ElektraLite lightStream

USER MANUAL

(Version 1.02)

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1. Unpacking

Thank you for choosing the **Elektralite lightStream moving light fixture.**. For your own safety, please read this manual before installing the fixture. This manual covers important information on installation and applications. Please keep this manual for future reference.

To keep this simple, we are going to refer to the fixture as the **Elektralite lightStream** throughout the manual.
The **Elektralite lightStream** uses a high powered 90 watt led which is run a balanced and conservative arrangement at 60 watts.
Please unpack the **Elektralite lightStream** carefully and check whether it was damaged in shipping. Turn the head both horizontally (Pan) and vertically (Tilt) to make sure all movement is smooth.
The following items should be in the box with the fixture:-

Safety cable
U brackets

2. Safety Instructions.

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual. The **Elektralite lightStream** is a high voltage fixture. Be careful when dealing with high voltages.
Please read this manual. If you do not read this manual and damages occur to the Elektralite lightStream, then it could void the warranty.
During shipping, **Elektralite lightStream** may have been exposed to high temperature or humidity changes. So, as a precaution, do not switch the **Elektralite lightStream** on immediately. Condensation can damage the **Elektralite lightStream** so leave it switched off, until it has reached room temperature.
The electrical connection must be carry out by a qualified person and it is absolutely essential that the **Elektralite lightStream** be **grounded**. This is imperative and is a safety issue. Do not break or bend out of the way, the ground center pin on the plug.

Always disconnect the **Elektralite lightStream** from the power source, when the device is not in use or before cleaning it. Only unplug the **Elektralite lightStream** from the power cord. Never pull out the plug out by pulling on the power cord.
Please keep the **Elektralite lightStream** away from children and the general public. Please be intelligent and use common sense when operating the **Elektralite lightStream**.

3. General Guidelines.

The **Elektralite lightStream** is a lighting fixture for professional use on stages, in churches, theatres, etc.
The **Elektralite lightStream** should only be operated at between 120 to 240 volts and only indoors. By 240 volts we mean that the neutral must remain a neutral and NOT be used as one phase in a 120v circuit to create 208 volts across the **Elektralite lightStream.** The reason for this is simple, the neutral is not protected with a fuse. Any problem with that phase will not be protected by the **Elektralite lightStream.**
The **Elektralite lightStream** should not be operated 24/7 (24 hours a day; 7 days a week). The **Elektralite lightStream** needs operation breaks to ensure that it will work for a long time without problems. Please do not shake **Elektralite lightStream** and avoid using brute force when installing or operating it.
When choosing the location to install the **Elektralite lightStream**, please make sure that it is not exposed to extreme heat, moisture or dust. The minimum distance between the **Elektralite lightStream** and the illuminated surface must be more than 3 feet.
Always mount the **Elektralite lightStream** with an appropriate safety cable/chain.
Operate the **Elektralite lightStream** only when you are familiar with the features of the fixture. Do not permit operation by persons not qualified to operate it.
All modifications to the **Elektralite lightStream will invalidate the warranty. There are absolutely no exceptions. That includes operation of the fixture at 208v using two different 120v phases.**
If **Elektralite lightStream** is operated in any way different to the one described in this manual, the **Elektralite lightStream** maybe damaged and the guarantee will be void.

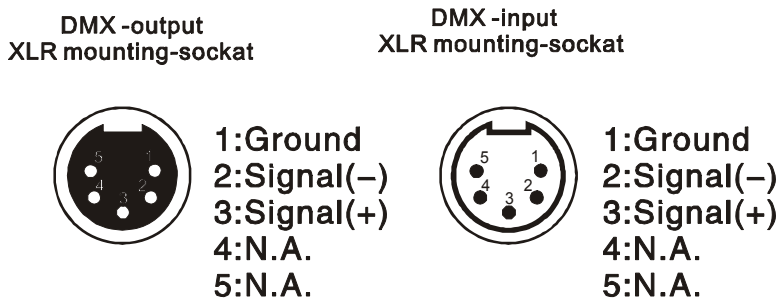
4. Installation

Please ensure that the **Elektralite lightStream** is hung using the appropriate "C" clamps or half cheeseboros and the U brackets that come with the **Elektralite lightStream**. A safety chain or cable should also be used as a secondary point of holding the fixture in case the clamp comes loose. **Never hang the fixture without a safety chain or cable**.
Mount the **Elektralite lightStream** either vertically upright or vertically down. DO not mount the **Elektralite lightStream** sideways.
If you are not qualified or have any doubts about hanging the **Elektralite lightStream,** then do **NOT** hang it.
Do not clamp the cable to the U bracket or clamp. That is not a secondary safety point.
A secondary safety point is any point that will adequately hold the **Elektralite lightStream,** if the "U" brackets, "C" clamps or half cheese-boros fail. Then the safety cable would be the backup and stop the **Elektralite lightStream** from falling to the ground. So do **NOT** fix the safety to the same place that the "C"clamps/half cheese-boros are attached.

