

# **USER MANUAL**

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## Check that the unit has not been damaged during transport



## Read all cautions and warnings prior to operation of this equipment

#### **Protection Against Fire**



Fire

- 1. Maintain a minimum of 1 foot distance from any type of flame.
- 3. Replace fuse only with the specified type and rating.
- 4. Do Not install the unit to close to a heat source.
- 5. Make sure cable are properly secured away from unit movement.
- 6. Maximum surface operating temperature 104°.

#### Protection Against Electrical Damage



Electrical

- 1. Disconnect power before lamp replacement or servicing.
- 2. For connection to main power supply proceed to page 6.
- 3. This unit must be earthed. (electronically grounded)
- 4. Do not expose unit to rain or moisture.
- 5. Unit must not be left on for a long period of time.

#### Protection Against Mechanical Hazards



- 1. Use safety chain when hanging unit.
- 2. Use quality clamps or bolts when positioning unit
- 3. Do not open unit risk of electrical shock.

## **Specifications**

#### **Part Numbers**

Fixture Lamp Flight Case

1220 - MB1 80W LED CAS-1210-4 Quad Road Case

## **Mechanical Specifications**

Pan: 540° 8/16 Bit Tilt: 270° 8/16 Bit

DMX Connectors: 3 and 5-pin XLR connectors

Power Connectors: Power Con Type

Thermal: Maximum ambient temperature 110° F

Maximum surface temperature 140° F

Fastening System: 2 Quick Release Bi Directional Clamp Mounts

Fixture	Packaged for Shipping
Size: 11.88" x 9" x 18.5"	Size:14.5" x 12.5" x 23"
Weight: 24.lb	Weight: 26 lb



## **Electrical Specifications**

Power supply: Auto Switch100V-240V 50/60 HZ

Power consumption: Watts: 210W

Amps: 2.94

Ballast:ElectronicLED Type:80W LEDDisplay:LCD Display

## **Electromechanical Effects**

**Shutter:** Electronic Shutter strobe 18 flash per second

Angle: .85°

Prism: 8 Facet Circular Prism

Prism 2: 6 Facet Linier Prism

Multi Color: 6 Color Multi Color Effect

Frost: Soft Frost Effect

Focus: Mechanical Focus

Color: 13 Colors + Open

**Fixed Gobo**: 9 Fixed Gobo's + 2 Beam Reducing Gobo's

Output at 10 Feet .85° Degree:

ССТ	5774 K
CRI	77.3
Lux	111845.5
fc	10394.6

### **Main Power Connection**

#### Caution!

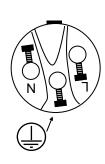
- 1. Do not connect fixture to a dimmer system.
- 2. This unit must be earthed. (electronically grounded)
- 3. Replace fuse only with the specified type and rating.
- 4. Power link maximum 5 units at 110V

This device is equipped with a auto switching power supply that will allow you to work from 100V-240V 50/60Hz

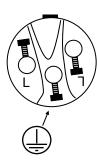
The occupation of the connection-cable is as follows:

Cable (USA)	Cable (EU)	Pin	110V	220V
Black	Brown	Live	L	L
White	Light Blue	Neutral	N	L
Green	Yellow/Green	Ground		

110V Connection



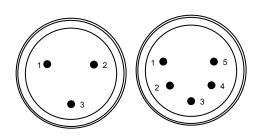
220V Connection



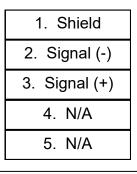
## **DMX-512 Connection**

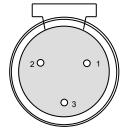
The fixture is equipped with 3 and 5 pin XLR Sockets for DMX input and output. The sockets are wired in parallel. Only use a shielded twisted pair cable designed for RS-485 and 3 or 5 pin XLR plugs and connectors in order to connect the controller with the fixture or the fixture with another.

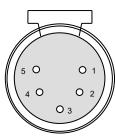
#### **DMX—Input**



#### **DMX**—Output







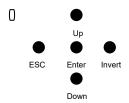
## Caution!

