



Elektralite LED

1018

USER MANUAL

(Version 4.0)

(From serial number 11915).



**Elektralite (a division of Group One),
70, Sea Lane, Farmingdale, NY11735, U.S.A.
T. +1 (631)-396-0184. F. +1 (631)-396-0190
WWW.MYELEKTRALITE.COM**

1. Unpacking

Thank you for choosing the **Elektralite 1018** 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 1018** throughout the manual.

The **Elektralite 1018** fixture uses 18 high powered leds in a balanced arrangement giving incredible output. Please unpack it carefully and check whether it was damaged in shipping. The following items should be in the box with the fixture:- Gel frame, safety glass and safety cable.

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 1018** 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 1018, then it could void the warranty.

During shipping, the **Elektralite 1018** may have been exposed to high temperature changes or humidity changes. So, as a precaution, do not switch the **Elektralite 1018** on immediately. Condensation can damage the **Elektralite 1018** so leave the **Elektralite 1018** switched off until it has reached room temperature. The **Elektralite 1018** is an **INDOOR** operational fixture. Do **not** operate this fixture **outdoors** or anywhere there is high **humidity**.

The electric connection must carry out by a qualified person and it is absolutely essential that the **Elektralite 1018** be **grounded**. So under no circumstances break off the ground pin on the Edison plug or use the fixture where a ground is not present. A ground pin, like the fuse for the **Elektralite 1018** is there for safety.

Always disconnect the **Elektralite 1018** from the power source, when the fixture is not in use or before cleaning it. **Elektralite 1018**. Never pull out the Edison plug out by just pulling on the power cord itself.

Please keep the **Elektralite 1018** away from children and the general public. Please be intelligent and use common sense when operating the **Elektralite 1018**.

3. General Guidelines.

Elektralite 1018 is a lighting fixture for professional use on stages, in clubs, theatres, churches etc.

Elektralite 1018 should only be operated at between 120 to 240 volts and only indoors.

Elektralite 1018 should not be operated 24/7 (24 hours a day; 7 days a week). **Elektralite 1018** needs operation breaks to ensure that it will work for a long time without problems. Please do not shake the **Elektralite 1018** and avoid using brute force when installing or operating it.

When choosing the location to install the **Elektralite 1018**, please make sure that it is not exposed to extreme heat, moisture or dust and never install it outdoors. Make sure that the fixture has a good amount of free space around it for air flow. Do not install it in a confined space or have insulation around the fixture. The minimum distance between the **Elektralite 1018** and the illuminated surface must be more than 3 feet.

Always mount the **Elektralite 1018** with an appropriate safety cable.

Operate the **Elektralite 1018** only when you are familiar with the features on the fixture. Do not permit operation by persons not qualified.

All modifications to the **Elektralite 1018** will invalidate the warranty. There are absolutely no exceptions.

If **Elektralite 1018** is operated in any way different to the one described in this manual, **Elektralite 1018** maybe damaged and the guarantee will be void

4. Installation

Please ensure that the **Elektralite 1018** is hung using the appropriate "C" clamp or half cheeseboro. 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. Make sure the Gel frame (Gel holder) is clipped into position correctly and cannot come loose. If you are not qualified or have any doubts about hanging the **Elektralite 1018** then do **NOT** hang it.

Do not clamp the safety 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 1018** if the "C" clamp or half cheeseboro fails. Then the safety cable would be the backup and stop the fixture from falling to the ground. So do **NOT** fix the safety cable to the same place that the "C" clamp is attached.

Installation during construction.

Many times fixtures are installed during the construction phase of a building. It is imperative that the fixture is protected during this phase. A lot of dust is usually created. This dust can adversely affect the fixture. Specifically, of course, in coating the lenses and therefore reducing the output. However much more seriously, dust, like sheetrock dust, can get inside the fan bearings especially if the fixture is being operated during construction. Sheetrock dust, mixed with the grease of the fan motor, will result in the fan's premature failure and that is not covered under the fixture's warranty. It is therefore strongly advised to keep the fixtures covered up during the construction phase and not used.

5. Grounding.

Always make sure that there is sufficient grounding (earth) for the fixture. This is not only imperative within the circuit that the fixture is being connected to, but also make sure there is sufficient grounding into the building. All fixtures regardless of manufacturer have a surge at initial "turn-on". Once initial "turn-on" is complete, the surge current (per fixture) will travel down the ground. While each 20 Amp circuit may have the correct size of ground wire, the ground input to the building and/or electrical panel may not be sufficient for the job. Please review this with the electrical contractor. The **elektraLite 1018** has a surge current over and above its operating current of approximately 2 Amp at 120 volts. If an installation has 100 1018 fixtures that means 200 Amps needs to be dissipated through the GROUND WIRING. If there is a lack of a sufficiently big enough ground cable into the building or on the individual circuits it can cause severe damage to the fixture and this is **not** covered under the warranty.

