

# FOCUS SPOT 250R

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## 1. General Information

**INTRODUCTION:** Congratulations, you have just purchased one of the most innovative and reliable lighting fixtures on the market today! The Focus Spot 250R™, 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 Focus Spot 250R™ by Elation Professional®. Every Focus Spot 250R™ 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](http://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](mailto:support@elationlighting.com)

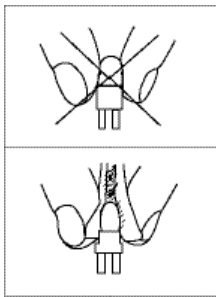
Forum: [www.ElationLighting.com/forum](http://www.ElationLighting.com/forum)

**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 Focus Spot 250R™ 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.



**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 and will decrease gradually over time.

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

All electrical connections must be carried out by a qualified person.

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.

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

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

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

## 2. Safety Instructions



The Focus Spot 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.

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.
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 **FOCUS SPOT 250R™** 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 **FOCUS SPOT 250R™**. 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 **FOCUS SPOT 250R™** 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 fixture to rain or moisture.

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

**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.



**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.



### 3. Features

- Pan 630° or 540° (User selectable) / Tilt 265°
- 18° Beam Angle
- 8 Dichroic color plus spot, for a total of 9 colors
- 7 Rotating Gobos
- Strobe: 0~10Hz
- Electronic Focus via DMX
- Sound Active – Master/Slave Operation
- 4 Segment Digital LED
- High-speed pan & tilt movements
- Reversible Display (Can be turned 180°)
- Bright MSD 250 Discharge Lamp
- Lamp switches ON/OFF locally
- Glass Dichroic Reflector for Even Lamp Output
- User Selectable Power Supply (Internal)
- USITT DMX-512 Complaint
- RDMX (Remote DMX addressing from any DMX console)
- 11 DMX Channels
- Long Life Phillips MSD250/2 Lamp (250w, 8500°k, 3000hrs)
- Automatic Pan/Tilt Correction
- Anti-reflection Coated Lenses
- Internal Program:

Edit and save programs to the incorporated EEPROM through the front control panel or external controller; you can save a maximum of 48 scenes, and run the saved programs by using the “run” menu on the front control panel

## 4. GENERAL GUIDELINES

This fixture is a professional lighting effect for designed for use on stage, in nightclubs, in theatres, etc. Do not attempt operation or installation without a proper knowledge on how to so.

This fixture was designed for indoor use only.

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

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

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 .5 meter.

Always install the fixture with an appropriate safety cable. When installing the fixture in a suspended environment always be to use mounting hardware no less than M10 x 25 mm, also be sure the hardware is insert in the pre-arranged screw holes in the base of the fixture.

When using the quick release “Omega” cam-lock system, be sure the four quick lock fasteners are locked in the quick lock holes correctly.

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

Do not permit operation by persons not qualified for operating this type of theatrical fixture, most damages are the result of operations by nonprofessionals.

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

## 5. LAMP INSTALLATION INSTRUCTIONS

### *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:**



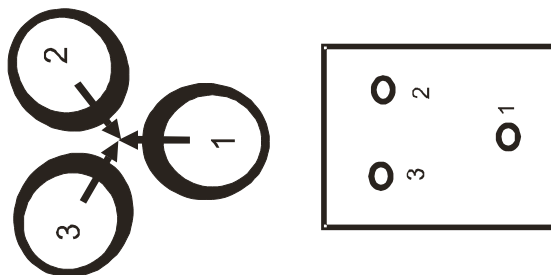
1. Remove the two thumbscrews labeled “A” and “B” on the rear housing of the head.
2. Gently pull the lamp/socket assembly to access the lamp.
3. Gently remove the old lamp by grasping it by the ceramic base.
4. Carefully insert the new lamp into the socket. Please remember there is only one way to insert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

## 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 **Focus Spot 250R™** 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:

1. Using either a DMX controller or the control panel on the unit, strike the lamp 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. 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 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 ("**1, 2, 3**") counterclockwise  $\frac{1}{2}$ -turn until the light is bright and evenly distributed.



### CAUTION!

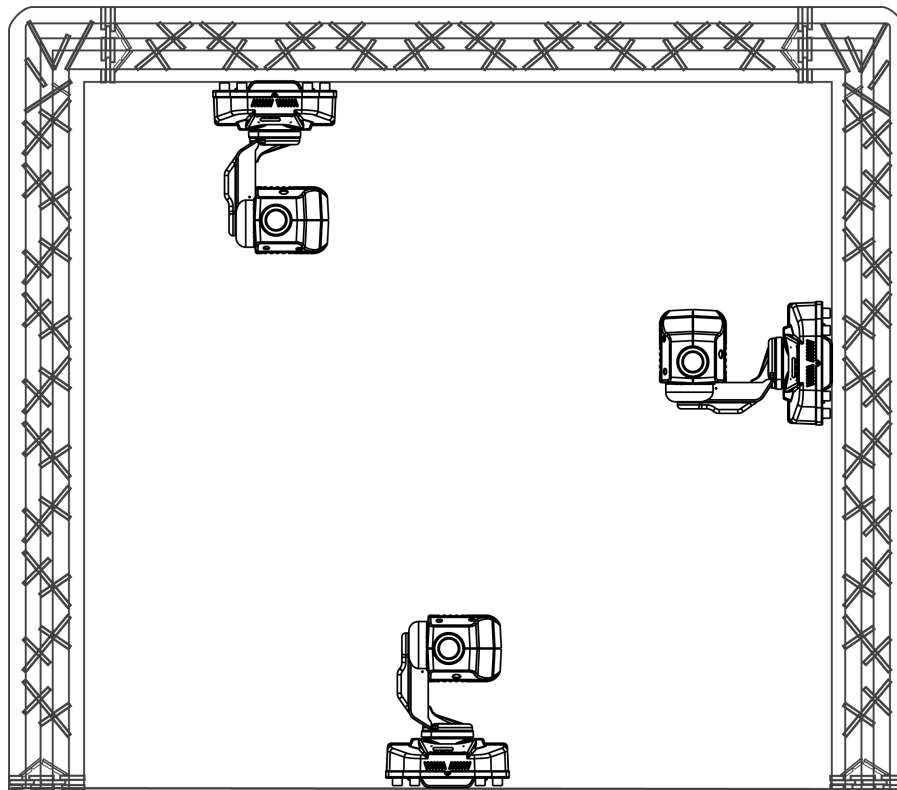
Do not operate this device with open cover

