



# MEGA PAN T BOT Lite Tiltbot Trio User Manual

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**MEGA PAN T BOT Lite Tiltbot Trio**



Check that the unit has not been damaged during transport

### **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. For indoor use only do not expose unit to rain or moisture.
3. Replace fuse only with the specified type and rating.
4. Do not install the unit too close to a heat source.
5. Make sure cables are properly secured
6. Maximum surface operating temperature 130°.

#### **Protection Against Electrical Fire**

1. Disconnect power before servicing.
2. For connection to main power supply proceed to page 5.
3. This unit must be earthed. (electronically grounded)
4. This fixture must not be left on for long periods of time.

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

1. Use secondary safety chain 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.

### **What is Included**

- 1pc Pan T Bot Fixture
- 1pc Power Con (type) to Nema 5-15 Cable
- 2pc Quick Connect Clamp Mounts
- 1pc User Manual

## Technical Information

### Part Numbers

#### Fixture/ Road Case

1187-Pan T Bot CAS-1187-2 2 Unit Road Case

### Mechanical Specifications

- **Pan Angle:** 540° 8/16 bit
- **Tilt Angle:** 270° 8/16 bit
- **DMX Connectors:** Panel Mounted 3 and 5-pin XLR connectors in/out
- **Artnet Connection:** Panel Mounted RJ45 In and Out
- **Power Connections:** Panel Mounted Power Conn (Type) Power in/out connection. (Nema 5-15 to Power Conn (Type) cable included)
- **Thermal:** Maximum ambient temperature 104°F Maximum surface temperature 140°F
- **Display:** Digital
- **Fastening System:** 2 Quick Connect Clamp Mount
- **Lens Angle:** 89° RGB Emitters, 40° White Emitters

### Electrical Specifications

- **LED:** 960 RGB 0.5 Watts / 300 White 1 Watt (6670K)
- **Lumen Output:** 28,595lm (All Emitters)
- **Power Input:** Universal 100 – 240V 50/60 Hz
- **Color Rendering:** 6911K (White Center Emitter Only)
- **Ballast:** Electronic

### Power Consumption:

- **Watts:** 590W
- **Amps:** 5.04A @110V
- **RDM:** Yes

### Control & Programming

- **Protocol:** DMX 512
- **RDM:** Yes
- **DMX Channels:** 2 Modes of Operation
  - **Mode: 23 Ch:** Pan, Pan Fine, Tilt , Tilt Fine, Pan and Tilt Speed, Dimmer, Red, Green, Blue, Strobe,

Shutter Macro, Macro Speed, Color Macro, Macro Speed, Alpha numeric Display, Background Red, Background Green, Background Blue, White Dimmer, White Strobe, White Macro, Macro Speed, Control

- **Mode: 256 Ch:** Pan, Pan Fine, Tilt , Tilt Fine, Pan and Tilt Speed, Control, RGB X 80, White X 10.
- **Operating Mode:** Stand alone 255 step dimmer setting via display Auto preprogram via display

## Main Power Connection

### Caution!

1. Do not connect fixture to a dimmer system.
2. This unit has Auto switching power supply. It will respond to 110V or 240V automatically
3. This unit must be earthed. (electronically grounded)
4. Replace fuse only with the specified type and rating.
5. Power Link max 3 units at 110V and 6 units at 220V.

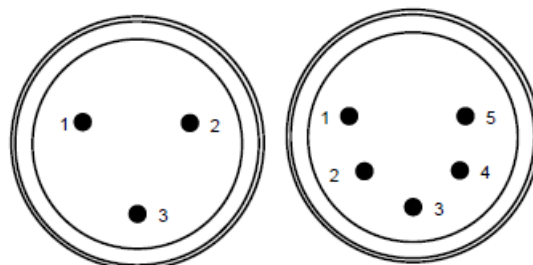
**The occupation of the connection-cable is as follows:** This fixture is equipped with an electronic power supply that will let the unit operate from 100V to 240V from 50Hz to 60Hz

