

# □ Tetra Driver16



## **USER MANUAL**

## **Table of Contents**

Safety Information	2
What's Included	2
Specifications	3
Main Power Connection	4
DMX Connection	4
Output Connection	5
Display Settings	6
DMX Profile	8
Size And Weight	10
Parts	10
Cleaning	11
Installation	11
Warranty	12
Customer Service	13



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

#### **Protection Against Fire**



- 1. Maintain a minimum of 2 foot distance from any type of flame.
- 2. Fixture is designed for outdoor use.
- 3. Do not install the unit too close to a heat source.
- 4. Make sure cables are properly secured.
- 5. Maximum surface operating temperature: 130°.

#### Protection Against Electrical Fire

4.



- 1. Disconnect power before servicing.
- 2. For connection to main power supply, proceed to page 4.
- 3. The power supply must be earthed (electronically grounded).
  - This fixture must not be left on for long periods of time.

#### **Protection Against Mechanical Hazards**



- 1. Use secondary safety attachment when hanging unit.
- 2. Use quality clamps or bolts when positioning unit.
- 3. Do not open unit while it is on. Risk of electrical shock.

#### Ingress Protection



20

The IP rating is commonly expressed as IP (Ingress Protection) is followed by 2 numbers (i.e. 65) where the numbers define the fixture rating. The first number indicates the size of a particle that can enter the fixture. The second number indicates the extent of protection against water entering the fixture. An IP20 rating in this fixture indicates that solid objects up to 12mm can't enter . And there is **NO** protection against water from entering the fixture.

#### What is Included

1pc Tetra Driver 16 fixture1pc Seetronics SAC3FCA Connection to Nema 5-15 Connection Cable1pc User Manual

#### **Specifications**

#### **Part Numbers**

#### **Fixture**

5072 - Tetra Driver 16

#### **Mechanical Specifications**

Housing: Aluminum

Display: Digital .

IP Rating: IP20

Fastening System: Rack Mount, Removable Clamp Mounts, Rear Rail Removable Mounts

**DMX Connection:** 5 Pin XLR In and Out & rj45 In and Out

Output Connection: 16 X 5 Pin XLR output

Power Connection: Sectronics SAC3MPA (Sectronic SAC3FCA to nema 5-15 cable included)

#### **Electrical Specifications**

Output Ports: 16

Power Per Port: 60W

Drive Method: Constant Voltage

Power Consumption: Amps

Watts

Power Supply: 2 X Mean Well UHP

Output: 24Vdc

Working Ambient Temp: 24°f - 148°f

Cooling: Fan Cooled

Refresh: 4,000Hz

**Power Input:** 90-264V AC 50/60Hz

### **Control & Programming**

Protocol: DMX 512

DMX 7 Modes: 1 Channel Mode Dimmer

2 Channel Mode Warm White, Cool White

3 Channel Mode R,G,B

4 Channel Mode R,G,B, W

7 Channel Mode Dimmer, R,G,B, W, Strobe, Macro

64 Channel Mode 16 X R,G,B, W

112 Channel Mode 16 X Dimmer, R,G,B, W, Strobe, Macro

RDM: Yes, Addressing, Channel Mode Control

Operating Mode: 17 Pre Programs

Manual Settings Via Display

#### **Main Power Connection**

#### Caution!

- 1. Do not connect to a dimmer system.
- 2. This unit has auto switching power supply. It will respond to 90-264V AC 50/60hz automatically
- 3. Replace Fuse with specific type and rating.
- 4. This unit must be earthed. (electronically grounded)

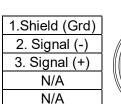
Cable USA	Cable EU	110V	220V
Black	Brown	Live	Live
White	Light Blue	Neutral	Live
Green	Yellow / Green	Ground	Ground

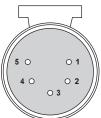
#### **DMX-512 Connection**

The fixture is equipped with 5 pin XLR Sockets and RJ45 for DMX input and output connection. The sockets are wired in parallel. Only use a shielded twisted pair cable designed for RS-485 and 5 pin XLR or RJ45 connectors in order to connect the controller with the fixture or the fixture with another.