Please remember that a MSD-250/2 lamp is not a hot-restrike lamp therefore, you must wait approximately 15 minutes after having turned the lamp off before you can attempt to strike the lamp once again.

## 6. Mounting and Installation

### *Mounting*

The FOCUS SPOT 250R™ is fully operational in three different mounting positions, hanging upside-down from a ceiling, side mounted, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage in the event of a clamp failure (see section “**b**” on the next page).



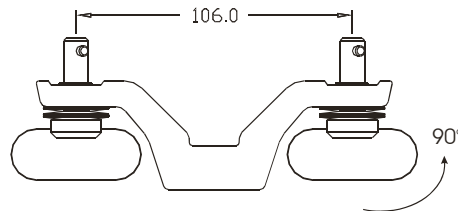
**Refer to regulations BGV C1 (formerly VBG 70 ) and DIN VDE0711-217 for proper installation in Europe  
To ensure proper installation, only qualified staff should attempt installation.**

### *Mounting points*

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

installation. Never use the carrying handles for secondary attachment.

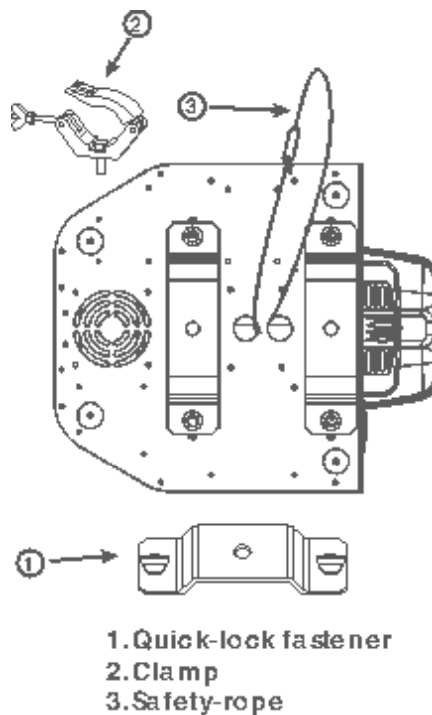
- a) **Cam lock System:** This system allows a quick and efficient means to secure a clamp to the unit. To secure a clamp to the unit, attach a clamp that is rated to handle the weight of the unit to your cam lock. After a clamp has been attached to the cam lock, attach the cam lock to the designated position on the bottom of your unit. Lock the cam lock into position by turning the wing nuts 90°.



- b) Be sure to always use two cam locks mounted to the bottom of unit to ensure safe truss mounting.

## Secure the FOCUS SPOT 250R™

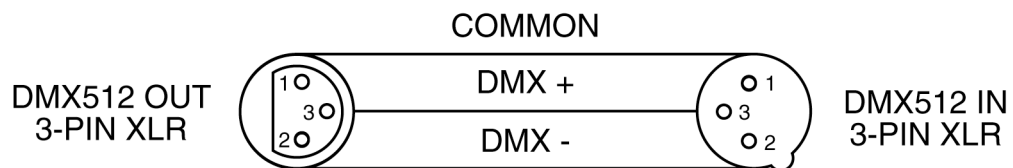
Regardless of the rigging option you choose for your **FOCUS SPOT 250R™** always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the underside of the fixture, be sure to use this point and never secure a safety cable to a carrying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



## 7. Understanding DMX

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

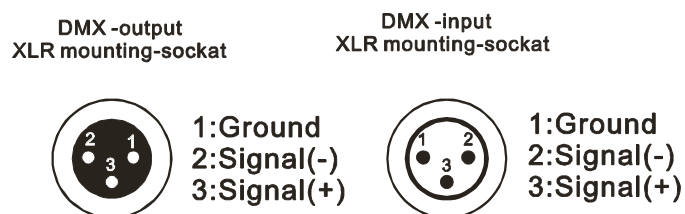
Your fixture and your DMX controller require a standard 3-pin XLR connector for data input and data output (see figure below). If you are constructing your own cables be sure to use two conductor shielded digital cable rated at a 120 ohms (this cable can be purchased at almost all professional sound and lighting stores). Your cables should be made with a male and female 3-pin XLR connector on either end of the cable.



*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.*

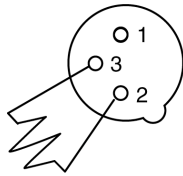
### **DMX-512 control connection**

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 (Please refer to the diagram below.). You can chain multiple moving heads together through serial linking. The cable needed should be two conductor, shielded cable with XLR input and output connectors. Always be sure 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™.

