

CMY ZOOM 250

Elation Professional 4295 Charter Street Los Angeles, Ca 90058

www.elationlighting.com

CMY ZOOM 250™

INTRODUCTION: Congratulations, you have just purchased one of the most innovative

and reliable lighting fixtures on the market today! The CMY Zoom 250™, 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 CMY Zoom 250[™] by Elation Professional®.

Every CMY Zoom 250™ 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 unit for damage

and be sure all accessories necessary to operate the unit have arrived intact. In the event

damage has been found or parts are missing, please contact our customer support team for

further instructions. 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) 582-3108

E-mail:

support@elationlighting.com

Forum:

www.ElationLighting.com/forum/

Warning! To prevent or reduce the risk of electrical shock or fire, do not expose this unit to

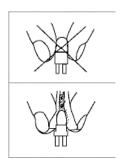
rain or moisture.

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 CMY Zoom 250[™] 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 customers expanse. You may obtain a R.A. number by contacting customer support at (323) 582-3322.



DISCHARGE LAMP WARNING: This fixture is fitted with a discharge lamp, which is highly susceptible to damage if improperly handled. Never touch the lamp with your bare hands, as the oil from your hands will shorten lamp life. Also, never move the fixture until the lamps have had ample time to cool. Remember, lamps are not covered under warranty conditions.

This fixture emits intense UV radiation, which is harmful to the eyes and skin. The intense luminance of the lamp can cause severe damage to the retina. Never operate this fixture with the protective covers removed, these covers have been specially designed to shield against UV radiation.

Epileptic Warning: Those suffering from epilepsy should avoid looking directly into the lamp at all times.

Avoid switching the fixture on and off repeatedly in short intervals, as this will reduce lamp life and intensity.

To achieve the intensity associated with discharge lamps, these lamps use a gas sealed in a high-pressure environment to emit a brilliant output. Due to the high pressure involved with the construction of the lamp, the lamp may explode during prolonged extensive use. This risk is increased with age; added care is encouraged when dealing with older lamps. Thus, lamp should always be replaced at the end of their recommended duty cycle. Extreme

caution should be used when operated this or any fixture fitted with a gas discharge lamp.

Never open this fixture while in use!

During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp.

Safety Instructions



The CMY Zoom 250[™] is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

- 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.
- 2. Never touch the fixture during normal operation. This can cause severe personal injuries and/or damage to the fixture.
- 3. Be sure to unplug the CMY ZOOM 250™ from the power outlet before performing any service related issues.
- 4. Lamp Replacement; Allow at least 30 minutes after disconnecting main power before you open the CMY ZOOM 250™. To prevent personal injury, never touch the lamp if you are not absolutely sure it has cooled.
- 5. Never look directly into the lamp beam. You risk injury to your retina, which may induce blindness.
- 6. Be sure to track and record the lamp running time. The lamp should be changed at the end of the specified lamp life, regardless of lamp output. You may also have to change the lamp if it shows any deformations or damage. The same is with all glass components, color filters, lenses and mirrors.
- 7. For safe operation, follow the Installation guide described in chapter two of this manual. Operating the **CMY ZOOM 250™** without suited safety aids such as safety cables or clamps can increase the risk of damage and/or personal injury.
- 8. Installation should only be performed by qualified and certified personal.
- 9. When mounting this fixture, use only the original rigging parts included with this fixture. Any structural modification will void the original manufactures warranty and

may increase the risk of damage and/or personal injury.

- 10. To reduce the risk of fire or shock, do not expose this unit to rain or moisture.
- 11. Do not attempt to operate this fixture if the power cord is frayed or damaged.



Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

For your own safety, please read this user manual carefully before installing the and using this fixture.



CAUTION!

Never touch the device during operation! The housing may heat up



CAUTION!

Never look directly into the light source, as sensitive persons may suffer an epileptic shock.

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

Keep away from children and non-professionals.

GENERAL GUIDELINES

This device is a lighting effect for professional use on stages, in discotheques, theatres, etc. This fixture is only allowed to be operated with the max alternating current which is stated in the technical specifications in the last page of this manual. This device was designed for indoor use only.

Consistent operation breaks may ensure that the device will serve you for a long time without defects.

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

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. The minimum distance between light-output from the projector and the illuminated surface must be more than 0,5 meter.

Always fix the fixture with an appropriate safety cable if you use the clamp to hang up the fixture. When fixing the device on a raised-from-the- ground support, be sure to use no less than screws and nuts of M10 x 25 mm and insert them in the pre-arranged screw holes in the base of the fixture.

