

- Now available with our ADAPT globe family (5", 3.5" and 2.5" globe)
- Tivoli's proprietary algorithm controls RGB+W (5000K) LEDs for superior color saturation and TRUE white performance with only 3 channels of DMX other than a standard 4 channel system
- True RGB +W Technology delivers more than 16 million combinations of pure and precise color tones
- Audio enhanced with MADRIX 5 software
- Individually control each globe with DMX512 protocol for a unique and personal environment
- Each globe is auto-addressed for fast set-up and connection
- Tivoli's proprietary PCB design delivers a high level performance and easy replacement
- Two mounting options for suspended and a twist-off cap for surface applications
- 24V DC Low voltage system for long runs
- Pre-molded twist connect male and female power leads for multiple runs
- IP67
- cULus listed
- 3 Year warranty

## **Dimensions**

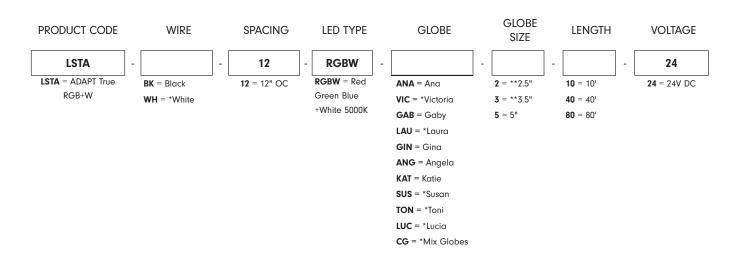




## **Strand Order Guide**

**Note:** For suspension application, a catenary cable is required for proper installation. Please contact Tivoli for recommendations on unique mounting applications.

#### Strand Order Guide - 12" OC Max electrical run length (80 total globes each circuit): 80'



\*Consult factory for MOQ and lead-time

\*\* 2.5", 3.5" AVAILABLE IN ANG, GIN, KAT ONLY Consult factory for MOQ and lead-time

Strand Order Guide - 24" OC Max electrical run length (80 total globes each circuit): 160'



#### \*Consult factory for MOQ and lead-time

\*\* 2.5", 3", 4" AVAILABLE IN ANG, GIN, KAT ONLY Consult factory for MOQ and lead-time



# Specifications

Output	
Kelvin Temperature	Red / Green / Blue / White (5000K)
Pixels	1 pixel/globe
Lumens (Im/globe)	55 (all color fully on)
Electrical	
Input Voltage	24V DC
Power Consumption (W/globe)	1
Maximum Run (based on O.C. spacing)	80' @ 12" O.C., 160' @ 24" O.C. (Total 80 globes per circuit)
Control	
Control System	DMX 512
Address Setting	Auto Addressing
Physical	
Socket Housing	PVC
Globe	Glass (Shatter resistance assist with silicone coating - Glass may still break under certain conditions)
Mounting	Surface Mount, Suspended
Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Certification and Testing	
Certification	cULus
Environment	Wet Location
IP Rating	IP67
Warranty	3 Years

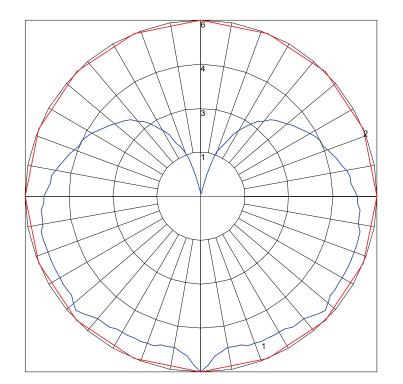
Weights (5" Globe)	12"	24"				
lb/ft	0.48	0.42				
lb/ft with catenary cable	0.50	0.44				
Weights ( 3.5" Globe)						
lb/ft	0.32	0.26				
lb/ft with catenary cable	0.34	0.28				
Weights ( 2.5" Globe)						
lb/ft	0.18	0.12				
lb/ft with catenary cable	0.20	0.14				
Weights (ST19 Globe)						
lb/ft	0.49	0.41				
lb/ft with catenary cable	0.51	0.43				



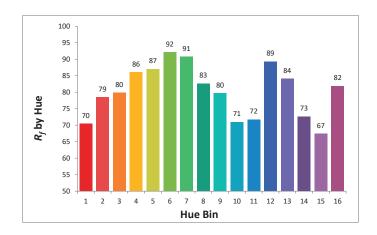
## Photometrics - based on 5" Lucia Globe