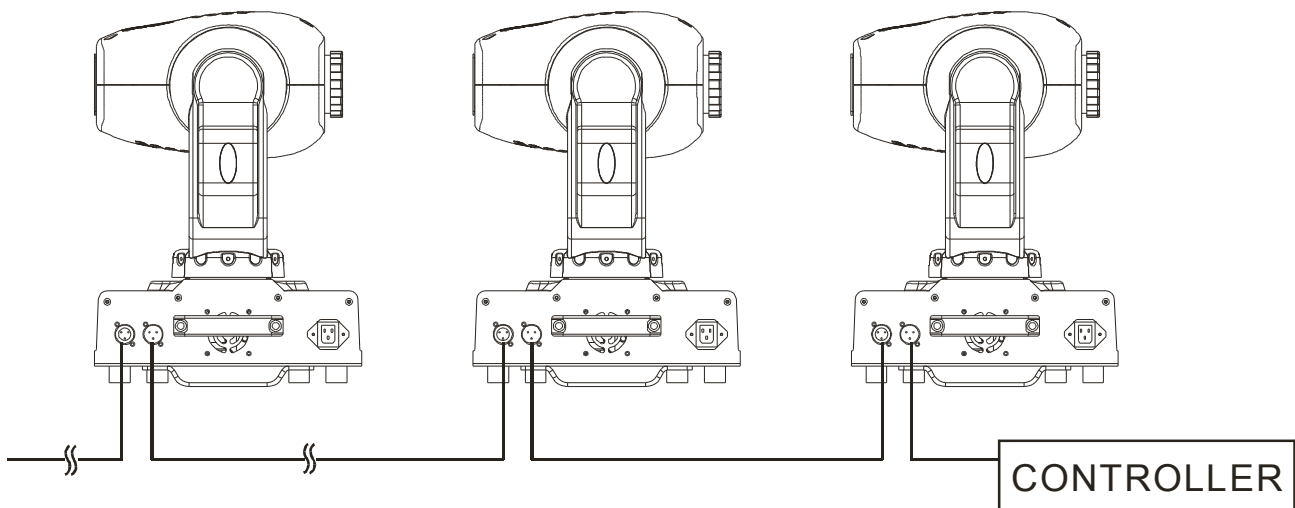


### **DMX-512 connection with DMX terminator**

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 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 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 following chart details a proper cable conversion.



<b>3-Pin XLR to 5-Pin XLR Conversion</b>		
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 address;***

All fixtures should be given a DMX starting address when using a DMX signal, 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 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. 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 unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of the Focus Spot 250R™, 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 Focus Spot 250R™ will automatically detect whether a DMX data signal is being received or not. If 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 XLR plug (cable with DMX signal from controller) is not connected or is not inserted completely into the DMX input jack.
- The DMX controller is switched off or defective.
- The DMX cable or connector is defective.

## 8. FIXTURE MENU

**On-Board System Menu:** The FOCUS SPOT 250R™ comes with an easy to navigate system menu. This next section will detail the functions of each command in the system menu.

**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 **Focus Spot 250R™**. 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.

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

### ***Default settings shaded.***

1	ADDR	A001~A511		Indicate the starting DMX address A001 also is the setting for slave
2	TEST	T-01~T-XX		Automatically test the function
3	PLAY	RUN	MSTR/ALON	Runs fixture as “master” or “alone” for auto
		AUDI	MSTR/ALON	Runs fixture as “master” or “alone” for audio
		AUTO	OFF/ RUN / <b>AUDI</b>	Runs fixture when no DMX signal is present
4	LAMP	<b>ON/OFF</b>		Manually switches lamp “on” and “off”

5	RESE	ALL		Reset all motors and returns fixture to home	
		SCAN		Reset only motors for pan/tilt	
		COLR		Reset only motors for colors	
		GOBO		Reset only motors for gobo and rotation	
		SHTR		Reset only motors for shutter and/or dimmer	
		OTHR		Reset other motors	
6	TIME	LIFE	0000~9999	Displays the total fixture running time	
		LAMP	0000~9999	Displays a lamps running time	
		CLMP		Clear lamp running time	
7	RPAN	ON/OFF		Reverses the pan movements	
8	RTLT	ON/OFF		Reverses the tilt movements	
9	FINE	ON/OFF		Switch between 16 bit/8 bit	
10	DEGR	630/540		Pan degree select	
11	MIC	M-XX M-70		Mic sensitivity	
12	DISP	VALU	D-XX D-00 (DXXX)	Display the DMX512 value of each channel	
		D ON	ON/OFF	Display turn off after 2mins	
		FLIP	ON/OFF	This function will reverse the display 180	
13	SPEC	LAAU	ON/OFF	Automatic lamp start with power	
		RDMX	ON/OFF	Change DMX address via external controller	
		DLOF	ON/OFF	Switch lamp via DMX	
		DLAY	D-XX D-05	Lamp on delay time	
		SPOT	ON/OFF	Lamp optimization	
		DFSE	ON/OFF	Resets all the fixture functions to default	
		FEED	ON/OFF	Pan/tilt feedback (error correction) on/off	
		VER	V1.0~V9.9	Software version	
14	EDIT	STEP	S-01 ~S-48	Set the amount of your program	
		SCXX	C-01	01 XX(00~FFH)	
			:	:	
			C-30	30 XX(00~FFH)	
			TIME	I XXX(001~999)	
			CEDT	ON/OFF	
		REC.	RE.XX		Auto Save
RUN	ON/OFF		Program test		

## Main Menu Functions

### 1. ADDRESS MENU -

*ADD 1 - 1511* (Value) - This is where you set the fixtures DMX address.