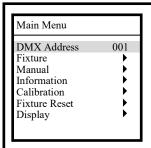
At the last fixture the DMX signal needs to be terminated with a terminator. Solder a 120 Ohm resistor between the (-) and the (+) signal into a 3 or 5 pin XLR plug and plug it in to the last fixture on the signal run. Pre-manufactured terminator plugs are available for purchase from your Mega-Lite dealer (P-DMX-T).

## **Main Control**

The control board on the fixture base is your interface to access and control all the functions on the unit. It's LCD display gives you a code view of the options and functions. The following will explain each function and its options. Press ESC to Enter Main Menu



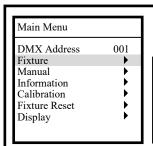




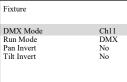
#### **DMX Address**



To Select the fixtures start address channel Press **Enter** use the **Up Down** button to select the fixtures start address. Press **Enter** to confirm



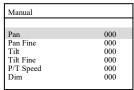
#### **Fixture**



DMX Mode CH Mode CH17, CH20
Run DMX, Master, Audio
Pan Invert Yes or No
Tilt invert Yes or No



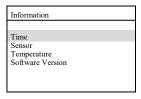
#### Manual



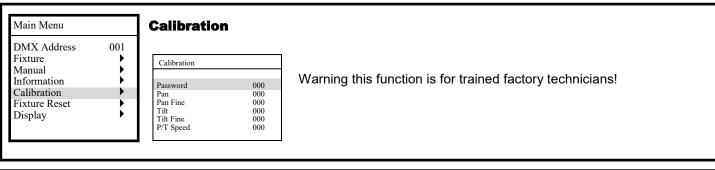
Gives you manual control of each functions. Press Enter over the function and you will have 255 steps of control.

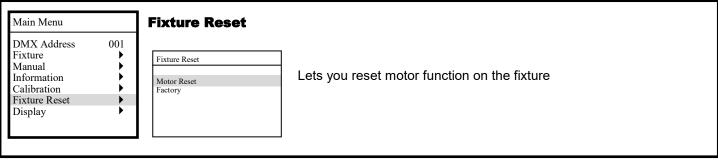


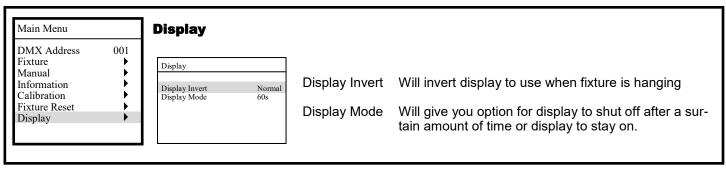
#### **Information**



Fixture Information







## Rigging the fixture

#### Caution!

- 1. The installations must be carried out by an authorized dealer or trained professional.
- 2. Unit may cause severe injures if you have doubts concerning the safety do not install.
- 3. Unit is to be 24inches away from flammable materials (decoration material)
- 4. Use high quality installation equipment to hang unit.

When rigging a unit it is very important that you follow common safety procedures. Rigging requires extensive experience including but not limited to calculating working loads, material being used and periodic safety inspections. If you lack these qualifications, do not attempt the installation yourself, instead use a professional structural rigger.

When rigging the unit always be secured with a secondary safety attachment. The installation location of the projector has got to be built in the way that it can hold 10 times the weight for 1 hour with out any harming. Installation should be checked at least one time a year by a skilled person.