5. DMX-512 Control Connection

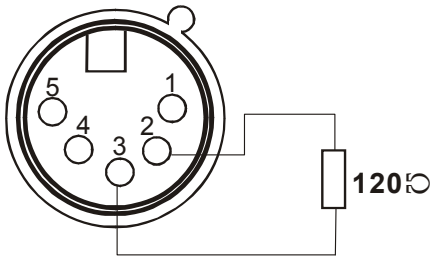
Connect an XLR cable to the female 5-pin XLR output of an **Elektralite CP 16/24** or other DMX controller. The other end should be connected to the male 5-pin XLR input of the **Elektralite lightStream**. Then daisy-chain out of the first **Elektralite lightStream** and into the next **Elektralite lightStream** or other dmx device. Never **"Y"** split the DMX connection.

If you need more cable, then it should be two core, screened cable fitted with a 5 pin XLR input and output connector. Please refer to the diagram below. (Please remember the DMX signal has a maximum transmission distance of just 300 feet from controller to the last fixture. So don't use 50 foot cables when you only need 10 or 15 foot cable runs).



DMX-512 connection with DMX terminator

For installations where the DMX cable does run a long distance or is in an electrically "noisy" environment, it is recommended that a DMX terminator is used. This helps prevent corruption of the digital control signal. The DMX terminator is simply a 5 pin XLR plug (male) with a 120 Ω resistor connected between pins 2 and 3. It is then plugged into the output XLR socket of the last **Elektralite lightStream** or other dmx device in the chain. Please see illustration below.



6. Channel Values for profiling the Elektralite lightStream.

Channel				Name	Function	Min DMX Value	Max DMX Value
St	Ex	Ba 8bit	Ba 16bit				
1	1	1	1	Pan	Pan Coarse	0	255
	2		2	Pan fine	Pan Fine	0	255
2	3	2	3	Tilt	Tilt Coarse	0	255
	4		4	Tilt fine	Tilt Fine	0	255
3	5	3	5	Tilt	Tilt Coarse	0	255
	6		6	Tilt fine	Tilt Fine	0	255
4	7	4	7	Movement Speed	fastest to Slowest	0	255
5	8	5	8	Movement Function	Normal	0	15
					Movement With Blackout between the positions	16	31
					All Tilt Movement	32	47
					Not used	48	255
6	9			Shutter Function	Normal Shutter Functions	0	15
					Pulse-effect Forward (See ch7)	**16**	**31**
					Pulse-effect Reverse (See ch7)	**32**	**47**
					Random Strobe (See ch7)	**48**	**63**
					Effect (See ch7)	**64**	**95**
					Not used	80	255
7	10			Shutter	Normal Shutter Functions		
					Close	0	31
					Strobe Rate (slow to fast)	32	223
					Open	224	255
					Pulse-effect Forward (ch6 must be set at between 16-31)		
					Closed shutter	**0**	**31**
					Strobe Rate (slow to fast)	**32**	**223**
					Open	**224**	**255**
					Pulse-effect Reverse (ch6 must be set at between 32-47)		
					Closed shutter	**0**	**31**
					Strobe Rate (slow to fast)	**32**	**223**
					Open	**224**	**255**
					Random Strobe (ch6 must be set at between 48-63)		
					Closed shutter	**000**	**031**
					Strobe Rate (slow to fast)	**032**	**223**
					Open	**224**	**255**
					Effect (ch6 must be set at between 64-95)		
					Closed shutter	**000**	**031**
					Effect Speed (slow to fast)	**032**	**223**
					Open	**224**	**255**

