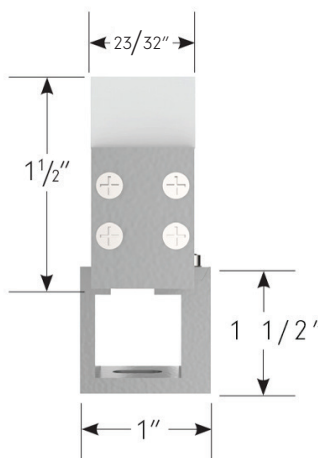


Project: \_\_\_\_\_ TYPE: \_\_\_\_\_

## Product Features

- 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

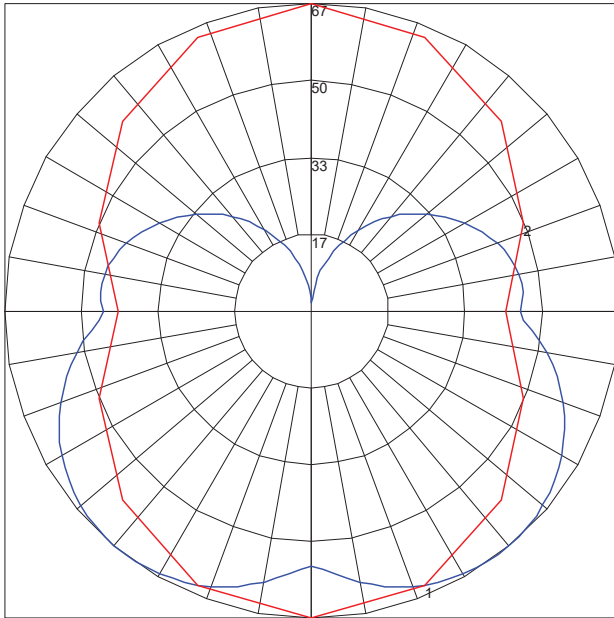
PRODUCT CODE	LENGTH	PIXEL/FOOT	VOLTAGE	
<b>MLB</b>	-	<b>3</b>	-	<b>24</b>
<b>MLB</b> = Magic Linear Bar	<b>1</b> = 1ft <b>2</b> = 2ft <b>3</b> = 3ft <b>4</b> = 4ft	<b>3</b> = 3 pixels per ft.	<b>24</b> = 24V DC	

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

## Specifications

<b>Output</b>	
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
<b>Electrical</b>	
Input Voltage	24V DC
Power Consumption (W/ft)	3
Maximum Run	32'
<b>Control</b>	
Control System	DMX 512 / Artnet
Address Setting	Auto / Manual
<b>Physical</b>	
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)
<b>Certification and Testing</b>	
Certification	cETLus, CE, RoHS
Environment	Wet Location
IP Rating	IP67
Vibration	3G (ANSI C136.31)