#### Setting/Changing the DMX Address

After applying power to the **FOCUS SPOT 250R™** 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 **FOCUS SPOT 250R™** and wait for the fixture reset process to finished.
2. Press the **Mode/Esc** button to access the main menu. Toggle through the menu by pressing the **Up** and **Down** buttons until the display shows *ADD 1*. 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 *PASS*.

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

### 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.

#### 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 11 channels, but only channels 1, 3, 5, 6, 8, and 9 can be tested.

4. Press MODE/ENTER or EXIT to exit.

### **3. PLAY MENU -**

*RUN* – This feature is used to run the internal preset programs as either a Master or Slave (ALON) unit.

*AUDI* - This feature is used to run the internal preset programs in AUDIO mode as either a Master or Slave (ALON) unit.

*AUTO* – Runs the unit without any DMX signal.

#### **PLAY MAIN MENU**

*RUN* beings automatic playback of the internal scenes -

1. Access the main menu.
2. Tap the UP button until “PLAY” is displayed, press ENTER.
3. Tap the UP button until “RUN” is displayed, press ENTER.
4. Tap the UP button to select either “Master” or “Alone” and press ENTER.
5. Press Mode/Esc to return to the main menu.

*AUDI* beings automatic playback of the internal scenes to sound -

1. Access the main menu.
2. Tap the UP button until “PLAY” is displayed, press ENTER.
3. Tap the UP button until “AUDI” is displayed, press ENTER.
4. Tap the UP button to select either “Master” or “Alone” and press ENTER.
5. Press Mode/Esc to return to the main menu.

*AUTO* beings automatic playback of the internal scenes without the use of a DMX controller -

1. Access the main menu.
2. Tap the UP button until “PLAY” is displayed, press ENTER.
3. Tap the UP button until “AUTO” is displayed, press ENTER.
4. Tap the UP button to select either “Master” or “Alone” and press ENTER.

5. Press Mode/Esc to return to the main menu.

#### **4. LAMP MENU -**

ON/OFF Manually switches the lamp on and off.

#### **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 ENTER.
3. The display will show “ON/OFF”.
4. Press the UP button to select “ON” to activate this function, or “OFF” to deactivate this function.
5. Press ENTER to confirm.
6. Press MODE/ESC to return to the main menu.

#### **5. RESE (RESET) MENU -**

*ALL* - Resets all the motors in the unit.

*SCAN* - Resets the Pan and Tilt motors.

*COLR* (Color) - Resets the color motors.

*GOBO* - Resets the gobo motors.

*SHTR* - Resets the shutter motors.

*OTHR* - Reset all other motors

#### **RESE MAIN MENU**



**ALL** - When you activate this reset function, the fixture will begin to reset all motors.

1. Access the main menu.
2. Tap the UP button until “RESE” is displayed, press ENTER.
3. Tap the UP button until “ALL” is displayed, press ENTER.
4. The display will show “ON/OFF”. Press the UP button to select “ON” to reset the color motor.
5. Press ENTER to confirm
6. Press MODE/ESC to return to the main menu.

**SCAN** - When you activate this reset function, the fixture will only reset the Pan and Tilt

mirror motor.

1. Access the main menu.
2. Tap the UP button until "RESE" is displayed, press ENTER.
3. Tap the UP button until "SCAN" is displayed, press ENTER to confirm.
4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the color motor. Press ENTER.
5. Press MODE/ESC 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 MODE/ESC 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.
2. Tap the UP button until "RESE" is displayed, press ENTER.
3. Tap the UP button until "SHTR" is displayed, press ENTER to confirm.
4. The display will show "ON/OFF." Press the UP button to select "ON" to restart the shutter/dimmer motor. Press ENTER to confirm.
5. Press MODE/ESC to return to the main menu.

**OTHR** - When you activate this reset function, the fixture will only reset any motor not specified in the other reset commands previously listed.

1. Access the main menu.
2. Tap the UP button until "RESE" is displayed, press ENTER.
3. Tap the UP button until "OTHR" is displayed, press ENTER to confirm.
4. The display will show "ON/OFF". Press the UP button to select "ON" to reset the color motor. Press ENTER.
5. Press MODE/ESC to return to the main menu.



## 6. TIME MENU -

**LIFE** - Displays the fixtures total running time.


**LAMP** - Displays the lamp running time.

**CLMP** - Clears the lamp running time.


### **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 ENTER.
3. Tap the UP button until "LIFE" is displayed, press ENTER.
4. Press MODE/ESC 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 ENTER.
3. Tap the UP button until "LAMP" is displayed, press ENTER.
4. Press MODE/ESC 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 ENTER.
3. Tap the UP button until "CLMP" is displayed, press 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 deactivate this function.
6. Press ENTER to confirm.
7. Press MODE/ESC to return to the main menu.

## 7. RPAN MENU -

This menu setting reverses the Pan movements.

### ***RPAN MENU -***

The image shows the text 'RPAN' displayed in a monospaced font within a rectangular border, representing the menu selection on the device's display.

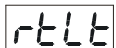
**RPAN** – This menu function will reverse the mirror PAN movements.

1. Access the main menu.
2. Tap the UP button until “RPAN” is displayed, press ENTER.
3. The display will show “ON/OFF”.
4. Press the UP button to select “ON” to activate this function, or “OFF” to deactivate this function.
5. Press ENTER to confirm.
6. Press MODE/ESC to return to the main menu.

### ***8. RTLT MENU -***

This menu setting reverses the Tilt movements.

### ***RTLT MENU -***

The image shows the text 'RTLT' displayed in a monospaced font within a rectangular border, representing the menu selection on the device's display.

