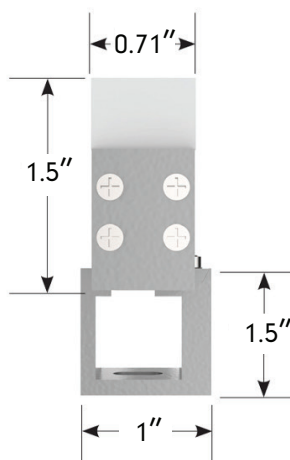


Project: \_\_\_\_\_ TYPE: \_\_\_\_\_

- Designed for architectural facade, bridge, and media display applications
- Low power consumption with efficient power management design
- Standard DMX 512 control protocol (Max. 44 frames/second)
- Amazing resolution with 3 pixels per foot
- Perfect light synchronization with Artnet system and ESD protection
- Electrical protection for short circuit, over current, over voltage, and over temperature
- Dynamic resolution control ranging from the entire fixture length down to 4" segments
- IP67 rated
- Mounting brackets included (2 per fixture)
- 3G Vibration Rated

## Dimensions



## Order Specification Guide

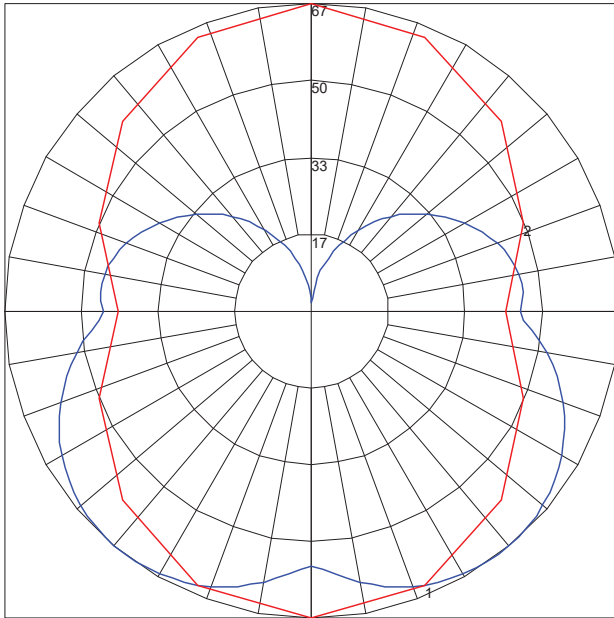
PRODUCT CODE	LENGTH	PIXEL/FOOT	VOLTAGE
<b>MLB</b>	<b>3</b>	<b>3</b>	<b>24</b>
<b>MLB</b> = Magic Linear Bar	<b>1</b> = 1ft <b>2</b> = 2ft <b>3</b> = 3ft <b>4</b> = 4ft	<b>3</b> = 3 pixels per ft.	<b>24</b> = 24V DC

Note: A layout/drawing must accompany each order showing run length and location

## Specifications

Output	
LED Channels	Red / Green / Blue / White (4000K)
Lumens (lm/ft)	106 (all colors fully on)
Efficacy (lm/W)	78
Beam Angle	145° x 105°
On-Axis Candela	44
Pixels	3 pixels/ft
Electrical	
Input Voltage	24V DC
Power Consumption (W/ft)	3
Maximum Run	32'
Control	
Control System	DMX 512 / Artnet
Address Setting	Auto
Physical	
Dimensions W/ Bracket	1.12" W x 2.48" D x 39.37" L
Dimensions W/O Bracket	0.71" W x 1.5" D x 39.37" L
Housing	Aluminum Powder Coat - Gray
Housing Expansion/Contraction	0.5cm (0.2")
Lens	Opal PMMA Acrylic
Mounting	Surface Mount
Cooling	Passive
Cable Entry	Bottom
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	cETLus, CE, RoHS
Environment	Wet Location
IP Rating	IP67
Vibration	3G (ANSI C136.31)