If you use the quick lock cam in hanging up the fixture, please make sure the 4 quick lock fasteners turned in the quick lock holes correctly.

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.

Please use the original packaging if the device is to be transported.

For safety reasons, please be aware that all modifications on the device are forbidden.

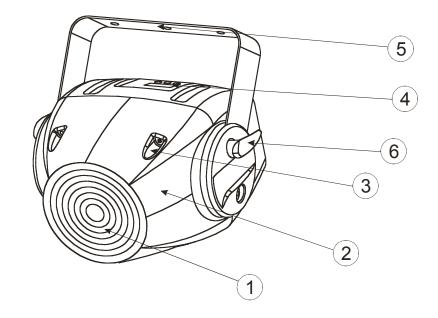
If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to short-circuit, burns, electric shock, lamp explosion, crash, etc.

Features:

- Stand-Alone mode with 1 integrated internal program (maximum 48 scenes)
- Internal program programmable via on board menu or external 512 DMX controller
- CMY color mixture
- Color-wheel with additional 4 discrete dichroic filters plus open, 3200K and 5600K
 Correction-filters, UV-filter
- Switchable color change modes: mode 1: only full colors, mode 2: color-change at every position)
 Rainbow-effect with adjustable speed in both directions
- Macro-function for combinations between CMY-color mixture and color-wheel
- Frost filter for softer beam
- Beam-shape effect: wide and flat beam can steplessly be rotated by 180°
- Strobe effect of 1-13 flash per second
- Control-Board with 4-digit display and foil-keyboard for adjusting the DMX starting address,
 Program, Reset, lamp on/off
- · Remotely switching of the lamp
- Built-in demo sequence
- Preprogrammed variable/random strobe and dimmer pulse effects
- Black-out while CMY/color/beamshaping changing
- · Remote reset function
- Motorized zoom
- For MSD/HSD 250 or MSD 250/2 lamp
- 3 operation mode: DMX controlled, stand alone or sound activated via built in microphone

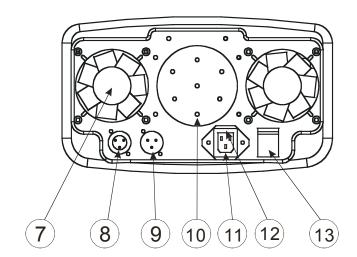
Overview:

- (1) Fresnell-lens
- (2) Housing cover
- (3) Housing screws
- (4) Control Board
- (5) Mounting bracket
- (6) Fixation screw



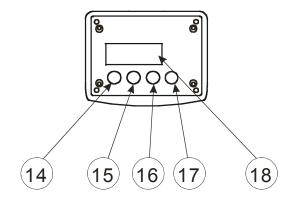
Rear panel:

- (7) Ventilation fan
- (8) DMX-In socket
- (9) DMX-Out socket
- (10) Lamp system
- (11) Power supply
- (12) Fuseholder
- (13) Power switch



Control Board:

- (14) Enter-button
- (15) Down-button
- (16) Up-button
- (17) Exit
- (18) Display



INSTALLATION INSTRUCTIONS

a) Installing or replacing the lamp



CAUTION!

Only install the lamp with the device unplugged from the mains.



CAUTION!

The lamp has to be replaced when it is damaged or deformed.

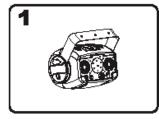
Before replacing the lamp be sure the unit has ample time to cool, to avoid injury to yourself never touch the lamp when it is hot.

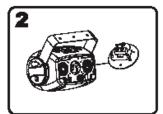
During the installation of halogen lamps do not touch the glass bulbs bare handed. Always use a cloth to handle the lamps during insertion and removal.

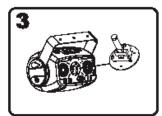
Do not install lamps with a higher wattage. They generate higher temperatures than which the device was designed for.

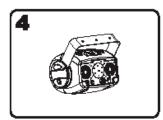
For the installation, you need one MSD250/2 GY9.5 lamp;

Procedure:









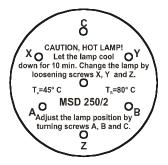
- 1. Remove the two thumb screws labeled "A" and "B" on the rear housing of the head.
- 2. Gently pull the lamp/socket assembly to access the lamp.
- 3. Gently remove the old lamp by grasping it by the ceramic base.
- 4. Carefully insert the new lamp into the socket. Please remember there is only one way to insert the lamp. Once the lamp has be inserted into the socket, gently slide the socket assembly back into place and fasten the two thumb screws.

b) Lamp Optimization

The lamp orientation and optimization must be adjusted after every lamp change. This procedure centers the lamp in the reflector. Proper optimization will increase lamp life and ensure a bright crisp output. Improper optimization may add a yellow tint to the lamp output and reduce intensity. The minimum deviation amount is 1.0mm. Running the fixture within a lower deviation can cause damage to the lamp and/or lens.