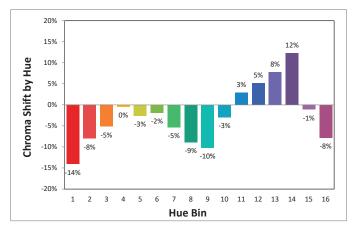
Maximum Candela = 5.6 Located At Horizontal Angle = 0

Vertical Angle = 0 #1 Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.) #2 Vertical Cone Through Vertical Angle (0) (Through Max. Cd.)



## TM-30-15



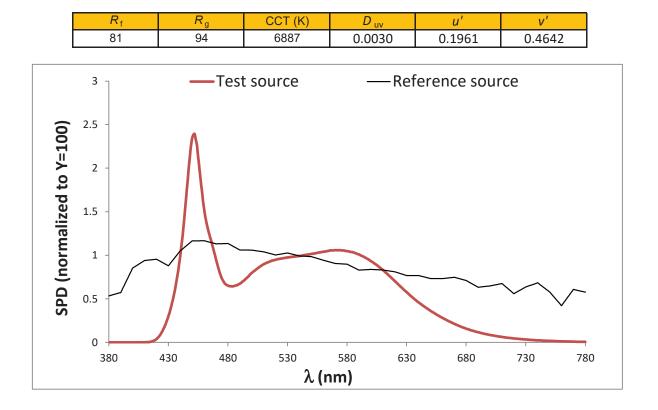


Tivoli, LLC. reserves the right to modify this specification without prior notice.

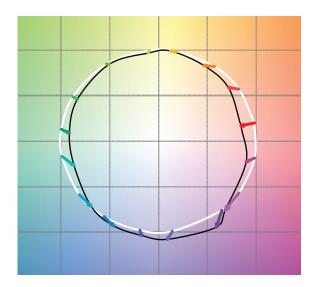
Copyright © Tivoli 03/05/23



## TM-30-15



Color Vector Graphic



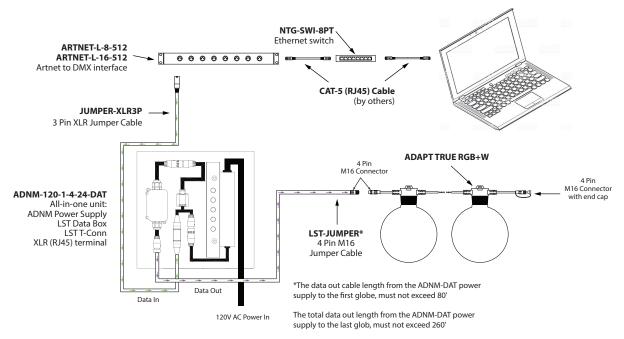
		Graphic Shifts (%)			
Hue Bin	<b>R</b> <sub>f</sub>	Chroma	Hue		
1	70	-14%	0%		
2	79	-8%	7%		
3	80	-5%	9%		
4	86	0%	6%		
5	87	-3%	2%		
6	92	-2%	-2%		
7	91	-5%	0%		
8	83	-9%	2%		
9	80	-10%	12%		
10	71	-3%	17%		
11	72	3%	14%		
12	89	5%	3%		
13	84	8%	-7%		
14	73	12%	-15%		
15	67	-1%	-23%		
16	82	-8%	-6%		

## Wiring Diagram

## **Online Operation**

#### MADRIX (Live)

This is a live control performance setup. Widely used for concerts or performance-based manipulation. Use of a live network is necessary for communication between MADRIX software and Litesphere True RGB+W.

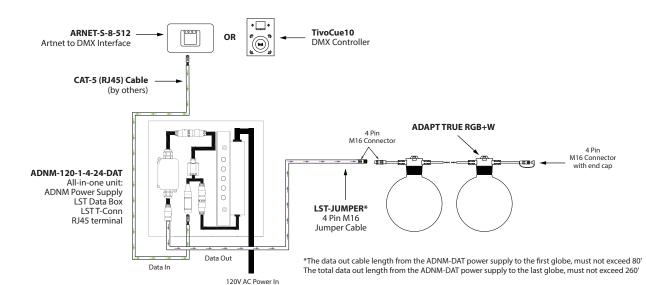


## **Off-line Operation**

#### TivoCUE (Preset)

Programmed via CUE software and recorded to a Micro SD card for data transfer into TivoCUE control. This is a stand-alone feature with no need for network support by software (CUE) once recorded and transferred to in-wall DMX control hardware. Please refer to TivoCue10 User Manual for additional information.

