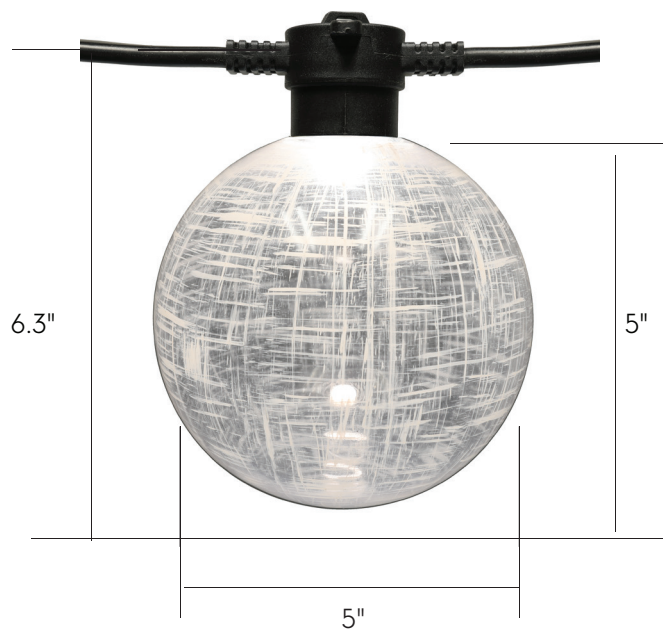# TRUE RGB+W
ADAPT

tivoli®

Project: _____   Type: _____

- Now available with our ADAPT PET 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
- Available DarkSky option with added light shade
- 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

6.3" 5" 5"

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

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Strand Order Guide

PRODUCT CODE	WIRE	SPACING	LED TYPE	GLOBE	LENGTH	VOLTAGE
LSTA			**RGBW**			**24**
LSTA = ADAPT True RGB+W	**BK** = Black	**12** = 12" OC	**RGBW** = Red Green Blue + White 5000K	**GINPET** = Gina	**10** = 10'	**24** = 24V DC
	WH = *White	**24** = 24" OC		**ANGPET** = Angela	**40** = 40'	
				KATPET = Katie	**80** = 80'	
				LUCPET = Lucia	**160** = *160'	

* Available for 24" Spacing Only

Globe Choice /Replacement

Note: Polyethylene Terephthalate (PET) globe for 100% shatter proof design
PET globes should not be exposed to industrial alcohol

LSA2-GIN-PET
Gina PET Globe
Clear with Frosted Design

LSA2-KAT-PET
Katie PET Globe
Clear with Frosted Design

LSA2-ANG-PET
Angela PET Globe
Clear with Frosted Design

LSA2-LUC-PET
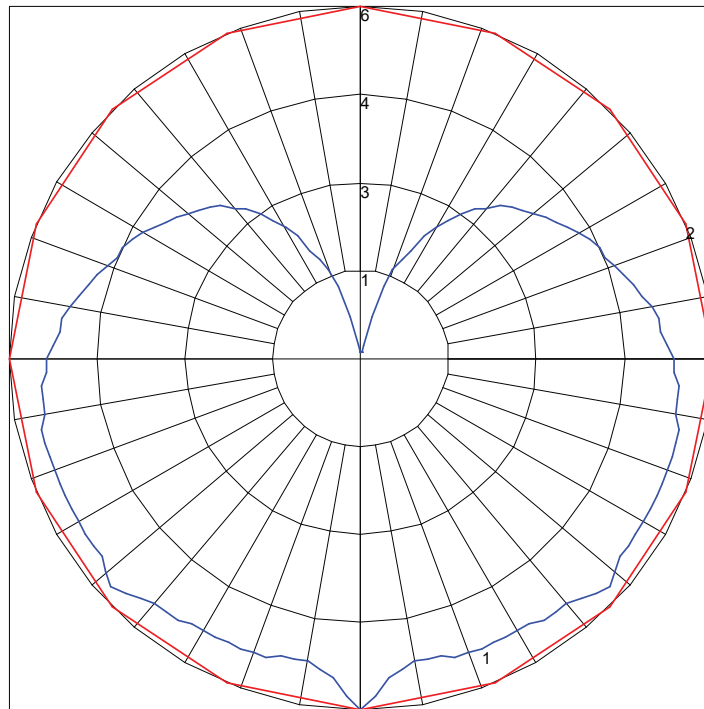Lucia PET Globe
Clear with Frosted Design

Specifications

EPA	12"	24"
G125 Globe only	0.16	0.09
Hat 8"	0.53	0.28
Hat 13"	N/A	0.71
Dish 10"	0.82	0.42
Flower 10"	0.82	0.42
Flower 13"	N/A	0.71

