ELAR 180PAR RGBAW

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1. GENERAL INFORMATION

INTRODUCTION: Congratulations, you have just purchased one of the most innovative and reliable LED fixtures on the market today! The ELAR 180 Par RGBAW™ has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

UNPACKING: Thank you for purchasing the ELAR 180 Par RGBAW™ by Elation Professional®. Every ELAR 180 Par RGBAW™ has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for damage and be sure all accessories necessary to operate the fixture have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Inside the box you should find: the fixture, a DMX XLR cable, a safety cable, and this manual. Please do not return this unit to your dealer without first contacting customer support at the number listed below.

CUSTOMER SUPPORT: Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. For service related issue please contact Elation Professional®. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

> Voice: (323) 582-3322
> Fax: (323) 832-9142
> E-mail: support@elationlighting.com
> Forum: www.ElationLighting.com/forum

Warning! To prevent the risk of fire and reduce the risk electrical shock, do not attempt to operate this fixture with the lens cover removed.

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs

yourself. Doing so will void your manufactures warranty.

Please do not discard the shipping carton in the trash. Please recycle whenever possible.

WARRANTY REGISTRATION*:* The ELAR 180 Par RGBAW™ carries a two-year (730 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support at (323) 582-3322.

2. SAFETY INSTRUCTIONS

⚠	To guarantee proper and consistent operation, it is important to follow the guidelines in this manual. Elation Professional will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

1. Always be sure that the fan and the air inlets remain clean and are never blocked. Allow about 6" (15cm) between this fixture and other devices or a wall to allow for proper cooling. See page 12.

2. Never touch the fixture during normal operation.

3. Never look directly into the light source. You risk injury to your retina, which may induce blindness.

4. For safe operation, follow the Installation guide described in chapter six of this manual. Operating the ELAR 180 Par RGBAW™ without suited safety aids such as safety cables or clamps can increase the risk of damage and/or personal injury.

5. Qualified and certified personnel should only perform installation.

6. When mounting this fixture, use only the original rigging points included with this fixture. Any structural modification will void the original manufactures warranty and may increase the risk of damage and/or personal injury.

7. Do not attempt to operate this fixture if the power cord has become damaged or frayed.

8. ***Never open this fixture while in use.***

9. This device falls under protection-class I. Therefore it is essential that the device be grounded properly.

10. Qualified personnel should perform all electrical connections.

11. Be sure the available voltage matches the voltage requirements of the unit. Be sure the power cord is never crimped or damaged. If the power cord is damaged,

replace it immediately with a new one of similar power rating.

12. Always disconnect from main power before performing any type of service or any cleaning procedure.

13. Only handle the power cord by the plug. Never pull out the plug by tugging the wire portion of the cord.

14. ***Please be aware that damages caused by modifications to the device are not subject to warranty.***

Important Notice: Damages resulting from the disregard of safety and general user instructions found in this user manual are not subject to any warranty claims.

3. FEATURES

- IP65 Rated Fixture

- Low power consumption

- Minimal heat emission

- Maintenance free operation

- Equipped with 60 3-Watt (12 x red, 12 x green, 12 x blue, 12 x Amber, 12 x white)

- Silent Operation, convection cooled, no fans

- 100,000 hours _**rated**_ LED life

- Linear RGBAW Color Mixing, infinite color possibilities

- 9˚ Beam Angle/22˚ Field Angle (15˚ Lens)

- USITT DMX-512 Complaint

- Preprogrammed colored macros

- Strobe-effect with a maximum flash rate of 25fps

- DMX-controlled operation or stand-alone operation with Master/Slave-function

- 7 built-in programs can be called up via DMX-controller

    ~ 48 preprogrammed scenes per program

- Sound-controlled via built-in microphone

- Four DMX Modes:

    5 DMX channels

    6 DMX channels

    8 DMX channels

    10 DMX channels (default)

- DMX-control via standard DMX-controller

- Upgradable firmware via Elation "E-Loader" Data Pack

- Electronic Switching Power Supply 100v~240v

- Flicker-free operation for television and film

- Compact design: fits in 12" box truss

- 0%~100% Dimming (two dimming options; linear & standard)

4. GENERAL GUIDELINES

This fixture is a professional lighting effect designed for use on stage, in nightclubs, in theatres, and other types of architectural installations. Do not attempt operation or installation without a proper knowledge on how to do so.

Consistent operational breaks will ensure that the fixture will function properly for many years to come.

Do not shake the fixture around. Avoid brute force when installing or operating the fixture.

While choosing an installation location, please be sure that the fixture will not be exposed to extreme heat, moisture, or dust. The minimum distance between the fixture and a wall or flat surface should be at least 0.5 meter (about 1.5ft). See page 12.

Always install the fixture with an appropriately rated safety cable. When installing the fixture in a suspended environment always be sure to use mounting hardware no less than M10 x 25 mm, also be sure the hardware is only inserted in the yoke's mounting holes.

Do not attempt to operate this fixture until you have familiarized yourself with all of its functions.

Do not permit operation by persons not qualified for operating this type of architectural fixture. Most damages are the result of improper operation.

Please use the original packaging to transport the fixture in for service.

For your own safety, please read this user manual carefully before installing the device.

5. FIXTURE OVERVIEW
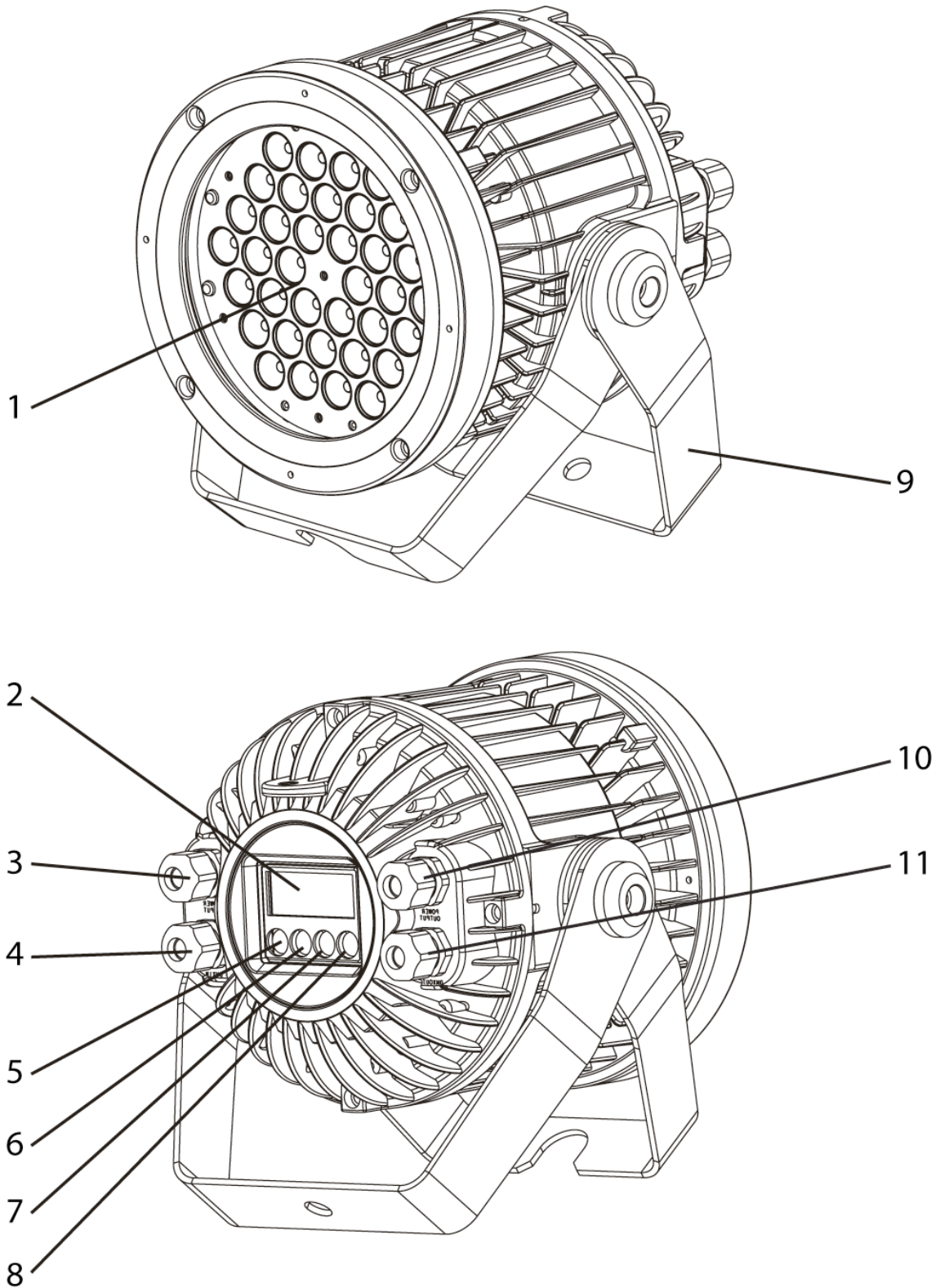
1. **LED Lens Assembly –** The lens assembly may be user replaced in the event repair is needed or a different beam angle is required.