One further check : the ground to neutral voltage for each circuit. In a lot of buildings, voltages across these can damage fixtures or cause operational problems both for the fixture and DMX. Please review these two important points with a qualified electrical contractor. If in any doubt, have an independent qualified third party electrical contractor check the installation, **well before** commencing installation.

Circuit Limitation:-

There should be no more than 5 **Elektralite 1018** on a 20 amp 120 volt circuit, having no other load on it. That means to say a, maximum of 5 **Elektralite 1018** are on a 20 amp 120 volt circuit with nothing else plugged into that circuit.

6. DMX-512 Control Connection

Connect an XLR cable to the female 5-pin XLR output of your **Elektralite CP 20** or other DMX controller. The other end should be connected to the male 5-pin XLR input of the **Elektralite 1018**. Then daisy-chain out of the first **Elektralite 1018** into the next **Elektralite 1018** or other dmx device. Never “Y” split the DMX connection.

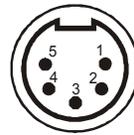
If you need more cable, then it should be two core, screened cable fitted with a 5 pin XLR input and output connector. Please refer to the diagram below.

DMX -output
XLR mounting-socket



1:Ground
2:Signal(-)
3:Signal(+)
4:N.A.
5:N.A.

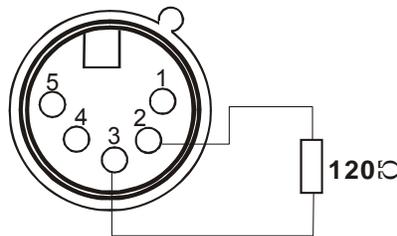
DMX -input
XLR mounting-socket



1:Ground
2:Signal(-)
3:Signal(+)
4:N.A.
5:N.A.

DMX-512 connection with DMX terminator

For installations where the DMX cable has to 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 1018** or other dmx device in the chain. Please see illustration below.



7. Menus in the fixture.

Root Menu	Sub Menu 1	Sub Menu 2
STAT (STATIC LOOK)	R(ED)	0-255
	G(REEN)	0-255
	B(LUE)	0-255
	W(HITE)	0-255
	S(STROBE)	0-255
AUTO (AUTOMATIC)	AT 01 THROUGH TO AT10	
DMX	ASSIGN DMX CHANNEL	1-512
PERS (PERSONALITY)	STAG(E)	
	ARC1	
	ARC1d	
	ARC2	
	AR2d	
	AR2s	
	HSV	
ID	ID 01 THROUGH 66	
SET	REST (RESET)	
	DIM	DIM=0 to DIM=4
	CURE	CUR0 to CUR3
	BSW	ON/OFF
	IDSW	ON/OFF
	POWS	ON/OFF
CAL1	RGBW	
KEY	OFF	
	ON	
TEMP	In Centigrade	
PWMF	1.2K – 24.0K	

8. Static Look.

The **Elektralite 1018** can be set to a single static look quickly.

Use the Menu button to get to STAT.

Press Enter.

The next screen will read R000. This is addressing the RED leds.

If Red is to be in the static look, then use the ↑ or ↓ to increase the value of the red.

Numbers are expressed in DMX values so 0 is no output and 255 is highest output.

Press Enter to save the value.

The screen will automatically advance to the next color Green.

If Green is to be in the static look, then use the ↑ or ↓ to create the value of green.

Press Enter to save the value.

The screen will automatically advance to the next color Blue.

If Blue is to be in the static look, then use the ↑ or ↓ to create the value of blue.

Press Enter to save the value.

The screen will automatically advance to the next color White.

If White is to be in the static look, then use the ↑ or ↓ to create the value of white.

Press Enter to save the value.

The screen will automatically advance to the strobe function.

If the strobe function is to be in the static look, then use the ↑ or ↓ to create the value of strobes flash rate.

Press Enter to save the value.

This is the last entry and the static look is complete. Pressing the Enter key just continues around if you need to make fine adjustments to the color of the static look.

Do not press MENU as this will get you out to the Root directory and out of the static look.

