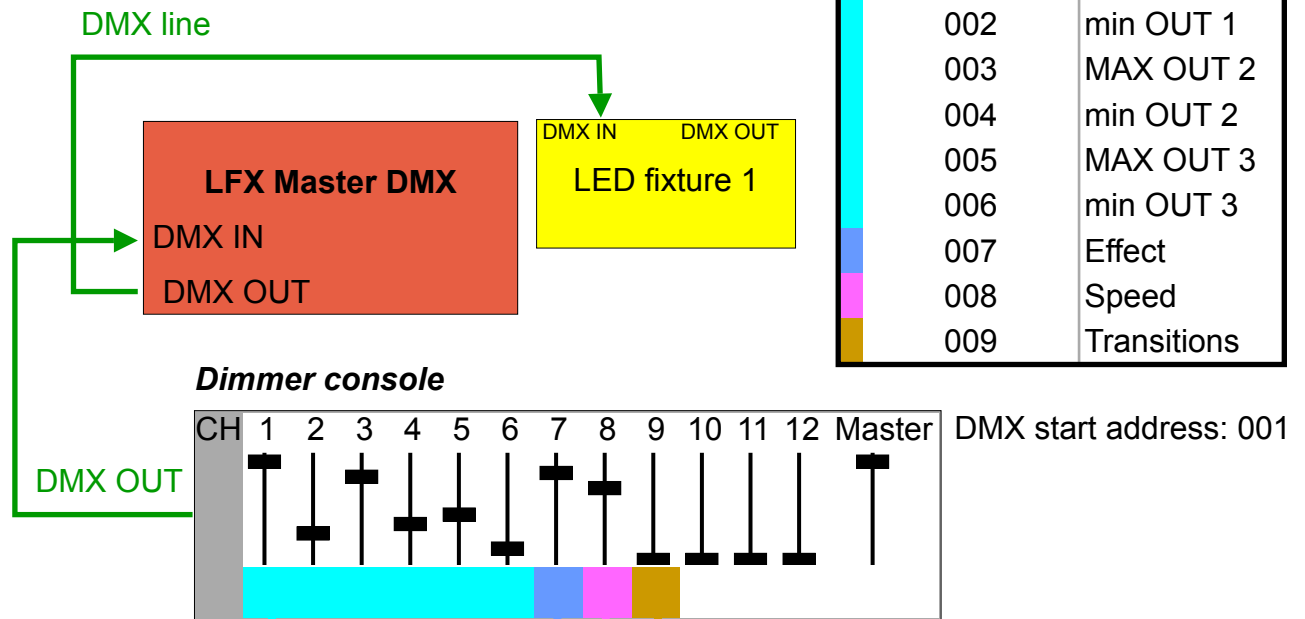


6.3.6 Indicating DMX IN values

If a DMX IN source is detected AND the rotary knob EFFECT is on any effect position the DMX input values are displayed.