2. **LED Display –** 4-segment menu display. Used to display the DMX address as well as all other menu functions.

3. **Power Output Lead –** This lead is used to jump power to another ELAR 180 Par RGBAW™. Please do not daisy chain power for more than 16 fixtures. To maintain the integrity of the IP rating, only use proper Elation IP rated power cables.

4. **DMX Out Lead –** This lead is used to send an incoming DMX signal to the next fixture in the DMX chain. To maintain the integrity of the IP rating, only use proper Elation IP rated DMX cables.

5. **MENU Button –** This button is used to access the fixtures menu functions.

6. **Up Button –** The up button is used to toggle forward through the menu functions and settings.

7. **Down Button –** The down button is used to toggle backwards through the menu functions and settings.

8. **Enter Button –** The enter button is used to enter in to a certain menu function or to lock a menu setting in to memory.

9. **Yoke Assembly –** This yoke is designed to perform two functions; 1) When split it can be used as a floor stand bracket. 2) Used to secure a mounting clamp for truss mounting.

10. **Main Power Input Lead –** This lead is the main power input lead. When the unit is the first in a chain or the only fixture to be used, be sure to use the power starter

cable that converts a standard Edison 3-prong to the IP rated twist lock connector. When jumping from fixture to fixture be sure to only use Elation IP rated power connectors to maintain the IP rating.

11. **DMX In Lead –** This lead is the main DMX input lead. When the unit is the first in a chain or the only fixture to be used with a DMX controller, be sure to use the DMX starter cable that converts a standard 3-pin XLR DMX connector to the IP rated twist lock connector that is used on the fixture. When jumping from fixture to fixture be sure to only use Elation IP rated DMX cables to maintain the IP rating.

6. MOUNTING AND INSTALLATION

Cautions:

For added protection mount the fixtures in areas outside walking paths, seating areas, and away from areas were unauthorized personnel might reach the fixture.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

To avoid injury, never stand directly below the device when mounting, removing, or servicing the fixture.

⚠	**Refer to regulations BGV C1 (formerly VBG 70) and DIN VDE0711-217 for proper installation in Europe To ensure proper installation, only qualified staff should attempt installation.**

Mounting points

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

⚠	**CAUTION!** **Be sure a qualified electrician performs all electrical connections.**

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Mounting

The ELAR 180 Par RGBAW™ is fully operational in any mounting position, hanging upside-down, side mounted, or set on a flat level surface, etc. Be sure this fixture is kept at least 0.5m (1.5 feet) away from any flammable materials (decoration etc.). When clamp mounting; always use and install the supplied safety cable as an added safety measure to prevent accidental damage in the event of a clamp failure. *See the image below.*
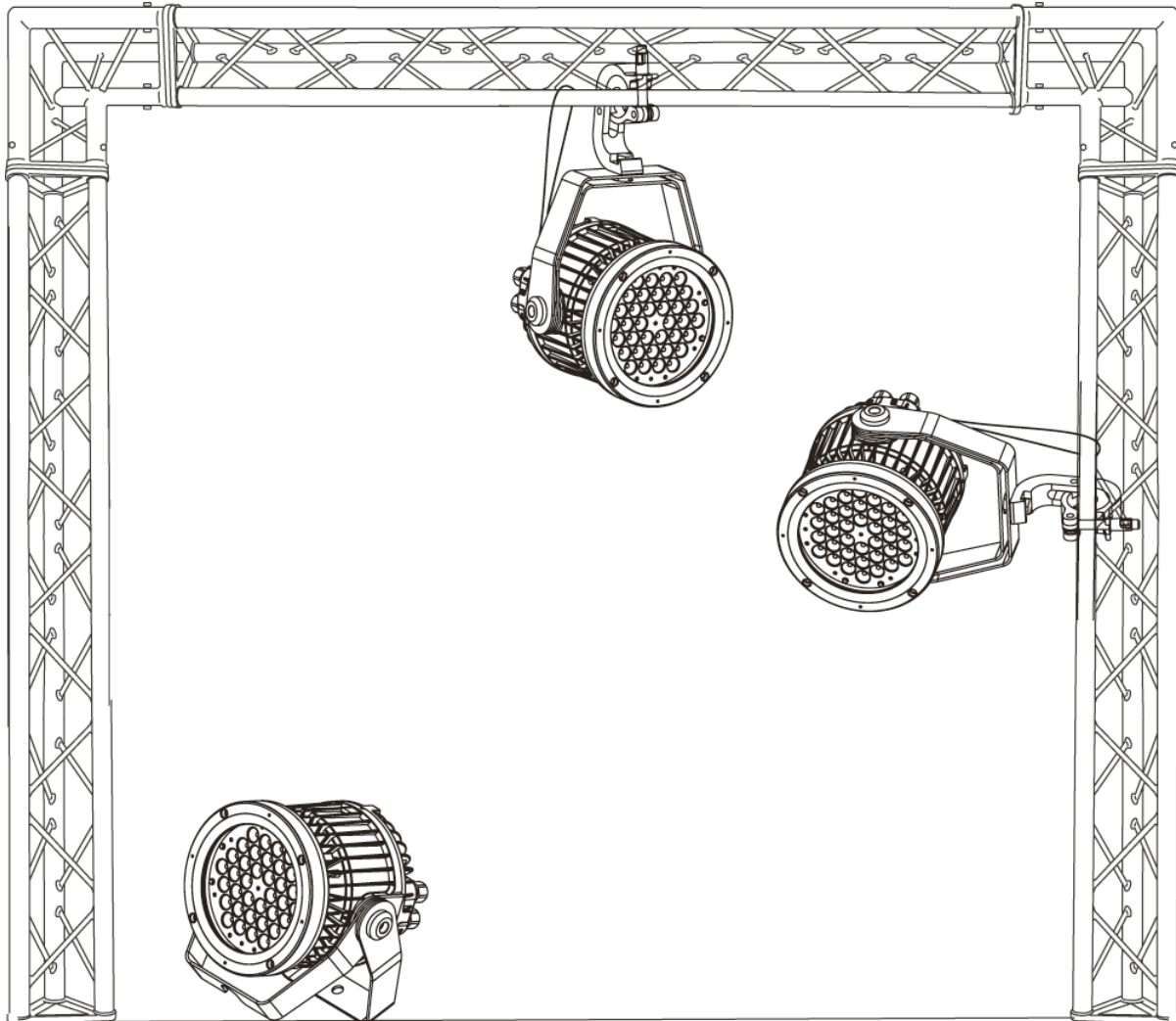
Clamp Mounting

The ELAR 180 Par RGBAW™ provides a unique mounting bracket assembly that allows the unit to stand on a flat surface or to be hung on truss via a clamp in any safe position (see the illustration above). Regardless of the mounting option you choose please be sure to refer to the safety guidelines in this manual to avoid damage to the unit and/or personal injury.

