

# ElektraLite eyeBall 4-in-1 (Quad)

## USER MANUAL

(Version 3.0)



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## 1. Unpacking

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

**ElektraLite eyeBall** wash fixture uses 7 high powered 10 watt quad leds in a balanced arrangement giving incredible output. Please unpack the **ElektraLite eyeBall** carefully and check whether it was damaged in shipping.

The following item should be in the box with the fixture:-

- 2 part yoke
- 2 knobs for yoke
- 1 DMX 5 pin cable
- 1 Turnaround 3 to 5 pin cable
- 1 Turnaround 5 to 3 pin cable
- 1 IEC power cable
- 1 IEC jumper cable (for joining fixtures)

## 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. **ElektraLite eyeBall** 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 eyeBall, then it could void the warranty.**

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

The electrical connection must carry out by a qualified person and it is absolutely essential that the **ElektraLite eyeBall** 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 eyeBall** is there for safety.

Always disconnect the **ElektraLite eyeBall** from the power source, when the fixture is not in use or before cleaning it. Only unplug **ElektraLite eyeBall** from the power source holding onto the Edison plug. Never pull out the Edison plug out by just pulling on the power cord itself.

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

### 3. General Guidelines.

**ElektraLite eyeBall** is a lighting fixture for professional use on stages, in clubs, theatres, churches etc.

**ElektraLite eyeBall** should only be operated at between 120 to 240 volts and only indoors.

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

When choosing the location to install the **ElektraLite eyeBall**, 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 eyeBall** and the illuminated surface must be more than 3 feet.

Always mount the **ElektraLite eyeBall** with an appropriate safety cable.

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

All modifications to the **ElektraLite eyeBall** will invalidate the warranty. There are absolutely no exceptions.

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

### 4. Installation

Please ensure that the **ElektraLite eyeBall** 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.

If you are not qualified or have any doubts about hanging the **ElektraLite eyeBall** then do **NOT** hang it.

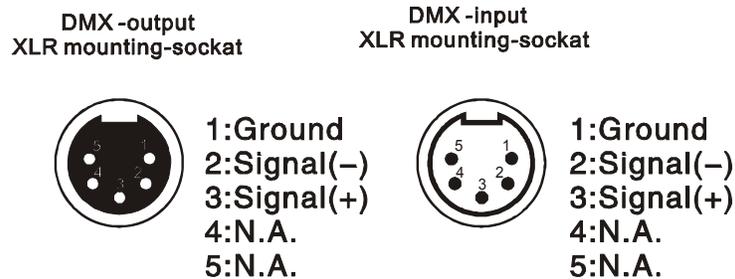
Do not clamp the safety cable to the U bracket or clamp. That is not a secondary safety point.

A secondary safety point is any point that will adequately hold the **ElektraLite eyeBall** 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.

## 5. DMX-512 Control Connection

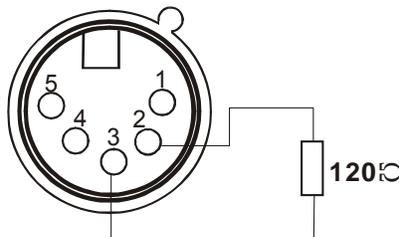
Connect an XLR cable to the female 5-pin XLR output of your **ElektraLite CP 20** or other DMX controller. The other end should be connected to the male 5-pin XLR input of the **ElektraLite eyeBall**. Then daisy-chain out of the first **ElektraLite eyeBall** into the next **ElektraLite eyeBall** or other 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-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  $\Omega$  resistor connected between pins 2 and 3. It is then plugged into the output XLR socket of the last **ElektraLite eyeBall** or other dmx device in the chain. Please see illustration below.