**RTLT** – This menu function will reverse the mirror TILT movements.

1. Access the main menu.
2. Tap the UP button until “RTLT” is displayed, press ENTER.
3. The display will show “ON/OFF”.
4. Press the UP button to select “ON” to activate this function, or “OFF” to deactivate this function.
5. Press ENTER to confirm.
6. Press MODE/ESC to return to the main menu.

### ***9. FINE MENU -***

This menu item switches between 16 bit (fine) and 8 bit (coarse) modes. When this function is turned on the fixture will operate in 16 bit (fine) mode. When functioning in 16 bit mode the fixture will use 11 DMX channels, when the 16bit function is turned off the fixture will use nine DMX channels.

### ***FINE MENU -***

**FINE** – This menu function will toggle between the 16bit and 8bit operating modes. In

16bit mode the unit will have 11 DMX channels that includes two pan movement channels and two tilt movement channels. In 8bit mode the fixture will only have one pan and one tilt movement channel for a total of nine DMX channels.

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

### **10. DEGR MENU -**

This menu switches the "PAN" functions between 630° (default) and 540°. When this function is turned on, the fixture will operate with a pan movement of 630°.

**DEGR** – This menu function will toggle between the 630° and 540° for pan movement.

1. Access the main menu.
2. Tap the UP button until "DEGR" is displayed, press ENTER.
3. The display will show "630/540".
4. Press the UP button to select 630° or 540° for the pan movement angle
5. Press ENTER to confirm.
6. Press MODE/ESC to return to the main menu.

**11. MIC MENU** – This function allows for electronic control of the internal microphone's sound sensitivity.

### **MIC MENU -**

1. Access the main menu.
2. Tap the UP button until "MIC" is displayed and press ENTER.
3. The display will show "M-XX" (Where XX represents a value between 00 & 99).
4. Use the UP and DOWN button to adjust the mic sensitivity, 99 being the highest.
5. Press ENTER to confirm and lock your new setting in place.
6. Press MODE/ESC to return to the main menu.

**12. DISPLAY MENU -**

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

**DISP** (Display On) – Turns the digital display on or off.

**FLIP** - “Flips” the digital display 180 degrees.

**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 adjusted through the use of a DMX console.

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

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

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 “FLIP” 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 MODE/ESC to return to the main menu.

### **13. SPEC MENU –**

*LAAU* - Automatic lamp start with power.

*EBOC* - Allows DMX address to be changed via and external DMX controller.

*DLDF* - Switch lamp via DMX controller.

*DLRY* - Lamp delay on time.

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

*DFSE* (Default) - Resets the unit to default.

*FEED* – This function turn the DMX correction feature "ON" (default) or "OFF."

*VER* (Version) - Displays the software version.

### **SPEC MAIN MENU -**

**LAAU** – This function control the automatic lamp start feature. By default the unit will automatically ignite the lamp when unit is turned on. Use this function to turn this feature on and off.

1. Access the main menu.
2. Tap the UP button until "SPEC" is displayed, press ENTER.
3. Tap the UP button until "LAAU" is displayed, press 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 ENTER to confirm.
7. Press MODE/ESC to return to the main menu.

**RDMX** – This function allows the DMX address to remotely be adjusted from a DMX console.

#### **Fixture Settings:**

1. Access the main menu.
2. Tap the UP button until "SPEC" is displayed, press ENTER.

3. Tap the UP button until “RDMX” is displayed, press 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 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.**



**DLOF** – This feature allow you to control the lamp via DMX.

1. Access the main menu.
2. Tap the UP button until “SPEC” is displayed, press ENTER.
3. Tap the UP button until “DLOF” is displayed, press 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 ENTER to confirm.
7. Press MODE/ESC to return to the main menu.



**DLAY** – This function allow the user to set a lamp “strike” delay time.

1. Access the main menu.

2. Tap the UP button until “SPEC” is displayed, press ENTER.
3. Tap the UP button until “DLAY” is displayed, press ENTER.
4. The display will show “D-XX.”
5. Press the UP and DOWN buttons to adjust the delay time.
6. When completed press ENTER to confirm.
7. Press MODE/ESC to return to the main menu.

**SPOT** – This function allows you to optimize the lamp without the use of an external DMX controller. In this mode, the device will not react to any control signal.

1. Access the main menu.
2. Tap the UP button until “SPEC” is displayed, press ENTER.
3. Tap the UP button until “DFSE” is displayed, press 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 ENTER to confirm.
7. Press MODE/ESC 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 confirm this function, the fixture will begin to reload the original factory settings.***

1. Access the main menu.
2. Tap the UP button until “SPEC” is displayed, press ENTER.
3. Tap the UP button until “DFSE” is displayed, press 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 ENTER to confirm.
7. Press MODE/ESC to return to the main menu.

**FEED** - Use this function to activate the pan/tilt error correction.

1. Access the main menu.

2. Tap the UP button until “SPEC” is displayed, press ENTER.
3. Tap the UP button until “FEED” is displayed, press 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 ENTER to confirm.
7. Press MODE/ESC to return to the main menu.

**UeF** **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 ENTER.
3. Tap the UP button until “VER” is displayed, press 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 MODE/ESC 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.

**13. EDIT MENU** - This menu item allows you to write a program into the fixture’s memory (EEPROM) via the control panel or via an external DMX controller.

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

**STXX** (SC01 – SC48) - These are the scenes that are stored in your program. There are a total of 48 scenes. C-01 - C-11 (Channel 1 - Channel 11) – Represents the total fixture channels for each scene that can be edited.