When mounting this fixture to truss be sure to secure an appropriately rated clamp to the hanging yoke using a M10 screw fitted through the center hole of the hanging yoke. As an added safety measure be sure to attach at least one properly rated safety cable to the fixture. See illustrations below.
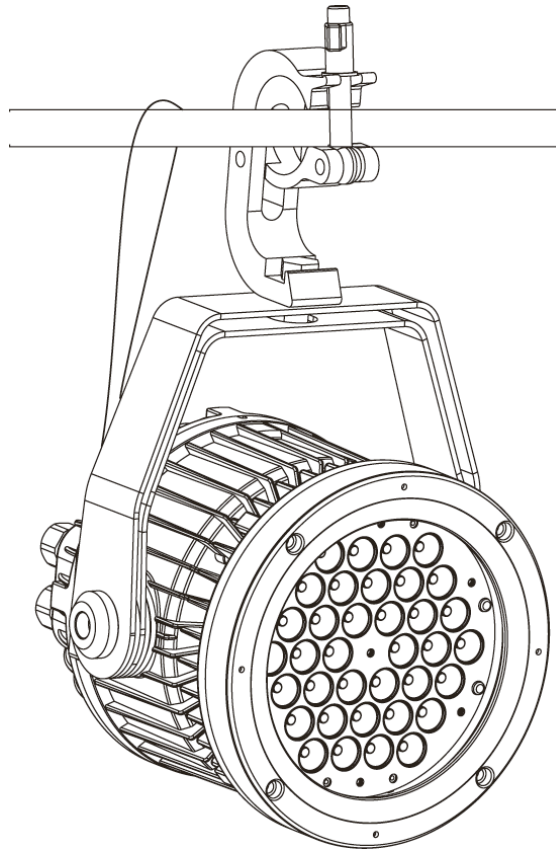
Securing the ELAR 180 Par RGBAW™

> *Always be sure to secure your fixture with a safety cable when suspending the unit from truss or other means. The fixture provides a built-in rigging point for a safety cable as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to the hanging bracket.*

7. UNDERSTANDING DMX

DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used by most lighting and controller manufactures as a form of communication between intelligent fixtures and controllers. DMX allows all makes and models of different manufactures to be linked together and operate from a single controller. This is possible as long as all the fixtures and the controller are DMX compliant. A DMX controller sends the DMX data instructions to a fixture allowing the user to control the different aspects of an intelligent light. DMX data is sent out as serial data that travels from fixture to fixture via data "IN" and "OUT" leads located on the fixtures (most controllers will only have output jacks).

DMX Linking: To ensure proper DMX data transmission, always use proper DMX cables and a terminator. When using several DMX fixtures try to use the shortest cable path possible. Never split a DMX line with a "Y" style connector. The order in which the fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in the DMX chain, at the beginning, at the end, or anywhere in the middle. The DMX controller knows to send data assigned to address 1 to that fixture no matter where it is located in the DMX chain. The ELAR 180 Par RGBAW™ can be controlled via DMX-512 protocol. The ELAR 180 Par RGBAW™ is a fixture that can operate in 4, 5, 7, or 9 DMX channels (see pages 28-35 for the different DMX traits). The DMX address is set electronically using the controls on the LED menu.

Cable Requirements: This fixture is designed with special cables for both DMX and power. These cables are specifically designed to maintain the integrity of the IP rating. When using this fixture outdoors be sure to ***ONLY*** use the Elation cables that have been manufactured to meet the IP rating.

"First" DMX Cables - Special DMX "First" cables may be purchased from Elation to provide a means of data communication with standard DMX fixtures for indoor use. These cables will come with the IP rated twist lock connector on one end and either a 3-pin XLR male or female connector on the other depending on model. Be sure to only use these cables for intergrading this fixture in a standard DMX chain.

"First" Power Cable – A special power "First" cable is included with every fixture. This cables is used to provide power to your fixture. This cable comes with the IP rated twist lock connector on one end and a standard Edison 3-prong, grounded prong on the other end. Be sure to only use this cable for power distribution and never attempt to connect this cable to the DMX lines.

You can chain multiple fixtures together through serial linking. Using the IP rated signal cables provided through Elation. Always be sure to daisy-chain your in and out data connections, never split or "Y" your DMX connections unless you are using an approved DMX splitter such as the Elation Opto Branch 4™ or DMX Branch/4™.

Terminator/Next Fixture — Controller
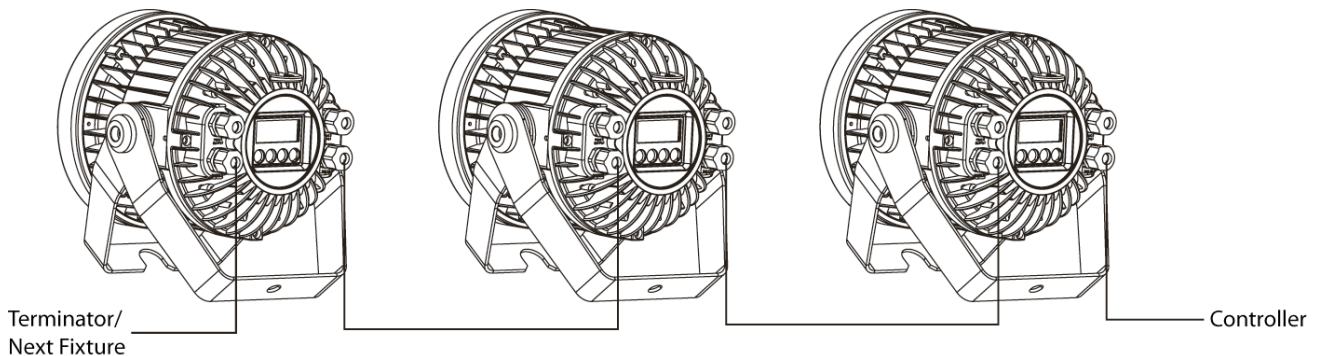
DMX-512 connection with DMX terminator

A DMX terminator should be used in all DMX lines especially in longer runs. The use of a terminator may avoid erratic behavior in your DMX line. A terminator is a 120 ohm 1/4 watt resistor that is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This fixture is inserted in the female XLR connector of the last fixture in your daisy chain to terminate the line. Using a *line terminator (Elation part: DMX T PACK) will decrease the possibilities of erratic behavior.*
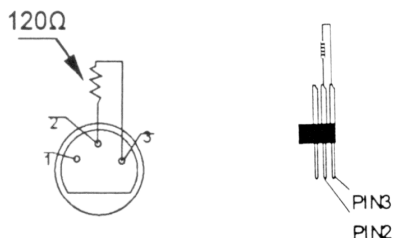
Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

5-Pin XLR DMX Connectors. Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The following chart details a proper cable conversion.

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Pin 4 - Do Not Use
Not Used		Pin 5 - Do Not Use

Fixture DMX addressing;

All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control information sent out from the DMX controller. The allocation of this starting DMX address is achieved by setting the correct DMX address on the digital display located on the back of the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different address for each individual fixture. Be advised that setting all you fixtures to the same DMX address will subsequently control all fixtures in the same fashion, in other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to "listen" to the channel number you have set, based on the quantity of control channels (DMX channels) of each fixture. That means changing the settings of one channel will only affect the selected fixture.

In the case of the ELAR 180 Par RGBAW™, which is up to a ten channel fixture, you should

set the starting DMX address of the first unit to 1, the second unit to 11 (10 + 1), the third unit to 21 (10 + 11), and so on.

Note: During start-up the ELAR 180 Par RGBAW™ will automatically detect whether a DMX data signal is being received or not. If a DMX data signal is being received, the display will show **"A.XXX" (XXX** representing the actual DMX address). If the fixture is not receiving a DMX signal the display will flash **"A.XXX" (XXX** representing the actual DMX address).

