

User Manual for: Professional DJ Multi Pattern Laser & LED Stage Effect Light With DMX

MODEL: LGMEGAx



#### WARNING!

# CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER ON THIS SPEAKER. THERE ARE NO USER-SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO A QUALIFIED TECHNICIAN



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of "dangerous" voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans. Users should exhibit extra safety when this symbol appears in this instruction manual and follow all precautions as they are stated.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this manual.

1- Read these instructions thoroughly before using this item.

2- Keep these instructions for future reference.

3- Heed all warnings.

4- Follow all instructions.

5- WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture. Do not store or operate this product near any liquids.

6- Clean only with a dry cloth.

7- Do not store or operate this product near any heat sources such as radiators, heat registers, stoves, or other apparatuses (including amplifiers) that produce heat.

8- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a round grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician for the replacement of the obsolete outlet.

9- Protect the all wires connected to this unit from being walked on or pinched, particularly plugs and the point where they exit from the unit. When removing the cord from the power outlet, remove it by holding the plug not by pulling the cord.

10- Unplug the unit during lightning storms or when unused for long periods of time.

11- When wiring this unit and all other equipment used in connection to this unit make sure that all of your equipment is turned OFF.

12- This product is intended for indoor use only! To prevent risk of fire or shock, do not expose fixture to rain or moisture.

13- Make sure the distance between the fixture and the lighted object is not less than 0.5 meters. Make sure there are no combustible or explosive objects 0.5 meters around the fixture. Be sure that no ventilation slots are blocked.

14- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse source.

15- Secure fixture to fastening device using a safety chain.

16- Maximum ambient temperature (Ta) is 104° F (40° C). Do not operate fixture at temperatures higher than this.

17- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact Technical Pro for the nearest authorized technical assistance center.

18- Never connect the device to a dimmer pack.

19- Make sure the power cord is never crimped or damaged.

20- Never disconnect the power cord by pulling or tugging on the cord.

21- Never carry the fixture directly from the cord. Always use the hanging/mounting bracket.

22- Avoid direct eye exposure to the light source while it is on.

23- Once installation and wiring is complete power on all your equipment with the volume and level controls turned DOWN. Once all the equipment is ON slowly raise the volume or level controls to their proper positions.

24- When grounding this unit, be sure to do so correctly, so as not to defeat the built-in grounding in this unit.

25- Before placing, installing, rigging, or suspending any product, inspect all hardware, suspension, cabinets, transducers, brackets and associated equipment for damage. Any missing, corroded, deformed, or non-load rated component could significantly reduce the strength of the installation, placement or array. Any such condition severely reduces the safety of the installation and should be immediately corrected. Use only hardware which is rated for the loading conditions of the installation and any possible short-term, unexpected overloading. Never exceed the rating of the hardware or equipment.

26- Consult a licensed, Professional Engineer regarding physical equipment installation. Ensure that all local, state and national regulations regarding the safety and operation of equipment are understood and adhered to.

27- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

#### Introduction

Congratulations and thank you for your purchase of this Technical Pro LED stage effect light. To get the most from your unit it is recommended that you review all of the information provided in this instruction manual before operating this equipment.



# **Unpacking Instructions**

Thanks for chasing our laser fixture, believe this brand new product will bring you unlimited marvel and happiness. Before operating this device, please read this manual thoroughly, and retain if for future reference.

## Warning:

If the external flexible cable or cord of this luminaire is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or his service agent.

Shields, lenses or ultraviolet screens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches.

The lamps shall be changed if it has become damaged or thermally deformed.

As receiving a fixture, carefully unpack the carton, checking contents to ensure that all parts are in good condition. Informing the shipper immediately and retaining packing material for inspection if any parts damaged from shipping or device damaged, keep packing materials as evidence for shipper's confirmation.

# **Attention!**

This unit is perfect condition before delivery, please check all accessories when unpacking the unit, you should follow this user manual to operate this unit, and make sure that you are clear on all laser safety information and unit operation before power it on. Any wrong operation will make this unit out of warranty.

Carefully move after receiving it, checking whether there is any damage from shipping, and all the accessories in it.

LGMEGAx: 1pc Power Cord:1pc Keys: 2pcs Interlock Switch: 1pc User's Manual: 1pc Warranty Card: 1pc



### Warning:

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

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Carefully move after receiving it, checking whether there is any damage from shipping, and all the accessories in it.