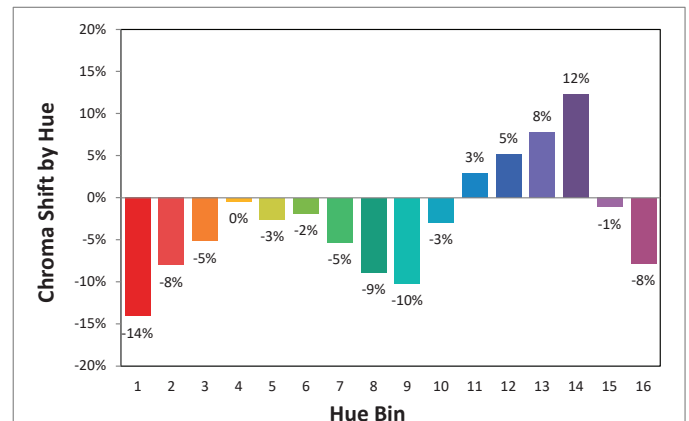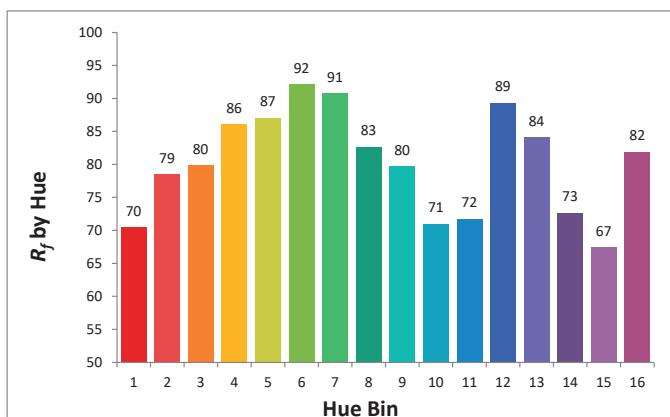| Weights (G125 PC Globe)	12"	24"
lb/ft	0.31	0.335
lb/ft with catenary cable	0.33	0.355

Output	
Kelvin Temperature	Red / Green / Blue / White (5000K)
Pixels	1 pixel/globe
Lumens (lm/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 (3 channel/globe)
Address Setting	Auto Addressing
Physical	
Socket Housing	PVC
Globe	PET (Shatter proof)
Mounting	Surface Mount, Suspended
Operating Temperature	-20°C to 50°C (-4°F to 122°F)
Storage Temperature	-40°C to 65°C (-40°F to 149°F)
Certification and Testing	
Certification	cULus
Environment	Wet Location
IP Rating	IP67
Warranty	3 Years

Photometrics - based on 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

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Copyright © Tivoli 05/14/25   Page 5 of 14   www.tivolilighting.com   tel: 714-957-6101   fax: 714-427-3458
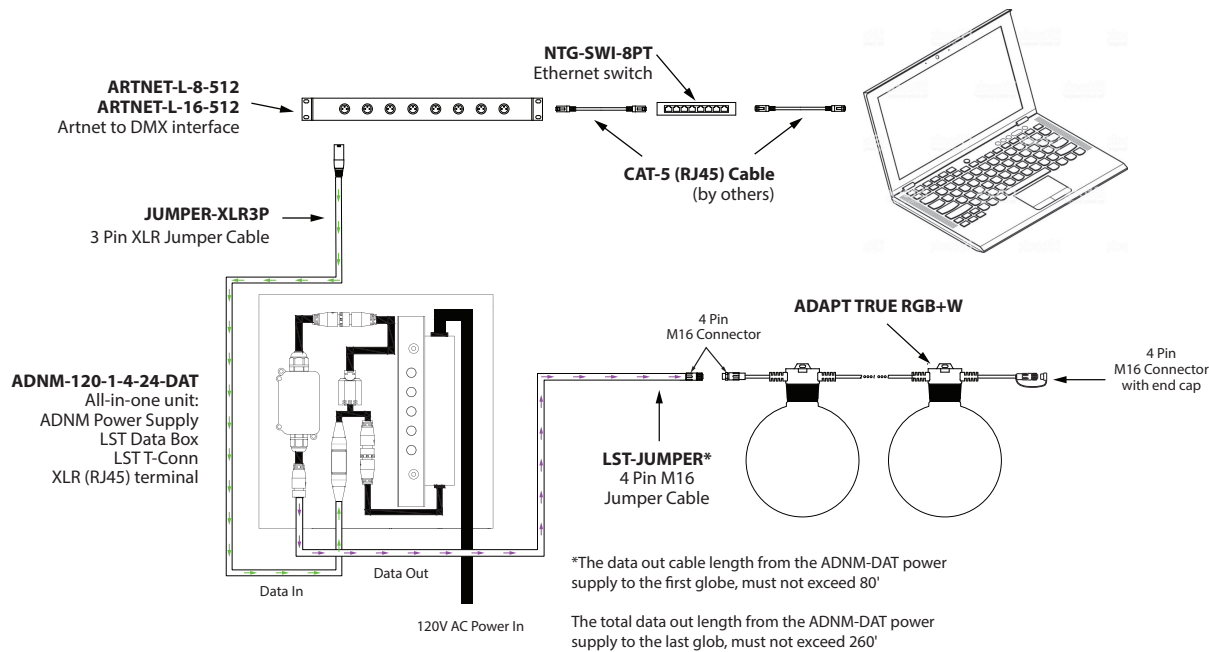
Wiring Diagram