9. Auto Programs.

The **Elektralite 1018** can be set to run some inbuilt programs.
There are ten programs in the **Elektralite 1018**.
They are labeled AT 01 to AT10.

10. DMX 512 Setting (address).

Sets up the address for the dmx.
Using the Menu button in the root menu go to DMX
Press Enter to get into DMX and the display will read the current dmx channel.
The display will read for example **d.001**
This means the fixture's current address is **1**
To change it, use the ↑ or ↓ buttons to get to the correct address.

11. Fixture Personality.

There are several different choices on how the fixture will operate.
What these "Personalities" do in terms of their channel assignments is detailed in the tables on page 12.
To change a Personality use the Menu button to get to **PERS**
Press Enter then using the ↑ or ↓ buttons go to the personality required.
Press Enter to save the Personality.
The one Personality not defined in these tables is **STAG**. **STAG** is short for STAGE and it is the full dmx number of channels as detailed in the DMX Channel Assignments shown on pages 13 & 14.
The full dmx number of channels is 11.

12. ID Address.

An **Elektralite 1018** can be addressed (controlled) through the dmx or instead it can have its own unique ID address.
There are a total of 66 different ID addresses from 1 to 66.
To set up the address for a fixture, use the Menu button in the root menu go to **ID**
Press Enter and then using the ↑ or ↓ buttons, to select the ID address.
Press Enter to save the address.
For the ID address to work you must chose a **Personality** that uses the ID. For example **STAG**
This allows you to access the ID address system on channel 11.
Set the DMX address to d.001 for the fixture. So if ID address 22 is chosen then go to channel 11 on the lighting board and set the level at 211. You will then be controlling only fixture(s) with ID address 22.

13. **Set.** (Set has several Sub Menus which allow functions to be used).

1). **REST**

This resets all values to their default.

Go through the Root Menu until **Set**. Press Enter and then use the ↑ or ↓ buttons to get to REST. Press Enter. The display will have 4 dots across the bottom. The password needs to be entered. The password is the following sequence using the ↑ and ↓ buttons.

↑ ↓ ↑ ↓ press Enter once complete. The display will read OK followed by a return to the REST sub menu. The Menu button will need pressing to return to the Root Menu. Only once at the Root Menu will the dmx control function. Please note the Reset also takes the dmx address back to 001.

2). **DIM**

The Dim function allows different Dimmer curves to be chosen. There are 5 choices.

Choice 1 :- this is Dim off. The Dimmer curve is 0 which means any change in dimmer level is instantaneous.

Choice 2:- Dim 1. The dimmer curve has the shortest fade in and fade out time.

Choice 3:- Dim 2. The dimmer curve has the 2nd shortest fade in and fade out time.

Choice 4:- Dim 3. The dimmer curve has the 3rd shortest fade in and fade out time

Choice 5:- Dim 4. The dimmer curve has the longest fade in and the fade out time.

To access the DIM function go through the Root Menu until **SET** is found. Press Enter and then use the ↑ or ↓ buttons to get to **DIM**. Press Enter and then use the ↑ or ↓ buttons to get to **DIM** choice : DIM0, DIM1, DIM2, DIM3 or DIM4. Once chosen, press Enter to save it and then use the Menu button to exit back to the root directory.

Please note the DIM function under the Set menu in the fixture does not work when in the STAG mode.

When is STAG mode you can operate/access the DIM function directly through channel 10 on your lighting controller.

3). **CURE**

This mode sets up a dimmer curve.

CURE0 is no curve at all. CURE1 through to CUR3 are different curve generators with CURE3 being more logarithmic and faster “attack” than CURE1. (The display only has 4 characters so the labels are CUR0, CUR1, CUR2 and CUR3).

Using the Menu button, go through the Root Menu until **Set**. Press Enter and then use the ↑ or ↓ buttons to get to **CURE**.

Press Enter and then use the ↑ or ↓ buttons to get to the **CUR** choice required. Once chosen, press Enter to save it and then use the Menu button to exit back to the root directory.

4). **BSW**

In order to work mode **CAL1**, **BSW** must be turned on. Using the Menu button, go through the Root Menu until **Set**. Press Enter and then use the ↑ or ↓ buttons to get to **BSW**. Press Enter and then chose ON if you want to change the **Elektralite 1018** white calibration under **CAL1**

13. Set (Cont). (Set has several Sub Menus which allow functions to be used).

5). ID SW

This mode turns On or OFF the ID address system. See section 12 above for an explanation of ID address.

Using the Menu button, go through the Root Menu until **Set**. Press Enter and then use the ↑ or ↓ buttons to get to **IDSW**.