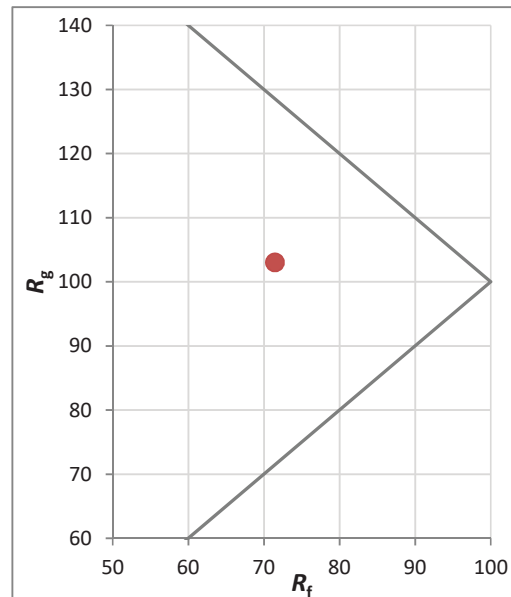
Photometrics



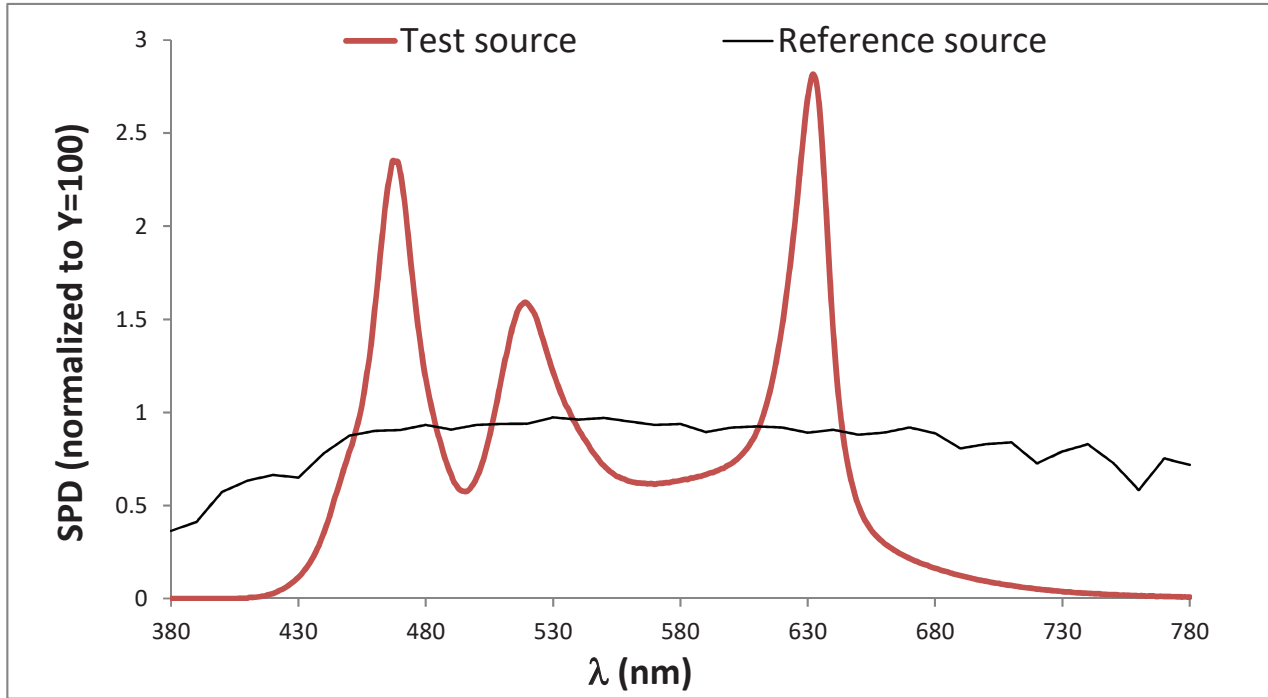
Maximum Candela = 66.5  
 Located At Horizontal Angle = 90  
 Vertical Angle = 37.5  
 #1 Vertical Plane Through Horizontal Angles (90-270) (Through Max. Cd.)  
 #2 Vertical Cone Through Vertical Angle (37.5) (Through Max. Cd.)