DMX Databox base address is always 001 and auto addresses on powerup all connected globes up to a maximum of 170 globes equal to 510 DMX channels. (3 DMX Ch. per Globe) DMX Ch 511-512 can be used for DMX relay controlled powerup, optional.

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.
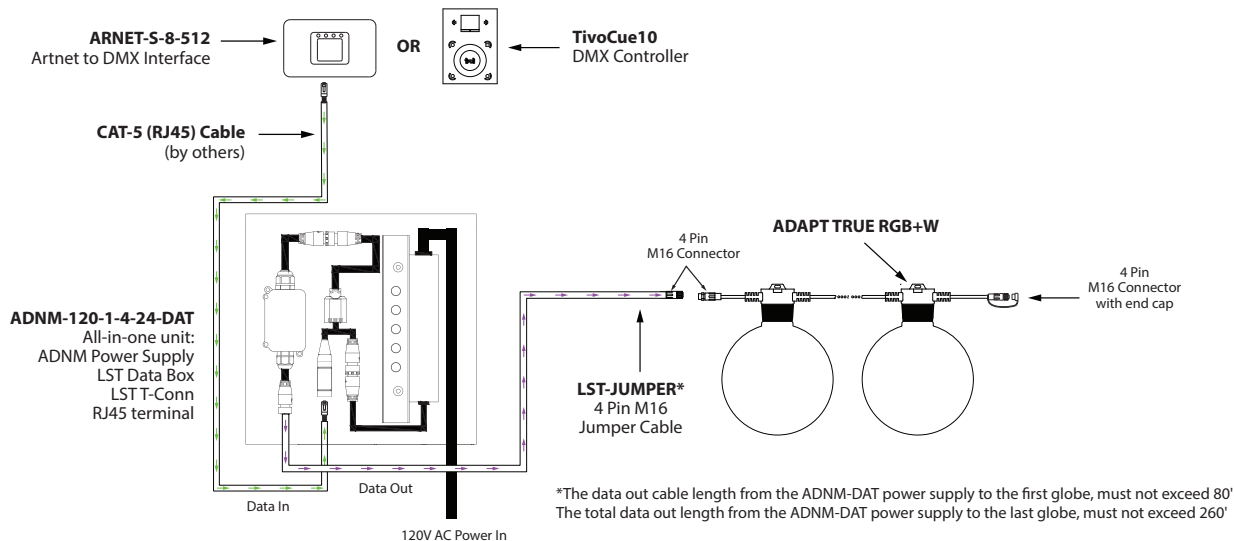

ARTNET-L-8-512
ARTNET-L-16-512
Artnet to DMX interface

NTG-SWI-8PT
Ethernet switch

CAT-5 (RJ45) Cable
(by others)

JUMPER-XLR3P
3 Pin XLR Jumper Cable

ADNM-120-1-4-24-DAT
All-in-one unit:
ADNM Power Supply
LST Data Box
LST T-Conn
XLR (RJ45) terminal

4 Pin
M16 Connector

ADAPT TRUE RGB+W

4 Pin
M16 Connector
with end cap

LST-JUMPER*
4 Pin M16
Jumper Cable

Data Out

Data In

120V AC Power In

*The data 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 glob, must not exceed 260'