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

## DMX-512 Connection

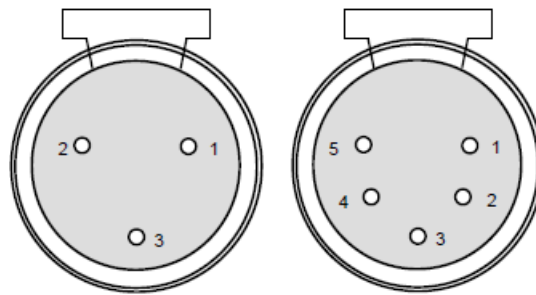
The fixture is equipped with 3 & 5 pin XLR cable mounted sockets for DMX input and output. The sockets are wired in parallel. Only use a shielded twisted pair cable designed for RS-485 3 and 5 pin XLR plugs and connectors in order to connect the controller with the fixture or the fixture with another

### DMX—Input



1. Shield
2. Signal (-)
3. Signal (+)
4. N/A
5. N/A

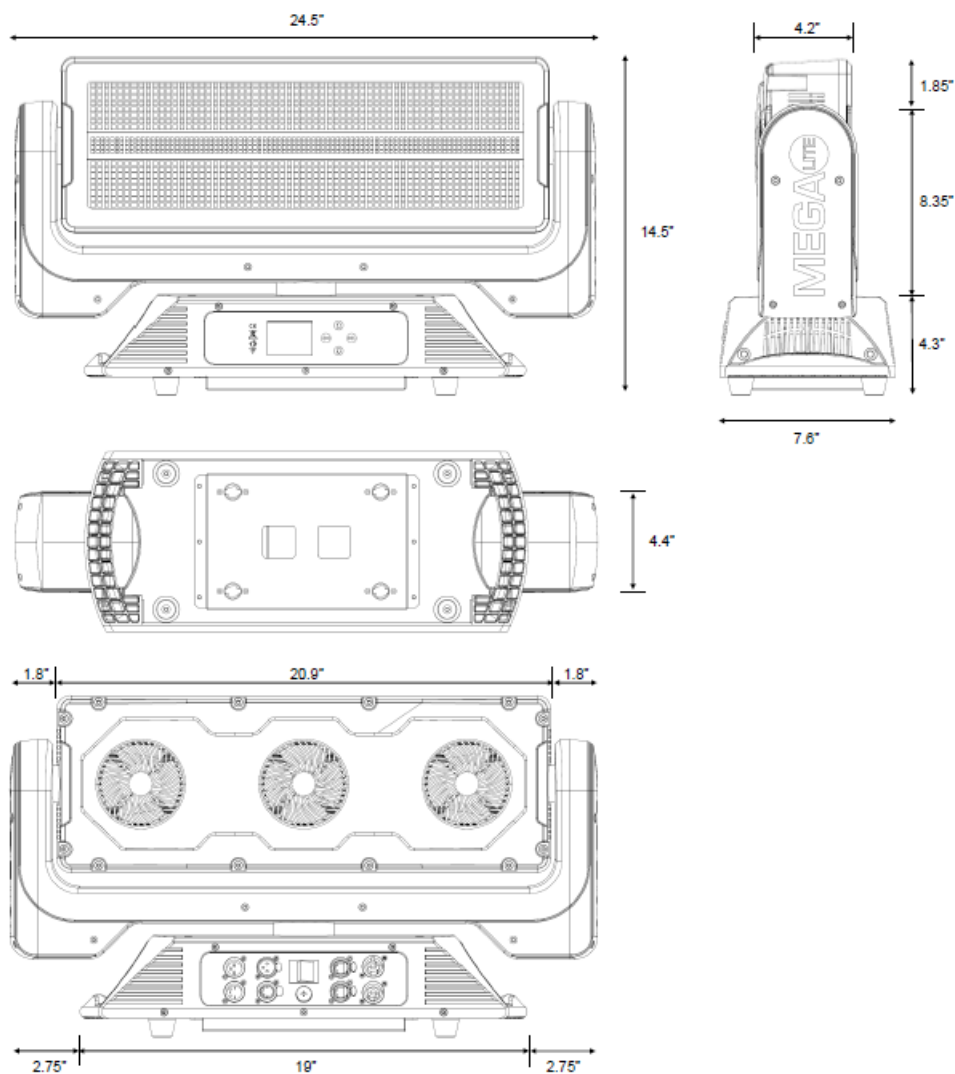
## DMX—Output



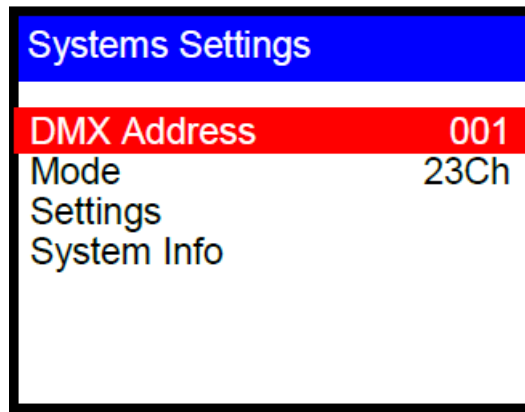
### Caution!

At the last fixture the DMX signal needs to be terminated with a terminator. Solder a 120 Ohm re-sistor 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-DMXT).

## Segment Positions



## Size and Weight



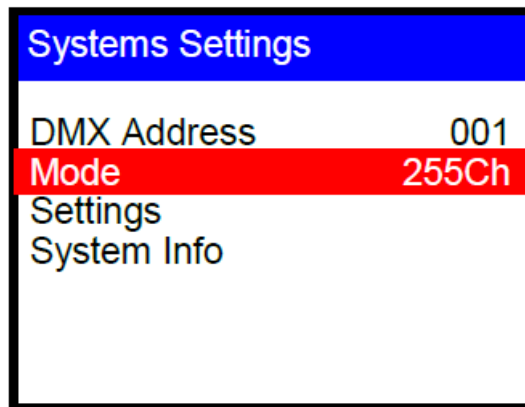