The **CMY ZOOM 250™** lamp holder is aligned at the factory. However, due to slight imperfections in all lamps, fine adjustments will improve light performance. Please follow the procedure below for proper lamp optimization:

- Using either a DMX controller or the control panel on the unit, strike the lamp, set the dimmer intensity to 100 % and focus the light on a flat surface (beam open, white, no gobo, no effects).
- 2. Center the hot-spot (the brightest part of the beam) using the 3 adjustment screws ("A, B, C"). Turn one screw at a time to drag the hot-spot diagonally across the projected image. If you cannot detect a hot-spot, adjust the lamp until the light is even.
- 3. To reduce a hot-spot, pull the lamp in by turning all three screws ("A, B, C") clockwise 1/4-turn at a time until the light is evenly distributed.
- 4. If the light is brighter around the edge than it is in the center, or if light output is low, the lamp is too far back in the reflector. "Push" the lamp out by turning each the adjustment screws ("A, B, C") counterclockwise ¼-turn until the light is bright and evenly distributed.





CAUTION!

Do not operate this device with open cover

Please remember the lamp is not a hot-restrike type, you must wait approximately 10 minutes after having turned the lamp off before you can turn it back on again.

Preparation and Installation

Mounting the device



Refer to regulations BGV C1 (formerly VBG 70) and DIN VDE 0711-217 for proper installation in Europe

To ensure proper installation, only qualified staff should attempt installation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety cable.

Never stand directly below the device when mounting, removing or servicing the fixture.



CAUTION!

Before taking into operation for the first time, the installation has to be approved by an expert.

Cautions:

Be sure to install this fixture outside any areas where persons may reach it and out of any walkways.



CAUTION!

When installing the device, make sure there is no highly inflammable material within a distance of min. 0,5m

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



CAUTION!

The electric connection must only be carried out by a qualified electric

Secure the CMY ZOOM 250™

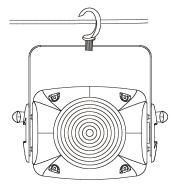
Regardless of the rigging option you choose for your CMY ZOOM 250™ always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the underside of the fixture, be sure to use this point and never secure a safety cable to a carrying handle.

Clamps

The CMY ZOOM 250[™] has been designed to hold multiple clamps to the bottom of the unit in several different orientations. Always use an appropriately rated clamp to mount this unit to truss. Refer to the printed instructions on the bottom of the fixture for proper clamp installation.

Installation method via clamp

Please refer to the picture below:

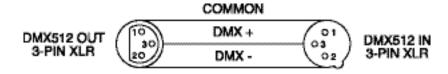


Screw one clamp each via a M10 screw and nut directly into the bracket of the scanner. Pull the safety-chain through the bracket of the base and over the trussing system or any safe fixation point.

DMX-512

Data Cable (DMX Cable) Requirements (For DMX and Master/Slave Operation):

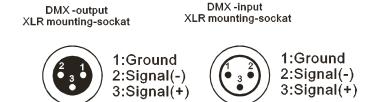
Your fixture and your DMX controller require a standard 3-pin XLR connector for data input and data output (Figure Below). If you are making your own cables, be sure to use standard two conductor shielded cable (This cable may be purchased at almost all professional sound and lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and can not be split.



Be sure to follow the above figure when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behavior.

DMX-512 control connection

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

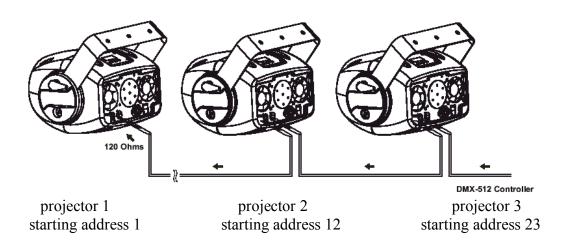


DMX-512 connection with DMX terminator

When longer runs of cable are used, you may need to use a terminator on the last fixture to avoid erratic behavior. A terminator is a 90-120 ohm 1/4 watt resistor which 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 cable terminator (Elation part number Z-DMX/T) 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 chart below 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 (+ signai)	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 signal, so that the correct fixture responds to the correct control signals. 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 address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make different address for each fixture individually.