If your fixture is connected to a DMX controller and the display is flashing (not receiving a DMX signal), please check the following:

- The 3-pin or 5-pin XLR plug (cable with DMX signal from controller) may not be connected or is not inserted completely into the DMX input jack.
- The DMX controller is switched off or defective.
- The DMX cable from the controller merging with included IP Rated Cable adapter is not connected securely
- The DMX cable or connector is defective.
- A DMX terminator has been inserted into the last fixture in your DMX chain.

8. DISPLAY LED INDICATOR.

The ELAR 180 Par RGBAW ™ has a LED indicator on the display. This indicator is designed to give a quick visual indication of the fixtures' DMX status. The illustration below details the functionality of the LED indicators.

A.001   A 001

DMX OK   NO DMX
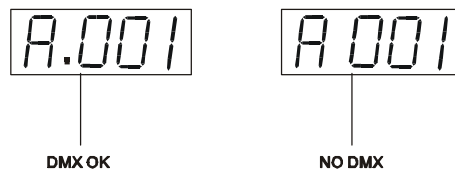
The LED indicator represents DMX signal:

- If the indicators is on, a clean DMX signal is present
- If the indicator is off, there is no DMX signal present

9. DISPLAY MENU

Default settings shaded.

MODE	<ADDR>	VALU	**A001**~AXXX (AXXX)	DMX address setting
		SLAV	ON/**OFF**	Set as Slave
		RDMX	**ON**/OFF	Change address via DMX
	<RUN>	AUTO	**ALON**/MAST	Run Auto program
	<DISP>	VALU	D-XX D-00(DXXX)	Display DMX value
		FLIP	ON/**OFF**	Flip display
		D ON	**ON**/OFF	Delay shutting off LED display
		LOCK	ON/**OFF**	Key lock (Press the MENU button for 3 seconds to activate)
SET	<CHAN>	**5CH**/6CH/8CH/10CH		DMX channel Mode
	<FAIL>	OFF/**HOLD**/AUTO		Status while there is no DMX
	<DFSE>	ON/**OFF**		Default setting
	<DIMR>	**MOD1**/MODE2		Set dimmer mode
	POHO	ON/**OFF**		Power on to preserve the MANL data
	<VER>	V-1.0~V-9.9		Software version
MANL	<RED GREN BLUE WHIT AMBE TEMP MACO PROG STRB DIMM>	R XXX(000~255) G XXX(000~255) B XXX(000~255) W XXX(000~255) A XXX(000~255) T XXX(000~255) M XXX(000~255) P XXX(000~255) S XXX(000~255) D XXX(000~255)		Manual adjust intensity
TIME	<LIFE>	0000~9999(HOURS)		Total fixture runtime hours
	<CODE>	CXXX		Passcode to clear last run time "038"
	<CLFE>	ON/**OFF**		Clear last run time hours
EDIT	<STEP>	S-01~**S-48**		Select steps of program
	<SC01> ~<SC48>	<RED GREN BLUE WHIT AMBE TEMP MACO PROG STRB DIMM>	R XXX(000~255) G XXX(000~255) B XXX(000~255) W XXX(000~255) A XXX(000~255) T XXX(000~255) M XXX(000~255) P XXX(000~255) S XXX(000~255) D XXX(000~255)	Edit the internal scenes

		FADE	XXX	
		TIME	XXX.X(000.1S~999.9S)	

Remarks:

1) **If the fixture does not receive a DMX signal the menu display will flash repeatedly.**

2) **TIME: Adjust the hold time for each scene in built-in chase programs.**

3) **FADE: Adjust the fade time between each scene in the built-in programs.**

9.1 "MODE" - Function Mode:

9.1.1 <ADDR> - DMX address setting – This function is used to set or adjust the fixture's starting DMX address. Every device controlled by DMX has to have a unique starting address. The addressing feature is what allows DMX to function properly. The DMX address of a fixture is what allows it to communicate with a controller properly. The DMX addressing also allows the fixture to ignore any DMX information coming from the controller that is not meant specifically for the fixture. Because each fixture is connected in a daisy-chain fashion it is imperative to assign a proper and unique starting DMX address to each and every fixture. The DMX address is non-destructive and will remain in the fixture's memory even when the power to the unit is switched off. Memory is backed-up and retain by an internal power source that should last about five years. For proper DMX addressing see "DMX Addressing" on page 25 of this user manual.

"VALU" - Display the DMX 512 value of each channel
With this function you can display the DMX 512 value of each channel. The display will automatically detail the changing DMX values as they are received from the controller.

"SLAV" - Slave setting for Master/Slave Operation
With this function, you can define the device as slave for operation in Master/Slave mode. Each slave setting will have a different function for a dynamic lightshow without a controller.

"RDMX" - Address via DMX - This function allows the DMX address to remotely be adjusted from a DMX console. This setting requires special settings for both the controller and the fixture. RDMX is on by default. For operational instructions please see Section 10/Page 25 of this manual "Remote DMX addressing."

9.1.2 <RUN> - Internal Program Settings

This function allows the internal programs to run in either stand-alone or master/salve mode. In "Master" mode the fixture will send DMX data to other fixtures connect via the DMX chain. In "Alone" mode the fixture will operate as a single fixture. The program for this mode is selected in the **"Select program"** section of the control menu. You can set the number of steps under **"Edit program"**. You can edit the individual scenes under **"Edit scenes"**. With this function, you can run the individual scenes either automatically, i.e. with the adjusted Step-Time.

9.1.3 <DISP> - Menu Display Settings

This function allows the internal programs to run in either stand-alone or master/salve DMX chain. In "Alone" mode

"VALU" - Display the DMX 512 value of each channel
This function will electronically display the current DMX value for any channel that is currently being adjusted. The display will automatically detail the changing DMX values as they are received from the controller. This function is "off" by default.

"FLIP" – This function will flip the display readout by a 180˚ allowing for better visualization when the fixture is mounted in an inverted position.

"D ON" – The display is designed to turn off during normal operation to avoid excessive light in situations that require an extremely dark environment. This function will adjust the time delay the fixture will remain on before it turns off. ***This function is disabled as default.***

LOCK –This function allows you to lock the keys.

This function activates the automatic keylock command. If this function is activated, all menu keys will automatically lock whit in 15 seconds of the last menu function. To temporarily deactivate the keylock function, press and hold down the Mode/Esc-button for 3 seconds.

1. Access the main menu.

2. Tap the UP button until "DISP" is displayed.

3. Press ENTER, the display will show "VALU".

4. Tap the UP button until "LOCK" is displayed and tap the ENTER button.

5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.

6. Press ENTER to confirm.

7. Press MENU to return to the main menu.!

9.2 "SET" – Fixture Personality Settings:

These functions set specific running modes and operating parameters.

<CHAN> DMX Mode settings

This function allows the fixture to run in different DMX channel modes. Four modes are available; 5 channel, 6 channel, 8 channel or 10 channel. See "DMX Traits" beginning on page 28 for a detailed explanation of the different DMX modes.

<FAIL> DMX Fault Protection

This function dictates how the fixture will operate in the event DMX signal is suddenly lost while operating in DMX mode. The three fail safe modes are; 1) "OFF" which will blackout all light output. 2) "HOLD," which will hold the last DMX command, or 3 "AUTO," which will put the fixture in sound-active mode.

<DFSE> - Restore Default

This function is used to restore the factory settings of the device. All settings will be set back to the default values (shaded). Any edited scenes will be lost.

<DIMR> - Set dimmer mode

There are two selectable dimmer modes, Mode 1 and Mode 2. Mode 1 is designed for

entertainment (rock and roll) use and Mode 2 is designed for theatrical use. Mode 1 has a quicker dimming curve and Mode 2 has a smoother dimming curve of 0-100%.

<POHO> - Power on to preserve the MANL settings

This function is designed to work with the Manual (MANL) settings. When this function is turned on, all the manual settings will be retained after power has been shut off.

<VER> Software Version

This function will display the current firmware version.

9.3 "MANL" – Manual Fixture Settings:

This function allows the each of the ten DMX channels to be controlled manually. This will allow the fixture to be preset to a specific color or built-in program without the use of a DMX console.