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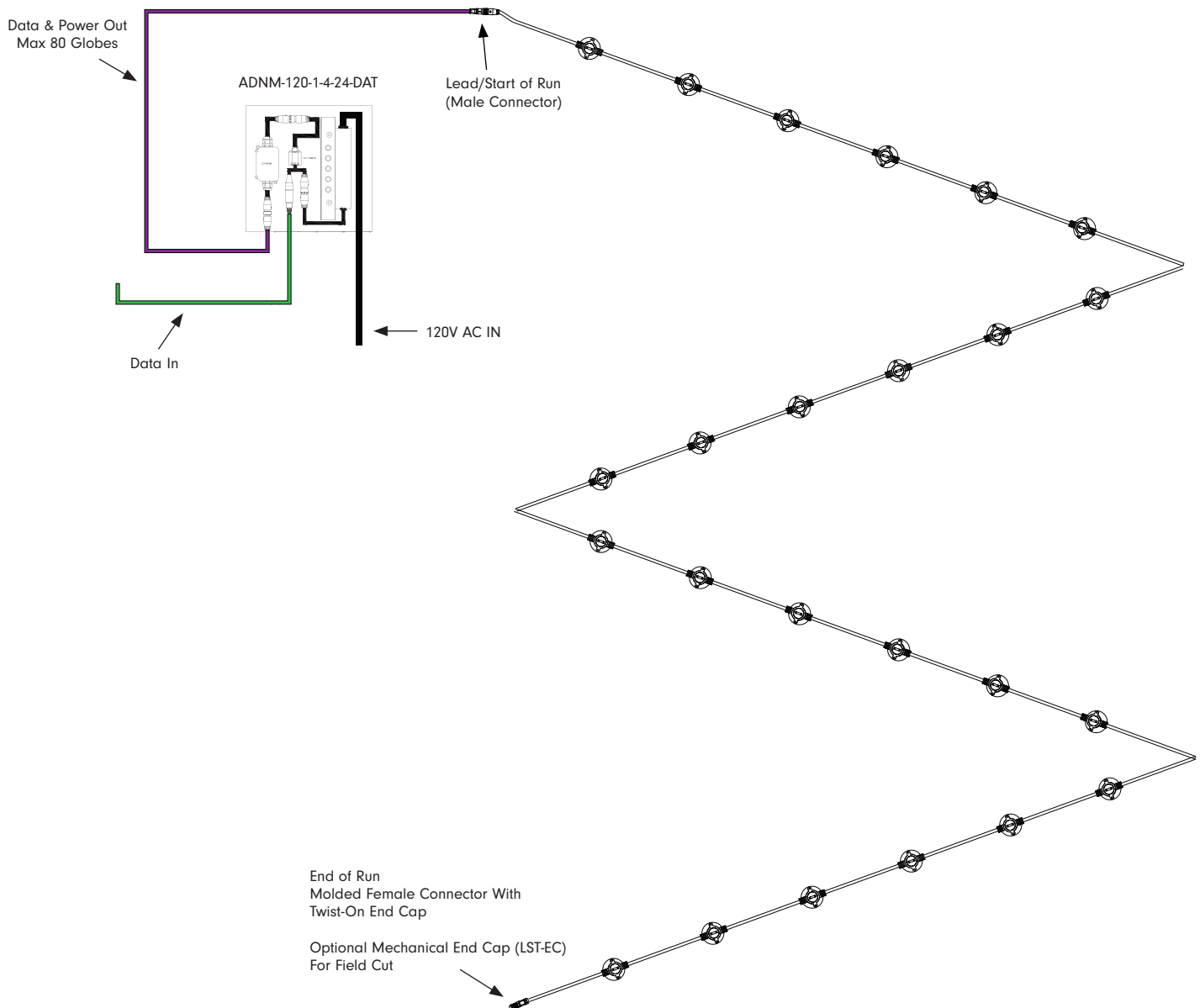
Note: TivoCue10 controls a maximum of 1 universes with 80 pixels (globes) total. Consult factory for 160 pixels (globes) maximum option.

ARNET-S-8-512
Artnet to DMX Interface

OR

TivoCue10
DMX Controller

CAT-5 (RJ45) Cable
(by others)

ADNM-120-1-4-24-DAT
All-in-one unit:
ADNM Power Supply
LST Data Box
LST T-Conn
RJ45 terminal

4 Pin
M16 Connector

ADAPT TRUE RGB+W

4 Pin
M16 Connector
with end cap

LST-JUMPER*
4 Pin M16
Jumper Cable

Data Out

Data In

120V AC Power In

*The data 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'

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'

Data & Power Out
Max 80 Globes

ADNM-120-1-4-24-DAT

Lead/Start of Run
(Male Connector)

Data In

120V AC IN

End of Run
Molded Female Connector With
Twist-On End Cap

Optional Mechanical End Cap (LST-EC)
For Field Cut

⚠ 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.