TM-30

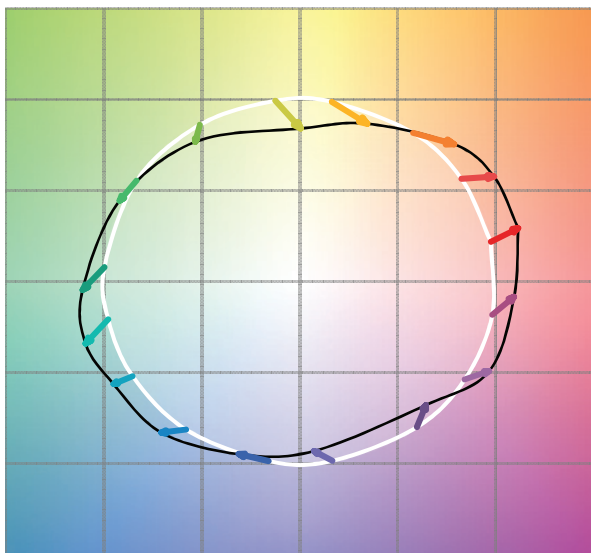
Hue Bin	$R_f$	Graphic Shifts (%)	
		Chroma	Hue
1	65	15%	5%
2	71	14%	-8%
3	58	7%	-21%
4	62	-8%	-20%
5	68	-17%	-10%
6	83	-6%	7%
7	75	1%	14%
8	69	9%	15%
9	77	14%	11%
10	78	10%	-2%
11	74	8%	-10%
12	74	-1%	-16%
13	80	-7%	-8%
14	75	-8%	11%
15	72	8%	11%
16	72	9%	12%