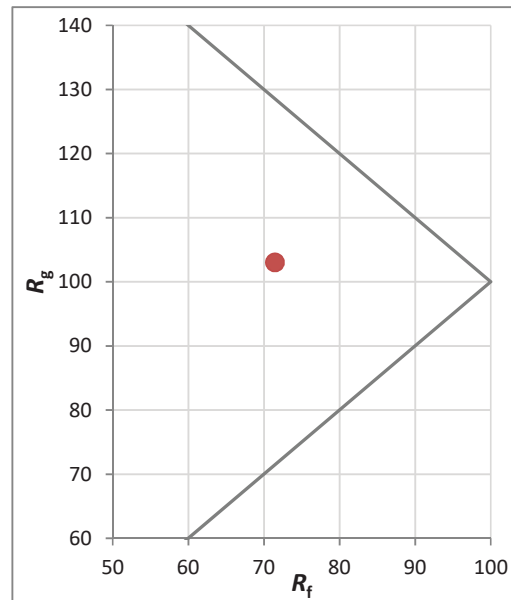
**Photometrics**



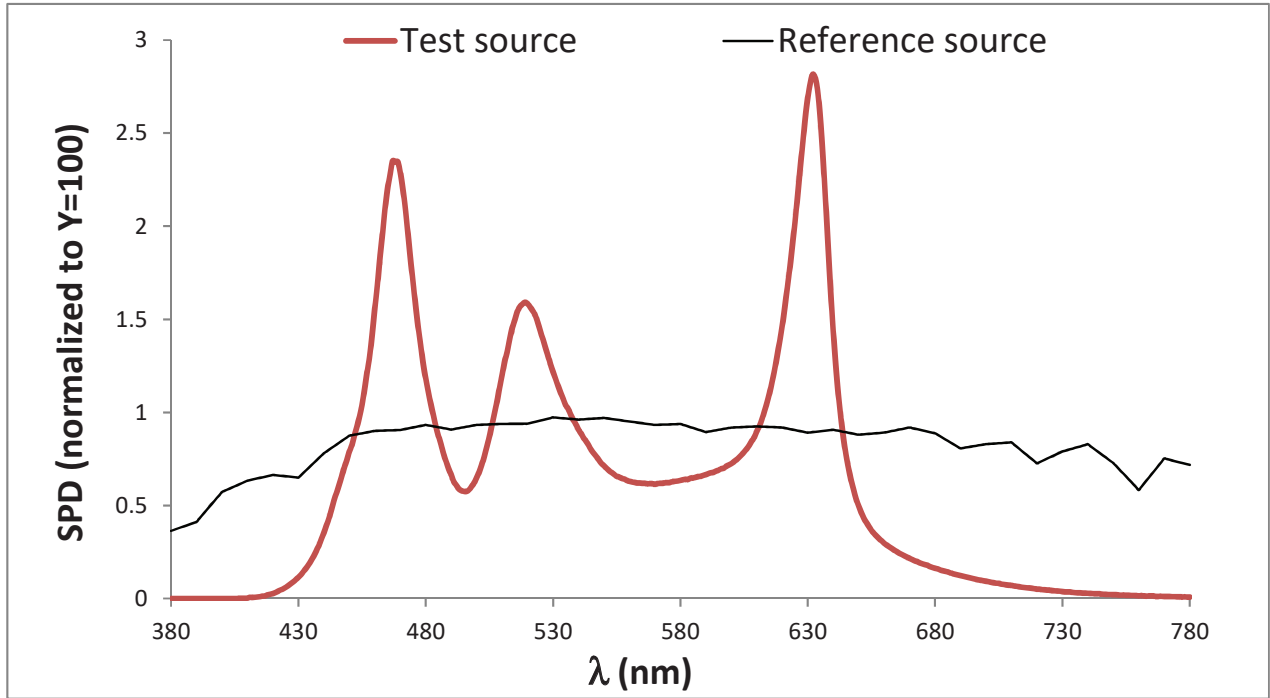
Maximum Candela = 66.5  
 Located At Horizontal Angle = 90  
 Vertical Angle = 37.5  
 #1 Vertical Plane Through Horizontal Angles (90-270) (Through Max. Cd.)  
 #2 Vertical Cone Through Vertical Angle (37.5) (Through Max. Cd.)