If you set the same address, all the units will start to "listen" to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

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

In the case of the CMY ZOOM 250[™], which is a 11 channel fixture, you should set the starting address of the first unit to 1, the second unit to 12 (11 + 1), the third to 23 (12 + 11), and so on.

Note: After switching on, the CMY ZOOM 250[™] will automatically detect whether DMX 512 data is received or not. If the data is received, the display will show **"A.XXX"** (**XXX** representing the actual DMX address). If the fixture is not receiving DMX signal the display will flash **"A.XXX"** (**XXX** representing the actual DMX address). This situation can occur if:

- the 3 PIN XLR plug (cable with DMX signal from controller) is not connected with the input of the machine.
- the controller is switched off or defective, if the cable or connector is defective or the signal wires are swap in the input connector.

Control Board

The control panel located on the top of the fixture allows you to access the main menu and make all necessary adjustments to the CMY ZOOM 250™. During normal operation, tapping the "MODE" key once will access the fixture's main menu. Once in the main menu you can navigate through the different functions and access the sub-menus with the **Up** and **Down** buttons. Once you reach a field that requires adjusting, tap the **ENTER** button to activate that field and use the **UP** and **Down** button to adjust the field. Tapping the **Enter** button once more will confirm your setting. Once a setting is saved the LED will briefly readout **PASS** to confirm a new setting has been made and locked into memory. You may exit the main menu at any time without making any adjustments by tapping the **EXIT** button.

Default settings are shaded.

1	ADDR	A001~A511				s the staring DMX address so is the setting for slave
2	TEST	T-01~T-XX			Automatically test the function	
3	AUDI	MSTR			Runs fixture as "master" for audio	
		ALON				ture as "alone" for audio
4	LAMP	ON/OFF			Manually switches lamp "on" and "off"	
5	RESE	ALL	ON/OFF ON/OFF		Reset all motors and returns fixture to home	
		COLR			Reset only motors for colors	
		SHTR	ON/OFF		Reset of dimmer	only motors for shutter and/or
		OTHR	ON/OFF		Reset ot	her motors
6	TIME	LIFE	0000~9999		Displays	the total fixture running time
		LAMP	0000~9999		Displays	a lamps running time
		CLMP	ON/OFF		Clear lar	mp running time
7	RDIM	ON/OFF			Reverses the dimmer	
8	DISP	VALU	D–XX D-00 (DXX	X)	Display channel	the DMX512 value of each
		D ON	ON/OFF		Display t	turn off after 2mins
		FLIP	ON/OFF		This function will reverse the display 180	
9	SPEC	LAAU	ON/OFF		Automat	ic lamp start with power
		DLOF	ON/OFF		Switch la	amp via DMX
		DLAY	D-XX D-15		Lamp on	delay time
		SPOT	ON/OFF		Lamp optimization	
		DFSE	ON/OFF		Resets a	all the fixture functions to default
		VER	V1.0~V9.9		Software	version
10	EDIT	STEP	S-01 ~S-48			Set the amount of your program
		SCXX	C-01	<u>0 1</u> XX(00	D~FFH)	
			:	:		

	C-30	3 0 XX(00~FFH)	
	TIME	<u>T</u> − XX(01~FFH)	
	CEDT	ON/OFF	
RUN	ON/OFF		Program test

Main Menu Functions

1. ADDRESS MENU -

AOO1 - A511 (Value) - This is where you set the fixtures DMX address.

2. TEST MENU -

T-01 - T-XX (Test) - Tests the functions of each channel. There are eleven DMX channels, but only channels 1,2,3,4, and 6 can be tested.

3. AUDI MENU -

MAST (Master) - Runs the unit as master in sound active mode.

ALON (Alone) - Runs the unit stand alone, sound active mode.

4. LAMP MENU -

ON/OFF Manually switches the lamp on and off.

5. RESE (RESET) MENU -

ALL - Resets all the motors in the unit.

COLR (Color) - Resets the color motors.

GOBO - Resets the gobo motors.

SHTR - Resets the shutter motors.

OTHR-Reset other motors

6. TIME MENU -

LIFE - Displays the fixtures total running time.

LAMP - Displays the lamp running time.

CLMP - Clears the lamp running time.

7. RDIM MENU -

This menu setting reverses the dimmer functions (100% \sim 0%)

8. DISPLAY MENU -

VALU (DMX-512 Value) - Display the DMX-512 value of each channel.

D ON (Display On) - Turns digital display on or off.