6. Channel Values for profiling the Elektralite lightStream (Cont).

Channel				Name	Function	Min DMX Value	Max DMX Value
St	Ex	Ba 8bit	Ba 16bit				
		6	9	Shutter	Shutter closed	000	031
					Effect 1 slow to fast	032	047
					Effect 2 slow to fast	048	063
					Strobe effect slow to fast	064	095
					Effect 3 slow to fast	096	111
					Effect 4 slow to fast	112	127
					Pulse-effect in sequences	128	159
					Effect 5 slow to fast	160	175
					Effect 6 slow to fast	176	191
					Random strobe effect slow to fast	192	223
					No function (shutter open)	224	255
8	11	7	10	Dimmer	Dimmer(Close to Open)	000	255
9	12	8	11	Virtual Color Function	No Function	000	015
					CTC (Color Temperature Correction) Function	016	031
					Forward Spin (See ch10)	**032**	**047**
					Reverse Spin (See ch10)	**048**	**063**
					Continuous (See ch10)	**064**	**079**
					Color Bounce (See ch10 & ch11)	**080**	**111**
					Not used	128	255
10	13	9	12	Virtual Color 1	**CTC Function (ch9 must be set at between 16-31)**		
					CTC (Color Temperature Correction) 2000K→2700K	000	223
					White 3200K	224	231
					White 4200K	232	239
					White 5600K	240	247
					White 8000K	248	255
					Forward Spin (ch9 must be set at between 32-47)		
					Rainbow Effect (Slow → Fast)	**000**	**255**
					Reverse Spin (ch9 must be set at between 48-63)		
					Rainbow Effect (Slow → Fast)	**000**	**255**
					Continuous (ch9 must be set at between 64-79) & Color Bounce (ch9 must be set at between 80-111).		
					Black out	**000**	**003**
					Red=full, Green→up, Blue=0, White=0	**004**	**033**
					Red→down, Green=full, Blue=0, White=0	**034**	**063**
					Red=0, Green=255 Blue→up, White=0	**064**	**093**
					Red=0 Green→down, Blue=255 White=0	**094**	**123**
					Red=0, Green=0, Blue=255, White→up	**124**	**153**
					Red=0, Green=0, Blue→down, White=255	**154**	**183**
					Red→up, Green=0, Blue=0, White=255	**184**	**213**
					Red=255, Green=0, Blue=0, White→down	**214**	**243**
					Red	**244**	**245**
					Green	**246**	**247**
					Blue	**248**	**249**
					White	**250**	**251**
					Blended white using all colors	**252**	**255**

6. Channel Values for profiling the Elektralite lightStream (Cont).

Channel				Name	Function	Min DMX Value	Max DMX Value
St	Ex	Ba 8bit	Ba 16bit				
11	14	10	13	Virtual Color 2	**Color Bounce (ch9 must be set at between 80-111).**		
					Black out	**000**	**003**
					Red=full, Green→up, Blue=0, White=0	**004**	**033**
					Red→down, Green=full, Blue=0, White=0	**034**	**063**
					Red=0, Green=255, Blue→up, White=0	**064**	**093**
					Red=0, Green→down, Blue=255, White=0	**094**	**123**
					Red=0, Green=0, Blue=255, White→up	**124**	**153**
					Red=0, Green=0, Blue→down, White=255	**154**	**183**
					Red→up, Green=0, Blue=0, White=255	**184**	**213**
					Red=255, Green=0, Blue=0, White->down	**214**	**243**
					Red	**244**	**245**
					Green	**246**	**247**
					Blue	**248**	**249**
					White	**250**	**251**
					Blended white using all colors	**252**	**255**
12	15	11	14	LED 1	Black out	000	003
					Going through the colors from red→green→blue→white	004	243
					Red	244	245
				Also known as (Color A)	Green	246	247
					Blue	248	249
					White	250	251
					Blended white using all colors	252	255
13	16	12	15	LED 2	Black out	000	003
					Going through the colors from red→green→blue→white	004	243
					Red	244	245
					Green	246	247
				Also known as (Color B)	Blue	248	249
					White	250	251
					Blended white using all Colors	252	255
14	17	13	16	LED 3	Black out	000	003
					Going through the colors from red→green→blue→white	004	243
					Red	244	245
					Green	246	247
				Also known as (Color C)	Blue	248	249
					White	250	251
					Blended white using all colors	252	255
15	18	14	17	LED 4	Black out	000	003
					Going through the colors from red→green→blue→white	004	243
					Red	244	245
					Green	246	247
				Also known as (Color D)	Blue	248	249
					White	250	251
					Blended white using all colors	252	255

6. Channel Values for profiling the Elektralite lightStream (Cont).

Channel				name	Function	Min DMX Value	Max DMX Value
St	Ex	Ba 8bit	Ba 16bit				
16	19	15	18	LED 5	Black out	000	003
					Going through the colors from red→green→blue→white	004	243
					Red	244	245
					Green	246	247
				Also known as (Color E)	Blue	248	249
					White	250	251
					Blended white using all colors	252	255
17	20	16	19	LED 6	Black out	000	003
					Going through the colors from red→green→blue→white	004	243
					Red	244	245
					Green	246	247
				Also known as (Color F)	Blue	248	249
					White	250	251
					Blended white using all colors	252	255
18	21	17	20	Control	Normal	000	007
					Reset All See below	008	015
					Pan & Tilt Reset See below	016	023
					Not used	024	031
					Not used	032	039
					Not used	040	047
					Not used	048	055
					Display Off	056	063
					Display On	064	071
					Not used	072	079
					Not used	080	087
					Hibernation (see menu section 7 for explanation of hibernation)	088	095
					Not used	096	255