**TM-30**

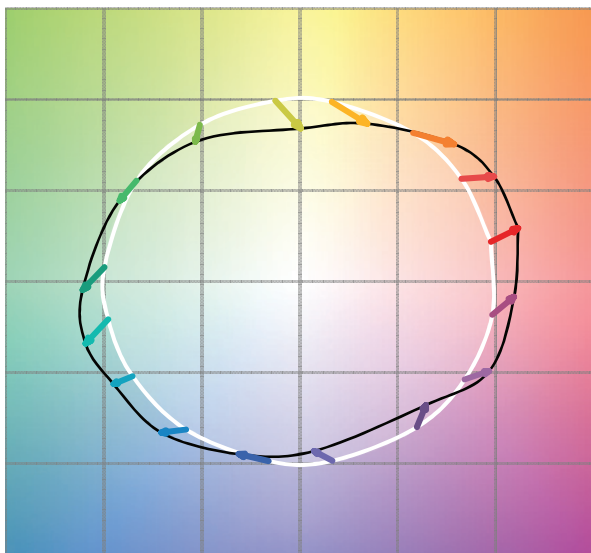
Hue Bin	$R_f$	Graphic Shifts (%)	
		Chroma	Hue
1	65	15%	5%
2	71	14%	-8%
3	58	7%	-21%
4	62	-8%	-20%
5	68	-17%	-10%
6	83	-6%	7%
7	75	1%	14%
8	69	9%	15%
9	77	14%	11%
10	78	10%	-2%
11	74	8%	-10%
12	74	-1%	-16%
13	80	-7%	-8%
14	75	-8%	11%
15	72	8%	11%
16	72	9%	12%