FLIP - "Flips" the digital display 180 degree

9. SPEC MENU -

LAAU-Automatic lamp start with power

DLOF-Switch lamp via DMX controller

DLAY-Lamp delay on time

SPOT - This provides a spot beam for better lamp optimization.

DFSE (Default) - Resets the unit to default.

VER (Version) - Displays the software version

10. EDIT MENU -

RUN - This will run your own custom program.

STEP (S-01 - S-48) - These are the steps slots that you write your programs into. There are at total of 48 steps.

SCXX (SC01 - SC30) - These are the scenes that are stored in your program. There are a total of 30 scenes. C-01 - C-08 (Channel 1 - Channel 08) - The channels of each scene that can be edited.

TIME (Time) - Running time of the entire program.

CEDT - Edit program using a external controller.

On-Board System Menu. The CMY ZOOM 250. comes with an easy to navigate system menu. This next section will detail the functions of each command in the system menu.

Enter Button - To access the main menu locate the MODE/ENTER button on the front of the unit. Press this button to activate the system menu. Tap the UP button until you reach function you wish to change. When you reach the function you wish to change tap the MODE/ENTER button. When a function is selected the menu will begin to .ash, use the UP button to change the function. Once your changes are made tap the MODE/ENTER button again to lock the change in the system. To exit without making any changes tap the EXIT button.

1. Setting/Changing the DMX Address

After applying power to the **CMY ZOOM 250™** the LED will display the fixture's current DMX address immediately after the reset sequence. 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. Switch on the **CMY ZOOM 250™** and wait for the fixture reset process to finished.
- Press the Mode button to access the main menu. Toggle through the menu by pressing the Up and Down buttons until the display shows ROD I. Tap the enter button to make changes to the address, the current three digit address will immediately begin to flash.
- 3. While the current three-digit address is flashing, use the **Up** and **Down** buttons to select adjust the address. Lock your new address into the unit's memory by pressing the **Enter** button. After the new address has been successfully stored into the fixture's memory the LED will briefly readout **PR55**.

The DMX address is non-destructible and will remain in the fixture's memory even when the power has been switched off. Memory is backed-up and retained by an internal power source with a five year shelf life.

2. TEST MAIN MENU

TEST - This will test the functions of each channel.

- 1. Access the main menu.
- 2. Tap the UP button until "TEST" is displayed, press ENTER.
- 3. The display will show T-01. You can now press the up button and test the different channels. For example: If you press the up button until "T-03" is displayed, the unit will test the color channel, changing the color one by one and show the rainbow effect with different speeds. There are eight channels, but only channels 1,2,3,4, and 6 can be tested.
- Press MODE/ENTER or EXIT to exit.

3. AUDI MAIN MENU

MSTR Define the unit as the master, in master/slave mode-

- 1. Access the main menu.
- 2. Tap the UP button until "AUDI" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "MSTR" is displayed, press MODE/ENTER.
- 4. Press EXIT to return to the main menu.

ALON Define the unit as a stand alone unit -

- 1. Access the main menu.
- 2. Tap the UP button until "NODE" is displayed, press ENTER.
- 3. Tap the UP button until "ALON" is displayed, press MODE/ENTER to confirm.
- 4. Press EXIT to return to the main menu.

4. LAMP MENU -

LAMP – This menu function will manually turn the lamp on and off.

- 1. Access the main menu.
- 2. Tap the UP button until "LAMP" is displayed, press MODE/ENTER.
- 4. The display will show "ON/OFF".
- 5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.

- 6. Press MODE/ENTER to confirm.
- 7. Press EXIT to return to the main menu.

5. RESE MAIN MENU

- ALL When you activate the reset function, the fixture will begin the reset motion.
- 1. Access the main menu.
- 2. Tap the UP button until "RESE" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "ALL" is displayed, press MODE/ENTER.
- 4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the color motor.
- 5. Press MODE/ENTER to confirm
- 6. Press EXIT/DN to return to the main menu.
- COLR When you activate this reset function, the fixture will only reset the color wheel motor.
- 1. Access the main menu.
- 2. Tap the UP button until "RESE" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "COLR" is displayed, press MODE/ENTER to confirm.
- 4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the color motor. Press MODE/ENTER
- 5. Press EXIT/DN to return to the main menu.
- SHTR When you activate this reset function, the fixture will only reset the shutter/dimmer motor.
- 1. Access the main menu.
- Tap the UP button until "RESE" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "SHTR" is displayed, press MODE/ENTER to confirm.
- 4. The display will show "ON/OFF". Press the UP button to select "ON" to restart the shutter/dimmer motor. Press MODE/ENTER to confirm.
- Press EXIT/DN to return to the main menu.