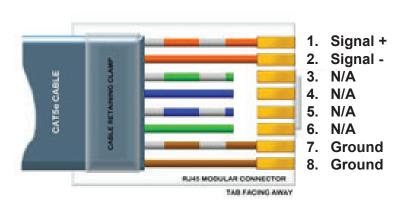
Or

#### **DMX 5 Pin XLR - Input / Output**





## DMX 8 Pin RJ45 - Input / Output

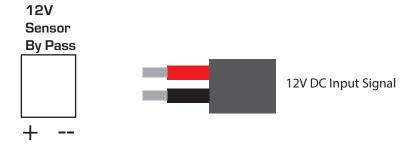


#### Caution!

On the last fixture the DMX signal needs to be terminated with a terminator. Pre-manufactured terminator are available for purchase from your Mega Lite dealer item #P-DMX-T.

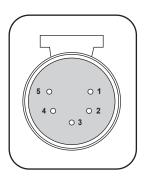
## 12V Sensor By-Pass

Once the Tetra Driver 16 receives a DC 12V input signal all dimmer channels will go to a full position and by pass DMX Control. Once 12V signal is removed the DMX Control will reengaged.



## **Output Connection**

When using the Tetra Driver 16 with Lighting Fixtures the following cable configuration must be followed. Use 5 Pin XLR connectors with 5 conductor cable. (do not use cable shield jacket as a conductor) Cable bust be a minimum of 20 AWG thickness.

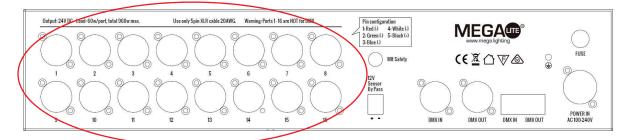


XLR Position	Drive Connection	Cable Color
Position 1	Red	Red
Position 2	Green	Green
Position 3	Blue	Blue
Position 4	White	White
Position 5	Voltage +	Black

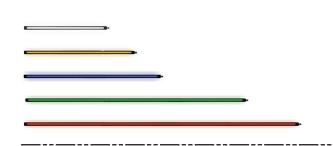




## **Max Power Link Configuration**



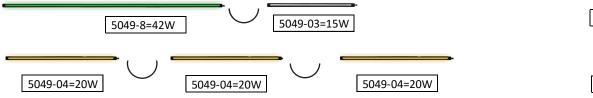
Each Tetra Driver 16 Port can connect up to 60W of power. Do not connect more than 60W or their will be voltage drop or driver failure



## LIGHT PIPE (example)

Item Number	Size	Max Watts
5049-03	3ft	15W
5049-04	4ft	20W
5049-05	5ft	25W
5049-08	8ft	42W
5049-10	10ft	53W

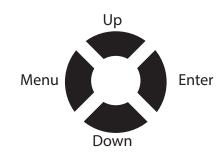
Additional fixtures can be connected together using the Input and Output connections on the fixture. Must not exceed 60W per port (examples below).



42W+15W=57W

20W X 3=60W

Mega Lite Tetra 16



**Display Lock:** The display for the Tetra Driver 16 factory setting is lock screen function to unlock the display press and hold the **Menu & Enter** buttons for 3 seconds

**DMX:** DMX mode allows you to set the DMX operational mode for each of the output ports and the DMX Start Channel. Press Enter use the Up / Down buttons to select the desired output port press Enter to select. Channel Mode will then be highlighted, use the Up / Down buttons to select the ports operating channel mode. Go to Page 8 on the manual to review what operational DMX Profile options that will work with your fixture. Each lighting fixture can have different or the same operating mode. Consult the lighting fixtures operating manual to determine the operating mode. Press Enter DMX Address will then be highlighted use the Up / Down buttons to select the fixtures start address. The Start address must match your lighting controllers start address channel. Press **Enter** to confirm your settings.

(note) If you want fixtures to operate the same way in different ports just duplicate the same setting in multiple ports.

DMX Mode Individual

Port	Mode	DMX Address
(01)	(04)	(001)

Port Mode DMX Address (02) (04) (001)

"

"

Port	Mode	DMX Address
(15)	(03)	(207)

Port	Mode	DMX Address
(16)	(07)	(210)

DMX Mode 64 CH DMX Address 001

( 16X 4Ch R,G,B,W)

DMX Mode 112 CH

DMX Address 001

( 16X 7Ch Dimmer,R,G,B,W Strobe, Macro)

**Auto:** Auto mode allows you to access the pre-built auto functions for the control. Press Enter use the Up / Down buttons to select the pre program fixture look. Programs 01 to 18 are single scene programs and programs 19 to 21 are chase programs. Press Enter once you have selected your scene or chase. For programs 01-18 use the Up / Down buttons to adjust