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

**EDIT** - Edit program using a external controller.

**REC** – Auto save function.

**RUN** – Program test mode.

**Ed It** **EDIT MENU** -

**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 ENTER.
3. Tap the UP button until "RUN" is displayed, press 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.
6. Select a mode, and press ENTER to confirm.
7. Press MODE/ESC 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 indicates 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 the scene will "RUN" the first 5 scenes you saved in "Edit."
5. Press ENTER to save and MODE/ESC to exit.



**SC01** - This function allows you to choose the total number of scenes in your internal program.

1. Access the main menu.
2. Tap the UP button until "EDIT" is displayed, press ENTER.
3. Tap the UP button until "SC01" is displayed.
4. The display indicates "SC01," this stands for the first scene of your program. You may recall up to 48 scenes. For example, if you choose "SC05," and then select the "Run" function, the first 5 scenes you saved in "Edit" mode will run.
5. Press ENTER to save and MODE/ESC to exit.

**Editing procedure 1:** Using the control board only.

1. Access the main menu.

2. Tap the UP button until “EDIT” is displayed and press 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 ENTER. You can change the scene number by tapping the UP button.
4. Press ENTER, the display will show “C-01,” this represents the channel number. If “C-01” is displayed, you will be editing the fixture’s channel 1 value of the selected scene, press ENTER. You can change the channel number by tapping 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 tapping the UP button, until you get the expected effect for this channel.
7. Press 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 begin to flash “TIME,” this indicates the time needed to run this scene.
10. Press 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 tapping the UP button.
12. Press 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 MODE/ESC to exit and save your edited scene into the fixtures internal memory. The number of steps can be defined under “EDIT” and the scenes can be called up under “Run.” To run the scenes see page 30.

**Editing procedure 2:** Using an external controller.

1. Call up the first scene in your controller now.
2. Select “SC01” by pressing [UP] or [DN].

3. Press [MODE/ESC], the display shows "SC01".
4. Press [MODE/ESC], the display shows "C-01".
5. Select "**CEDT**" by pressing [UP] or [DN].
6. Press [MODE/ESC], the display shows "OFF".
7. Press [UP], the display shows "ON".
8. Press [MODE/ESC], the display shows "SC02". You successfully downloaded the first scene.
9. Adjust the Step-time as described above.
10. Call up the second scene in your controller now.
11. Repeat steps 5-11 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"

## 9. DMX Channel Traits:

The chart below details the channel layout for 11 DMX channels (default).  
*In 8bit mode the “Pan Fine” and “Tilt Fine” channels are not used, thus converting the fixture into a 9 channel DMX fixture.*

%	1 Pan High Resolution	2 Pan	3 Tilt High Resolution	4 Tilt	5 Color	6 Gobo	7 Gobo Rotation	8 Strobe	9 Focus	10 Speed	11 Auto Program
100%	16 bit pan move		16 bit tilt move							No function	Auto program by music
75%								PANDOM STROBE		Blackout by all wheel changing	Program 7
50%							Stop			Blackout by movement	Program 6
25%										Max	Program 5
0%										Min	Program 4
										Moving speed	Program 3
											Program 2
											Program 1
											Other motor reset
											Shutter&Dimmer motor reset
											Gobos motor reset
											Colors motor reset
											Scan motor reset
											All motor reset
											Lamp switch off
											Lamp on
											Color change to any position
											Color change normal

CHANNEL 1: Pan movement (max. 630°)

CHANNEL 2: 16 bit pan movement (pan fine)

CHANNEL 3: Tilt movement (max. 265°)

CHANNEL 4: 16 bit tilt movement (tilt fine)

CHANNEL 5: Select one of the 9 colors, color cycle or rainbow effect

CHANNEL 6: Select one of the 6 gobo's + open or gobo cycle+ gobo shake

CHANNEL 7: Select gobo rotation speed and direction + gobo index

CHANNEL 8: Strobe (0-10Hz), dimming and shutter close/open function + random strobe

CHANNEL 9: Electronic focus

CHANNEL 10: Speed pan/tilt movement, blackout selection

CHANNEL 11: Auto program control + lamp on, motor reset, lamp switch off

**DMX channel function and values:****Channel 1 – PAN Coarse 8bit :****Channel 2 – PAN Fine 16bit****Channel 3 – TILT Coarse 8bit****Channel 4 – TILT Fine 16bit****Channel 5 - Color Wheel :**

0-13	Open (White)
14-27	RED
28-41	BLUE
42-55	GREEN
56-69	YELLOW
70-83	MAGENTA
84-97	ORANGE
98-111	PURPLE
112-128	PINK
128-187	Clockwise Color Scroll (fast to slow)
188-193	No Rotation
194-255	Counter-Clockwise Color Scroll (slow to fast)

**Channel 6 - Gobo**

0-9	Open
10-19	Gobo 1
20-29	Gobo 2
30-39	Gobo 3
40-49	Gobo 4
50-59	Gobo 5
60-69	Gobo 6
70-89	Gobo 1 Shake (slow to fast)
90-109	Gobo 2 Shake (slow to fast)
110-129	Gobo 3 Shake (slow to fast)
130-149	Gobo 4 Shake (slow to fast)
150-169	Gobo 5 Shake (slow to fast)
170-189	Gobo 6 Shake (slow to fast)
190-255	Gobo Wheel Continuous Rotation (slow to fast)

**Channel 7 - Gobo indexing, Gobo rotation**

0-127	Gobo Indexing
128-187	Clockwise Gobo Rotation (fast to slow)
188-193	No rotation
194-255	Counter-Clockwise Gobo Rotation (slow to fast)

**Channel 8 - Shutter, Strobe:**

0-31	Shutter Closed
32-63	Dimmer (close to 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 9 - Focus**