There is a choice of 4 modes that the **ElektraLite lightStream** can operate**.**
The default channel configuration out of the box, is Standard Mode **(St)** using a total of 18 channels of DMX.
Extended mode **(Ex)** uses 21 channels.
Basic 8bit mode **(Ba 8bit)** uses 17 channels.
Basic 16bit mode (**Ba 16bit)** uses 20 channels.

Reset

Holding the dmx output at the level required will start a reset. However if the output is kept at this level and not returned to some other value outside the dmx range for the reset, then the fixture will constantly do resets! So, once the reset starts take the channel output to 000.

7. Operational Tips. (In Standard Mode).

A). In order to have output from the leds. The shutter (ch 7) and dimmer (ch 8) must be outputting (>001 dmx) plus any of the individual led channels (ch 12 through to 17) must be outputting >001 dmx.
So if all 6 leds are needed full on in Red; take ch 7 and 8 to 255dmx and then take channels 12 through 17 to either 006dmx or 244dmx.
From 006dmx to 244dmx then leds crossfade through colors in the order of red→green→blue→white.

B). Shutter function (ch6) with shutter (ch7).
When a specific shutter function is chosen then that function becomes “active” when the corresponding shutter is applied.
For example. Pulse-effect Forward for the shutter is achieved by setting channel 6 between 016dmx - 031dmx and then ch7 becomes the speed control for the Pulse-effect Forward. 000dmx value being the slowest speed and 255dmx being the fastest speed.

C). Virtual Color function (ch9) with Virtual Color 1 (ch10) or 2 (ch11).
When a specific color function is chosen then that function becomes “active” when the corresponding virtual color is applied.
For example. Forward spin for all the colors is achieved by setting channel 9 between 032dmx - 047dmx and then ch10 becomes the speed control for the forward spin. 000dmx value being the slowest speed and 255dmx being the fastest speed.
Color bounce has a twist to its operation. What is happening is that the fixture “bounces” between two colors. The operator has to use both ch10 and ch11 to set up the two colors.

7. Menus

Connect	DMX Address①	XXX		DMX address setting
Light	Max Temperature①	80~139℃, 90℃ /176~282℉, 194℉		Lamp off if temperature continuously over for 5 minutes
	Lamp Adjust①	PAN……..CONTROL		Adjust value of ALL channels individually
Information	Time Info.	Current XXXX(Hours) Fixture Life XXXX(Hours)		Fixture boot time Fixture total run time
	Temperature	Near Lamp Temp (depends on fixture)		Temperature Sensors
	Fans Speed	Near Lamp Fan (depends on fixture)		Fan speed Sensors
	Channel Value	PAN……CONTROL		Display value of channel
	Error Message	Pan,Tilt……		Error channels
	Fixture Model	ElektraLite LightStream		Display model brand and model
	Software Ver	1U01 V1.0.00 & 2U01 V1.0.00		Version of each IC
Set	Reset	All Pan & Tilt		Reset all Reset Pan & Tilt
	Movement	Pan Reverse① Tilt Reverse① Pan Degree① Encoders① Pan/Tilt Mode①	ON/OFF ON/OFF 630/540 ON/OFF Standard/Smooth	Pan Reverse Tilt Reverse Choose Pan Degree Encoder wheel on/off Choose pan/tilt mode
	UI Set	Mic Sens. ③ No Signal① Temperature. C/F① Fans Mode① Hibernation① Backlight① Flip Display① Display Bright③ Brand Show① Key Lock① Language③	0~99%,60% Close/Hold/Auto/Music Fahrenheit /Celsius Auto Speed /High Speed OFF, 01M~99M，15M 02~60m 02m ON/OFF 00~31 10 ON/OFF ON/OFF En/简/繁/Fr/Sp	Sensitivity of Mic Mode when no signal Temperature at ℃/℉ Fans mode If the controller is off and so no dmx is transmitting, then the fixture can be set to go into this “Sleep mode”. While the fixture is “on”, the fans/electronics etc., are not. Show backlight time Display 180° reverse Display Brightness Show brand name or not Key lock on/off Language Select
	Users	User Mode①	Standard Extended Basic-8bit Basic-16bit User	Standard mode Extended mode Basic-8bit mode Basic-16bit mode User program mode
		Edit User③	Max Channel = XX PAN = CH01	Change the DMX chs for any function.