Note: TivoCue10 controls a maximum of 1 universes with 80 pixels (globes) total. Consult factory for 160 pixels (globes) maximum option.

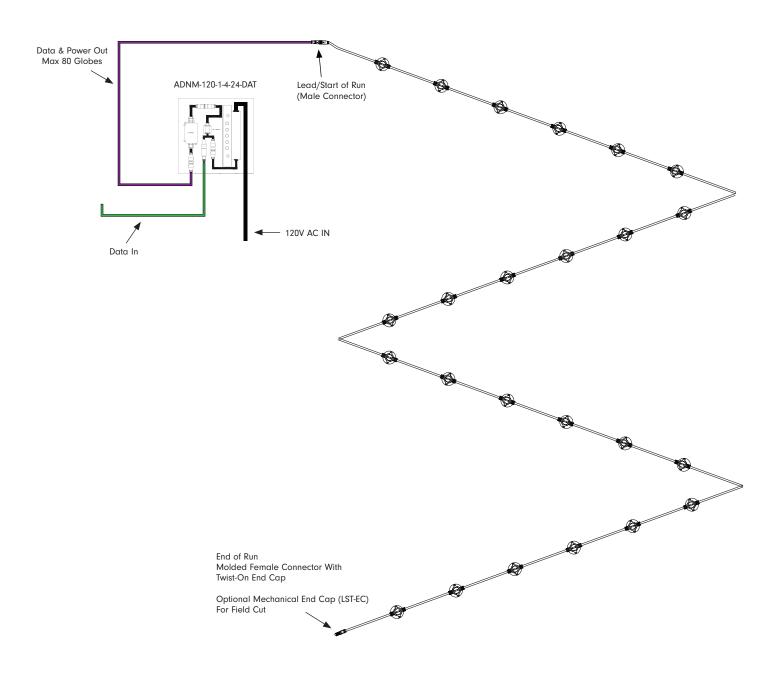




## Wiring Single Run with single circuit 96W

#### WARNING! Risk of Product Failure

The data & power out cable length from the ADNM-DAT power supply to the first globe, must not exceed 80'



Warnings: Risk of injury or fire.

Do not cover any luminaire as the covering may cause it to overheat.

Do not install this lighting system where the exposed bare contacts can be shorted or contact any conductive material to reduce the risk of fire and burns.

Do not install any luminaire closer than 6 inches (15.25cm) from any curtain, or similar combustible material.

Tivoli, LLC. reserves the right to modify this specification without prior notice.

Do not use any luminaire if damaged; such as, broken globe, loose connections, or frayed wire insulation. Inspect periodically.

Do not submerge any luminaire in liquid. Use waterproof connectors for all outdoor applications.

Do not secure any luminaire with staples, nails or like means that might damage the wire insulation. Secure it by using screws through the base.