Size	24.5" X 7.6" X 14.5"
Weight	36lb
Packaged	28" X 18" X 11.5" 38.6lb

## Main Control Menu

The control board on the fixture is your interface to access and control all the functions on the unit. Its digital display gives you a code view of the options and functions. The following will explain each function and its options

### DMX Address

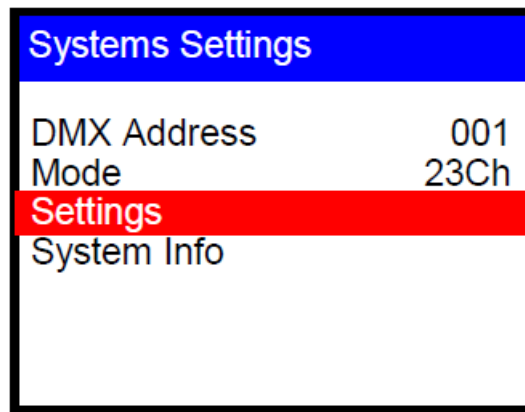
Press Home button. Use the up/down to select the DMX Address function press Enter to engage



Use the up/down arrows to select the desired DMX start Channel. Please con-sult your DMX Controller's Manual to find the correct DMX Start Channel 001

### Mode

Press Home button. Use the up/down to select the Mode function press Enter to engage. Select from the 2 different operating modes.