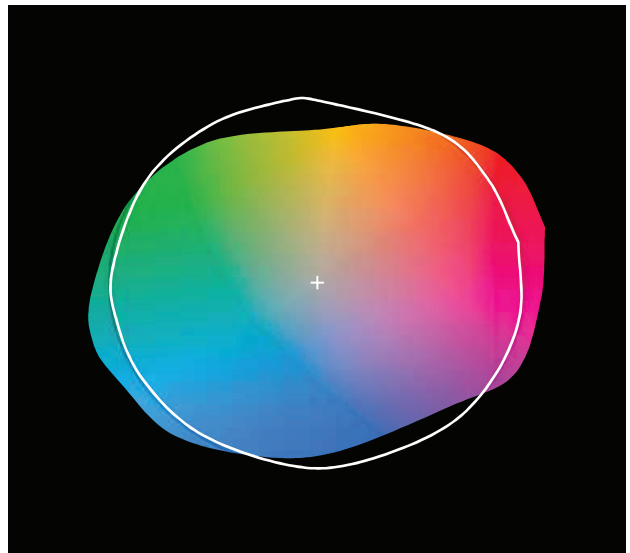
TM-30



Color Vector Graphic

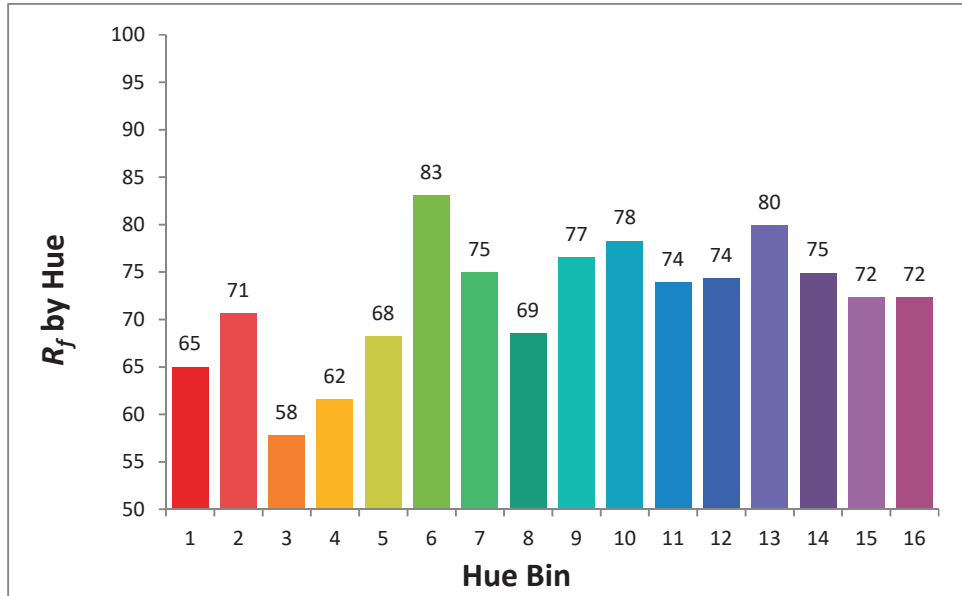


Color Distortion Graphic

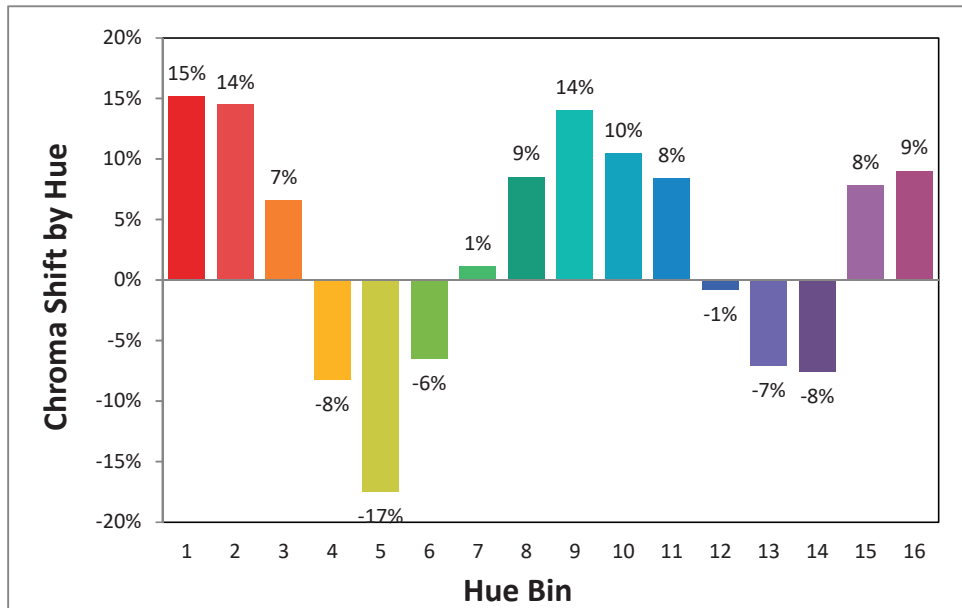


TM-30

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



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



**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



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



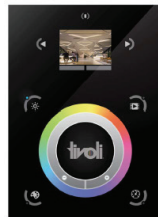
**MLB-TERM-CAP**  
End Cap for M15 Female  
Connector



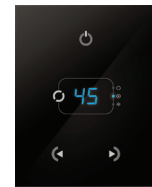
**MLB-T-CONN-3P**  
T Connector (IP67)  
3-PIN XLR Male for DMX  
4-PIN M15 Female for LED  
2-PIN M15 Screw Lock Male for  
Power