# **DMX Profile**

# MB1 17Ch Mode

DMX Channel	Function	Description	Value	Init Value
1	Pan	Pan	0-255	128
2	Pan Fine	Pan Fine	0-255	128
3	Tilt	Tilt	0-255	128
4	Tilt Fine	Tilt Fine	0-255	128
5	P/T Speed	Pan and Tilt Speed (fast to slow)	0-255	0
6	Dimmer	Dimmer off to full	0-255	255
	Dillillei	Closed	0-233	200
		Strobe (slow to fast)	4-103	
		Open	104-107	-
7	Shutter	Pulse Strobe (slow to fast)	108-207	255
,	Shuller	Open	208-212	200
	-	Random Strobe (slow to fast)	213-251	
	-		252-255	
		Open	0-4	+
	-	Open White + Red	5-9	_
	-		10-14	
	-	Red Nollow		
	-	Red + Yellow	15-19	
	-	Yellow Yellow + Blue	20-24	
	-		25-29	
	-	Blue	30-34 35-39	
	-	Blue + Green	40-44	
	-	Green - Maganta	40-44	
	-	Green + Magenta	+	
	-	Magenta L. Oranga	50-54	
	_	Magenta + Orange	55-59	
	-	Orange LIV	60-64	
	_	Orange + UV	65-69	
0	0.1	UV	70-74	-
8	Color	UV + Lime	75-79	0
	_	Lime	80-84	
	_	Lime + Pink	85-89	
	_	Pink	90-94	
	_	Pink + Candy Apple	95-99	
	_	Candy Apple	100-104	
	_	Candy Apple + Light Blue	105-109	
		Light Blue	110-114	
	_	Light Blue + Lilac	115-119	_
		Lilac	120-124	_
		Lilac + CTO	125-129	_
		СТО	130-134	
		Open	140-149	
		Clockwise Wheel Rotation (fast to slow)	150-199	_
		Rotation Spot	200-205	_
		Counter Clockwise Wheel Rotation (slow to fast)	206-255	

			Open	0-9		
			Gobo 1	10-19		
			Gobo 2	20-29		
			Gobo 3	30-39		
			Gobo 4	40-49		
			Gobo 5	50-59		
			Gobo 6	60-69		
			Gobo 7	70-79		
			Gobo 8	80-89		
			Gobo 9	90-99		
			Gobo 9 Gobo 10	100-109		
			Gobo 11	110-109		
	0	Fixed Cohe		+	0	
	9	Fixed Gobo	Gobo 1 Shake (slow to fast)	120-127	0	
			Gobo 2 Shake (slow to fast)	128-135		
			Gobo 3 Shake (slow to fast)	136-143		
			Gobo 4 Shake (slow to fast)	144-151		
		_	Gobo 5 Shake (slow to fast)	152-159		
		_	Gobo 6 Shake (slow to fast)	160-167		
		_	Gobo 7 Shake (slow to fast)	168-175		
			Gobo 8 Shake (slow to fast)	176-183		
		<u>_</u>	Gobo 9 Shake (slow to fast)	184-191		
			Gobo 10 Shake (slow to fast)	192-199		
			Gobo 11 Shake (slow to fast)	200-207		
			Clockwise Wheel Rotation (fast to slow)	208-230		
			Rotation Spot	231-232		
			Counter Clockwise Wheel Rotation (slow to fast)	233-255		
	10	Focus	Focus	0-255	127	
	11	Multi Color	No Function	0-127	0	
			Multi Color	128-255		
	12	Frost	No Function	0-127	0	
			Frost (clear to frost)	128-255		
	13	Prism 1	No Function	0-127	0	
	.0		Prism 1	128-255		
		+	Prism 1 Orientation	0-63		
			Clockwise Rotation (fast to slow)	64-126		
	14	Prism 1 Rotation	Rotation Spot	127-128	0	
	17	i iisiii i itotatiofi	Counter Clockwise Rotation (slow to fast)	129-191	U	
		Bounce Rotation (slow to fast)	192-255			
	15	Prism 2	No Function	0-127	0	
	15	FIISIII Z			U	
	40		Prism 2	128-255		
			Prism 1 Orientation	0-63		
		Duia 0 D:	Clockwise Rotation (fast to slow)	64-126	_	
16	Prism 2 Rotation	Rotation Spot	127-128	0		
		Counter Clockwise Rotation (slow to fast)	129-191			
			Bounce Rotation (slow to fast)	192-255		
			No Function	0-199	4	
	17	Control	Fixture Reset	200-250	0	
1				No Function	251-255	