7. Menus (cont).

Set	Calibration③	-Password- Pan…	=XXX =XXX	Password: 050 Calibrate channel value
	Fixture ID③	Name -Password- PID Code		Name Password: 050 Set PID of RDM
	Reload Default	Basic Reload(①) Program Reload(②) ---Password--- Private Reload(③) All Reload	ON/OFF ON/OFF XXX ON/OFF ON/OFF	Basic Reload Program Reload Password: 050 Private Reload All Reload

Program	Play①	DMX Receive Slave Receive Sequence (Chase) Music	Slave Receive 1,2,3 Master / Stand Alone Master / Stand Alone		DMX Receive Choose slave position Run Sequence Music mode
	Select Chase ②	Chase Part 1 Chase Part 2 (only used for slave 2) Chase Part 3 (only used for slave 3)	Chase 1 ~ 8 Chase 1 Chase 1 ~ 8 Chase 2 Chase 1 ~ 8 Chase 3		Select and run 1 of the 8 chases available in Chase Part 1. Chase Part 2 & 3 **ONLY** work if the fixture is set to either slave 2 or 3 respectively.
	Edit Chase ②	Chase 1 thru Chase 8 are available	Chase Test Step 01 ↓ Step 64	 = Scene #1 thru #250 ↓ = Scene #1 thru #250	Tests out the chase. It displays the step and scene being used. This makes finding the step and thus scene to edit much easier. Each chase step can have one scene saved to it. There are a total of 250 scenes that can be made.
	Edit Scenes ②	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt,…… Fade Time Scene Time DMX Input	Any channel can be manually modifed Expressed in seconds Expressed in mSec. So 00.500 = ½ sec Input from an external Controller.	Use the ↑↓ & Enter The time to X-fade between scenes. Time a scene is “played” Press Enter will record the scene into the LightStream
	Scenes Record	ScXX=>ScXX			For copying Scenes

Note:

1、Reload explanation: There are three types of reload.

“Basic Reload” will reload all function marked with ①

“Program Reload” will reload all function marked with ②

“Private Reload” will reload all function marked with ③

“All Reload” will reload functions marked with ①, ②, ③

8. Maintenance

Now ignoring maintenance and cleaning is very good way of creating problems "down the road" and many companies and installations do just that. However the net result is, no matter what the fixture, premature failure!
Changing the oil in a car most people do on a regular basis.
So with the fixtures, regular maintenance is an excellent practice, if you want the fixtures to last.
So what is the maintenance for the fixture?

Clean the fans! That's really it!

Use a small vacuum cleaner and suck the dust and "fur balls" out.
Do not use a can of co². That will just blast the dust and dirt everywhere!
The fans keep the led cool and also keep the electronics cool too.
Without the fan working efficiently and dust free, the fixtures will fail and that will be a lot more costly than having someone vacuum the fixtures on a regular basis.
How often should the fans be cleaned? It depends on where the fixtures are; in a very dusty atmosphere once a week. So check the fans on a regular basis, it may not need cleaned every week but a quick "visual inspection" should be done.
The front lens should be cleaned so the light output is maintained. Use only a moist lint-free cloth. Never use alcohol or solvents to clean the fixture.

9. Technical Specification.

- Operating voltage 100 – 250v (where the Neutral is always a Neutral not a different phase)
- Frequency 50 – 60 Hertz
- Fan cooled
- Length 18.25" (widest point) x Height 15.25"
- Length 463.6mm (widest point) x Height 387.5mm
- 21 pounds 10kgs (out of box)
- 26 pounds 12kgs (in box)

ElektraLite is a division of Group One. Group One and its divisions are constantly improving their product range and we reserve the right to make changes without prior notice.

Other Products.

ElektraLite has other great products that are manufactured under the ElektraLite product line.

Go check out the website at www.myelektralite.com

A preview of the products include:-

ElektraLite Audience Blinder

Using 144 x 5watt warm white or cool white leds,
Check out the website for light output figures!
This is the first true LED audience blinder!

The Elektralite 1018

Using 18 high powered 12 watt leds,
the ElektraLite 1018 is available using 4-in-1 or 6-in-1 leds.Each led can produce any combination of colors as each led is either an RGBW or RGBWAI device.

ElektraLite Eyeball

Using 7 high powered 12 watt leds, the ElektraLite eyeBall uses either 4-in-1 or 5-in-1 leds.
Each led can produce any combination of colors as each led is either an RGBW or RGBWA device.