### **Safety Instructions:**

To protect the environment, please try to recycle the packing material as much as possible.

The fixture is for indoor use only, IP20, use only dn dry locations, keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other fluids, or metallic objects.

Don't show this product away just as general trash, please deal with the product follow the abandon electronic product regulation in your country.

Locate the fixture in a well ventilate spot, away from any flammable materials and/or liquids, the fixture must be fixed at least 20cm from surrounding walls.

• To avoid condensation to be formed inside, allow this unit to adapt to the surrounding temperatures when bringing it into a warm room after transport.

- Condense sometimes prevents the unit from working at full performance or may even cause damages,
- Don't install it on flammable object.
- Don't use it when maximum ambient temperature is higher than 40 degree.
- Unplug the unit when it is not used for a longer time or before replacing the bulb.
- Don't open the top cover to avoid unit damage.
- Please use the original packing when the device is to be transported.
- Never expose the lens to direct sunlight, even for a short period, this may damage the light effect or even cause fire!



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- According to EN60825-1:2007, this product belongs to CLASS 3B, direct eye contact may cause injury.
  - This product is for laser show only. The class 3B laser light should be operated by professional operator only.

• This is so-called show laser, emitting radiation with a wavelength spectrum between 400 and 700nm and producing lighting effects for shows.

• International laser safety regulations require that the vertical height from installment to ground is more than 3 meters, horizontal distance is 2.5 meters from audience.

• Never direct the laser beam to people or animals and never leave this device running unattended.

• The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.

Warning: Avoid direct eye contact with laser beams during operations, especially when the laser beams stay still, or injury to eyes may occur.

Laser safety protection

Caution: The laser security measures are designed according to the specific terms of the relevant international laser safety standards and has the following laser safety protection means.

Laser key switch: Laser is available only when the key is turned on.

Laser Emergency Switch: Remote connecting switch, it will cut off ther laser light path emergently once the device in potential hazard.

Laser safety label: the labels of according with European standard are sticked on the device only.



### **Overhead Rigging**

Attention: the installation must be carried out by qualified service personal only. Improper installation can result in serious injuries and/ or damage to property. Overhead rigging require extensive experience! Working load limits should be respected, certified installation materials should be used, the installed device should be inspected regularly for safety. Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing. Locate the fixture in a well-ventilated spot, far away from any flammable materials and/or liquids, the fixture must be fixed at least 50cm from surrounding walls.

The device should be installed out of reach of people and outside areas where persons may walk by or be seated.

The device should be well fixed, a free swinging mounting is dangerous and may not be considered!

Do not cover any ventilation opening as this may result in overheating.

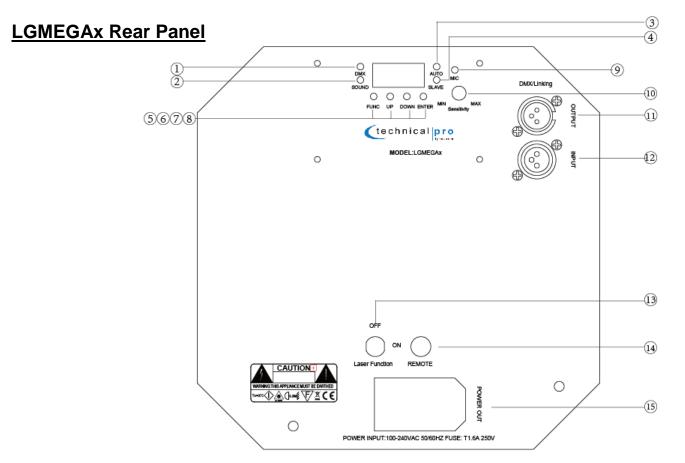
Before the first time use, it must be inspected by professional staff to make user safety, inspection regularly every year.

Never expose the lens to direct sunlight, even for a short period, this may damage the light effect or even cause fire!

#### AC Power:

Please use the attached power, not that power voltage and frequency are the same as the marked voltage and frequency of device when connecting power, every device's power should be connected separately, so that device can be controlled individually.