System Mode (Auto)	Prog 01 (ST Color 1)	Prog 01 Dimmer (000)
	u	"
	Prog 18 (ST Color 18)	Prog 18 Dimmer (255)
	Prog 19 (Step Chase)	Prog 19 Speed (255)
	Prog 20 (Color Fade)	Prog 20 Speed (010)
	Prog 21 (Strobe)	Prog 21 Speed (000)
	Prog 22 (Chassing)	Prog 22 Speed (000)

Manual: Manual Mode allows you to manually control the intensity of all 16 ports simultaneously via the display control without the need for a DMX Controller. Press Enter to select the dimmer color you would like to adjust. Use the Up / Down keys to select the dimmer intensity. Please review the lighting fixtures manual to see what values are active. Press Enter to confirm the setting.

System Mode (Manual) Red (000)

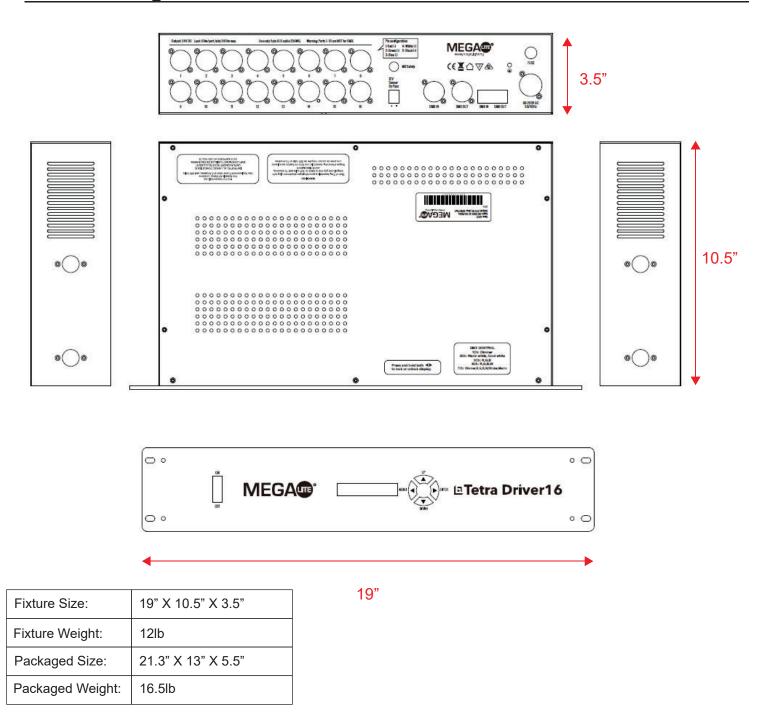
Green (000)

Blue (000)

White (000)

Tetra [	Oriver 16 1	Ch Mode		
DMX Ch	Function	Description	Value	Init
1	Dimmer	LED Intensity	0-255	255
Tetra [	Oriver 16 2	Ch Mode		
DMX Ch	Function	Description	Value	Init
1	LED Color	Warm White LED Intensity	0-255	255
2	LED Color	Cool White LED Intensity	0-255	255
		-		
Tetra [	Driver 16 3	3 Ch Mode		
DMX Ch	Function	Description	Value	Init
1	LED Color	Red LED Intensity	0-255	255
2	LED Color	Green LED Intensity	0-255	255
3	LED Color	Blue LED Intensity	0-255	255
Tetra [	Oriver 16 4	Ch Mode		
DMX Ch	Function	Description	Value	Init
1	LED Color	Red LED Intensity (all outputs)	0-255	255
2	LED Color	Green LED Intensity (all outputs)	0-255	255
3	LED Color	Blue LED Intensity (all outputs)	0-255	255
4	LED Color	White LED Intensity (all outputs)	0-255	255
Tetra [	Oriver 16 7	Ch Mode		
DMX Ch	Function	Description	Value	Init
1	Dimmer	Dimmer 0 to 100	0-255	255
2	LED Color	Red LED Intensity (all outputs)	0-255	255
3	LED Color	Green LED Intensity (all outputs)	0-255	255
4	LED Color	Blue LED Intensity (all outputs)	0-255	255
5	LED Color	White LED Intensity (all outputs)	0-255	255
		No Function	0-1	
6	Strobe	Strobe (slow to fast)	2-127	0
		Random Strobe (slow to fast)	128-255	
		No Function	0-1	
7	Macro	Color Fade (slow to fast)	2-127	0
		Color Chase (slow to fast)	128-255	