0-255	Continuous adjustment from near to far
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**Channel 10 – Pan/Tilt Motor Speed**

0-4	Max speed
5-225	Max to min speed
226-235	Blackout by movement
236-245	Blackout by all wheel changing
246-255	No function

**Channel 11 – Special Functions**

0-19	Color change normal – No split colors
20-39	Split Color Operation
40-59	Lamp on
60-79	Lamp switch off
80-84	Total reset – All motors to the home position
85-87	Pan and Tilt motors reset only
88-90	Color wheel motor reset only
91-93	Gobo wheel motor reset only
94-96	Shutter and dimmer motors reset only
97-99	All other motors reset only (Focus)
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	Internal program 8

## 10. ERROR CODES:

When power is applied, the unit will automatically enter a “reset/test” mode. This mode brings all the internal motors to a home position. If there is an internal problem with one or more of the motors an error code will flash in the display in the form of “XXEr” where as XX will represent a function number. For example, when the display shows “02Er,” it means there is some type of error with the channel 2 motor. If there are multiple errors during the start-up process they will all flash in the display. For example: if the fixtures has errors on channel 1, channel 2, and channel 5 all at the same time, you will see the error message “01Er”, “02Er,” and ”05Er” flash repeated 5 times.

If an error does occur during the initial start-up procedure the fixture will self-generate a second reset signal and try to realign all the motors and correct the errors, if the error persists after a second attempt a third attempt will be made.

If after a third attempt all the errors have not been corrected the fixture will make the following determinations: 1) 3 or more errors - The fixture cannot function properly with three or more errors therefore the fixture will place itself in a stand-by mode until subsequent repairs can be made. 2) Less than 3 errors - The fixture has less than 3 errors, therefore most other functions will work properly. The fixture will attempt to operate normally until the errors can be corrected by a technician. The errors in question will remain flashing in the display as a reminder of internal errors.

### **01Er** – PAN movement error:

The yoke is not located in the default position after start-up or after a reset command.

This message will appear after a fixture reset if the pan-yoke’s magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or a defective motor IC drive on the main PCB).

### **03Er** – TILT movement error:

The head is not located in the default tilt position after start-up or after a reset command.

This message will appear after a fixture reset if the tilt magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or a defective motor IC drive on the main PCB).

**05Er - Color-wheel error:**

The color wheel is not located in the default position after start-up or after a reset command.

This message will appear after a fixture reset if the color wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or a defective motor IC drive on the main PCB).

**06Er - Rotating gobo-wheel error:**

The gobo-wheel is not located in the default position after start-up or after a reset command.

This message will appear after a fixture reset if the gobo wheel's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or a defective motor IC drive on the main PCB).

**07Er - Rotating gobo indexing error:**

The gobo is not located in the default position after start-up or after a reset command.

This message will appear after a fixture reset if the gobo positioning magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or there is a stepper motor failure (defective motor or a defective motor IC drive on the main PCB).



## 11. CLEANING AND MAINTENANCE

The following points have to be considered during the inspection:

1. 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.*



### CAUTION!

Disconnect from mains before starting maintenance operation.

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 with the exception of the lamp. 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.

## 12. 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.

## 13. TECHNICAL SPECIFICATIONS

**Power supply (user selectable):**

\_98VAC,50Hz;\_120VAC,50Hz;\_208VAC,50Hz;  
\_220VAC,50Hz;\_230VAC,50Hz;\_240VAC,50Hz; **or**  
\_98VAC, 60Hz;\_120VAC,60Hz;\_208VAC,60Hz;  
\_220VAC,60Hz;\_230VAC,60Hz;\_240VAC,60Hz;

**Power consumption:** max. 400W:

**Lamp:** MSD250 GY9.5 socket, Metal Halide (250w, 8500°K, 3000hrs)

**Fuse:** GMA 250v/8A

**Motors:** 7 micro motors

**Pan Movement:** 630° in 3.5 sec. (default) 540° (user selectable)

**Tilt Movement:** 265° in 2.0 sec.

**Focus:** Motor driven focus from near to far

**DMX Drive:** Standard DMX-512, 3 pole XLR; [+] = Pin 3 [-] = Pin 2 [Ground] = Pin 1.

**Colors:** 8 Dichroic colors plus white. (Size: 34mm diameter/1mm width)

**Gobos:** 6 indexable, interchangeable plus open. (Size: 27mm diameter/24mm viewable/1mm width)

**DMX Channels:** 11 (16bit ~ default) / 9 (8bit)

**Beam angle:** 18°

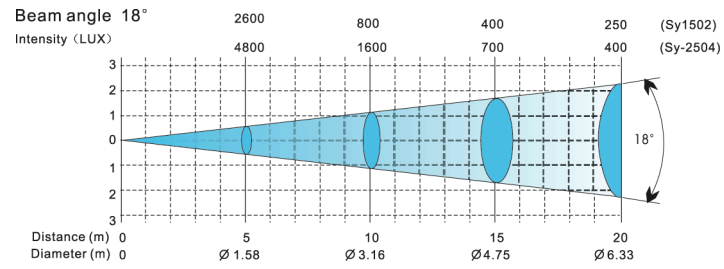
**Packing dimensions:** (58 x 42 x 46) cm