9.4 "TIME" – Operating Hours

These functions will detail different time functions associated with the fixture.

<LIFE> (0000~9999 Hours)

This function tracks the running time of the fixture from the point it was last cleared. Where "XXXX "represents the total number of running hours. This time is none destructive and will remain in the fixtures memory indefinitely. Use this time to track rentals or show durations.

<CODE> Clear run time access code

This lock-out code prevents the current run time from being erased accidently. The access code is "038"

<CLFE> Clear Fixture Run Time

This function resets the run time to zero.

9.5 "Edit" Internal Program Settings:

The fixture comes equipped with a built-in DMX recorder that allows custom programs to be installed and recalled directly from the fixture's control board. Programs can be created and stored using the fixture's control board or by using an external DMX controller. For detailed instructions on how to complete this task please see "Working with Built-In Programs" Section 12/ Page 35.

9.5.1 **Select program –** This function allows the user to select one of ten of the user defined built-in programs. This program is then accessed in "Function Mode" under "Program Run."

9.5.2 **Edit program –** This function allows the user to edit the built-in programs.

9.5.3 **Edit Scenes –** This function allows the user to edit or define the actual scenes that are stored in the user defined built-in programs that are accessed in the previous step.

10. DMX ADDRESSING

Setting the DMX address - After the fixture is turned "ON" it will immediately complete a reset process that test all the fixture's functions. When the reset process concludes the LCD will display the fixture's current DMX address. If the fixture is not receiving a DMX signal, the display will flash continuously. To set or adjust a DMX address, please follow the procedure below:

1. Toggle through the menu by pressing the Up and Down buttons until the display reads "Addr=XXX." Tap the enter button to make changes to the address.

2. While the display is flashing use the "UP" and "DOWN" buttons to select a new address. Once the new address has been selected, lock the new address into the fixture's memory by pressing the "ENTER" button.

The DMX address is non-volatile and will remain in the fixture's memory even when the power to the unit is switched off. Memory is backed-up and retain by an internal power source that should last about five years

Remote DMX addressing (RDMX) / Address Via DMX- This function allows the DMX address to be changed remotely from a DMX console. This setting requires special settings for both the controller and the fixture. This function may be turned on and off, and is "ON" be default. Follow the procedure listed below to access the RDMX functions:

Fixture Settings*:*

1. Access the main menu and use the UP or DOWN to get to the "Personality" menu, then press ENTER

2. Once in the "Personalities" menu, tap the UP or Down to get to the "Status Settings " menu, press ENTER.

3. Once in the "Status Settings" tap the UP or Down to get to the "Address via DMX" function and press ENTER.

4. "Address via DMX" is the function that turn the RDMX function on and off. Press ENTER and be sure the function is turned on.

5. Press the UP button to display "ON" to activate this function, or "OFF" to deactivate this function.

6. Press ENTER to confirm.

7. Press MODE/ESC to return to the main menu.

Controller Settings*:*

1. Set the DMX value of channel 1 to a value of 7.

2. Set the DMX value of channel 2 to a value of 7 or 8. When channel 2 is set to "7" you can adjust the starting address between 1 and 255. When set to "8" you can adjust the starting address between 256 and 511.

3. Use channel 3 to set your desired DMX starting address. ***For example:*** If you want to set the starting address to 57, set channel 1 to a value of "7," set channel 2 to a value of "7" and use channel 3 to set your address to 57 by selecting a channel value of 57. Example 2: If you want to set the starting address to 420, set channel 1 to a value of "7," channel 2 to "8" and channel 3 to "164" (256+164=420).

4. ***Wait for approximately 20 seconds for the unit to complete the address reset function.***

11. DMX TRAITS

DMX Operation Notes:

The fixture will function in DMX mode whenever the unit is receiving a DMX signal. Please note that this will override all manual settings.

This unit will keep and retain the last DMX command in the event of DMX signal failure. To reset the fixture you must turn the power off.

DMX CHANNEL TRAITS

The chart below and on the preceding pages outlines the different DMX traits for the four different DMX modes.

DMX channel functions and values:					
Mode/Channel				**Value**	**Function**
5CH	**6CH**	**8CH**	**10CH**	**!**	**!**
1	1	1	1	!	**Red LED:**
				0-255	Red (0-Black, 255-100% Red)
2	2	2	2	!	**Green LED:**
				0-255	Green (0-Black, 255-100% Green)
3	3	3	3	!	**Blue LED:**
				0-255	Blue (0-Black, 255-100% Blue)
4	4	4	4	!	**White LED:**
				0-255	White (0-Black, 255-100% White)
5	5	5	5	!	**Amber LED:**
				0-255	Amber (0-Black, 255-100% Amber)
NA	NA	6	6	!	**Color Temperature:**
				0	No function
				1-255	Color Temperature (2700K-7200K)
NA	NA	7	7	!	**Color macros:**
				0	No function
				1-7	Color Macro 1
				8-15	Color Macro 2
				16-23	Color Macro 3
				24-31	Color Macro 4
				32-39	Color Macro 5
				40-47	Color Macro 6

				48-55	Color Macro 7
				56-63	Color Macro 8
				64-71	Color Macro 9
				72-79	Color Macro 10
				80-87	Color Macro 11
				88-95	Color Macro 12
				96-103	Color Macro 13
				104-111	Color Macro 14
				112-119	Color Macro 15
				120-127	Color Macro 16
				128-135	Color Macro 17
				136-143	Color Macro 18
				144-151	Color Macro 19
				152-159	Color Macro 20
				160-167	Color Macro 21
				168-175	Color Macro 22
				176-183	Color Macro 23
				184-191	Color Macro 24
				192-199	Color Macro 25
				200-207	Color Macro 26
				208-215	Color Macro 27
				216-223	Color Macro 28
				224-231	Color Macro 29
				232-239	Color Macro 30
				240-247	Color Macro 31
				248-255	Color Macro 32
NA	NA	NA	8	!	**Internal programs:**
				0-10	No Function
				11-40	Internal program 1
				41-70	Internal program 2
				71-100	Internal program 3
				101-130	Internal program 4
				131-160	Internal program 5
				161-190	Internal program 6
				191-220	Internal program 7
				221-255	Gradient effect
NA	NA	NA	9	!	**Shutter, strobe:**
				0-31	LEDs off
				32-63	LEDs on
				64-95	Strobe effect slow to fast
				96-127	LEDs on

				128-159	Pulse-effect in sequences
				160-191	LEDs on
				192-223	Random strobe effect slow to fast
				224-255	LEDs on
NA	6	8	10	!	**General dimming/speed:**
				0-255	Dimming (0-Black, 255- 100%)
				!	Speed from slow to fast (when running internal programs)
				!	Speed from slow to fast (when running gradient effect)

12. WORKING WITH BUILT-IN PROGRAMS

The fixture comes equipped with a built-in DMX recorder that allows custom programs to be installed and recalled directly from the fixture's control board. Programs can be created and stored using the fixture's control board or by using an external DMX controller. The following instructions will detail the procedures for using the on-board system menu as well as using a DMX compliant controller.

Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3	→	Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3	→	Auto Pro Part 1	Auto Pro Part 2	Auto Pro Part 3

Memory Statistics:

Quick Access Programs (Program Part): 3

Total Number of Programs: 10

Maximum Number of Steps (Scenes) per a Program: 64

Total Number of Scenes (Steps): 250

Step 1 – Building Scenes.