Tetra Dri	ver 16 64	Channel (4Ch X 16)		
DMX Chanel	Function	Description	Value	Init
1	LED Color	Red LED Intensity (Port 1)	0-255	255
2	LED Color	Green LED Intensity (Port 1)	0-255	255
3	LED Color	Blue LED Intensity (Port 1)	0-255	255
4	LED Color	White LED Intensity (Port 1)	0-255	255
" "	" "	п	" "	" "
61	LED Color	Red LED Intensity (Port 16)	0-255	255
62	LED Color	Green LED Intensity (Port 16)	0-255	255
63	LED Color	Blue LED Intensity (Port 16)	0-255	255
64	LED Color	White LED Intensity (Port 16)	0-255	255
Tetra Dri	ver 16 112	2 Channel (7Ch X 16)		
DMX Chanel	Function	Description	Value	Init
1	Dimmer	Dimmer 0 to 100	0-255	255
2	LED Color	Red LED Intensity (all outputs)	0-255	255
3	LED Color	Green LED Intensity (all outputs)	0-255	255
4	LED Color	Blue LED Intensity (all outputs)	0-255	255
5	LED Color	White LED Intensity (all outputs)	0-255	255
		No Function	0-1	
6	Strobe	Strobe (slow to fast)	2-127	0
		Random Strobe (slow to fast)	128-255	
		No Function	0-1	
7	Macro	Color Fade (slow to fast)	2-127	0
		Color Chase (slow to fast)	128-255	
" "	" "	п	" "	" "
106	Dimmer	Dimmer 0 to 100	0-255	255
107	LED Color	Red LED Intensity (all outputs)	0-255	255
108	LED Color	Green LED Intensity (all outputs)	0-255	255
109	LED Color	Blue LED Intensity (all outputs)	0-255	255
110	LED Color	White LED Intensity (all outputs)	0-255	255
		No Function	0-1	
111	Strobe	Strobe (slow to fast)	2-127	0
		Random Strobe (slow to fast)	128-255	
		No Function	0-1	
112	Macro	Color Fade (slow to fast)	2-127	0
		Color Chase (slow to fast)	128-255	



#### **Parts & Accessories**

5072-PCB-MAI-DIS	DISPLAY AND MAIN PCB
5072-PCB-DRI	LED DRIVER PCB
5060-PCB-DMX-3	RJ45 & 3PIN XLR CONNECTION PCB
5060-PCB-DMX-5	RJ45 & 5PIN XLR CONNECTION PCB
5065-POW	MEAN WELL UHP-500-24
5060-SWI	GREEN POWER SWITCH
5072-FAN	24v FAN
5072-HOU-QUI	QUICK RELEASE CLAMP MOUNTS

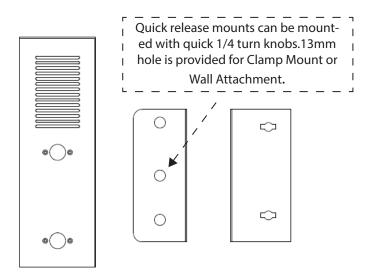
#### Installation

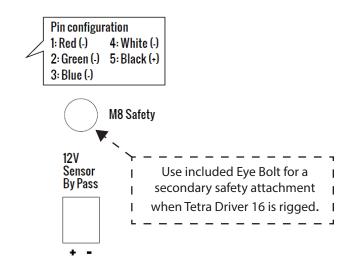
#### Caution!

- 1. The Installation 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 24 inches away from flammable materials.
- 4. Use high quality installation equipment to hang the unit.

When rigging the it is very important that you follow common safety procedures. Rigging requires extensive experience including but not limited to calculating working weight 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 secure with a secondary safety attachment. The installation location of the fixture has got to be built in the way that it can hold 10 times the weight for 1 hour with out any failures. Installation should be checked at least one time a year by a skilled professional.





## **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 year.

The following points must 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) 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.
- 4) Fixture housing must only be cleaned from the outside using only soap and water.

Note: Maintenance and service operations are to be carried out by authorized dealers.

Replacing the fuse: When possible, 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 or trained professionals only.

Should you have further questions, please contact your dealer.