# MB1 20Ch Mode

WID I ZOOII	141040			
DMX Channel	Function	Description	Value	Init Value
1	Pan	Pan	0-255	128
2	Pan Fine	Pan Fine	0-255	128
3	Tilt	Tilt	0-255	128
4	Tilt Fine	Tilt Fine	0-255	128
5	P/T Speed	Pan and Tilt Speed (fast to slow)	0-255	0
6	Dimmer	Dimmer off to full	0-255	255
7	Dimmer Fine	Dimmer Fine	0-255	255
	-	Closed	0-3	4
		Strobe (slow to fast)	4-103	4
0	Claustia n	Open	104-107	255
8	Shutter	Pulse Strobe (slow to fast)	108-207	255
	+	Open Random Strobe (slow to fast)	208-212 213-251	-
	+	,	252-255	+
		Open Open	0-4	
		White + Red	5-9	-
		Red	10-14	1
	†	Red + Yellow	15-19	
	†	Yellow	20-24	
	İ	Yellow + Blue	25-29	1
		Blue	30-34	-
		Blue + Green	35-39	
		Green	40-44	
		Green + Magenta	45-49	
		Magenta	50-54	
		Magenta + Orange	55-59	
		Orange	60-64	
		Orange + UV	65-69	
		UV	70-74	
9	Color	UV + Lime	75-79	0
		Lime	80-84	
		Lime + Pink	85-89	
		Pink	90-94	_
		Pink + Candy Apple	95-99	_
		Candy Apple	100-104	_
		Candy Apple + Light Blue	105-109	_
		Light Blue	110-114	4
		Light Blue + Lilac	115-119	4
		Lilac	120-124	-
		Lilac + CTO	125-129	-
		СТО	130-134	-
		Open	140-149	
		Clockwise Wheel Rotation (fast to slow)	150-199	
		Rotation Spot	200-205	-
10	Color Fins	Counter Clockwise Wheel Rotation (slow to fast)	206-255	
10	Color Fine	Color Fine	0-255	0

		Open	0-9	
		Gobo 1	10-19	
		Gobo 2	20-29	
		Gobo 3	30-39	
		Gobo 4	40-49	
		Gobo 5	50-59	
		Gobo 6	60-69	
		Gobo 7	70-79	
		Gobo 8	80-89	
		Gobo 9	90-99	
		Gobo 10	100-109	
		Gobo 11	110-119	
11	Fixed Gobo	Gobo 1 Shake (slow to fast)	120-127	0
• • •	T IXCU GODO	Gobo 2 Shake (slow to fast)	128-135	
		Gobo 3 Shake (slow to fast)	136-143	
		Gobo 4 Shake (slow to fast)	144-151	
		Gobo 5 Shake (slow to fast)	152-159	
		Gobo 6 Shake (slow to fast)	160-167	
		Gobo 7 Shake (slow to fast)	168-175	
		Gobo 7 Shake (slow to last)  Gobo 8 Shake (slow to fast)	176-173	
			184-191	
	-	Gobo 9 Shake (slow to fast)		
	-	Gobo 10 Shake (slow to fast)	192-199	
		Gobo 11 Shake (slow to fast)	200-207	
		Clockwise Wheel Rotation (fast to slow)	208-230	
		Rotation Spot	231-232	
10	Га	Counter Clockwise Wheel Rotation (slow to fast)	233-255	107
12	Focus	Focus	0-255	127
13	Focus Fine	Fine Focus	0-255	127
14	Multi Color	No Function	0-127	0
4.5	- ,	Multi Color	128-255	
15	Frost	No Function	0-127	0
40	D : 4	Frost (clear to frost)	128-255	
16	Prism 1	No Function	0-127	0
		Prism	128-255	
		Prism 1 Orientation	0-63	
4-		Clockwise Rotation (fast to slow)	64-126	_
17	Prism 1 Rotation	Rotation Spot	127-128	0
		Counter Clockwise Rotation (slow to fast)	129-191	
		Bounce Rotation (slow to fast)	192-255	_
18	Prism 2	No Function	0-127	0
		Prism	128-255	
		Prism 1 Orientation	0-63	
		Clockwise Rotation (fast to slow)	64-126	
19	Prism 2 Rotation	Rotation Spot	127-128	0
		Counter Clockwise Rotation (slow to fast)	129-191	
		Bounce Rotation (slow to fast)	192-255	
		No Function	0-199	
20	Control	Fixture Reset	200-250	0
		No Function	251-255	

## **Cleaning and Maintenance**

**Installation Maintenance**: The operator has to make sure that the unit is operating safely and has the installations and electronics checked by an expert every 2 years.