The control will store a maximum of 250 scenes. These scenes are then used to create the programs. A program can store one or a maximum of 64 scenes. Keep in mind that a scene can only be access when it is stored in a "Program." If you wish to build a static scene (a scene consisting of no movement) for a logo or gobo projection, the scene must be stored inside a program. To build a scene follow the instructions below:

- Access the main menu and toggle to "Edit Programs" which is menu function 8.
- Then tap the "ENTER" button and toggle to "Edit Scenes," menu function 8-3.
- When you get to the "Edit Scenes" function tap the "ENTER" button. The screen will then change to Edit Scene 001, this will be menu function 8-3-1. You can then press the "ENTER" button to begin to edit scene 1 or use the "UP" and "DOWN" buttons to toggle to access scenes 2-250.
- Once in the scene edit screen you have access to the functions listed below. Tapping the "ENTER" button will instantly allow you to change the values of the selected function in real time. The values can be adjusted from 0~250. Once you achieved your desired value tap the "ENTER" button once again to automatically

lock the value into the scenes memory. You can repeat the procedure for all functions listed below:

- "Auto Program" – Allows access to all of the fixture's DMX traits.
- "Red" – adjust all of the red LED values
- "Green" – adjust all of the green LED values
- "Blue" – adjust all of the blue LED values
- "Amber" – adjust all of the blue LED values
- "White" – adjust all of the white LED values
- "Strobe" – adjust the strobe
- "Dimmer" – adjust the dimmer intensity
- "Scene Time" – set the hold time for the scene
- "Input By Out" – this function will store a scene from an external DMX console. See the next section for scene editing via an external DMX controller.

Step 1B – Building Scenes from an External DMX Controller

The fixture includes a simple built-in DMX recorder. This recorder allows you to build a scene using your own DMX console. That scene can then be sent to the fixture and be stored inside one of the fixture's scene storage banks. Many people may find this procedure easier and quicker than using the on board menu functions as in "Step 1." To store a scene from an external DMX controller follow the procedures below:

- Using your DMX control build and store scenes as you normally would.
- Once you have built all your required scenes, enter the fixtures main menu and toggle to

Step 2 – Editing Programs.

The control will store a maximum of 10 programs. A program can store one or a maximum of 64 scenes. Keep in mind that a scene can only be access when it is stored inside one of the 10 available programs. Follow the procedure below to build an internal program:

- Access the main menu and toggle to "Edit Programs" which is menu function 8.
- Then tap the "ENTER" button and toggle to "Program 1" menu function 8-2-1.
- When you get to the "Program 1" function tap the "ENTER" button. The screen will

then change to Edit Steps 01, this will be menu function 8-2-1-1. Use the "UP" and "DOWN" buttons to toggle through the scenes created in "Step 1." Press the "ENTER" button to add a scene to the program. Tapping the "Enter" button will automatically lock the selected scene into the programs' memory. Repeat the process until all the desired scenes have been added to the program. Each program can store a maximum of 64 scenes.
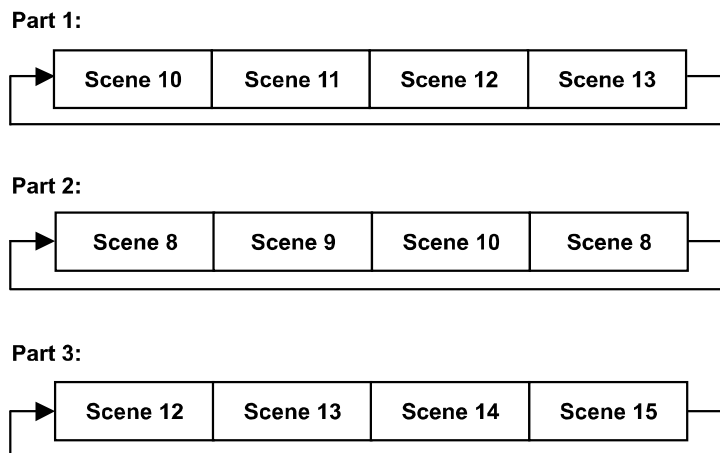
• To test the program access "Program Test" in the "Program Edit" menu function.

Step 3 – Playing a Program

To initiate a program follow the procedure below:

• Access the main menu and use the "Up" and "Down" to toggle to "Function Mode" and tap the "Enter" button.

• In the next screen select "Auto Program" and tap the "Enter" button.

• There are now two selections, "Master" and "Alone." Select "Master" when running multiple fixtures in a master/slave configuration. See section 10.2 "Master/ Slave Operation" on page 33 for proper set-up instructions. Select "Alone" when running a single fixture or when multiple fixtures in stand-alone mode. See section 10.1 "Stand-Alone Operation" on page 32 for proper set-up instructions.

The 3 Slave groups run the Auto Program in certain time segments, as shown in the following diagram:

Part 1:

Scene 10	Scene 11	Scene 12	Scene 13

Part 2:

Scene 8	Scene 9	Scene 10	Scene 8

Part 3:

Scene 12	Scene 13	Scene 14	Scene 15

13. LENS REPLACEMENT

The ELAR 180 Par RGBAW comes with a removable front cover that allows the lens assembly to be changed out to achieve different beam angles.

Lens cover is held in place by two ¼ turn locking fasteners. To remove the cover; 1) Turn the locking fasteners in a counter-clockwise direction. 2) Once the fasteners are loose lift the cover straight up to expose the inner lens (see illustration below). 3) Locate the 8 securing screws on the inner cover and remove them. 4) Remove the inner cover to access the lens kit (see second illustration below). Once the lenses are changed reassemble in reverse order.
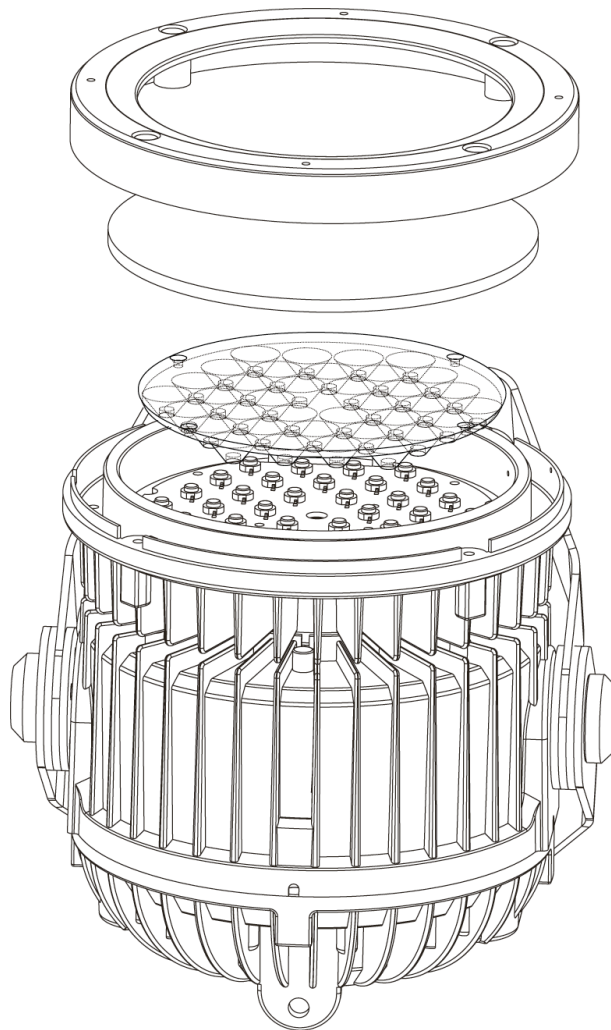
14. CLEANING AND MAINTENANCE

Consider the following points during normal service and inspection:

1. Be sure all screws and fasteners are securely tightened at all times. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

2. Electric power supply cables must not show any damage, material fatigue or sediments. Never remove the ground prong from the power cable.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.
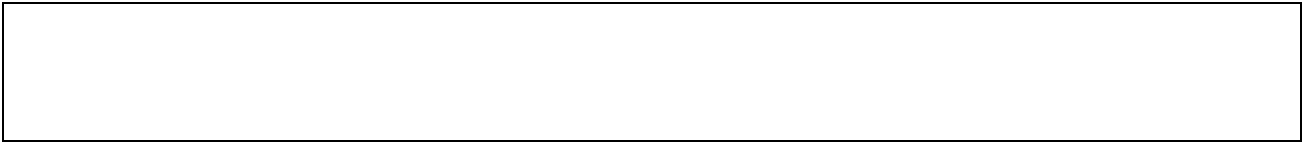
We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized Elation service technician.

Should you need any spare parts, please order genuine parts from your local dealer.