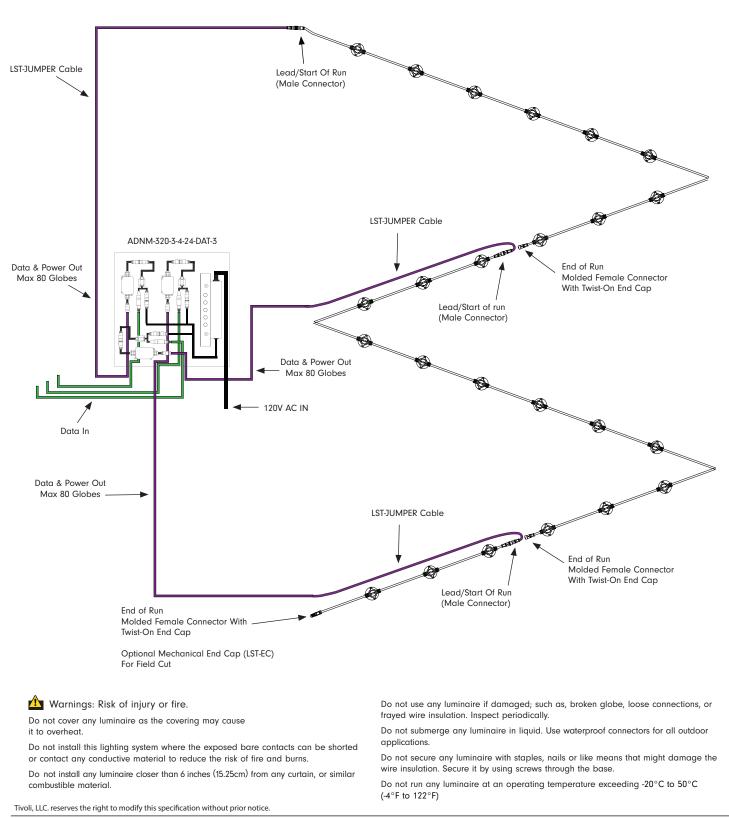
Do not run any luminaire at an operating temperature exceeding -20°C to 50°C (-4°F to 122°F)



## Wiring Multiple Runs with multi circuit 96W

#### WARNING! Risk of Product Failure

The data & power out cable length from the ADNM-DAT power supply to the first globe, must not exceed 80'

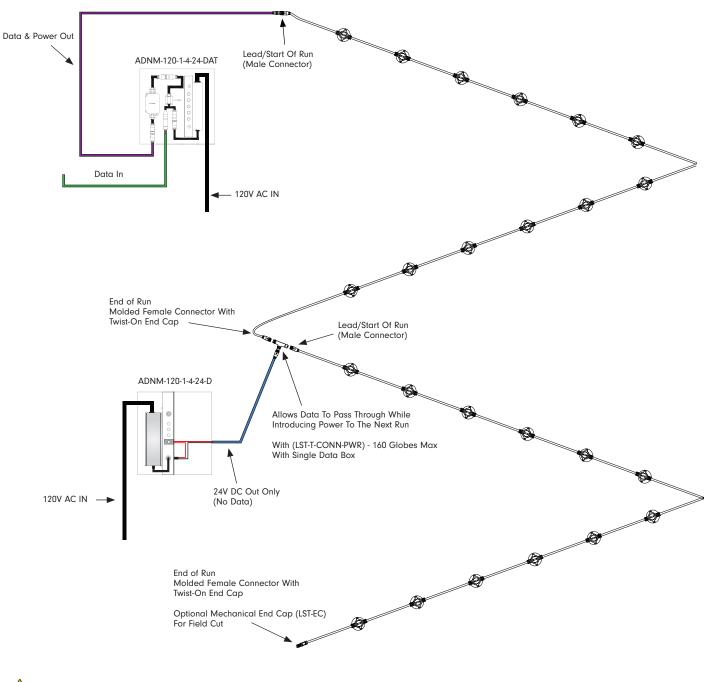




#### Wiring Dual Runs with single circuit 96W

#### WARNING! Risk of Product Failure

The data & power out cable length from the ADNM-DAT power supply to the first globe, must not exceed 80' The total data out length from the ADNM-DAT power supply to the last globe, must not exceed 260'



Warnings: Risk of injury or fire.

Do not cover any luminaire as the covering may cause it to overheat.

Do not install this lighting system where the exposed bare contacts can be shorted or contact any conductive material to reduce the risk of fire and burns.

Do not install any luminaire closer than 6 inches (15.25cm) from any curtain, or similar combustible material.

Tivoli, LLC. reserves the right to modify this specification without prior notice.

Do not use any luminaire if damaged; such as, broken globe, loose connections, or frayed wire insulation. Inspect periodically.

Do not submerge any luminaire in liquid. Use waterproof connectors for all outdoor applications.

Do not secure any luminaire with staples, nails or like means that might damage the wire insulation. Secure it by using screws through the base.