Press Enter and then use the ↑ or ↓ buttons to choose On or Off. Once chosen, press Enter to save it and then use the Menu button to exit back to the root directory.

6). POWS

This function is either ON or OFF

OFF : in this mode, when the temperature rises, the fan will come on and operate. The operation time and speed of the fan is governed by the temperature. So if the leds are at 100% the fan will operate to cool down the temperature and once that is achieved the fan will turn off. It will come back on again as the temperature increases again.

ON : in this mode, when the temperature increases the fan will turn on but at the same time as the fan is cooling the leds the leds will automatically reduce their output (and hence temperature) by up to 10%.

Using the Menu button, go through the Root Menu until **Set**. Press Enter and then use the ↑ or ↓ buttons to get to **POWS**.

Press Enter and then use the ↑ or ↓ buttons to choose On or Off. Once chosen, press Enter to save it and then use the Menu button to exit back to the root directory.

14. CAL 1

CAL1 will allow you to set up the white balance for the RGBW components.

To adjust the white balance, go through the Root Menu until **CAL1.**, the screen will display R255, use the ↑ or ↓ to set the Red component to the value required. Press Enter to save and the screen will automatically advance to the value for G (G255 for example). Again, use the ↑ or ↓ to make the adjustment you require for the Green leds. Repeat for the blue leds and finally the white leds.

Press Menu to exit and get back to the Root Menu.

Now whenever the white is output using the Red, Green, Blue and White leds, the maximum values are what is recorded in **CAL1.**

15. KEY

The Key function is an access password for the fixture. The **KEY** can be turned OFF or ON which then deactivates or activates the password.

To set the **KEY** go through the Root Menu until **KEY.** Press Enter and use the ↑ or ↓ to set the **KEY** to either OFF or ON. If the **Key** is turned ON then a password is required to go into sensitive Menus and to change functions.

The password is ↑ ↓ ↑ ↓ (Up + Down + Up + Down).

16. TEMP

This display gives the current temperature of the fixture. The temperature is in Centigrade.

17. PWMF

The speed at which the power supply operates at can be varied from 1.2 Khz to 24 Khz.

Slower frequency gives better dimming results while higher frequencies are needed for 4K video.

18. Glass front plate.

Certain fixtures come with a glass plate. This glass plate fits onto the front of the leds. It slots in the gel frame holder and the clip latches the plate into position.



19. Personality tables.

(for the personality **STAG** please refer to the DMX channel assignments on pages 13 & 14.

STAG uses all 11 channels as shown in the dmx channel assignment table).

ARC1

1	0-255	RED
2	0-255	GREEN
3	0-255	BLUE
ARC1 D		
1	0-255	MASTER
2	0-255	RED
3	0-255	GREEN
4	0-255	BLUE
ARC2		
1	0-255	RED
2	0-255	GREEN
3	0-255	BLUE
4	0-255	WHITE

ARC2 D		
1	0-255	MASTER DIMMER
2	0-255	RED
3	0-255	GREEN
4	0-255	BLUE
5	0-255	WHITE

ARC2 S

1	0-255	RED
2	0-255	GREEN
3	0-255	BLUE
4	0-255	WHITE
5	0-255	STROBE

HSV

1	0-255	H hue
2	0-255	S saturation level
3	0-255	V brightness

DMX Channel Assignments. (STAG)

1	Grand Master for RGBW	0-255
2	RED Leds	0-255
3	GREEN Leds	0-255
4	Blue Leds	0-255
5	White Leds	0-255
6	No effect	0-010
	Crossfade Red 255 Green 000→255	011-030
	Crossfade Red 255→000 Green 255 Blue 000	031-050
	Crossfade Red 000 Green 255 Blue 000→255	051-070
	Crossfade Red 000 Green 255→000 Blue 255	071-090
	Crossfade Red 000→255 Green 000 Blue 255	091-110
	Crossfade Red 255 Green 000 Blue 255→000	111-130
	Crossfade Red 255 Green 000→255 Blue 000→255	131-150
	Crossfade Red 255→000 Green 255→000 Blue 255	151-170
	Snap to Red 255 Green 255 Blue 255	171-200
	Color temperature 1	201-205
	Color temperature 2	206-210
	Color temperature 3	211-215
	Color temperature 4	216-220
	Color temperature 5	221-225
	Color temperature 6	226-230
	Color temperature 7	231-235
	Color temperature 8	236-240
	Color temperature 9	241-245
	Color temperature 10	246-250
	Color temperature 11	251-255
7	No effect/function	000-013
	Strobe from 1Hz to 20 HZ	014-255
8	No Function	000-020
	AT 01 (Automatic program 01)	021-030
	AT 02 (Automatic program 02)	031-040
	AT 03 (Automatic program 03)	041-050
	AT 04 (Automatic program 04)	051-060
	AT 05 (Automatic program 05)	061-070
	AT 06 (Automatic program 06)	071-080
	AT 07 (Automatic program 07)	081-090
	AT 08 (Automatic program 08)	091-100
	AT 09 (Automatic program 09)	101-110
	AT 10 (Automatic program 10)	111-120
	Sound active mode	121-255