15.   2-YEAR LIMITED WARRANTY

A.   Elation Professional® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of two years, (730 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B.   For warranty service, send the product only to the Elation Professional® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional® shall have no liability what so ever for loss of or damage to any such accessories, nor for the safe return thereof.

C.   This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Elation Professional® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional® factory unless prior written authorization was issued to purchaser by Elation Professional®; if the product is damaged because not properly maintained as set forth in the instruction manual.

D.   This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, Elation Professional® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional®. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that
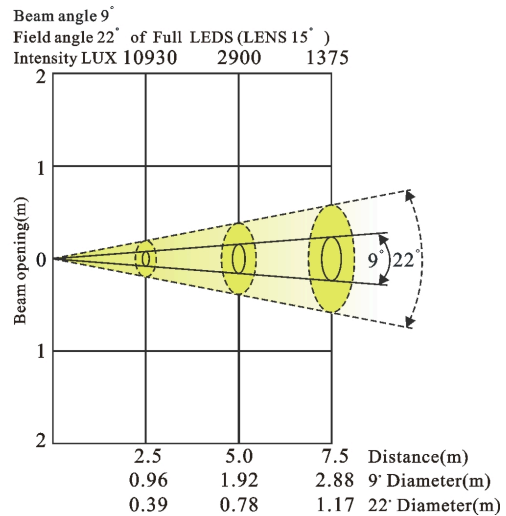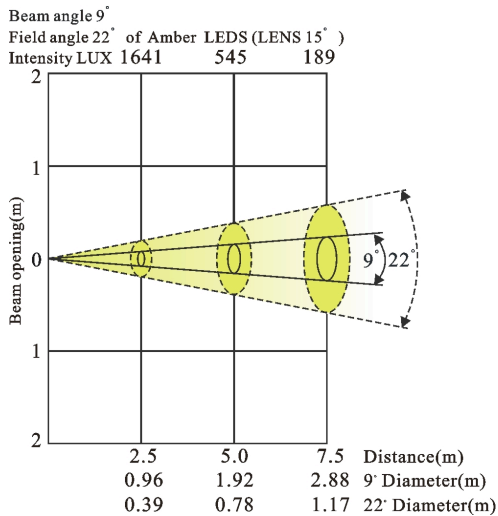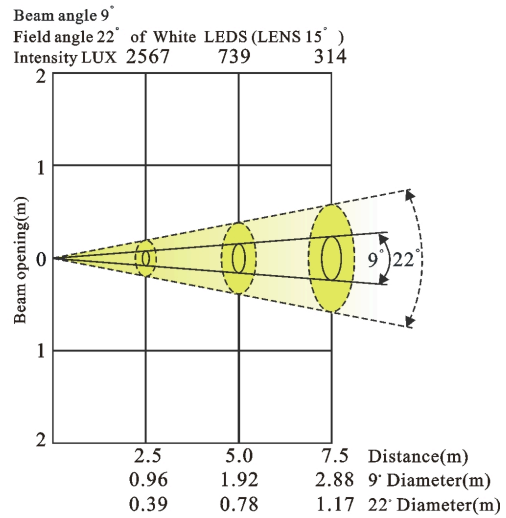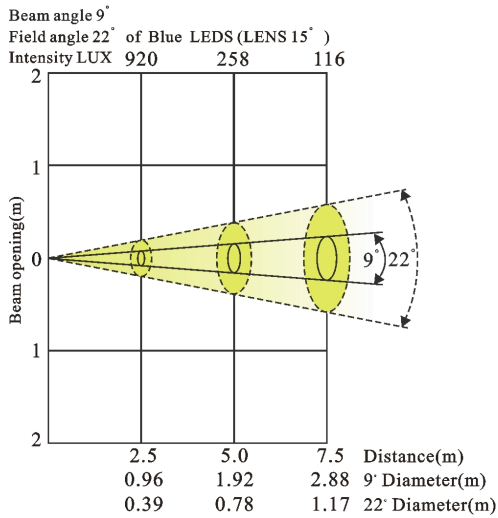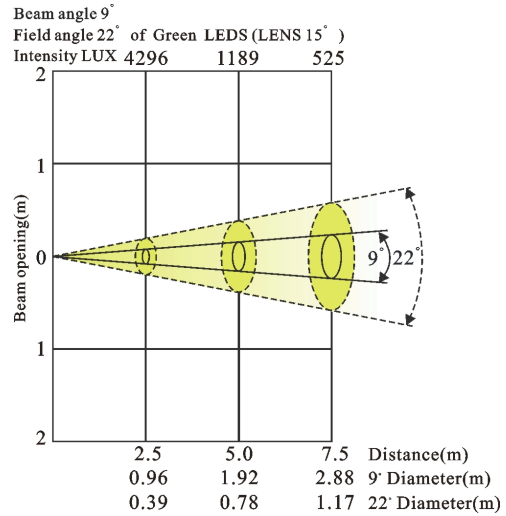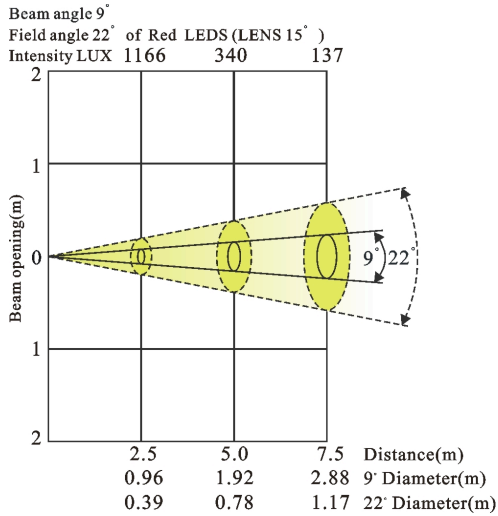
effect.