1. DMX Mode Indicator: The LED will turn red to indicate that the unit is connected to a DMX controller 2. Sound-Activated Mode Indicator: In sound-activated mode, the LED will turn green indicate that the unit is

operating in sound activated mode

3. AUTO Mode Indicator: In Auto mode, the LED will turn blue to indicate the unit is operating in Auto mode

4. Slave Mode indicator: In slave mode, orange indicate light on

5. Function: Press this button to change the function

6. UP Button: press this button to increase the number on the display screen. Press and hold down this button to rapidly increase the number.

7. DOWN Button: Press this button to decrease the number on the display screen. Press and hold down this button to rapidly decrease the number.

8. Enter Button: Press this button to save your settings to memory.

9. Microphone: This built-in microphone will pickup any sounds when the unit is being operated in

sound-activated mode. The fixture will illuminate changes according to the sound.

10. Sensitivity Knob: Use this knob to adjust the sensitivity of the lights when the fixture is operating in sound-activated mode.

11. DMX Output (XLR): DMX (Digital Multiplex) is the form of communication between controller and fixtures. When linking multiple LGMEGAx units simply connect the DMX Output to the DMX Input on the next unit.

12. DMX Input (XLR): DMX (Digital Multiplex) is the form of communication between a DMX controller and the fixtures. Connect the DMX output from the controller to this input. When linking multiple LGMEGAx fixtures connect the DMX Output to the DMX Input on the next unit.

13. Laser Function: This is the safety lock for laser

14. Remote: This is the interlock for remote to control the power off

15. Power Input: Connect the power cable to this input to power the unit on. When linking multiple units connect the power output to the power input on the next unit.

16. Power Output: When linking multiple units connect the power output to the power input on the next unit.



# AC Power:

This fixture runs on 110~220 VAC, 50/60 Hz. Before powering on the unit, make sure the line voltage to which you are connecting it is within the range of accepted voltages.



Always connect the fixture to a switched circuit. Never connect the fixture to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used only as a 0 to 100% switch.

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating indicates its average current draw under normal conditions.



Always connect the fixture to a circuit with a suitable electrical ground.

To connect the power cord to the LGMEGAx plug the female side of the power cord into the power cord input which is on the rear of the unit. Then plug the male side of the power cord to an electric outlet. When linking LGMEGAx units to each other connect the power output on the first unit to power input on the next unit.

The AC power cords supplied purposefully have 2 blades and one grounding prong. If your outlet is not equipped to handle this type of plug, do not attempt to forcefully plug this AC power cord into the outlet, and do not alter the plug so that it can fit in the outlet. The only course of action you can take is to find another outlet which is properly equipped to handle a grounded plug or have an electrician upgrade your electrical outlet. Be sure that the plug is well connected so that it does not disconnect in the middle of usage. If at any point in time the supplied AC power cord is punctured or damaged replace it with a new power cord from a local electrician.

### AC Power Linking:

This fixture comes equipped with an AC Input (10) and AC Output (11) allowing you to link multiple fixtures together. <u>The maximum quantity of fixtures that may be linked is 30.</u>

### Fixture Linking via XLR Input / Output:

You will need a serial data link to run light shows of one or more fixtures using a DMX controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard, no more than 32 fixtures should be connected on one data link. Connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended serial data link distance: 500 m (1640 ft) Maximum recommended number of fixtures on a serial data link: 32

DMX IN		
		PIN3



# What is DMX:

There are 512 channels in a DMX connection. Channels may be assigned in any manner. A fixture capable of receiving DMX will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same. DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+).

### Maintaining the Fixture:

To maintain optimum performance and minimize wear, fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint. The cleaning of external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates. Damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Clean the external optics at least every 20 days. Clean the fixture at least every 30/60 days. Always dry the parts carefully after cleaning them. Never spin a fan using compressed air.



# LED Screen Display Operate modes:

#### d001: DMX512 Mode

#### Aut0: Laser+RGWBA+8White LED on Mode:

Press the menu button until Autx(x stand for 0,1,2...6),Press "up" or "down" to get Aut0, Press enter to get Sxxx(xxx stand for 000~100), press "up" or "down" to increase or decrease the number to control the motor rotate speed, re-press the enter to confirm the current mode.

#### Aut1: Laser+RGBWA LED on Mode:

Press the menu button until Autx(x stand for 0,1,2...6),Press "up" or "down" to get Aut1, Press enter to get Sxxx(xxx stand for 000~100), press "up" or "down" to increase or decrease the number to control the motor rotate speed, re-press the enter to confirm the current mode.