Do not run any luminaire at an operating temperature exceeding -20°C to 50°C (-4°F to 122°F)

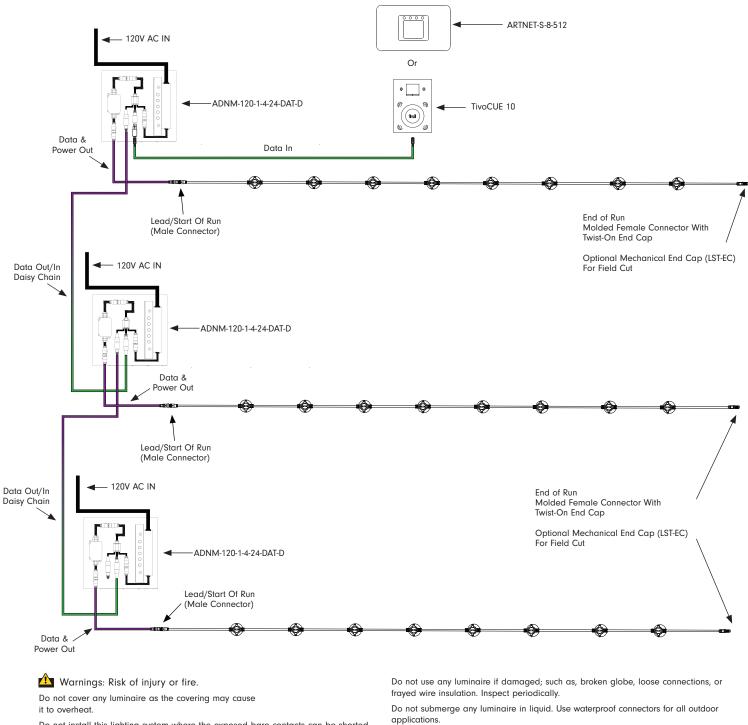


## Daisy-Chain Multiple Runs within single Universe

The below example setup is for 160 globes max on (1) universe with different globe count per strand. This process includes manually programing each Data Box for a specified DMX address according to your setup. Each Data Box must be addressed in house by the factory before shipment.

#### WARNING! Risk of Product Failure

The data & power out cable length from the ADNM-DAT-D power supply to the first globe, must not exceed 80' The total data out length from the ADNM-DAT-D power supply to the last globe, must not exceed 260'



Do not install this lighting system where the exposed bare contacts can be shorted or contact any conductive material to reduce the risk of fire and burns.

Do not install any luminaire closer than 6 inches (15.25cm) from any curtain, or similar combustible material.

Tivoli, LLC. reserves the right to modify this specification without prior notice.

(-4°F to 122°F)

Do not secure any luminaire with staples, nails or like means that might damage the

Do not run any luminaire at an operating temperature exceeding -20°C to  $50^\circ\text{C}$ 

wire insulation. Secure it by using screws through the base.



#### **Accessories**



LST-JUMPER-X-XX 4 PIN jumper cable, IP67 X = B (Black), W\* (White) XX = 5, 10, 20 (lengths in ft)



**JUMPER-XLR3P-X** Jumper Cable 3-PIN XLR X = 5, 10, 25 (lengths in ft)



**LST-EC-X** End Cap X = B (Black), W\* (White)



**LST-T-CONN-PWR-X** T-CONN power pass through X = B (Black), W\* (White)



LST-PWR-2-X-XX 2 pin power lead (for T-CONN-PWR) X = B (Black), W\* (White) XX = 10 (10'), 15 (15'), 20 (20'), 25 (25')



NTG-SWI-8PT NETGEAR 8-Port Gigabit Ethernet Unmanaged Switch



NTG-SWI-16PT NETGEAR 16-Port Gigabit Ethernet Unmanaged Switch



ARTNET-L-X-512 X = 8, 16 (ports) 8 or 16 port universe Artnet to DMX interface, 16 port 8192 DMX channels 8 port 4096 DMX channels (Online only)

\*Consult factory for MOQ and lead-time

## **Controls & Software**



**TVOQ-10-XX-7** XX = BK (Black), WH (White) 1024 DMX channel, 500 scene, 10 zone, glass touch screen



**TVOQ-2-BK** 512 DMX channel, 99 scene, 1 zone, glass touch screen



ARTNET-S-8-512 8 port universe Artnet to DMX interface, 4096 DMX channels (Online or Offline option)



Cue™ and CuePro™ softwares are specifically designed for the TivoCUE™ in-wall DMX controls and includes an array of tools required by the latest DMX lighting fixtures. Intuitive, with easy-to-use effects that can be dropped into timelines, and multi-zone synchronization capabilities allow you to program a project effortlessly.