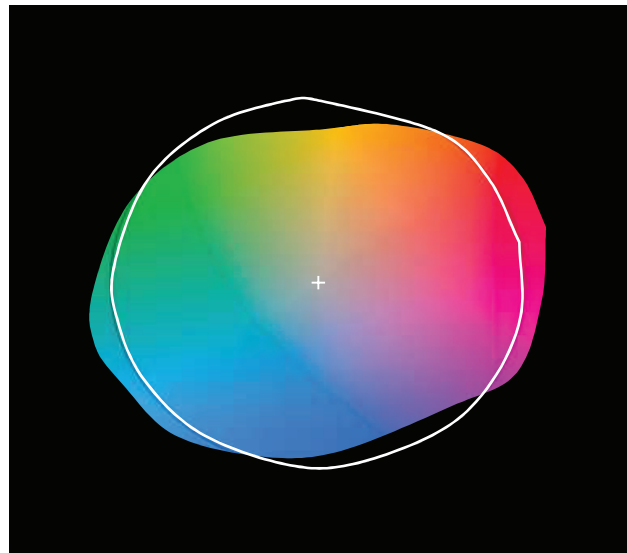
TM-30



Color Vector Graphic

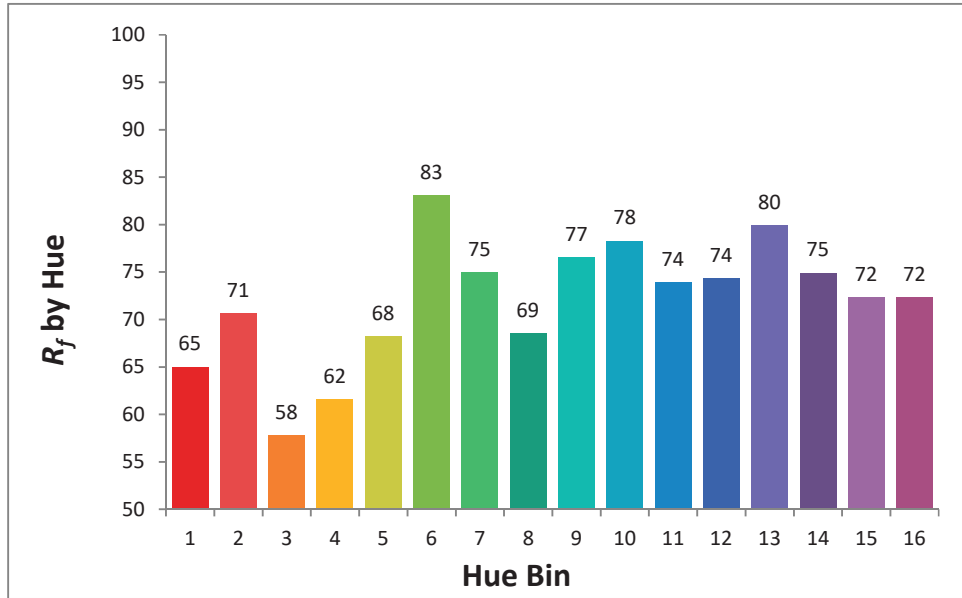


Color Distortion Graphic

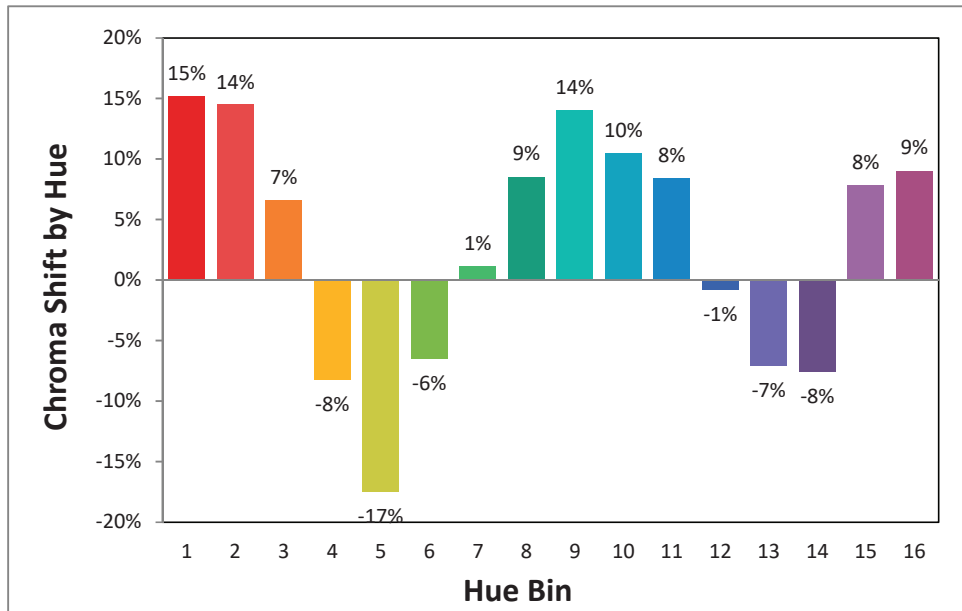


TM-30

Hue Angle Bin vs. Fidelity Index



Hue Angle Bin vs. Change of Chroma



Accessories



**MLB-PWR-2P**  
Power Feed Cable (IP67)  
6.5' length  
2-PIN M15 Screw Lock Female connector to Bare Wire



**MLB-JUMPER-M15-4P-X**  
Jumper Cable (IP67)  
**X = 10, 25, 100** lengths in ft  
4-PIN M15 Screw Lock Female to Male connector or Hardwire end for direct connection



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



**DMX3-X-CAT5-ADPTR**  
**X = M** (Male), **F** (Female)  
DMX Adapter  
3-pin XLR to RJ45



**DMX5-X-CAT5-ADPTR**  
**X = M** (Male), **F** (Female)  
DMX Adapter  
5-pin XLR to RJ45



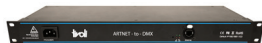
**MLB-T-CONN-3P**  
T Connector (IP67)  
3-PIN XLR Male for DMX  
4-PIN M15 Female for LED  
2-PIN M15 Screw Lock Male for Power



**NTG-SWI-XXPT**  
**XX = 8** (8 Ports), **16** (16 Ports)  
NETGEAR 16-Port gigabit Unmanaged Switch



**DMX-SPLIT-X**  
**X = 2, 4, 8** (Output Channels)  
DMX Splitter  
1 Input to 8 Output  
Ethernet or Hardwire Connection



**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)

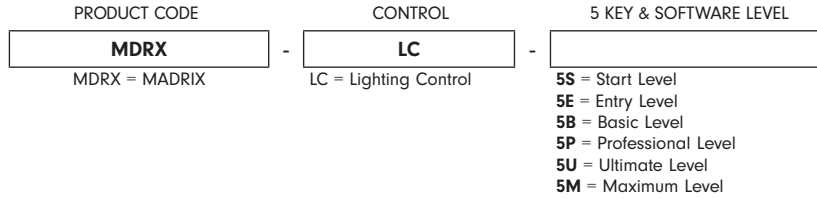


**MDRX-LUNA-XX**  
**X = 4, 8, 16** (ports)  
MADRIX Luna 4, 8, 16 port universe Artnet to DMX interface  
16 port 8192, 8 port 4096, 4 port 2048 DMX channels  
For RJ45 connection, DMX5 adapter needed



**MLB-TERM-CAP**  
End Cap for M15 Female Connector

## Key & Software Levels



### MADRIX KEY

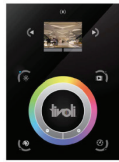
A USB dongle unlocks the software's full output. You can freely switch between different PCs as it is not bound to a specific one. It only needs to be activated online once.