6. TIME MAIN MENU

LIFE - With this function you can display the total running time of the unit.

- 1. Access the main menu.
- 2. Tap the UP button until "TIME" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "LIFE" is displayed, press MODE/ENTER.
- 4. Press EXIT to return to the main menu.

LAMP - With this function you can display the running time of the lamp.

- 1. Access the main menu.
- 2. Tap the UP button until "TIME" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "LAMP" is displayed, press MODE/ENTER.
- 4. Press EXIT to return to the main menu.

CLMP - With this function you can clear the running time of the lamp. Note Very Important: Please clear the lamp time every time you replace the lamp.

- 1. Access the main menu.
- 2. Tap the UP button until "TIME" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "CLMP" is displayed, press MODE/ENTER.
- 4. Press MODE/ ENTER, the display will show "ON/OFF".
- 5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivathis function.
- 6. Press MODE/ENTER to confirm.
- 7. Press EXIT/DN to return to the main menu.

7. RDIM MENU -

RDIM – This menu function will reverse the DMX dimmer functions. Instead of function from $0\% \sim 100\%$ the fixture will function from $100\% \sim 0\%$.

- 1. Access the main menu.
- 2. Tap the UP button until "RDIM" is displayed, press MODE/ENTER.

- 4. The display will show "ON/OFF".
- 5. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
- 6. Press MODE/ENTER to confirm.
- 7. Press EXIT to return to the main menu.

8. DISP MENU -

This menu function will control the various on-board display features.

VALU – This function will display the DMX value of each channel as it is change with a DMX console

- 1. Access the main menu.
- 2. Tap the UP button until "DISP" is displayed.
- 3. Press MODE/ENTER, the display will show "VALU".
- 4. Press MODE/ENTER, once again "d-00" will be displayed.
- 5. Press MODE/ENTER to confirm.
- Press EXIT to return to the main menu.

D ON – This function will turn the display off after the unit has gone two seconds without any activity.

- 1. Access the main menu.
- 2. Tap the UP button until "DISP" is displayed.
- 3. Press MODE/ENTER, the display will show "VALU".
- 4. Tap the UP button until ""D-ON" is displayed and tap the MODE/ENTER button.
- 4. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
- 5. Press MODE/ENTER to confirm.
- 6. Press EXIT to return to the main menu.

FLIP – This function will reverse the display readout buy 180°.

1. Access the main menu.

- 2. Tap the UP button until "DISP" is displayed.
- 3. Press MODE/ENTER, the display will show "VALU".
- 4. Tap the UP button until "FLIP" is displayed and tap the MODE/ENTER button.
- 4. Press the UP button to select "ON" to activate this function, or "OFF" to deactivate this function.
- 5. Press MODE/ENTER to confirm.
- 6. Press EXIT to return to the main menu.

9. SPEC MAIN MENU -

SPOT - With this function you can adjust the lamp via the control board. The shutter opens and the lamp can be adjusted. In this mode, the device will not react to any control signal.

- 1. Access the main menu.
- 2. Tap the UP button until "ADJU" is displayed, press ENTER.
- 3. Tap the UP button until "LADJ" is displayed, press ENTER.
- 4. The display will show "ON/OFF".
- 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 EXIT/DN to return to the main menu.

DFSE - With this function you can restore the factory settings of the device. All settings will be set back to the default values. Any edited scenes will be lost. When restoring the factory settings the unit must be set to the address that the unit was in when you started editing. When you exit this function, the unit will begin to reload data.

- 1. Access the main menu.
- 2. Tap the UP button until "SPEC" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "DFSE" is displayed, press MODE/ENTER.
- 4. The display will show "ON/OFF".
- 5. Press the UP button to display "ON" to activate this function, or "OFF" to

deactivate this function.

- 6. Press MODE/ENTER to confirm.
- 7. Press EXIT to return to the main menu.

VER - Use this function to display the Software version of the unit.

- 1. Access the main menu.
- 2. Tap the UP button until "SPEC" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "VER" is displayed, press MODE/ENTER.
- 4. The display will show "V-1.0", the display may also show, "V-2.0", "V-9.9" etc.
- 5. Press ENTER or EXIT/DN to exit. EDIT This menu item allows you to write a program into the memory (EEPROM) via the control panel or via the external controller.