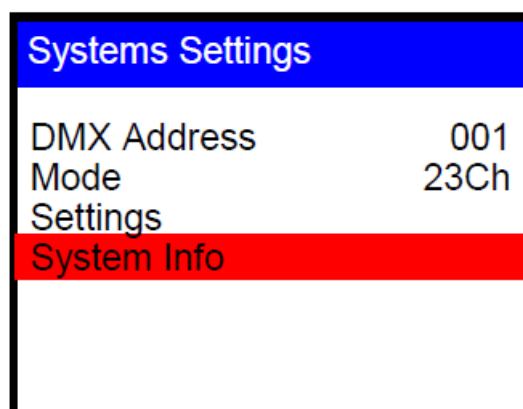


DMX DMX 23Ch Auto PRO 01 SP 90 Manual Remote

- **DMX:** Allows you to select from the DMX Channel control method, Linebot offers 2 control methods Standard 15 Ch and Extended 63 Ch. Please select one
- **Mode:** 23 Ch: Pan, Pan Fine, Tilt , Tilt Fine, Pan and Tilt Speed, Dimmer, Red, Green, Blue, Strobe, Shutter Macro, Macro Speed, Color Macro, Mac-ro Speed, Alpha numeric Display, Background Red, Background Green, Background Blue, White Dimmer, White Strobe, White Macro, Macro Speed, Control
- **Mode:** 256 Ch: Pan, Pan Fine, Tilt , Tilt Fine, Pan and Tilt Speed, Control, RGB X 80, White X 10
- **Auto:** Allows you to select from the 17 preprogram patterns that are built into the fixture. It also allows you to control the speed of those programs from 01 to 99
- **Manual:** Allows you to control each of the fixtures functions via the display menu. Control from 000 to 255 for each func-tion (note if fixture is powered off and back on the fixture will return to the last set mode function)
- **Remote:** Fixture will copy the same functions as the Main unit. (Master Fixture must be in home screen setting to en-gage)

### Settings

Press Home button. Use the up/down to select the Settings function press En-ter to engage. Select from the 5 different setting options.



Artnet Display On Display Rev Off Pan Rev N Tilt Rev N DMX Fail BI Language

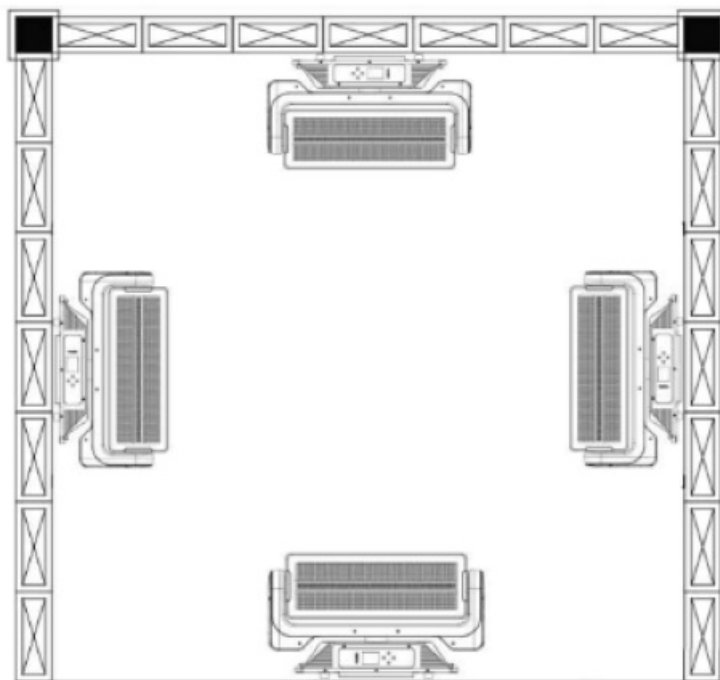
- **Artnet:** Please follow your lighting controllers instruction for artnet connection. As each controller has different procedure for connection. (note: Fixture has a maximum 16 universe setting) For Mega Control settings please set fixture to this setting:

**IP Address**

- 002.168.052.253
- SubNet Mask
- 255.000.000.000
- Net 000 Subnet 000
- Universe 01
- **Display:** Display On will keep the display on for the entire time the fixtures is powered on. Display Off will automatically turn off the display if there is no changes after 30sec.
- **Display Rev:** Allows you to select from the 17 preprogram patterns that are built into the fixture. It also allows you to control the speed of those programs from 01 to 99
- **Pan Rev:** Inverts Pan Position
- **Tilt Rev:** Inverts Tilt Position
- **DMX Fail:** This function will allow you to set a default setting if the DMX signal is ever lost or stops working.
  - **Black Out:** Will set all channel to 000 and turn light off
  - **Manual:** Will go to the set position set on your manual display setting
  - **Auto:** Will go to the selected Auto Preset and speed setting set in your auto option
  - **Hold:** Will hold last DMX commend until a new command signal is received
- **Language:** Select ether English or Chinese

### System Info

Press Home button. Use the up/down to select the System Info function press Enter to engage. Receive information on 3 different parameters



- **Firmware:** Gives you information on the software version being used in the fixture.
- **Time Info:** Provides information on the fixture usage, by counting the hours the fixture is powered on
- **Temp:** Gives you fixture internal temperature information