DMX Channel Assignments (Cont.)

9	Run speed for AT01-AT10 on channel 08	000-255
10	System default setting	000-009
	Dim 00 (straight line dimmer)	009-055
	Dim 01 (dimmer curve 1. Shortest fade time)	056-105
	Dim 02 (dimmer curve 2. 2 nd Shortest fade time)	106-155
	Dim 03 (dimmer curve 3. 3 rd Shortest fade time)	156-205
	Dim 04 (dimmer curve 4. Longest fade time)	206-255
11	All fixtures are addressed together	000-009
	ID 01	010-019
	ID 02	020-029
	ID 03	030-039
	ID 04	040-049
	ID 05	050-059
	ID 06	060-069
	ID 07	070-079
	ID 08	080-089
	ID 09	090-099
	ID 10	100-109
	ID 11	110-119
	ID 12	120-129
	ID 13	130-139
	ID 14	140-149
	ID 15	150-159
	ID 16	160-169
	ID 17	170-179
	ID 18	180-189
	ID 19	190-199
	ID 20	200-209
	ID 21	210
	ID 22	211
	ID 23	212
	ID 24	213
	ID 25	214
	ID 26	215
	ID 27	216
	ID 28	217
	ID 29	218
	ID 30	219
	ID 31	220
	ID 32	221
	ID 33	222

The above continues to ID66 at DMX 255

20. Cleaning and 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 it an excellent practice, if you want the fixtures to last.

So what is the maintenance for the fixture?

Clean the fan! That's really it!

Turn off the **Elektralite 1018**.

Using a small vacuum cleaner, suck the dust and "fur balls" out.

Do not use a can of CO_2 . That will just blast the dust and dirt everywhere!

The fan keeps the LEDs cool and 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 fan be cleaned? It depends on where the fixtures are; in a very dusty atmosphere once a week. So check the fan on a regular basis, it may not need cleaned every week but a quick "visual inspection" should be done.

The clear front plastic cover for the lenses should be cleaned so the light output is maintained. With the **Elektralite 1018** turned off, use only a moist lint-free cloth, and clean the plastic cover. Never use alcohol or solvents to clean the fixture. Never spray anything onto the fixture at the front or in any place on the fixture.

21. Technical Specification.

- Operating voltage 100 – 250v
- Frequency 50 – 60 Hertz
- 18 x quad leds
- Fan cooled
- 305mm x 276mm x 230mm
- 12" x 10.9" x 9.1"
- 8.5 kgs
- 19 pounds

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.

For other great products that are manufactured under the Elektralite product line, please go to the website at www.myelektralite.com

A preview of the products include:-

Elektralite Elektrabar with glare shield for perfect cuts



Utilizing homogenized 6-in-1 leds. RGBWAI where the I is indigo (not UV) ; this way perfect pastels like Lee 170 Lavender are flawlessly achieved.

Elektralite ML902



The ML902 utilizes a 120 watt Led and is brighter than a 250 discharge light source. Features include:- Color wheel, two gobo wheels, rotating gobos, rotating 3 facet prism, focus, dimmer, strobe and 16 bit pan and tilt.

Elektralite Stingray Ellipsoidal



The Elektralite Stingray is a 300 watt LED ellipsoidal with the output of a conventional 750 watt fixture. Different LED types are available including Warm White, 5600K, and RGBL

Elektralite SLA



The SLA is the perfect compact IP65 fixture for accent lighting everything from trees and walls to product high lighting. Even though it is compact it packs a massive punch with its 15 watt Cree RGBW leds.

Elektralite Dazer Downlight



The ideal pendant light. Made specifically for the installation market.
Can be simply installed by an electrical contractor. 180 watts of power.
Comes with 25° degree lenses installed but a lens pack (15°, 45°, & 60°)
allows the beam angles to be changed.