#### **GENERAL TERMS AND CONDITIONS**

- 1. All resellers must have approved and signed Reseller Application on file including their respective state tax information and W-9. Applications are re-evaluated on a fiscal calendar year basis to assure business integrity and tax status.
- 2. Cash, check, cashiers check, ACH, wire transfer, MasterCard, Visa, Discover and American Express are accepted forms of payment.
- 3. Past due invoices will be charged 1.5% per month finance charge. Uncollected invoices are subject to be turned over to collection.
- 4. The reseller will pay all reasonable expenses incurred in the course of collections.
- The proper venue for litigation will be Bexar County, Texas.
- 6. Returned checks will be charged a \$50.00 fee.
- 7. All prices are in U.S. Dollars.
- 8. All prices and specifications are subject to change without notice, sales order confirmations are emailed and will reflect correct pricing.
- 9. All terms are insured, monitored, analyzed and approved by Coface USA. Changes in credit line and approved terms can change without notice. Company authorization of credit is based on Coface approvals. Any conflicts or disagreements should be referred to:
  - 650 College Rd. East Suite 2005 Princeton, NJ 08540. 1-609-469-0400. E-mail: cofaceusa@coface.com
- 10. Returns are subject to 25% restocking charge plus any necessary charges for repair or re-packaging.

#### SHIPPING TERMS AND CONDITIONS

- 1. All orders are EXW San Antonio, TX (EXW means that a buyer/reseller incurs the risks for bringing the goods to their final destination). Any deviation needs to be done in writing.
- 2. UPS ground shipping is the preferred shipping method. Requests for specific carriers may require use of the customer's account number and may incur an additional charge for handling.
- 3. Drop shipments are subject to all return charges at reseller's expense. Drop shipments are not allowed outside of the territorial United States.
- 4. No C.O.D. shipments allowed.
- 5. Returned and undelivered shipment charges are the buyer/reseller's responsibility and will be billed to the buyer/reseller.
- 6. The freight carrier and company <a href="mailto:shipping@mega.lighting">shipping@mega.lighting</a> should be notified upon receipt of damaged freight, discrepancies or non-conformities within 24 hours. Company can assist in making claims with carriers or agents in the event of any loss or damage.

#### WARRANTY AND SERVICE PROCEDURES

- 1. All returns require an RMA# (Return Merchandise Authorization number) before returning goods for any reason. For a service or warranty RMA, please email <a href="mailto:service@mega.lighting">service@mega.lighting</a> or call 210-684-2600. For sales or demo returns, please contact <a href="mailto:sales@mega.lighting">sales@mega.lighting</a>.
- 2. Case will be created and an RMA notice will be emailed. All units received must have the RMA # included with the unit as well as on the shipping label.
- 3. All shipping charges are the responsibility of the customer: MEGA Systems, Inc., Service, 18668 HWY 16 N, Helotes, TX 78023.

#### WARRANTY FOR PRODUCTS PURCHASED BEFORE 2021

Unless otherwise stated in writing, product is covered by a one year parts and labor limited warranty and is subject to same limitation listed under the limited warranty exclusions listed below.

#### WARRANTY FOR PRODUCTS PURCHASED AFTER JANUARY 1, 2021

MEGA SYSTEMS INC ("MSI") hereby warrants to the original purchaser/owner ("Customer"), MSI products to be free of manufacturing defects in material and workmanship, for the warranty periods as defined below from the original purchase invoice date. This warranty applies exclusively to new MSI branded and/or distributed products listed below, purchased from an MSI AUTHORIZED dealer/ reseller. This warranty is not transferable and may or may not apply to products sold and/or forwarded outside the United States. Please contact MSI for applicable regional product warranty information. The purchase of MSI product constitutes the Customer's acceptance of all warranty terms and conditions as listed in this limited warranty statement. This warranty provides the Customer with legal rights which may vary from state to state. Please contact MSI regarding warranty questions prior to purchasing.

Product / Series	Warranty Period	Coverage
BATTERY POWERED LED	Six month battery one year all other components	1, 2
MOVING LED, HAZERS	One year	2
OUTDOOR IP RATED LED	Two Year	3
HOUSE LIGHT LED, DECORATIVE LED, COMPACT LED, ICANDY LED, THEATRICAL LED, STROBE WASH LED, FOLLOW SPOT LED, PRODUCTION & HOUSE OF WORSHIP CONTROL, ARCHITECTURAL CONTROL, THEATRICAL CONTROL, DIRECT VIEW LED DISPLAYS, AND MY CONTROL FRS.	Three Year	4

1. Battery, 183 days six months 2. Parts and Labor, 365 days one year 3. Parts and Labor, 730 days two year 4. Parts and Labor, 1095 days three year

#### This limited warranty excludes any defects caused by, resulting from or relating to the following:

Normal wear and tear of lamps, color media, brushes, contact rings, lamp sockets, belts and other parts prone to wear and tear.