RUN With the function "RUN", you can run your pre-made program. You can set the number of steps under Step (S-01- S-48). You can edit the individual scenes under Edit.

- 1. Access the main menu.
- 2. Tap the UP button until "EDIT" is displayed, press MODE/ENTER.
- 3. Tap the UP button until "RUN" is displayed, press MODE/ENTER.
- 4. "AUTO" is displayed. If you press the UP button it will show "SOUN". Select which one you want to activate, and press ENTER.
- 5. Press UP, to select "ALON" or "NAST". Which mean stand alone, and master/slave mode.
- Select a mode, and press ENTER to confirm.
- 7. Press EXIT/DN to return to the main menu.

STEP - With this function you can program the number of steps in your individual Program.

- 1. Access the main menu.
- 2. Tap the UP button until "EDIT" is displayed, press ENTER.
- 3. Tap the UP button until "STEP" is displayed, press ENTER.

- 4. The display shows "S-01", this stands for the first step of your program. You can call up to 48 scenes in "Run". For example, if "S-05" is displayed, it means that "Run" will run the first 5 scenes you saved in "Edit".
- 5. Press ENTER to save and exit.
- SC01 With this function you can choose the number of scenes in your Program.
 - 1. Access the main menu.
 - 2. Tap the UP button until "EDIT" is displayed, press MODE/ENTER.
 - 3. Tap the UP button until "SC01" is displayed.
 - 4. The display shows "SC01", this stands for the first scene of your program. You can call up to 30 scenes. For example, if "SC05", it means that "Run" will run the first 5 scenes you saved in "Edit".
 - 5. Press ENTER to save and exit.

Editing procedure 1: Using the control board only.

- 1. Access the main menu.
- Tap the UP button until "EDIT" is displayed. Press MODE/ENTER.
- 3. The display will show "SC-01", this stands for the scene number. For example, "SC-01" is displayed, it means you will be editing scene 1, press MODE/ENTER. You can change the scene number by pressing the UP button.
- 4. Press MODE/ENTER, the display will show "C-1", this stands for the channel number. If "C-01" is displayed, you will be editing channel 1 of your selected scene, press MODE/ENTER. You can change the channel number by pressing the UP button.
- 5. The display will show the DMX value for the channel that is being edited. It will be displayed as "11XX", it stands for Channel 11 of the editing scene, the DMX value is "XX".
- 6. Adjust the DMX value by pressing the UP button, until you get the expected effect for this channel.

- 7. Press MODE/ENTER to enter the editing of the other channels of the scene.
- 8. Repeat steps 5-8, until you finish setting all the DMX values for all the channels of this scene, each scene can have 15 channels maximum.
- 9. Once all the channels are completed, the display will .ash "TIME", this stands for the time needed to run this scene.
- 10. Press MODE/ENTER to edit the time needed, the display shows "T-XX", "XX" stands for the time needed to run this scene. For example, "T-02" means scene 1 needs 6 seconds to run, "T-15" means this scene needs 45 seconds to run.

Note: "XX" is always three seconds not one second.

- 11. Adjust the time needed by pressing the UP button.
- 12. Press MODE/ENTER to save the settings for the scene you are editing, the display will change to the next scene automatically.
- 13. Repeat steps 3-12 to edit other scenes, you can edit and save 48 scenes maximum.
- 14. Press EXIT to exit, now you have edited and saved scenes using the control board. The number of steps can be defined under "EDIT" and the scenes can be called up under "Run". To run the scenes see page 26.

Editing procedure 2: Using an external controller.

- 1. Access the main menu.
- 2. Tap the UP button until "EDIT" is displayed. Press MODE/ENTER.
- 3. The display will show "SC01", this stands for the first scene number to be edited. For example: If "SC01" is displayed, you will be editing scene 1.
- 4. Change the scene number by pressing the UP button.
- 5. Press MODE/ENTER, the display will show "C-01", the "1" stands for the channel number 1.
- 6. Press the UP button until "CEDT" is displayed, press MODE/ENTER.
- 7. The display will show "OFF", press the UP button so that "ON" is displayed, press MODE/ENTER.

- 8. The display shows "SC02". You have successfully downloaded the .rst scene.
- 9. Adjust the Step-time. needed by pressing the UP button.
- 10. Call up the second scene in your controller now.
- 11. Repeat steps 3-6 until all desired scenes are downloaded.
- 12. Press EXIT to exit. The number of steps can be defined under "Step" and the scenes can be called up under "Run".