### DMX Profile

#### Pan T Bot 23Channel Mode



DMX Channel	Function	Description	Value	Init
1	Pan	Pan	0-255	127
2	Pan Fine	Pan Fine	0-255	127
3	Tilt	Tilt	0-255	127
4	Tilt Fine	Tilt Fine	0-255	127
5	Speed	Pan and Tilt Speed (fast to slow)	0-255	0
6	Dimmer	Dimmer (off to full)	0-255	255
7	LED Color	Red LED Intensity	0-255	255
8	LED Color	Green LED Intensity	0-255	255
9	LED Color	Blue LED Intensity	0-255	255
10		No Function	0-1	0
		Strobe (slow to fast)	2-127	
	Strobe	Strobe Pulse (slow to fast)	128-170	
	RGB	Random Strobe All (slow to fast)	171-213	
		Random 1-80 Strobe (slow to fast)	214-255	
11		No Function	0-1	0
		Macro 1	2-12	
		Macro 2	13-23	
		Macro 3	24-34	
		Macro 4	35-45	
		Macro 5	46-56	
		Macro 6	57-67	
		Macro 7	68-78	
		Macro 8	79-89	
		Macro 9	90-100	
		Macro 10	101-111	
	Shutter Macro	Macro 11	112-122	
	(Select Color)	Macro 12	123-133	
		Macro 13	134-144	
		Macro 14	145-155	
		Macro 15	156-166	
		Macro 16	167-177	

		Macro 17	178-188	
		Macro 18	189-199	
		Macro 19	200-210	
		Macro 20	211-221	
		Macro 21	222-232	
		Macro 22	232-255	
12	Macro Speed	Shutter Macro Speed (slow to fast)	0-255	0
13	Multy Color Macro	No Function	0-1	0
		Macro 1	2-12	
		Macro 2	13-23	
		Macro 3	24-34	
		Macro 4	35-45	
		Macro 5	46-56	
		Macro 6	57-67	
		Macro 7	68-78	
		Macro 8	79-89	
		Macro 9	90-100	
		Macro 10	101-111	
		Macro 11	112-122	
		Macro 12	123-133	
		Macro 13	134-144	
		Macro 14	145-155	
		Macro 15	156-166	
		Macro 16	167-177	
		Macro 17	178-188	
		Macro 18	189-199	
		Macro 19	200-210	
		Macro 20	211-221	
		Macro 21	222-232	
		Macro 22	232-255	
14	Macro Speed	Color Macro Speed (slow to fast)	0-255	0

		No Function	0-1	

	0	2-6
	1	7-12
	2	13-18
	3	19-24
	4	25-30
	5	31-36
	6	37-52
	7	43-48
	8	49-54
	9	55-60
	A	61-66
	B	67-72
	C	73-78
	D	79-84
	E	85-90
	F	91-96
	G	97-102
	H	103-108
Alpha Numeri c	I	109-114
Display	J	115-120
	K	121-126
	L	127-132
	M	133-138
	N	139-144
	O	145-150
	P	151-156
	Q	157-162
	R	163-168
	S	169-174
	T	175-180
	U	181-186
	V	187-192

		W	193-198	
		X	199-204	
		Y	205-210	
		Z	211-216	
		Right Arrow	217-222	
		Down Arrow	223-228	
		Up Arrow	229-234	
		Left Arrow	235-255	
16	Back Red	Background Red	0-255	0
17	Back Green	Background Green	0-255	0
18	Back Blue	Background Blue	0-255	0
19	White Dimmer	White	0-255	255
20	Strobe	No Function	0-1	0
		Strobe (slow to fast)	2-127	
		Strobe Pulse (slow to fast)	128-170	
		Random Strobe All (slow to fast)	171-213	
		Random 1-10 Strobe (slow to fast)	214-255	
21		No Function	0-1	0
		Macro 1	2-19	
		Macro 2	20-39	
		Macro 3	40-59	
		Macro 4	60-89	
	White Macro	Macro 5	90-109	
	(Responds to	Macro 6	110-139	
	White Dimmer )	Macro 7	140-159	
		Macro 8	160-189	
		Macro 9	190-209	
		Macro 10	210-239	
		Macro 11	240-255	
22	Macro Speed	White Macro Speed (slow to fast)	0-255	0
23	Control	No Function	0-127	0
		Reset	128-255	