### 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
<b>DMX-Based Output</b>						
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
<b>DVI-Based Output</b>						
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

## 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 = 02, 12, 32** (ports)  
 MADRIX Aura is a stand-alone controller for up to 2, 12, or 32 universes per unit



Power Supplies

**ADNM - NON DIMMING**

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
ADNM Series Class 2 Transformer	ADNM-90-1-4-24-D	Indoor / Outdoor	100-277V AC 50/60 HZ	24V DC	1	90W	3.75A
	ADNM-120-1-4-24-D				1	96W	4A
	ADNM-240-2-4-24-D				2	2x96W	2x4A
	ADNM-320-3-4-24-D				3	3x96W	3x4A

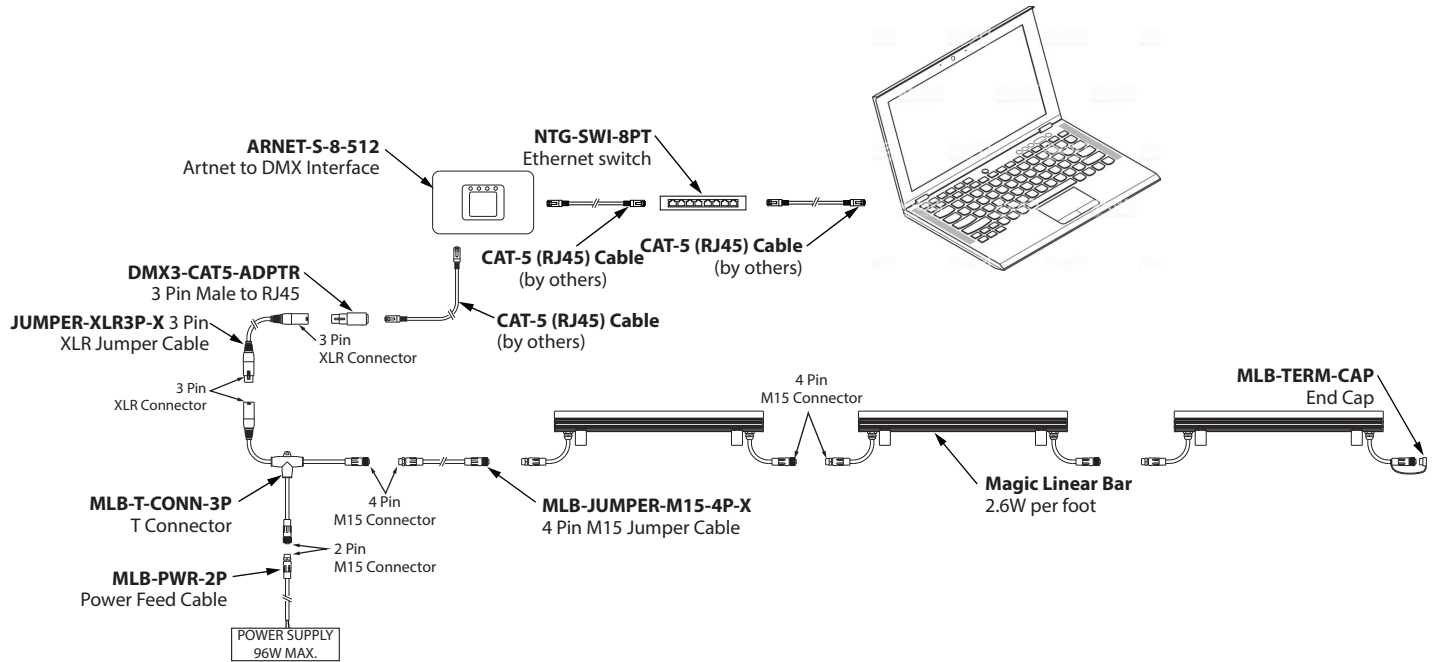
**INFINITY - MLV / ELV / 0-10V / PWM / TRIAC**

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	MIN LOAD	CIRCUIT CAPACITY
Infinity Series Class 2 Transformer	INF-J-30-1-1.3-24	Indoor / Outdoor	100 - 277V AC	24V DC	1	30W	3W	1.3A
	INF-J-60-1-2.5-24				1	60W	6W	2.5A
	INF-J-96-1-4-24				1	96W	9W	4A
	INF-J-192-2-4-24				2	2x96W	2x9W	2x4A
	INF-J-288-3-4-24				3	3x96W	3x9W	3x4A