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
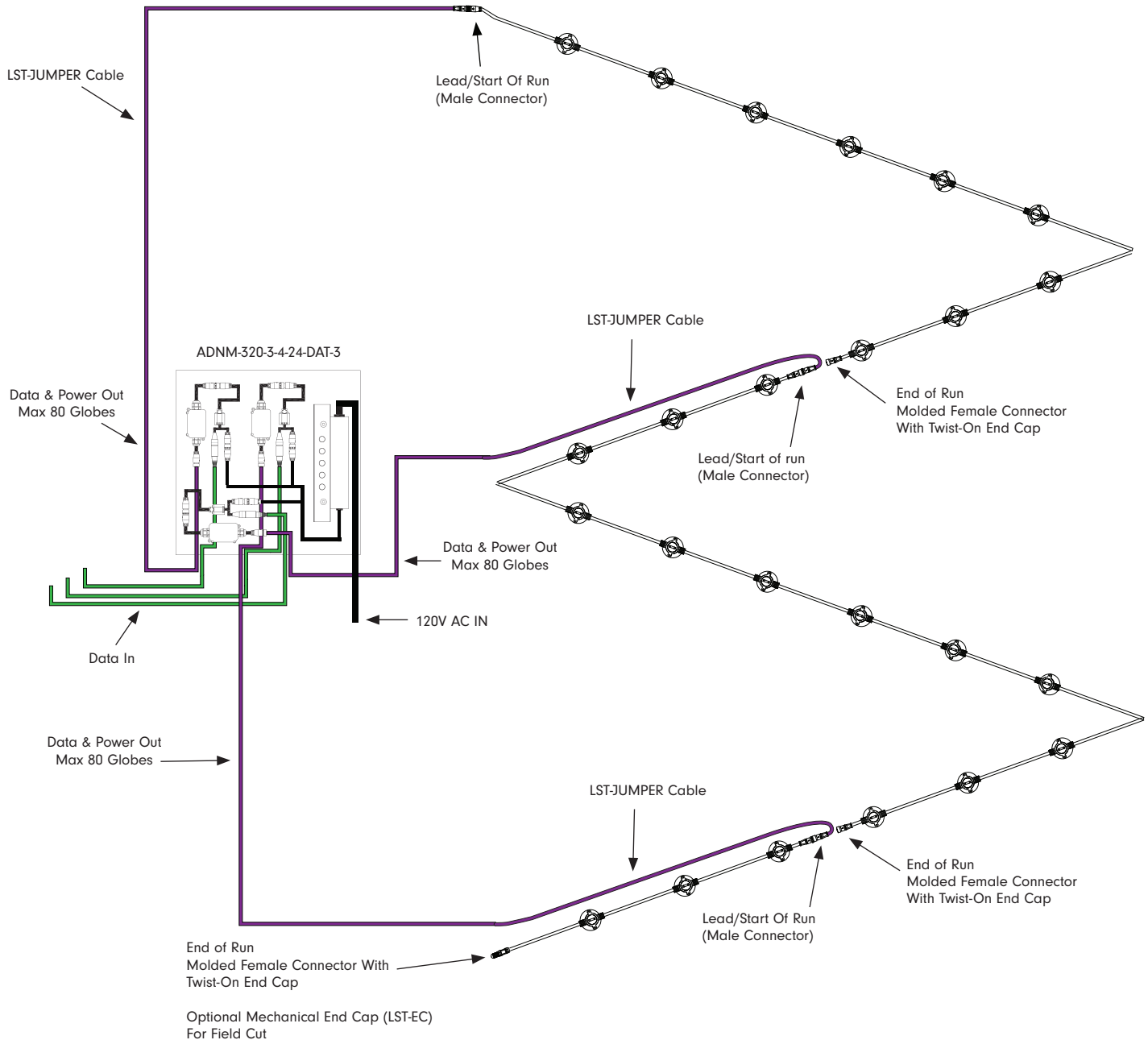applications.

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'

LST-JUMPER Cable

Lead/Start Of Run
(Male Connector)

ADNM-320-3-4-24-DAT-3

Data & Power Out
Max 80 Globes

LST-JUMPER Cable

Lead/Start of run
(Male Connector)

End of Run
Molded Female Connector
With Twist-On End Cap

Data In

Data & Power Out
Max 80 Globes

120V AC IN

Data & Power Out
Max 80 Globes

LST-JUMPER Cable

End of Run
Molded Female Connector
With Twist-On End Cap

Lead/Start Of Run
(Male Connector)

End of Run
Molded Female Connector With
Twist-On End Cap

Optional Mechanical End Cap (LST-EC)
For Field Cut

⚠ 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.