E.   Elation Professional® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
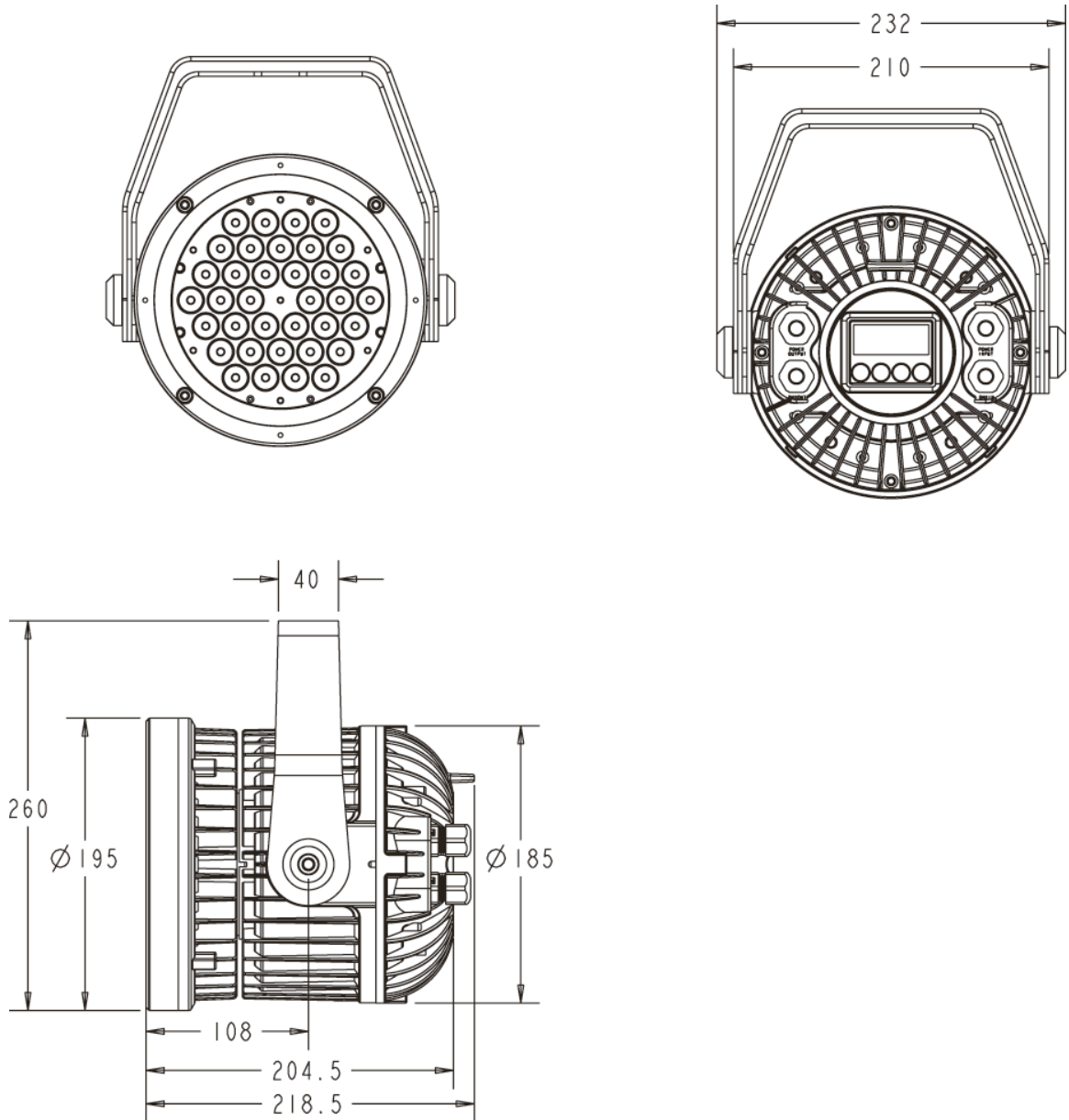
F.   No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G.   This warranty is the only written warranty applicable to Elation Professional® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.
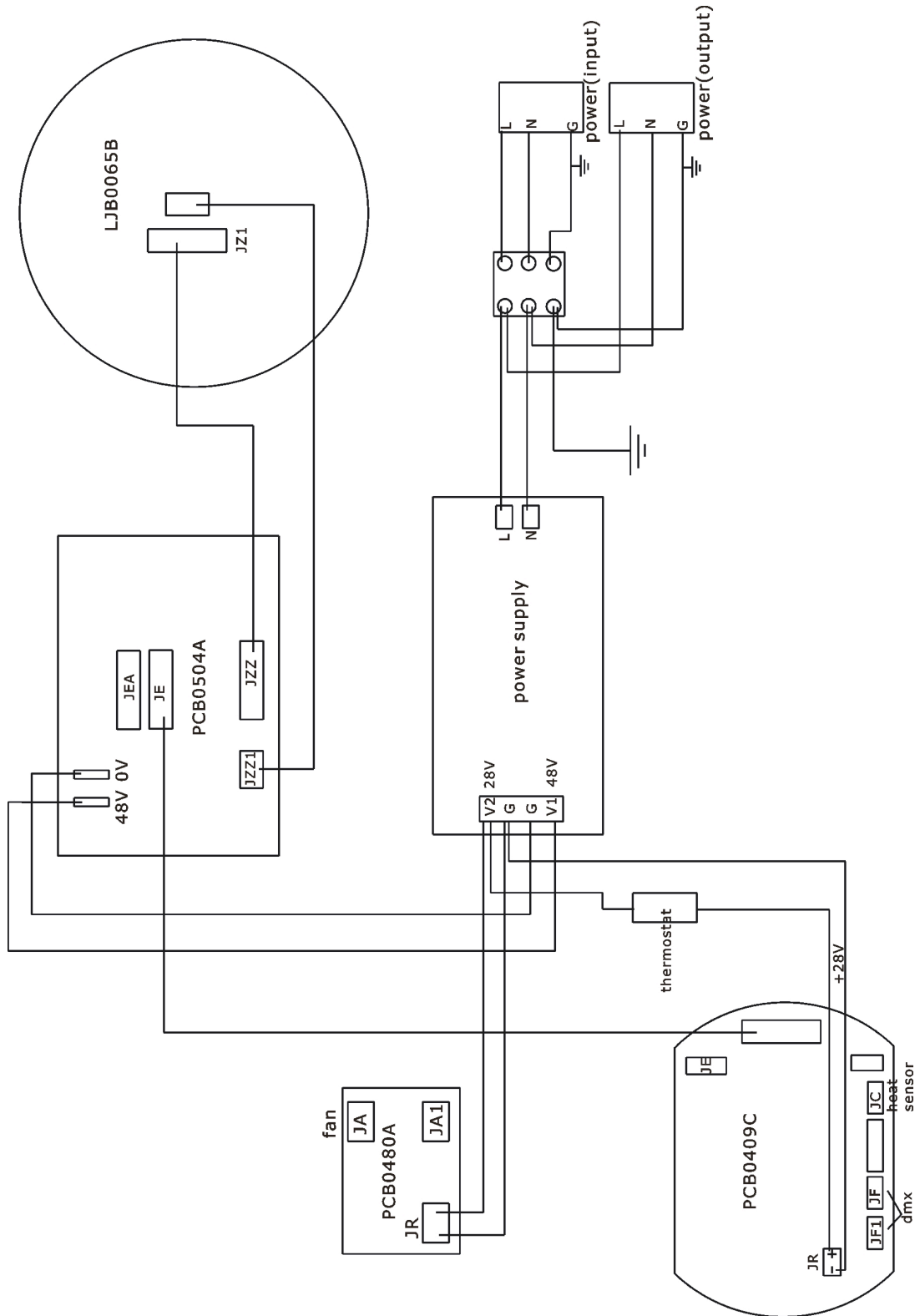
16. PHOTOMETRIC DATA

Beam angle 9°
Field angle 22° of Red LEDS (LENS 15°)
Intensity LUX 1166 340 137

Beam angle 9°
Field angle 22° of Green LEDS (LENS 15°)
Intensity LUX 4296 1189 525

Beam angle 9°
Field angle 22° of Blue LEDS (LENS 15°)
Intensity LUX 920 258 116

Beam angle 9°
Field angle 22° of White LEDS (LENS 15°)
Intensity LUX 2567 739 314

Beam angle 9°
Field angle 22° of Amber LEDS (LENS 15°)
Intensity LUX 1641 545 189

Beam angle 9°
Field angle 22° of Full LEDS (LENS 15°)
Intensity LUX 10930 2900 1375

Distance(m)	2.5	5.0	7.5
9° Diameter(m)	0.96	1.92	2.88
22° Diameter(m)	0.39	0.78	1.17

17. DIMENSIONAL DRAWINGS

18. CIRCUIT SCHEMATIC

19.   TECHNICAL SPECIFICATIONS

Power supply:	100v~240v / 50Hz~60Hz AC
Power consumption:	Maximum 150w
LED Configuration:	60 x 3 Watt
	(12 x Red, 12 x Green, 12 x Blue,
	12 x Amber, 12 x White)
IP Rating:	IP65
DMX Channels:	5, 6, 8, or 10 Channel mode
DMX Drive:	Standard DMX-512,
	5 pole IP Rated Locking Connector; [+] = Pin 3 [-] = Pin 2
	[Ground] = Pin 1.
Color Mixing:	RGBW Color Additive Mixing
Beam Angle:	9˚ Beam Angle (Standard 15˚ Lens)
Field Angle:	22˚ (Standard 15˚ Lens)
Luminance:	10,930 Lux / 1,015 FC at 8' / 2.5m
Fuse:	GMA 220v~2A (Internal)
Dimmer:	Continuous Dimming 0~100%
Strobe:	Electronic Strobe 0~25 Fps
Lamp Life:	100,000 Hours Rated Life
Operating Temperature:	-25˚C ~ 45˚C
Max Ambient Temperature:	113°F/45°C
Listing:	CE	cETLus	IP65
Weight:	7.5 Kgs / 16.5Lbs
Dimensions:	(232 x 220 x 260) mm
	9.13" x 8.66" 10.24"

ETL
Intertek
4010832

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

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