Wiring Diagram - Offline

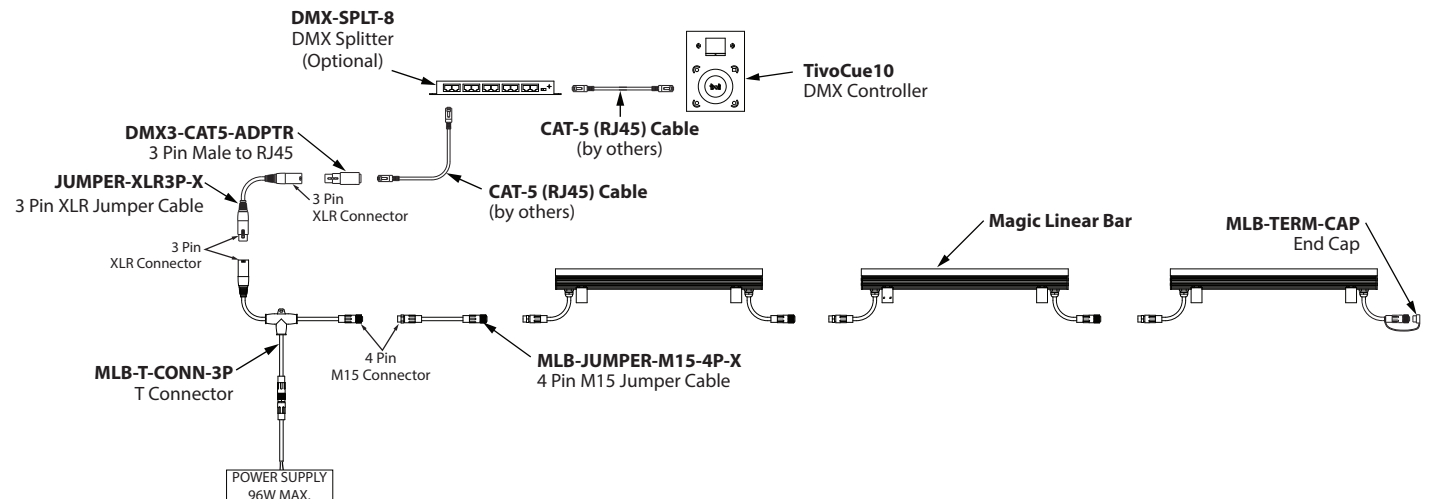
**ARNET-S**

Programmed via MADRIX software and recorded directly to an ARTNET-S interface for media applications and performance. This is a stand-alone feature without a need for network support by software (MADRIX) once recorded to the interface (ARNET-S). Please refer to installation instructions for additional information.