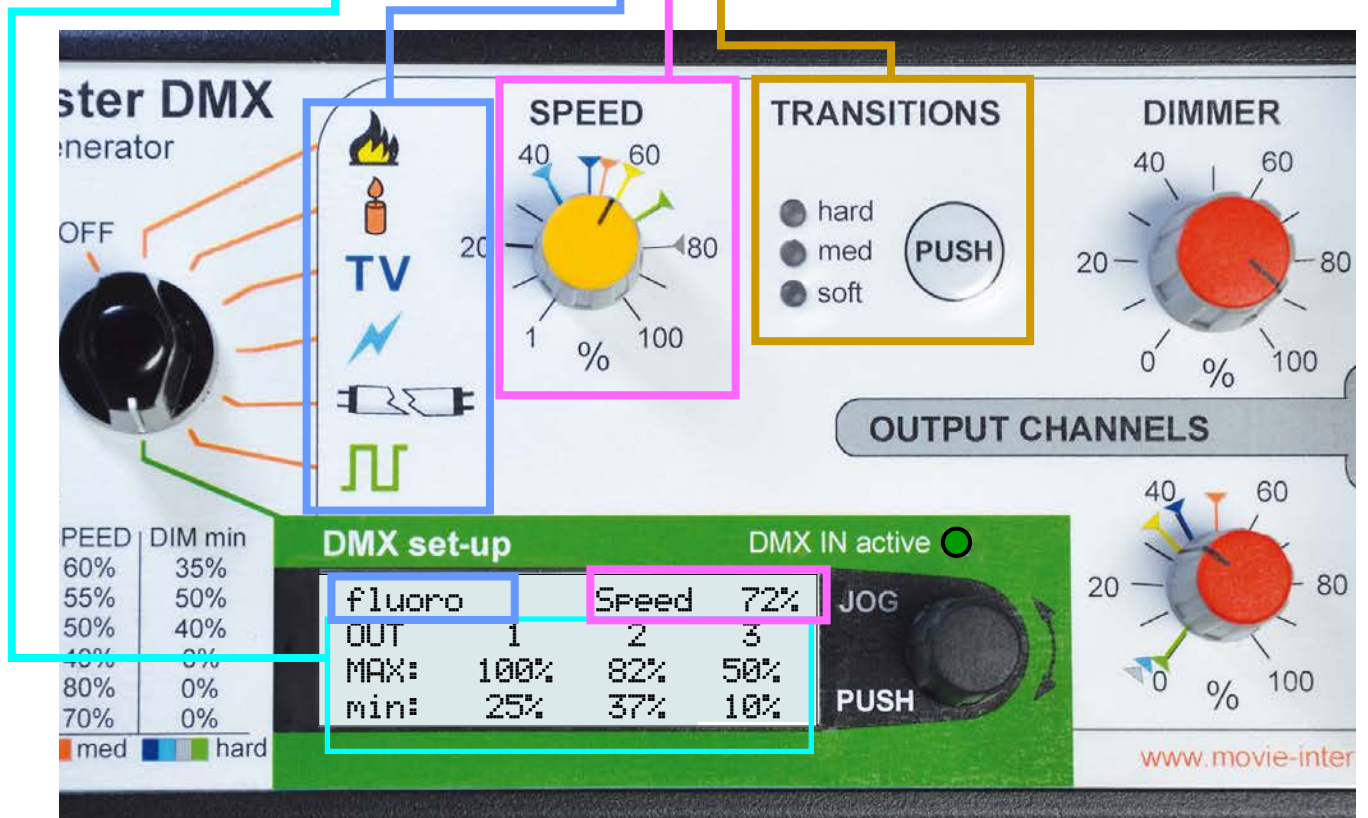
Remote control is disabled if switch "EFFECT" is on position "DMX set-up".

hardware set-up example:



DMX map

DMX channel	function
001	MAX OUT 1
002	min OUT 1
003	MAX OUT 2
004	min OUT 2
005	MAX OUT 3
006	min OUT 3
007	Effect
008	Speed
009	Transitions



Chapter 7

Software update

The LFX Master DMX functions are based on software.

Updating the software may add new features.

To update the software you will need a micro SD-card, type SD or SDHC, max. of 32 GB

required equipment

- micro SD-card (max. 32 GB)
- Screwdriver TX10

1. Copy the new software, received by e-mail, to the root level of the SD-card.

It needs to be formatted as FAT 32 (most likely that's the default format of new SD-cards)

2. Please remove the right hand side cover by screwing off the two screws (Torx 10).



The SD-card slot is located on the edge of the circuit board.

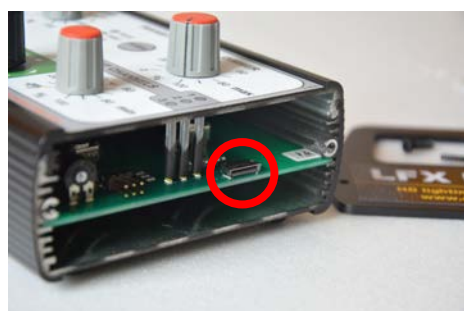
3. remove DC power plug (!)

4. insert the SD-card into the slot, contacts of the card should face down

5. power up the LFX Master DMX

6. follow the instructions shown on the display

7. Remove the SD-card and re-assemble the side panel



micro SD-card slot

WARNING

DO NOT INTERRUPT THE POWER SUPPLY UNTIL THE UPDATE PROCESS IS FINISHED!

It takes about 4 seconds.

Chapter 8

Trouble shooting**Basic conditions for operation**

1. The device and - especially the power supply unit - has no damages.
2. The operation voltage is 100 - 240 VAC @50/60 Hz or powered by USB with adaptor.