## **MADRIX 5 Key & Software Levels**



#### MADRIX KEY

A USB dongle unlocks the software's full output. You can freely switch between different PCs as it is not bound to a specific one. It only needs to be activated on-line once.

#### **MADRIX 5 LICENSE UPGRADES**

You can easily upgrade your MADRIX 5 KEY to any higher license at any time, increasing the available output.

MADRIX 5 Key & Software Cat No	MDRX-LC-5S	MDRX-LC-5E	MDRX-LC-5B	MDRX-LC-5P	MDRX-LC-5U	MDRX-LC-5M				
Level	START	ENTRY	BASIC	PROFESSIONAL	ULTIMATE	MAXIMUM				
	DMX-Based Output									
DMX Channels	1,024	4,096	16,384	65,536	262,144	1,048,576				
DMX Universe Example	2	8	32 128		512	2,048				
RGB Voxels Example	341	1,365	5,461	21,845	87,381	349,525				
	DVI-Based Output									
DVI Voxels	4,096	16,384	262,144	1,048,576	2,097,152	2,097,152				
Render Resolution Example	64 X 64 PIXELS	128 X 128 PIXELS	512 X 512 PIXELS	1,024 X 1,024 PIXELS	2,048 X 1,024 PIXELS	2,048 X 1,024 PIXELS				



## **Mounting Options**

#### SURFACE/FLUSH

For surface mount applications, remove the top suspension-plate by turning counter-clockwise until off. Place socket flush against the desired surface and mount using proper screws according to substrate.





#### SUSPENDED

Suspended mounting will use a combination of LS-Cable, LS-Locks with LS-UVZP. Tension the cable wire with our LS-TT (Tension Tool) for desired sag (Please adhere to local city code for suspended application).

Note: For suspension application, a catenary cable is required for proper installation. Please contact Tivoli for recommendations on unique mounting applications.

LS-LOCK-X Cable Lock

**X** = **2** (2 Locks), **4** (4 locks) Includes (1) cable release key. Cable Lock for 1/8th

adjusted without the use of tools.

inch cable, Heavy-duty lockable fasteners

support loads up to 200 lbs. Can be easily

## **Mounting Accessories**



**LS-CABLE-60 Catenary Cable Kit - 60'** (1/8" galvanized cable includes 2 cables locks for use with loads up to 200lbs)

**LS-CABLE-110 Catenary Cable Kit - 110'** (1/8" galvanized cable includes 2 cables locks for use with loads up to 200lbs)

LS-CABLE-500 Catenary Cable Kit - 500' (1/8t" galvanized cable for use with loads up to 2001bs)



LS-UVZP-BK-XX UV Zip Ties

XX = 30 (30pc), 50 (50pc) Bag set. UV resistant, heavy duty ties. Maximum weight up to 100 lbs./ per tie.

Tivoli, LLC. reserves the right to modify this specification without prior notice.



#### LS-TT

Catenary Cable Tensioning Tool up to 880lbs with minimal effort due to the 6:1 gear drive mechanism. Integral torque gauge controls the load applied to the wire, giving consistent tension every time and optimizing the life of the wire.



315/16"

## **Light Shades Order Guide** HAT 31/ 1219/32 SHADE-HT-BK-BK-8 SHADE-HT-BK-BK-13\* Light Shade - HAT Light Shade - HAT 8.3" Black Top, Black Bottom Weight: 0.38 lb 12.6" Black Top, Black Bottom Weight: 1.06 lb SHADE-HT-BK-CO-13\* Light Shade - HAT 12.6" Black Top, Copper Bottom Weight: 1.06 lb \*Consult factory for lead time and MOQ DISH 101/ SHADE-DS-BK-BK-10 Light Shade - DISH 10.2" Black Top, Black Bottom Weight: 0.72 lb **FLOWER** 213/32 013/... 1313/16 SHADE-FL-BK-BK-10 SHADE-FL-BK-BK-13 Light Shade - FLOWER Light Shade - FLOWER 9.8" Light Shade , Black Top, Black Bottom Weight: 0.54 lb 13.8" Light Shade, Black Top, Black Bottom Weight: 1.1 lb **Accessories** SHADE-LS2ADP-XX-01 2.0 Light Shade Adapter **X** = BK (Black), WH (White) PVC Black Adapter - Sold individually. SHADE-LS2ADP-XX-25 2.0 Light Shade Adapter

**X** = BK (Black), WH (White) PVC Black Adapter Kit - Sold in packs of 25

#### SHADE-LS2ADP-XX-50 2.0 Light Shade Adapter

**X** = BK (Black), WH (White) PVC Black Adapter Kit - Sold in packs of 50



## **Replacement Globes 5"**

G125 Globe (Weight: 4 oz./ea.)