**TivoCUE (Preset)**

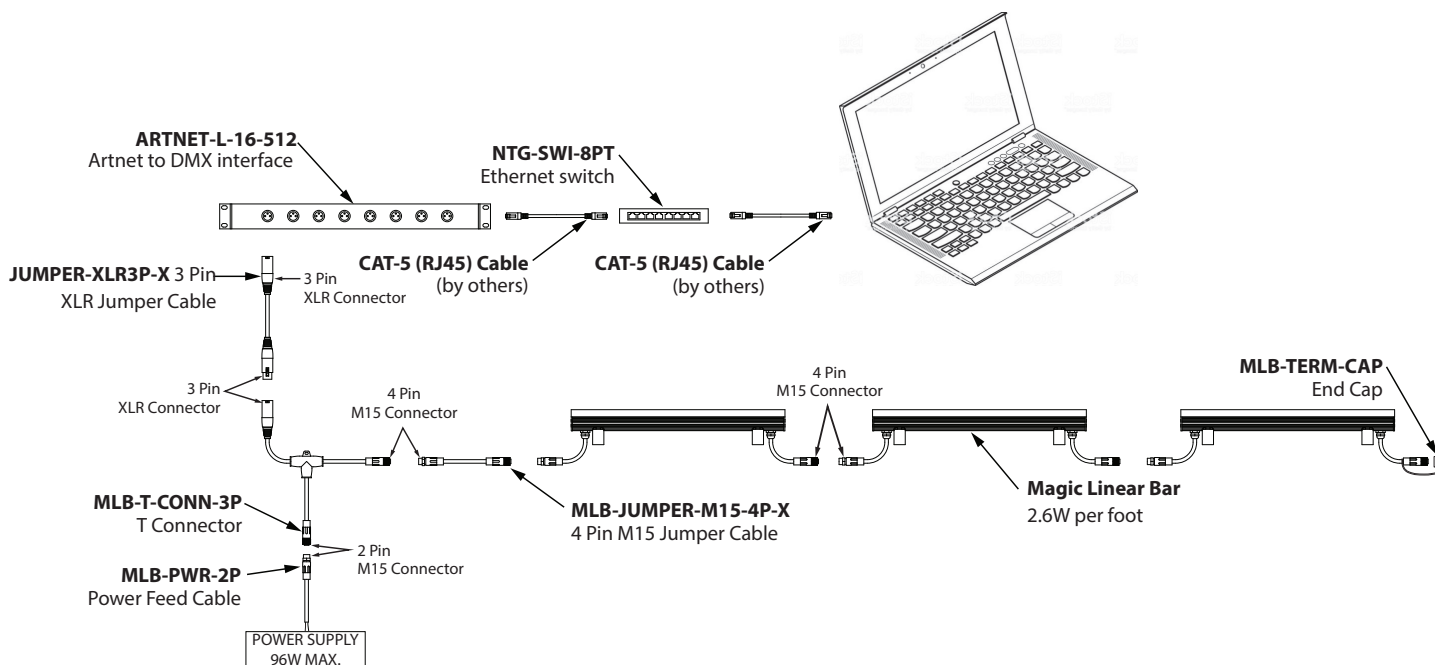
Programmed via CUE software and recorded to a MicroSD card for data transfer into TivoCUE control. This is a stand-alone feature with no need for network support by software (CUE) once recorded and transferred to in-wall DMX control hardware. Please refer to TivoCue 10 User Manual for additional information.



Wiring Diagram - Online

**MADRIX Live**

This is a live control performance setup, often used for concerts or performance-based manipulation. A live network is necessary for communication between MADRIX software and the fixture. Please refer to installation instructions for additional information.



Tivoli Commissioning Service

Tivoli's DMX Commissioning service involves the setup and configuration of our DMX lighting and control system, ensuring the seamless integration of our lighting fixtures with the specified DMX Control system ordered.

For more information about commission service, contact:  
 sales@tivoliusa.com  
 714-957-6101 (Engineering Tech Support)

Tivocue Wall Controllers (Default Scenes: White, Red,Green, Blue, Light Blue, Purple, Pink, Dim White, Yellow, Cool Cycle, Warm Cycle, All Cycle, Rainbow Scroll, Blackout)	
<b>TVOQ-REM-COMM-1</b>	Remote DMX commissioning for TIVOCUE 2 and 10 dmx wall controller. Pixel mapping/control is not offered for remote commissioning
<b>TVOQ-ONS-COMM-1</b>	Onsite DMX commissioning for TIVOCUE 2 and 10 dmx wall controller (est. 2 days)
ARTNET-S-8-512 (Default Scenes: White, Red,Green, Blue, Light Blue, Purple, Pink, Dim White, Yellow, Cool Cycle, Warm Cycle, All Cycle, Rainbow Scroll, Blackout)	
<b>ARTNET-S-REM-COMM-8</b>	Remote DMX commissioning for artnet s recorder up to 8 universes. Pixel mapping/control is not offered for remote commissioning
<b>ARTNET-S-ONS-COMM-8</b>	Onsite DMX commissioning for artnet s recorder up to 8 universes (est. 3 days)
<b>MADRIX DMX SYSTEM</b>	
<b>DMX-COMM-2U-MDRX</b>	Onsite commissioning for mardix, up to 2 universes (est. 3 days)
<b>DMX-COMM-8U-MDRX</b>	Onsite commissioning for mardix, up to 8 universes (est. 3 days)
<b>DMX-COMM-16U-MDRX</b>	Onsite commissioning for mardix, up to 16 universes (est. 4 days)
<b>DMX-COMM-24U-MDRX</b>	Onsite commissioning for mardix, up to 24 universes (est. 4 days)
<b>DMX-COMM-32U-MDRX</b>	Onsite commissioning for mardix, up to 32 universes (est. 5 days)
<b>32+ UNIVERSE</b>	Contact factory