#### Aut2: Laser+8White LED on Mode:

Press the menu button until Autx(x stand for 0,1,2...6),Press "up" or "down" to get Aut2, Press enter to get Sxxx(xxx stand for 000~100), press "up" or "down" to increase or decrease the number to control the motor rotate speed, re-press the enter to confirm the current mode.

#### Aut3: RGBWA+8White LED on Mode:

Press the menu button until Autx(x stand for 0,1,2...6),Press "up" or "down" to get Aut3, Press enter to get Sxxx(xxx stand for 000~100), press "up" or "down" to increase or decrease the number to control the motor rotate speed, re-press the enter to confirm the current mode.

#### Aut4: RGBWA LED on Mode:

Press the menu button until Autx(x stand for 0,1,2...6),Press "up" or "down" to get Aut4, Press enter to get Sxxx(xxx stand for 000~100), press "up" or "down" to increase or decrease the number to control the motor rotate speed, re-press the enter to confirm the current mode.

#### Aut5: Laser on Mode:

Press the menu button until Autx(x stand for 0,1,2...6),Press "up" or "down" to get Aut5, Press enter to get Sxxx(xxx stand for 000~100), press "up" or "down" to increase or decrease the number to control the motor rotate speed, re-press the enter to confirm the current mode.

#### Aut6: 8white LED on Mode:

Press the menu button until Autx(x stand for 0,1,2...6),Press "up" or "down" to get Aut6, Press enter to get Sxxx(xxx stand for 000~100), press "up" or "down" to increase or decrease the number to control the motor rotate speed, re-press the enter to confirm the current mode.

#### Sou0: Laser+RGBWA+8/W Mode:

Press the Func button until Soux(x stand for0,1...6), press "up"or "down" to get Sou0, then press enter to confirm the current mode.



#### Sou1: Laser+RGBWA on Mode:

Press the Func button until Soux(x stand for0,1...6), press "up"or "down" to get Sou1, then press enter to confirm the current mode.

#### Sou2:laser+8white LED on Mode:

Press the Func button until Soux(x stand for0,1...6), press "up"or "down" to get Sou1, then press enter to confirm the current mode.

Sou3: RGBWA+8White LED on Mode:

Press the Func button until Soux(x stand for0,1...6), press "up"or "down" to get Sou1, then press enter to confirm the current mode.

#### Sou4:RGBWA Mode:

Press the Func button until Soux(x stand for0,1...6), press "up"or "down" to get Sou1, then press enter to confirm the current mode.

Sou5:laser show Mode:

Press the Func button until Soux(x stand for0,1...6), press "up"or "down" to get Sou1, then press enter to confirm the current mode.

Sou6: 8white LED on Mode:

Press the Func button until Soux(x stand for0,1...6), press "up"or "down" to get Sou1, then press enter to confirm the current mode.



# **LED Screen Display**

- FUNC Mode Option, to chose the operating mode.
- (ENTER) Confirmation, to confirm the laser to show the present mode at the current operation.



UP/DOWN, to change operating mode, parameter or DMX address.

Mode	Display	Effect	Operation	Instruction
Auto	Aut0	laser+RGBWA+8/W	<ol> <li>Press Func to get Autx,</li> <li>press Enter to get</li> <li>Sxxx(001-100) to adjust</li> <li>the speed.</li> <li>Press Enter to confirm</li> <li>the current mode.</li> </ol>	RutO
	Aut1	laser+RGBWA		Rut (
	Aut2	laser+8/W		Rut2
	Aut3	RGBWA+8/W		Rut3
	Aut4	RGBWA		Ruty
	Aut5	laser		Ruts
	Aut6	8/W		Rutb
Soud	Sou0	Laser+RGBWA+8/W		5000
	Sou1	laser+RGBWA		5001
	Sou2	laser+8/W		5002
	Sou3	RGBWA+8/W		5003
	Sou4	RGBWA		5004
	Sou5	laser show		5005
	Sou6	8/W		5006
Slave	Master-Slave	mode		SLR
DMX	DMX512 Mod	de		d00 i d506



# 8Channel Mode (DMX):

When use the LGMEGAx together with a DMX controller, set the DIP 10+1 are on, then use the DMX controller to adjust the settings of CH1, CH2, CH3, CH4, CH5 and CH6,7,8 to show different effect.