Misuse, abuse, improper handling, accident, alteration or attempts to repair by or on behalf of the owner or any person not authorized by MSI.

Damage to the product resulting from acts of God, including, but not limited to, earthquakes, hurricanes, tornados, lightning and other natural disasters, fire, explosion, flood, riots, civil disorder or any other cause beyond the reasonable control of MSI.

Exposure to harsh or excessively corrosive environmental conditions (whether indoors or outdoors), including, but not limited to, extreme temperatures, humidity, atmospheric conditions (including salinity or pressure), radiation (UV, infrared or nuclear), shock and conditions which exceed the product's Ingress Protection ("IP)" rating.

Use of the product in a manner which exceeds the applicable product specification, including, but not limited to, exposure to excessive, insufficient or other voltage conditions

Installation or use of the product not in accordance with the technical documentation, MSI guidelines (as may be posted on its website at <a href="www.megasystemsinc.com">www.megasystemsinc.com</a> from time to time or otherwise designated by MSI or its brands) or applicable building and electrical codes, regulations and standards.

Failure to maintain the product in accordance with the technical documentation

Natural degradation and color shift of the LED source over the course of normal product use.

Slight deviations in the specified values of intensity and color that do not affect the functionality of the product.

Use of the product not for its intended purpose.

All warranty claims are evaluated under the terms of this limited warranty. If a product falls within the warranty period and if, upon examination by MSI it is found to have failed for a covered cause, MSI will, at its sole discretion, repair or replace the defective part or product or reimburse the purchaser a pro-rated portion of the purchase price based on the percentage of the warranty period still remaining as of the date that the returned product was received by MSI. Should a replacement part or product be discontinued or unavailable, MSI reserves the right, in its sole and absolute discretion, to substitute a comparable replacement part or product for the defective part or product. MSI warranty obligation hereunder is limited solely to the repair or replacement of or reimbursement for the particular parts or products determined by MSI to have failed for a covered cause within the warranty period. In no event shall MSI be responsible to replace or reimburse purchaser for any products or portions of a system that MSI determines has not failed for a covered cause within the warranty period, even if such other products or portions of a system are used together with products being repaired or replaced by MSI under this warranty and the repaired product differs in brightness, colors or any other attribute after the repair.

Costs of removal, shipping to MSI or its authorized representative and reinstallation are solely the responsibility of the purchaser. If MSI determines that the product is covered by this limited warranty, it will only pay for parts and labor as indicated by product type. If MSI determines that the product is not covered by this limited warranty, the purchaser will have the option of paying for the repair (if the product can be repaired) and the purchaser shall be responsible for the cost of shipping the repaired product back to the purchaser. MSI reserves the right, in its sole and absolute discretion, to decline any repair.

IN NO EVENT SHALL MEGA SYSTEMS, INC. BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT OR PUNITIVE LOSS OR DAMAGE OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUES, LOSS OF USE OF THE PRODUCT OR ANY OTHER GOODS OR ASSOCIATED EQUIPMENT, DAMAGE TO ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF SUBSTITUTE PRODUCTS, FACILITIES OR SERVICES, DOWN TIME COST, INSTALLATION OR LABOR COSTS, OR CLAIMS OF THE PURCHASER'S CUSTOMERS, WHETHER BASED ON WARRANTY, CONTRACT OR NEGLIGENCE, ARISING IN CONNECTION WITH THE SALE, USE OR REPAIR OF THE PRODUCT. MEGA SYSTEMS INC'S MAXIMUM LIABILITY SHALL NOT, IN ANY CASE, EXCEED THE PURCHASE PRICE OF THE PRODUCT THAT GIVES RISE TO THE CLAIM.

EXCEPT FOR THE LIMITED WARRANTY SET FORTH HEREIN, ALL PRODUCTS SOLD BY MEGA SYSTEMS, INC. ARE SOLD "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE EXPRESSLY AND SPECIFICALLY DISCLAIMED BY MEGA SYSTEMS, INC.

## **Customer Support**

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

Monday - Friday 9am to 6pm CST (210) 684-2600 service@mega.lighting

#### **Manual Version**

Please visit www.mega.lighting for the most up-to-date manual version.

Manual Version	Date	Fixture Software	Notes
1.0	08/17/2023	N/A	



MEGA-LITE 18668 Highway 16N Helotes, TX 78023 Phone (210)684-2600 / Fax (210)855-6279 www.mega.lighting / info@mega.lighting