## 6. Menus in the fixture.

Root Menu	Sub Menu 1	Sub Menu 2
STAT (STATIC LOOK)	RED	0-255
	GREEN	0-255
	BLUE	0-255
	WHITE	0-255
	STROBE	0-255
AUTO (AUTOMATIC)	Red	
	Green	
	Blue	
	Yellow	
	Cyan	
	Purple	
	White	
	Effect #1	
	Effect #2	
	Effect #3	
RUN	DMX 512	
	STMT	
ADDRESS	ASSIGN DMX CHANNEL	1-512
	ID address	1-255
PERSONALITY	STAG(E)	
	ARC.1	
	ARC1.D	
	ARC2	
	AR2.D	
	AR2.S	
	HSV	
SETTINGS	DTV	NTSC/PAL
	RGB→White	ON/OFF ***
	DIMMER	000(OFF), 001, 002, 003 or 004
	RESET	Password required*
FAN	OFF	
	AUTO	
	LOW	
	NORMAL	
	HIGH	
	OFF	
KEY LOCK	OFF	**SEE BELOW
	ON	

\*The Password for the reset is using the up and down buttons when in the reset menu. The screen will initially display [        ]. The following needs to be pressed ↑↓↑↓ then press Enter. The screen will then display the word "OK" for 2 seconds and the fixture will reset.

\*\*The Password for Key Lock is the same as reset. If key lock is ON then everytime you power up the eye Ball the Password is requested. The password must be put in the eye Ball display otherwise no changes can be made to the operation of the eye Ball.

\*\*\*RGB→White. If this feature is turned on the Output of the RGB and white can be adjusted for maximum output. Normally the R, G, B, and W all default to maximum of 255 output. However this can be change for each of the color components from a value of 128 up to 255.

## 7. Static Look.

The **ElektraLite eyeBall** 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.

## 8. Auto Colors & Programs.

The **ElektraLite eyeBall** can be set to run some inbuilt colors and programs (called effects).

To run either of these use the Menu button to get to AUTO.

Press ENTER.

Use the ↑ or ↓ key to get to the color or program. Press Enter.

The color or program will start.

## 9. Run Mode.

Run allows the fixture to operate in either DMX or STMT operation.

Using the Menu button in the root menu go to RUN.

Press Enter to get to DMX mode. To get to STMT mode use the ↑ or ↓

And press enter to save this setting.

In DMX mode:-

If the fixture loses the DMX signal or the DMX signal is turned off, the fixture will remain on at the last DMX setting it received from the control board. So, for example if the last DMX signal had the fixture in blue then the blue output would remain until the DMX was turned on again or the DMX lost signal came back.

STMT mode:-

If the fixture loses the DMX signal or the DMX signal is turned off, the fixture will automatically go to the values recorded in the STAT (static mode). So, for example, if the static mode was set to having all leds in all colors at 255 (full on) then this would be what the fixture would go to when it lost DMX. A useful setting for emergency light setting.

## 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. ID Address.

An **ElektraLite eyeBall** can be addressed (controlled) through the dmx or instead it can have its own unique ID address.

There are a total of 255 different ID addresses from 1 to 255.

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 4.

Set the DMX address to d.001 for the fixture. So if ID address 123 is chosen then go to channel 4 on the lighting board and set the level at 123. You will then be controlling only fixture(s) with ID address 123.

## 12. 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 pages 12 and 13.

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 the 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 11 & 12. The full dmx number of channels is 11.

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

### 1). DTV

The **DTV** setting allows the ability of the leds to not flicker when using video camera.

The choices are NTSC or PAL. NTSC is the USA system.

To set the **DTV** setting, go through the Root Menu until **DV**. Press Enter and then use the ↑ or ↓ buttons to get to either NTSC or PAL. Once chosen, press Enter to save the setting and the Menu to exit back to the Root Menu.

### 2). RGBW

The **RGBW** setting allows the ability to calibrate the white achieved when mixing RGB.

When **RGBW** is set to OFF, the output when Red, Green, and Blue is at maximum is 255 for all three colors. By definition this combination produces a white with a blue tinge which affects all other colors if cameras and other video equipment are "keyed" to this.