symptom	possible reason	solution
no display, no lights on the unit	power missing or supply voltage too low > 6 - 32 VDC, min 120 mA	check power supply, power is fine if display is illuminated
connected lamps remain off	no DMX communication	Set-up DMX OUT & DMX settings at lamp
	Some DMX channels might have been overwritten by DMX IN settings	check if all output channels are still present & configure it correctly
	connected device is switched off	Switch it on
	Value of DIM max is too low	increase DIM max
connected lamp remains on	Value of MIN DIM is too high	decrease MIN DIM
flicker effect is bad	effect settings need to be adjusted	start with the default values effect preset (labeled on the control panel), then change one value after the other
There are visible steps at the LED fixture for an effect	Transitions is set to "hard"	set "Transitions" to "med" or "soft"
An effect of a LED fixture looks smooth	Transitions is set to "soft"	Set "Transitions" to "hard" or "med"
	fixture settings wrong	for KinoFlo: set function "smooth" = OFF
	fixture delays DMX input signal	TEST: Choose any EFFECT, set DIM min to 100%, then rotate DIM MAX quickly, if there is a delay in response the fixture is not configured correctly or not applicable.
Effect with tungsten @ DMX dimmer looks smooth		set dimmer curve to "linear"
no Effect with tungsten @ DMX dimmer or lamp steadily on	wrong settings @ external dimmer	- set "pre-heat" > OFF and/or - must not be set in "switch"-mode
Unit does not work despite all solutions shown above has been tested	excessive heat?	let unit cool down
	excessive humidity?	let unit dry
	nothing helps	please contact us, we check it out for you

Chapter 9

Specifications

order code	lmdx
operating voltage	5 – 32 VDC, min 120 mA, universal PSU included for 90 – 240 VAC, 50/60 Hz, adapter plugs: US, UK, EU, AU
temperature operating range	-10°C ...65°C
Dimensions	(l x w x h) 20 x 11 x 8.6 cm
weight	650 gramms (1.4 lbs) without PSU
DMX protocol	USITT DMX-512-A
DMX sockets	5-pin XLR
DMX output	assisted configuration with device preset or custom DMX configuration. Set DMX channels for CCT, G/M, gel and RGB or allocate an output channel to a DMX channel.
Device presets	Pre-defined DMX set-up for Kino Flo: FreeStyle LED, Select LED, Diva-Lite LED, Celeb LED, Parabeam, Parazip, supported modes: White, GELS/ HUE, RGB, gel library by gel names Arri: Skypanel-C with LEE gel library by gel names, L5-C, L7-C, L10-C, Broadcaster 2+, 2 channel generic LED 12 channel tungsten dimmer pack custom DMX channel/function allocation for all others
DMX input presets	Extend the functionality with a simple DMX console and presets @ DMX INPUT (dimmer console required) separate dim (MAX & min) control for output channels 1, 2 and 3 remote control via DMX IN for all effects DMX patch to any device channel or LFX Master DMX function
resolution preset	24 fps, 60 seconds loop @ default value
HD effects	Fire, Candle, TV, Welding, “broken” fluoro, strobe Strobe t= 70 msec ...28 secs, aspect ratio 50%
enclosure	made of 3 mm thick aluminum
software updates	no shipping, provided by e-mail, micro SD-card slot for updates built-in
Mounting	1/4" thread on bottom of enclosure
All specs shown above are subject to change without prior notice.	

Chapter 10

Cleaning and disposal

Cleaning the unit

ONLY clean the unit when disconnected completely from all cables!

Use a clean slightly wet cloth.

Do not use any detergents for cleaning.

Disposal

In order to avoid any possible effects resulting from the disposal of electrical and electronic equipment containing substances damaging the environment and human health, the European Parliament and Council directives 2002/96/EC on waste electrical and electronic equipment (WEEE) and 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) have been transferred into national law in all EU member states.

The product you have purchased was developed in line with the current state of the art in an environmentally friendly manner and with the view of recycling.

The product is labelled with the symbol shown to the right. If you wish to dispose this product, this symbol obliges you to do so separately from industrial sorted waste.



Waste equipment should be shipped to movie-intercom. We will dispose the waste for you.

Electrical equipment does not belong in regular waste.

European Union declaration of conformity

This product corresponds to the following specifications under strict observance of the installation instructions and technical specifications:



Standard 2004/108/EG of the European Parliament and the council from 15. December 2004 for law provision adaptation of the member states concerning the electrical






compatibility and for abrogation of standard 2014/30/EU.

The device passed the test. Berlin, June 22, 2017

Chapter 10

Address & support

Please do not hesitate to contact movie-intercom.

postal address	movie-intercom Bluecherstr. 21 10961 Berlin Germany	
phone 24h / 7 days	+49 30 2232 0575	
fax	+49 30 2232 0571	
e-mail	support@movie-inter.com	@
web/online shop	http://www.movie-inter.com	
Online configurator for LFX Master DMX	www.lfxmaster.com	

We are looking forward to answer your questions.