**Net weight:** 16 KGS

**Gross weight:** 19 KGS

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

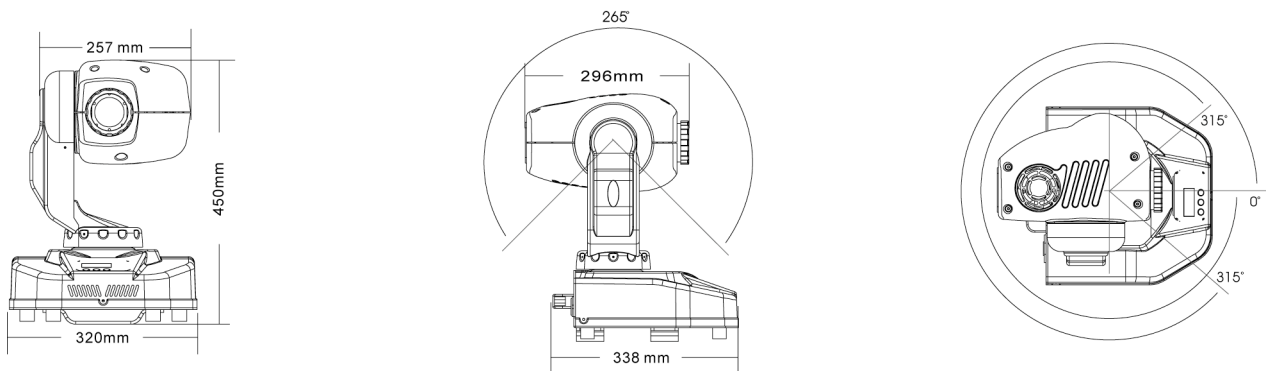
**Photometric Data:**

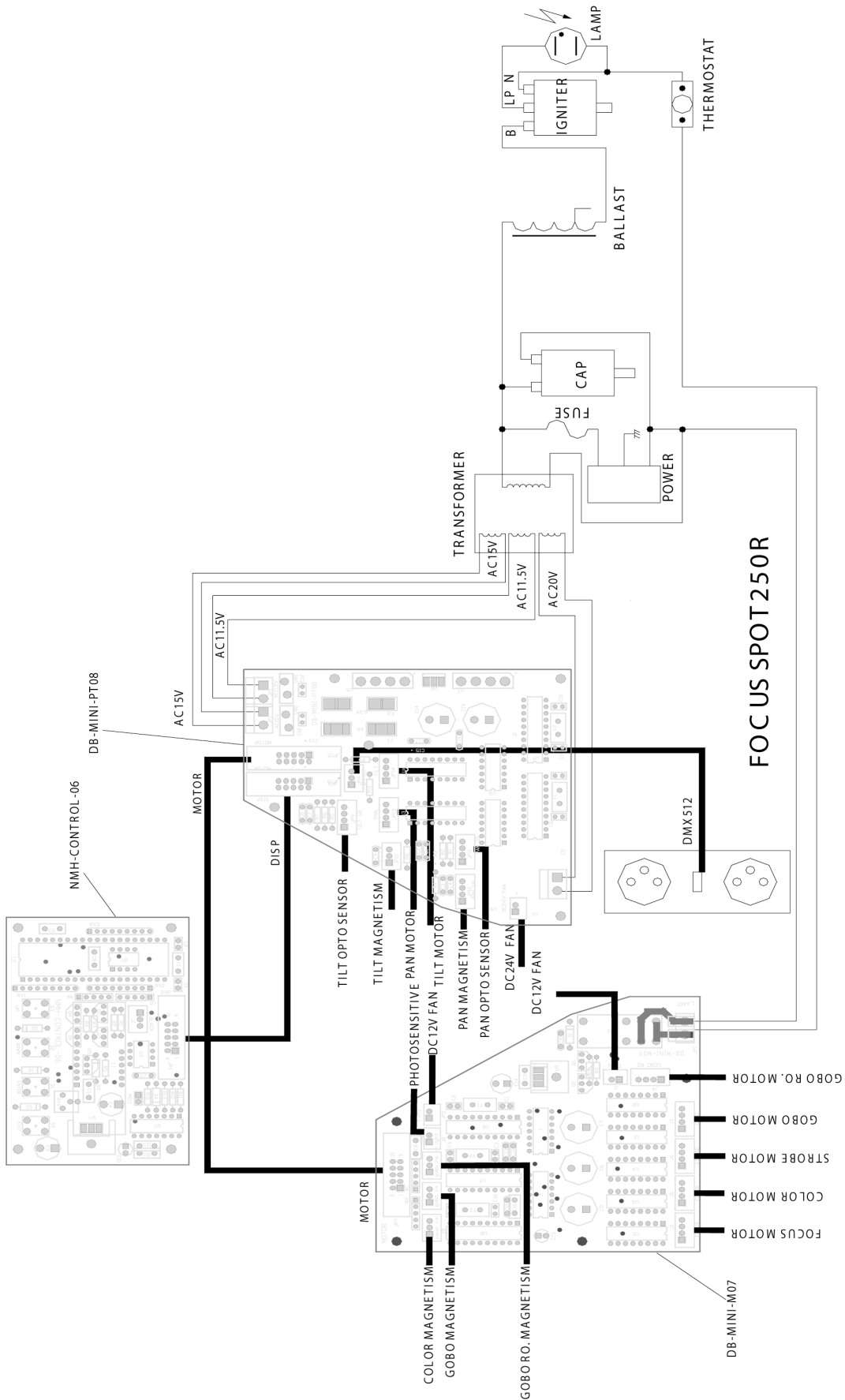


**Gobos:**



**Dimensional Drawings:**







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4295 Charter Street  
Los Angeles, CA. 90058  
323-582-3322 / 323-582-3108 fax  
[www.ElationLighting.com](http://www.ElationLighting.com) /  
[info@ElationLighting.com](mailto:info@ElationLighting.com)