DMX CHANNEL AND FUNCTION:

Channel 1 - Color Wheel 1:

0-15 Open / white

16-31 Red

32-47 Blue

48-63 Green

64-79 Orange

80-95 UV filter

96-111 CTF5600K

112-127 CTF3200K

128-189 Forwards rainbow effect from fast to slow

190-191 No rotation

192-255 Backwards rainbow effect from slow to fast

Channel 2 - Cyan Color Wheel :

0-255 Cyan (0-white, 255-100% Cyan)

Channel 3 - Magenta Color Wheel:

0-255 Magenta (0-white, 255-100% magenta)

Channel 4 - Yellow Color Wheel:

0-255 Yellow (0-white, 255-100% Yellow)

Channel 5 - Shutter, strobe:

0-31 Shutter closed

32-63 Dimmer control (shutter open)

64-95 Strobe effect slow to fast

96-127 No function (shutter open)

128-159 Pulse effect in sequences

160-191 No function (shutter open)

192-223 Random strobe effect slow to fast

224-255 No function (shutter open)

Channel 6 – Dimmer intensity:

0-255 Gradual adjustment of the dimmer intensity from 0-100%

Channel 7 - Effect wheel:

0-70 Full beam

71-230 Beam shaper

231-255 Frost filter

Channel 8 - Zoom:

0-255 Zoom 28 - Zoom 7

Channel 9 - Color macros - CMY and color wheel:

0-7	Off	128-135
8-15	Macro1	136-143
16-23	Macro2	144-151
24-31	Macro3	152-159
32-39	Macro4	160-167
40-47	Macro5	168-175
48-55	Macro6	176-183
56-63	Macro7	184-191
64-71	Macro8	192-199
72-79	Macro9	200-207
80-87	Macro10	208-215
88-95	Macro11	216-223
96-103	Macro12	224-231
104-111	Macro13	232-239
112-119	Macro14	240-247
120-127	Macro15	248-255

Channel 10 - Speed Of CMY And Dimmer :

0-225 Speed Max ->Min

226-235 no function

236-245 max speed and black out by while color change

246-255 no function

Channel 11 - Lamp on/off, reset, internal programs:

0-19 color change normal

20-39 color change to any position

40-59 Lamp on

60-79 Lamp switch off

80-84 All motor reset

85-87 No function

88-90 Colors motor reset

91-93 No function

94-96 Shutter & Dimmer motor reset

97-99 Other motor reset

100-119 Internal program 1

120-139 Internal program 2

- 140-159 Internal program 3
- 160-179 Internal program 4
- 180-199 Internal program 5
- 200-219 Internal program 6
- 220-239 Internal program 7
- 240-255 Auto program by music

Error Messages

When you turn on the fixture, it will make a reset first. The display may show "XXer" while there are problems with one or more channels. "XX" stands for the channel equipped with a testing sensor for positioning.

For example, when the display shows "03Er", it means there is some error in channel 3. If there are some errors on channel 1, channel 2, channel 3 at the same time, you may see the error message "01Er", "02Er", "03Er" flash repeatly for 5 times, and then the fixture will generate a reset signal, all the stepper motors will reset. If the error messages maintain after performing reset more than 3 times, it will detect whether the fixture has more than 3 errors. If the fixture has more than 3 errors (including 3 errors), all the channels can not work properly; but if the fixture has less than 3 errors, only the channels which have errors can not work properly, others can work as usual.

01Er:

(Color-wheel error) This message will appear after the reset of the fixture if the magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its drive circuit on the main PCB). The color wheel is not located in the default position after the reset.

07Er:

(Effect-wheel error) This message will appear after the reset of the fixture and if the magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driver circuit on the main PCB). The effect-wheel is not located in the default position after the reset.

08Er:

(Zoom-error) This message will appear after the reset of the fixture and if the magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepping-motor is defective (or its driver circuit on the main PCB). The zoom is not located in the default position after the reset.

CLEANING AND MAINTENANCE

The following points have to be considered during the inspection:

- All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2. There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
- 3. Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4. The electric power supply cables must not show any damage, material fatigue or sediments.

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 serviceable parts inside the device except for the lamp. Please refer to the instructions under "Installation instructions".

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

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 whatsoever 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 bear 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.

TECHNICAL SPECIFICATIONS

Power supply:

□ 120V/60Hz

Power consumption: 400W

Lamp: MSD250 GY9.5 socket, Metal Halide;

Motors: 8 motors

Packing dimensions: 49x36x48cm

Net weight: 16KGS;

Gross weight: 18KGS;

Remark: errors and omissions for every information given in this manual excepted. All information is subject to change without prior notice.

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