When **RGBW** is set to ON, the output can be white balanced to whatever looks good on camera, for example. It also serves to balance the white into a "warm" white which makes people look a lot better when they are in the light!

See Cal 2, for how to calibrate the white when the **RGBW** is turned ON.

To turn **RGBW** either OFF or ON, go through the Root Menu until **RGBW**. Press Enter and then use the ↑ or ↓ buttons to get to either OFF or ON. Once chosen, press Enter to save the setting and then Menu to exit out back to the Root Menu.

### 3). **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 2<sup>nd</sup> shortest fade in and fade out time.

Choice 4:- Dim 3. The dimmer curve has the 3<sup>rd</sup> 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 **DIM** is found. Press Enter and then use the ↑ or ↓ buttons to get to the DIM choice required.

Please note the DIM function under the Set menu in the fixture does not work when in the STAG mode. When in STAG mode you can operate/access the DIM function directly through channel 10 on your lighting controller.

### 4). **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.

### 14. **Fan.**

The fans inside the **eyeBall** can be set to operate in a number of different ways.

They can be set to OFF, AUTO, LOW, NORMAL or HIGH.

To access and set one of these settings go through the Root Menu until **FAN** appears. Press Enter and then use the ↑ or ↓ buttons to get to select the operating mode required. Press Enter to save this fan setting.

### 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)

**Personality tables.**

(for the personality **STAG** please refer to the DMX channel assignments on pages 11 & 12.

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

**ARC.1**

1	0-255	RED
2	0-255	GREEN
3	0-255	BLUE
4	0-50	Linear dimmer speed (DIM=OFF)
	51-100	nonlinear speed1 (DIM1)
	101-150	nonlinear speed 2 (DIM2)
	151-200	nonlinear speed 3 (DIM3)
	201-255	nonlinear speed 4 (DIM4)

**ARC1.D**

1	0-255	MASTER DIMMER
2	0-255	RED
3	0-255	GREEN
4	0-255	BLUE
5	0-50	Linear dimmer speed (DIM=OFF)
	51-100	nonlinear speed 1 (DIM1)
	101-150	nonlinear speed 2 (DIM2)
	151-200	nonlinear speed 3 (DIM3)
	201-255	nonlinear speed 4 (DIM4)

**ARC2**

1	0-255	RED
2	0-255	GREEN
3	0-255	BLUE
4	0-255	WHITE
5	0-50	Linear dimmer speed (DIM=OFF)
	51-100	nonlinear speed 1 (DIM=1)
	101-150	nonlinear speed 2 (DIM=2)
	151-200	nonlinear speed 3 (DIM=3)
	201-255	Nonlinear speed 4 (DIM=4)

ARC2.D		
1	0-255	MASTER DIMMER
2	0-255	RED
3	0-255	GREEN
4	0-255	BLUE
5	0-255	WHITE
6	0-50	Linear dimmer speed (DIM=OFF)
	51-100	Nonlinear speed 1 (DIM1)
	101-150	Nonlinear speed 2 (DIM2)
	151-200	Nonlinear speed 3 (DIM3)
	201-255	Nonlinear speed 4 (DIM4)

### ARC2.S

1	0-255	MASTER DIMMER
2	0-255	RED
3	0-255	GREEN
4	0-255	BLUE
5	0-255	WHITE
6	0-255	STROBE (0 to 8 is no strobe. From slow at 9 to maximum flash rate at 255)
7	0-50	Linear dimmer speed (DIM=OFF)
	51-100	nonlinear speed 1 (DIM1)
	101-150	nonlinear speed 2 (DIM2)
	151-200	nonlinear speed 3 (DIM3)
	201-255	nonlinear speed 4 (DIM4)

### HSV

1	0-255	H hue
2	0-255	S saturation level
3	0-255	V brightness
4	0-50	Linear dimmer speed (DIM=OFF)
	51-100	nonlinear speed 1 (DIM1)
	101-150	nonlinear speed 2 (DIM2)
	151-200	nonlinear speed 3 (DIM3)
	201-255	nonlinear speed 4 (DIM4)