## Pan T Bot 256 Ch Mode

DMX Channel	Function	Description	Value	Init
1	Pan	Pan	0-255	127
2	Pan Fine	Pan Fine	0-255	127
3	Tilt	Tilt	0-255	127
4	Tilt Fine	Tilt Fine	0-255	127
5	Speed	Pan and Tilt Speed (fast to slow)	0-255	0
6	Control	No Function	0-127	0
		Reset	128-255	
7	LED Color	White 1	0-255	0
8	LED Color	White 2	0-255	0
9	LED Color	White 3	0-255	0
10	LED Color	White 4	0-255	0
11	LED Color	White 5	0-255	0
12	LED Color	White 6	0-255	0
13	LED Color	White 7	0-255	0
14	LED Color	White 8	0-255	0
15	LED Color	White 9	0-255	0
16	LED Color	White 10	0-255	0
17	LED Color	Red 1	0-255	0
18	LED Color	Green 1	0-255	0
19	LED Color	Blue1	0-255	0
20	LED Color	Red 2	0-255	0
21	LED Color	Green 2	0-255	0
22	LED Color	Blue 2	0-255	0
	” “	” “	” “	” “
251	LED Color	Red 79	0-255	0
252	LED Color	Green 79	0-255	0
253	LED Color	Blue 79	0-255	0
254	LED Color	Red 80	0-255	0
255	LED Color	Green 80	0-255	0
256	LED Color	Blue 80	0-255	0

## Item List

Part Number	Description
1187-BEZ-ARM	Arm Plastic Housing
1187-BEZ-BAS	Base Plastic Housing
1187-BEZ-HAN	Handel Plastic Housing
1187-BEZ-HEA	Rear Head Plastic Housing
1187-BEZ-LEN	Front Head Plastic Housing
1187-BEZ-YOK	Yoke Plastic Housing (single piece)
1187-FAN-60	60mm Fan
1187-FAN-90	90mm Fan
1187-LED-MOD-RGB	Led Module RGB
1187-LED-MOD-WHI	Led Module White
1187-LED-RGB	Single LED RGB
1187-LED-WHI	Single LED White
1187-MOT-PAN	Pan Motor
1187-MOT-TIL	Tilt Motor
1187-PCB-DRI-WHI	LED PCB for White Driver
1187-PCB-MAI	Main PCB
1187-PCB-VOL	Voltage Distribution PCB
1187-POW	Power Supply
CAS-1187-2	Dual Road Case

## Rigging the Fixture

### Caution!

1. The installations must be carried out by an authorized dealer or trained professional.
2. Unit may cause severe injuries 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 once a year by a skilled person

**Unit can be installed in any of these directions**

## **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. 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

**Note:** There is no serviceable parts inside the device. Maintenance and service operations are to be carried out by au-thorized 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 professional only. Should you have further questions , please contact your dealer

## **MEGA Systems, Inc. Warranty**

MEGA SYSTEMS INC ("MSI) hereby warrants to the original purchaser/owner ('Customer), MSI products to be free of manufacturing defects in material and workmanship, tor the warranty periods as defined below from the original purchase invoice date. I his warranty applies exclusively to new MSI branded andlor 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 MS 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 years	3
House Light LED, Decorative LED, Compact LED, iCandy LED, Theatrical LED, Strobe Wash LED, Follow Spot LED, Lighting Control, Direct View LED Displays and Video Control	Three years	4

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

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 [www.megasystemsinc.com](http://www.megasystemsinc.com) 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, DOWNTIME 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



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## 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
- **Phone:** 210-684-2600
- **E-mail:** [service@mega.lighting](mailto:service@mega.lighting)


## Manual Version

Please Visit [www.mega.lighting](http://www.mega.lighting) for the most up to date manual version

- Document Version 1.0
- Date 01/10/2023
- Fixture Software V1.0
- Notes

Mega-Lite 18668 Highway 16N Helotes, Texas 78023 Ph 210-684-2600 Fax 210-855-6279 [www.mega.lighting](http://www.mega.lighting) / [info@mega.lighting](mailto:info@mega.lighting)

## Documents / Resources

	<p><a href="#">MEGA PAN T BOT Lite Tiltbot Trio</a> [pdf] User Manual PAN T BOT Lite Tiltbot Trio, PAN T BOT, Lite Tiltbot Trio, Tiltbot Trio, Trio</p>
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## References

- [HOME - MEGA-LITE](#)