The following points have to be considered during the inspection:

- 1) All screws used for installing the device or part of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations on the housing, fixation and installation spots (ceiling, suspension, trussing).
- 3) Mechanically moved parts like axles and other must not show any traces of wearing and must not rotate with unbalances.
- 4) The electronic power supply cables must not show any damages, material fatigue (e.g. porous cables) 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.

#### Disconnect from mains before starting maintenance operation!



Caution Danger to life!

Electrical

We recommend a frequent cleaning of the device. Please use a moist, lint free cloth. Never use alcohol or solvents!

- 1) The objective lens will require periodic cleaning on usage and environment. Environment with foggers will require more periodic cleaning as fog fluid tends to build up residues, reducing the light output.
- The cooling-fans should be cleaned monthly. DO NOT blow high pressure air into fans as incorrect rotation can damage the fans operation.
- The gobos, dichroic color filters and internal lenses may be cleaned with soft brush using soapy water.
- 4) The interior of the fixture should be cleaned using a vacuum.
- 5) We recommend proper lubrication of the motor wheel. The quantity of the oil must not be excessive in order to avoid oil run outs when motor wheel rotates

**Note:** There is no serviceable parts inside the device except for the fuse. Maintenance and service operations are to be carried out by authorized dealers.

Replacing the fuse: Only replace the fuse with the same type and rating.

**Replacing the power cable:** If the power cable of this device becomes damaged, it has to be replaced by authorized dealers only

Should you have further questions, please contact your dealer.

## **Parts List**

CAS-1210-4	4 Unit Road Case
1220-LED	LED Replacement
1220-PCB-DRI	LED Driver Board
1220-PCB-DIS	Display PCB
1210-BAN-PAN	Pan Band
1210-BAN-TIL	Tilt Band
1215-CON-DMX	DMX Connections
1220-FAN-24V-3.6	24VFan 3.6
1220-FAN-24V-4.8	24V Fan 4.8
1210-HOU-QUI	Quick Release Mount
1220-POW	Power Supply

## **Warranty Information**

#### Warranty Conditions

- -Unless otherwise stated in writing, your product is covered by a one year parts and labor limited warranty.
- -LEDs or Lamps are not guaranteed to match in color temperature or output.
- -It is the owner's responsibility to furnish receipts or invoices for verification of purchase, date, and reseller or distributor. If purchase date cannot be provided, date of manufacture will be used to determine warranty period.
- -Goods returned under warranty must follow the proper authorization procedure and must be accompanied by a copy of the original invoice.
- -Goods repaired under warranty will be returned to the owner with the freight prepaid by MSI via the most economical means of shipment.
- -Repair or replacement as provided for under this warranty is the exclusive remedy of the consumer. MEGA SYSTEMS INC. makes no warranties, express or implied, with respect to any product, and Mega Systems specifically disclaims any warranty of merchantability or fitness for a particular purpose. Mega Systems shall not be liable for any indirect, incidental or consequential damage, including lost profit, sustained or incurred in connection with any product or caused by product defect or the partial or total failure of any product regardless of the form of action, weather in contract, tort (including negligence), strict liability or otherwise, and weather or not such damage was foreseen or unforeseen.
- Warranty is void if the product is misused, damaged, modified in any way, or for unauthorized repairs or parts. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## **Customer Support**

Mega Lite has a customer support line to provide set up help and to answer any question should you encounter a problem. Please visit our website for any other related technical documents. For service related issue please contact our service dept.

Monday—Friday 9am to 6pm CST Voice: 210-684-2600

E-mail: service@megasystemsinc.com

Specifications in this manual are subject to change.

Mega-Lite 18668 Highway 16N Helotes, TX 78023 Ph 210-684-2600 Fax 210-855-6279 www.mega-lite.com / info@mega-lite.com