## DMX Channel Assignments.

1	Grand Master for RGBW	0-255
2	<b>RED</b> Leds	0-255
3	<b>GREEN</b> Leds	0-255
4	<b>Blue</b> Leds	0-255
5	<b>White</b> Leds	0-255
6	No effect	0-010
	Snap to <b>Red 255</b>	011
	Crossfade <b>Red 255→000</b> <b>Green 000→255</b>	012-050
	Crossfade <b>Green 255→000</b> <b>Blue 000→255</b>	051-090
	Crossfade <b>Red 000→255</b> <b>Blue 255→000</b>	091-130
	Crossfade <b>Red 255→000</b> White 000→ 255	131-150
	Crossfade <b>Blue 000→255</b> White 255→ 000	151-170
	Snap to <b>Red 255</b> <b>Green 255</b> <b>Blue 255</b> White 255	171-200
	Snap to White 1 (approximately 3200°K)	201-205
	Snap to White 2 (approximately 3400°K)	206-210
	Snap to White 3 (approximately 4200°K)	211-215
	Snap to White 4 (approximately 4900°K)	216-220
	Snap to White 5 (approximately 5600°K)	221-225
	Snap to White 6 (approximately 5900°K)	226-230
	Snap to White 7 (approximately 6500°K)	231-235
	Snap to White 8 (approximately 7200°K)	236-240
	Snap to White 9 (approximately 8000°K)	241-245
	Snap to White 10 (approximately 8500°K)	246-250
	Snap to White 11 (approximately 10000°K)	251-255
7	Strobe effect (0 to 8 is no strobe. From slow at 9 to maximum flash rate at 255)	000-255
8	No effect/function	000-010
	Fan Off	011-020
	Fan Low	021-025
	Fan High	026-030
	Fan Auto	031-040
	No effect/function	041-050
	Red	051-070
	Green	071-090
	Blue	091-110
	Yellow	111-130
	Cyan	131-150
	Purple	151-170
	White	171-190
	Effect #1 (This is a chase loop; the speed of which is controlled by ch9 & cross fade by ch10).	191-210

## DMX Channel Assignments (Cont.)

8 (cont)	Effect #2 (This is a chase loop; the speed of which is controlled by ch9 & cross fade by ch10).	211-230
	Effect #3 (This is a chase loop; the speed of which is controlled by ch9 & cross fade by ch10).	231-255
9	Auto Speed (Control for the effects #1, #2 & #3 on ch8).	000-255
10	Dim 00 (straight line dimmer)	000-050
	Dim 01 (dimmer curve 1. Shortest fade time)	051-100
	Dim 02 (dimmer curve 2. 2 <sup>nd</sup> Shortest fade time)	101-150
	Dim 03 (dimmer curve 3. 3 <sup>rd</sup> Shortest fade time)	151-200
	Dim 04 (dimmer curve 4. Longest fade time)	201-255
11	ID 01 thru ID 255 combined.	000
	ID 01	001
	ID 02	002
	ID 03	003
	ID 04	004
	ID 05	005
	ID 06 through to ID255 follow DMX values 006 to 255	006-255

## 18. 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 fans! That's really it!

Turn off the **ElektraLite eyeBall**.

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

Do not use a can of co<sup>2</sup>. 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 eyeBall** 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.

## 19. Technical Specification.

- Operating voltage 100 – 250v
- Frequency 50 – 60 Hertz
- 7 x quad 10watt leds
- 80 VI
- Fan cooled
- 162.5mm x 162.5mm x 218.5mm
- 6.5" x 6.5" x 8.6"
- 2.1 kgs
- 4.6 pounds

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**Other Products.**

For other great products that are manufactured under the ElektraLite product line, please go to the website at [www.myElektraLite.com](http://www.myElektraLite.com)  
A preview of the products include:-



ElektraLite ML602



ElektraLite LightStream



ElektraLite DazerIP65 in white