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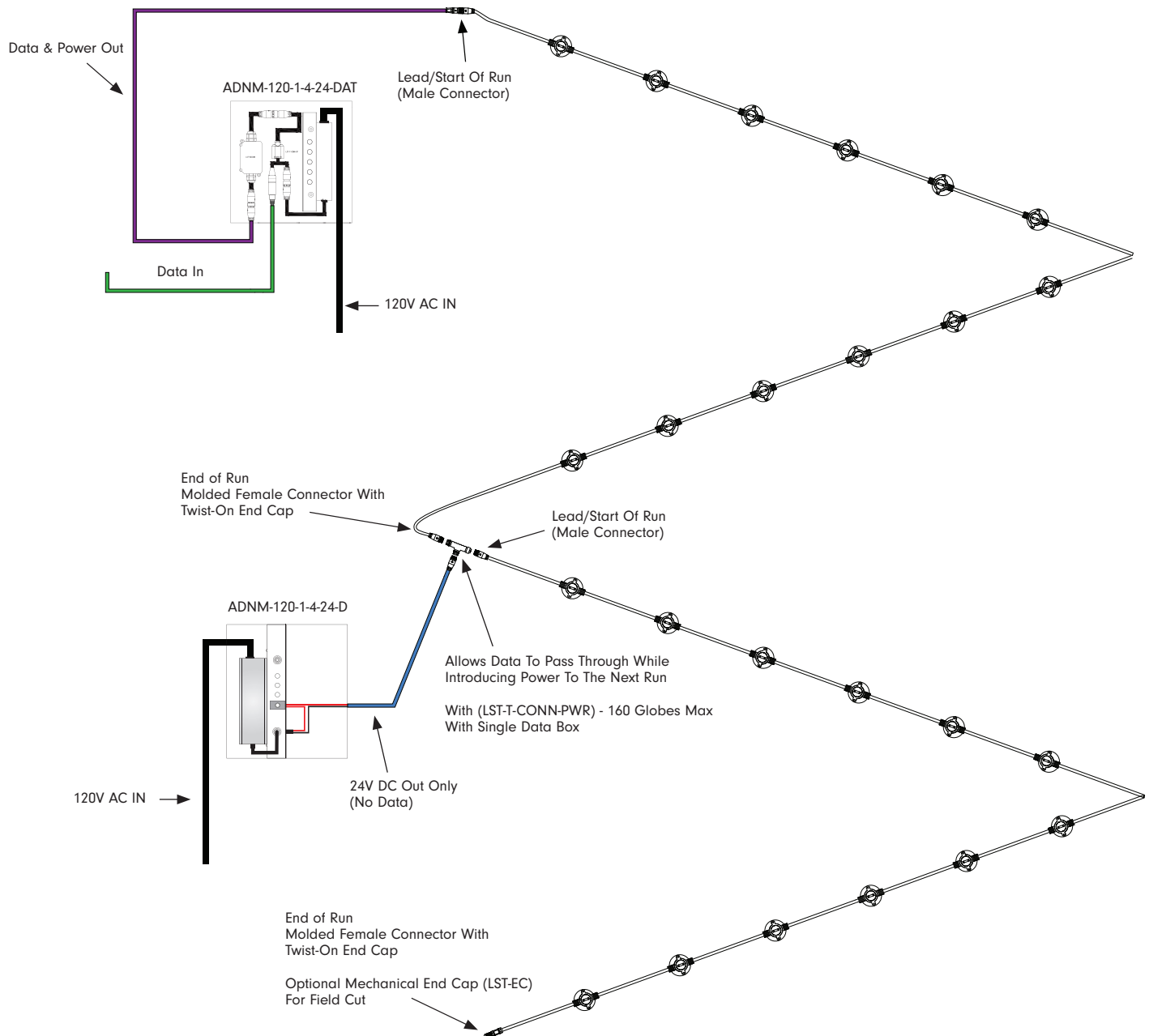wire insulation. Secure it by using screws through the base.

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

Wiring 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'

Data & Power Out

ADNM-120-1-4-24-DAT

Lead/Start Of Run
(Male Connector)

Data In

120V AC IN

End of Run
Molded Female Connector With
Twist-On End Cap

Lead/Start Of Run
(Male Connector)

ADNM-120-1-4-24-D

Allows Data To Pass Through While
Introducing Power To The Next Run

With (LST-T-CONN-PWR) - 160 Globes Max
With Single Data Box

120V AC IN

24V DC Out Only
(No Data)

End of Run
Molded Female Connector With
Twist-On End Cap

Optional Mechanical End Cap (LST-EC)
For Field Cut

⚠ 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.