# DMX 512 Function:

Channel	Value	Function	
	000-009	Blackout	
	010-024	Aut0	
	025-039	Aut1	
	040-054	Aut2	
	055-069	Aut3	
	070-084	Aut4	
CH1	085-099	Aut5	
(Auto and DMX Switch)	100-114	Aut6	
	115-129	Sou0	
	130-144	Sou1	
	145-159	Sou2	
	160-174	Sou3	
	175-189	Sou4	
	190-204	Sou5	
	205-219	Sou6	
	220-255	DMX mode(work with CH2,3,4,5,6,7,8)	
	000-009	Blackout	
	010-014	Red	
	015-019	Green	
	020-024	Blue	
	025-029	amber	
	030-034	white	
	035-039	White+red 15	
	040-044	Red+green 12	
CH2	045-049	Green+blue 23	
(All Auto modes)	050-054	Blue+amber34	
(All Auto modes)	055-059	Amber+white 45	
	060-064	White+green 25	
	065-069	Green+amber 24	
	070-074	Amber+red 14	
	075-079	Red+blue	
	080-084	Blue+white	
	085-089	Red+green+blue 123	
	090-094	Red+green+amber 124	
	095-099	Red+green+white 125	



100 104	Ded omber thus 124	
	Red+amber+blue 134 Red+white+blue 135	
	Red+amber+white 145	
	Amber+green+blue 234	
	Blue+green+white 235	
	Amber+green+white 245	
	Amber+white+blue 345	
	Red+green+blue+amber 1234	
	Red+white+blue+amber1345	
	Red+green+white+amber 1245	
	Red+green+blue+white 1235	
155-159	White+green+blue+amber2345	
160-164	Red+green+blue+amber+white	
165-209	Automatic(single color only)	
210-255	Automatic(two colors at a time)	
	Automatic speed(when CH2 is between 160-255)	
000-255	Slow-fast(only colors)	
000-004	No function	
005-254	Strobe(slow-fast)(work with CH1,CH2))	
255	Sound-activated strobe mode	
000-009	blackout	
010-019	Picture1(slow-fast)	
020-029	Picture2(slow-fast)	
030-039	Picture3(slow-fast)	
040-049	Picture4(slow-fast)	
050-059	Picture5(slow-fast)	
060-069	Picture6(slow-fast)	
	Picture7(slow-fast)	
	Picture8(slow-fast)	
	Picture9(slow-fast)	
	Picture10(slow-fast)	
	8white LED on	
	Black out	
	Red on	
	Green on	
	Red on	
	Green & Red on	
	No function	
	Strobe(fast-slow)(work with CH6)	
	Sound-activated strobe mode	
	stop	
005-127	Rotate counter-clockwise(slow-fast)(Work with CH2)	
	stop	
128-133		
	165-209           210-255           000-255           000-004           005-254           255           000-009           010-019           020-029           030-039           040-049           050-059           060-069           070-079           080-089           090-099           100-109           110-255           000-009           010-049           050-089           090-109           110-255           000           001-254           255           0000           001-254           255           000-004	



# **Technical Parameter:**

Dimension	10"X9"X10"
Power	AC in/out
Rang	100-240V 50/60HZ
rate	66W
Fuse	1.6A
Туре	Class 3B laser diodes/LED chip
Quantity/color	1/red 1/green
Laser power rate	100mw 50mw
Wave length	650nm 532nm
Quantity/color	1/red, 1/green, 1/blue, 1/orange, 1/white, 8/white
LED power rate	3W 3W 3W 3W 3W 1W
Max temperature	104°F(40°C)
Cool system	Fan
Auto	6 modes
Sound	6 modes
DMX channel	8CH

### Master / Slave Settings

When two or more fixtures are connected via DMX connectors the fixtures can be programmed to allow one fixture (master) to control the other fixtures (slave). In this setup making a change to the master fixture would change all the slave fixtures as well.

Set the master fixture to the desired setting. Then set ALL of the slave fixtures to d001.

Note: When using the master / slave setup only ONE unit can act as the master. ALL other fixtures must be set to d001. When using the master / slave setup the fixtures can't be connected to a DMX controller as it would interfere with the master / slave settings.