\*Consult Factory for MOQ and Lead Time.



Shatter Resistant Silicone Coating

## Replacement Globes 3.5", 2.5"



Angela LSA-ANG-X-N X = 3 (3.5"), 2 (2.5")



Gina **LSA-GIN-X-N X** = 3 (3.5"), 2 (2.5")



**LSA-KAT-X-N X** = 3 (3.5"), 2 (2.5")

## **Replacement Parts**



LST-RGBW-24 Litesphere True RGB+W LED sold each



DMX3-CAT5-ADPTR DMX Adapter 3-pin XLR Female to RJ45



LSA2-GA-X X = B (black), W (white) Litesphere ADAPT 2.0 Globe Adapter sold each



LST-T-CONN-3P T Connector, IP67 3-PIN XLR Male for DMX 5-PIN M16 Female for LED 2-PIN M16 female to 2-PIN male



LST-T-CONN-DSY Daisy-Chain T Connector, IP67 3-PIN XLR Male 3-PIN XLR Female 5-PIN M16 Female for LED 2-PIN M16 female (power)



LST-DATABX Data Box (for custom programing consult factory)



## **Power Supplies**

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-120-1-4-24-D	Indoor / Outdoor	100-277V AC ₅‰ HZ	24V DC	1	96W	4A

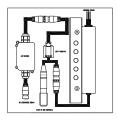
#### ADNM-DAT / ALL - IN - ONE

Litesphere True RGB+W ADNM-DAT power supply is an all-in-one unit that comes with: Power Supply, LST Data Box, LST T-Conn, RJ45-to-XLR connection. All contained within our outdoor rated NEMA 3 box. Box size can vary depending on number of circuits.

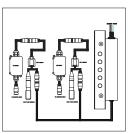
DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	DATA BOXES	MAX LOAD	CIRCUIT CAPACITY		
	ADNM-120-1-4-24-DAT	Indoor /	100-277V AC 5%0 HZ		1	1	96W	4A		
ADNM Series Class 2 Transformer	ADNM-240-2-4-24-DAT-2						24V DC	2	2	2x96W
	ADNM-320-3-4-24-DAT-3	Outdoor			3	3	3x96W	3x4A		

#### ADNM-120-1-4-24-DAT

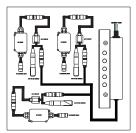
120-277V AC / 24V DC, 96W /1 CIRCUIT X 4A 1 LS RGB+W DATA BOX(s), (1) LST-T-CONN



ADNM-240-24-24-DAT-2 120-277V AC / 24V DC, 192W /2 CIRCUITS X 4A 2 LS RGB+W DATA BOX(s), (1) LST-T-CONN



ADNM-320-3-4-24-DAT-3 120-277V AC / 24V DC, 288W /3 CIRCUITS X 4A 3 LS RGB+W DATA BOX(s), (1) LST-T-CONN



#### ADNM-DAT-D / ALL - IN - ONE

Litesphere True RGB+W ADNM-DAT-D power supply is an all-in-one unit that comes with: Power Supply, LST Data Box, LST T-Conn-DSY. All are contained within our outdoor rated NEMA 3 box that allows you to daisy-chain multiple runs (not to exceed 160 globes) to (1) DMX universe. Manual addressing of each Data Box must be done at the factory.

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	DATA BOXES	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-120-1-4-24-DAT-D	Indoor / Outdoor	100-277V AC 5‰ HZ	24V DC	1	1	96W	4A

#### ADNM-120-1-4-24-DAT-D

120-277V AC / 24V DC, 96W /1 CIRCUIT X 4A 1 LS RGB+W DATA BOX(s), (1) LST-T-CONN-DSY