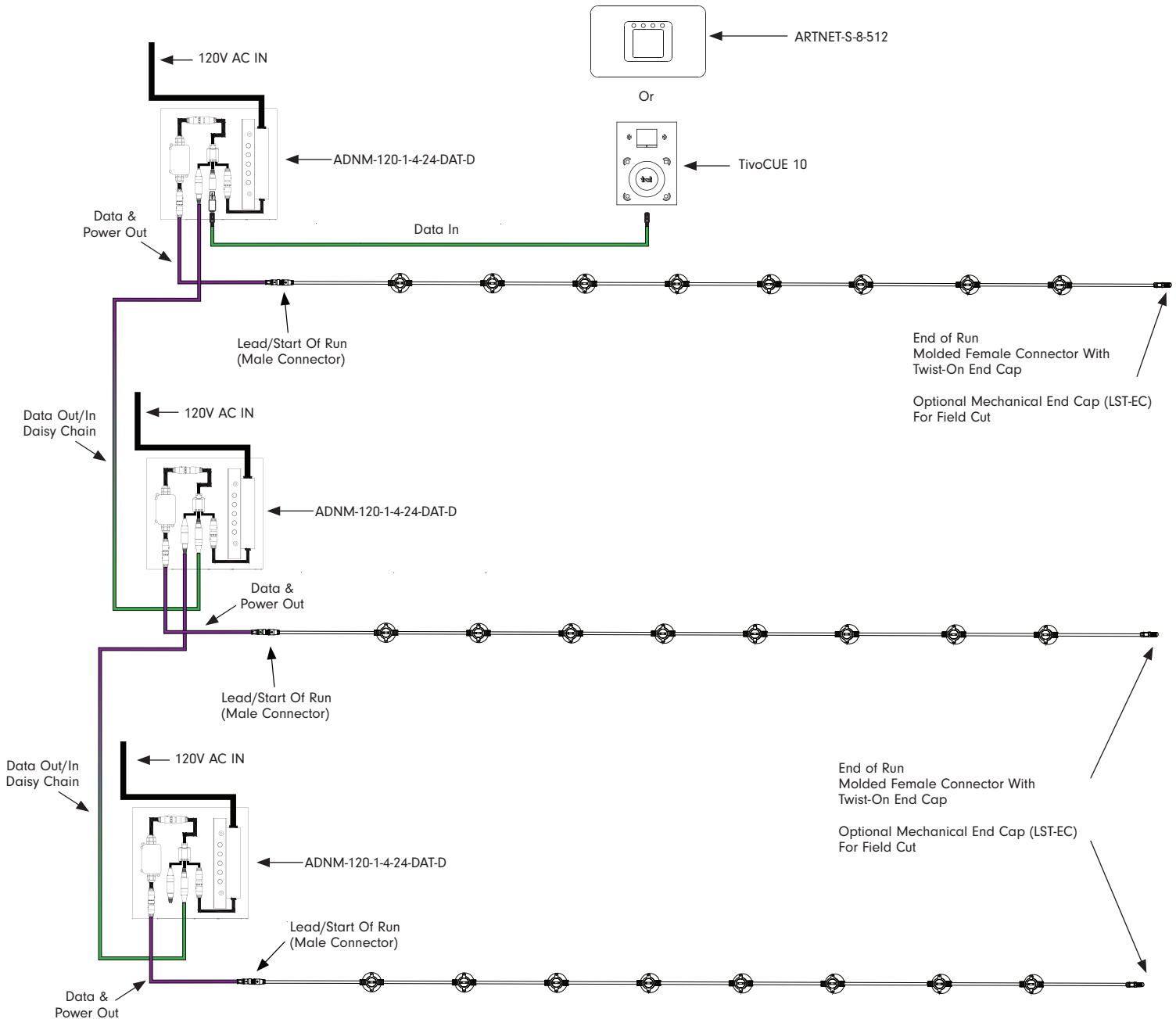Do not run any luminaire at an operating temperature exceeding -20°C to 50°C (-4°F to 122°F)

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 of each Data Box for a specified DMX address according to your setup. Each Data Box must be pre-addressed by the Tivoli 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'

120V AC IN

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

ARTNET-S-8-512

Or

TivoCUE 10

Data & Power Out

Data In

Lead/Start Of Run (Male Connector)

End of Run
Molded Female Connector With Twist-On End Cap

Optional Mechanical End Cap (LST-EC) For Field Cut

Data Out/In Daisy Chain

120V AC IN

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

Data & Power Out

Lead/Start Of Run (Male Connector)

End of Run
Molded Female Connector With Twist-On End Cap

Optional Mechanical End Cap (LST-EC) For Field Cut

Data Out/In Daisy Chain

120V AC IN

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

Lead/Start Of Run (Male Connector)

Data & Power Out

⚠ 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.

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)

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

Accessories

LST-JUMPER-X-XX
4 PIN jumper cable, IP67
X = **B** (Black), **W*** (White)
XX = **10, 20, 40, 60, 80, 100**
(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
Unmanaged Switch

ARTNET-L-X-512
X = **8** (8 Ports), **16** (Ports)
8 or 16 port universe Artnet to
DMX interface, 16 port 8192

MDRX-LUNA-XX
X = **04, 08, 16** (ports)
MADRIX Luna 4, 8, 16 port
universe Artnet to DMX interface
16 port 8192, 8 port 4096, 4 port
2048 DMX channels

DMX-SPLT-8
DMX Splitter
1 Input to 8 Output
Ethernet or Hardwire Connection

*Consult factory for MOQ and lead-time

Key & Software Levels

PRODUCT CODE		CONTROL		5 KEY & SOFTWARE LEVEL
MDRX	-	**LC**	-	
MDRX = MADRIX		LC = Lighting Control		**5S** = Start Level
				5E = Entry Level
				5B = Basic Level
				5P = Professional Level
				5U = Ultimate Level
				5M = Maximum Level

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 online once.

MADRIX 5 LICENSE UPGRADES

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

Level	START	ENTRY	BASIC	PROFESSIONAL	ULTIMATE	MAXIMUM
MADRIX 5 Order Code	MDRX-LC-5S	MDRX-LC-5E	MDRX-LC-5B	MDRX-LC-5P	MDRX-LC-5U	MDRX-LC-5M
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 (Pixel x Pixel)	64 x 64	128 x 128	512 x 512	1,024 x 1,024	2,048 x 1,024	2,048 x 1,024

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.

Controls

Touchscreen

TVOQ-10-XX-7
XX = **BK** (black), **WH** (white)

Touchscreen

TVOQ-2-BK
Black

Touchscreen

ARTNET-S-8-512
8 port universe Artnet to DMX interface, 4096 DMX channels
Programmable for playback and live support
(Online or Offline option)

MDRX-AURA-XX
X = 08, 16, 32 (ports)
MADRIX Luna 4, 8, 16 port universe Artnet to DMX interface.
Programible for playback and live support
(Online or Offline option)

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.

Mounting Accessories

LS-CABLE-X
X = **60** (60'), **110** (110'),
500 (500')
1/8" Galvanized cable includes (2) cable locks for use with loads up to 200lbs
Note: 500' no locks included

LS-LOCK-X
X = **2** (2 pcs), **4** (4 pcs)
Includes (1) release key
Cable Lock for 1/8" cable, support loads up to 200 lbs.

LS-TT
Cable tensioning tool up to 880lbs with 6:1 gear drive with integral torque gauge controls
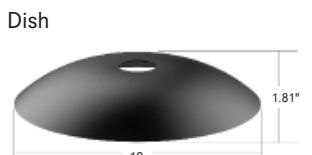
LS-UVZP-BK-XX
XX = **30** (30 pcs), **50** (50 pcs)
Black UV resistant, heavy duty ties maximum weight up to 100 lbs./per tie

Light Shade Accessories

Hat
3.125" (10)
3.93" (13)
XX = 10, 13

Dish
1.81"
10

Flower
2.40" (10)
2.68" (13)
XX = 10, 13

SHADE-HT-BK-XX-XX
XX = **BK** (black), **CO*** (copper)
XX = **8** (8.3"), **13**** (12.6")
Black top, black/copper bottom
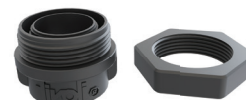Weight: 0.46 lb (8), 1.2 lb (13)

SHADE-DS-BK-BK-10
10.2"
Black top, black bottom
Weight: 0.76 lb

SHADE-FL-BK-BK-XX
XX = **10** (9.8"), **13** (13.8")
Black top, black bottom
Weight: 0.63 lb (10), 1.48 lb (13)

SHADE-ADP-LSL2-XX-XX
XX = **BK** (Black), **WH*** (White)
XX = **01** (1pc), **25** (25pcs),
50 (50pcs)
Litesphere 2.0 Shade Adapter kit

*Only available for 13 (Hat)   **Consult factory for lead time and MOQ

Replacement Parts

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

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

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)

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

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

Power Supplies

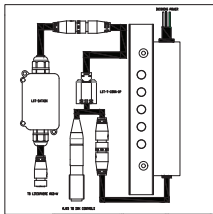| DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-120-1-4-24-D	Indoor / Outdoor	100-277V AC 50/60 HZ	24V DC	1	96W	4A

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.

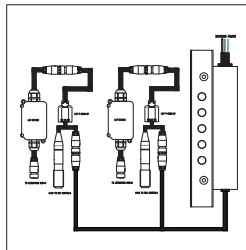| DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	DATA BOXES	MAX LOAD	CIRCUIT CAPACITY	DIMENSION
ADNM Series Class 2 Transformer	ADNM-120-1-4-24-DAT	Indoor / Outdoor	100-277V AC 50/60 HZ	24V DC	1	1	96W	4A	12.00" W X 12.00" L X 4.00" D
	ADNM-240-2-4-24-DAT-2				2	2	2x96W	2x4A	16.00" W X 16.00" L X 4.00" D
	ADNM-320-3-4-24-DAT-3				3	3	3x96W	3x4A	

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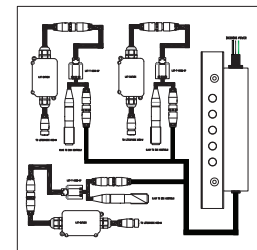1 LS RGB+W DATA BOX(s), (1) LST-T-CONN

ADNM-240-2-4-24-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 50/60 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