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



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



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



**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)



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

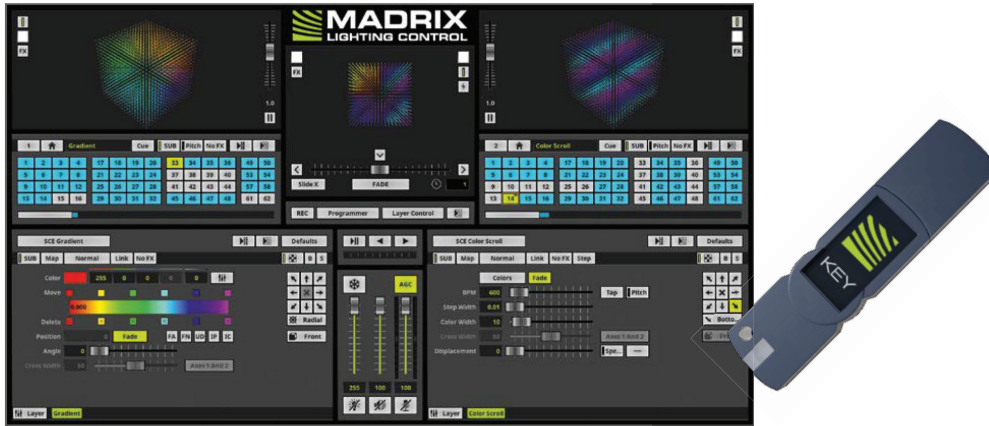


**NTG-SWI-16PT**  
NETGEAR 16-Port Gigabit  
Ethernet  
Unmanaged Switch



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

**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.

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

## 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

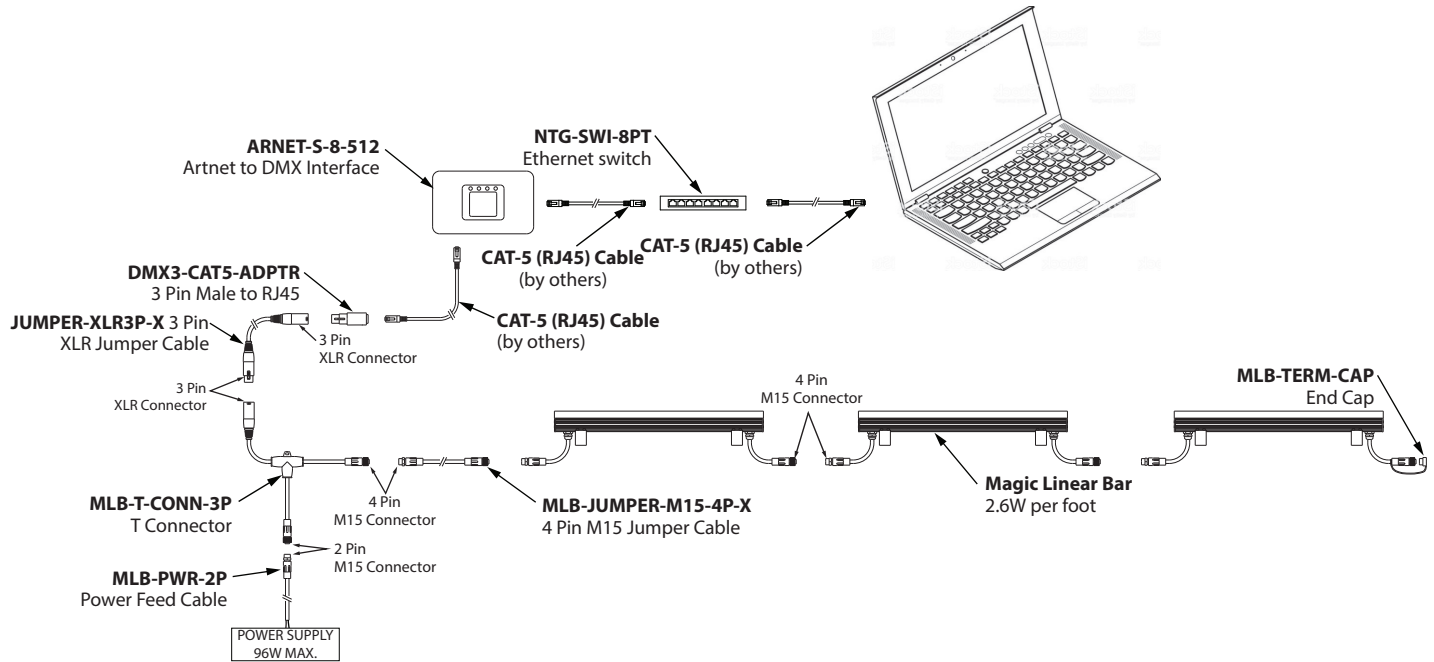
DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	MIN LOAD	CIRCUIT CAPACITY
Infinity Series Class 2 Transformer	INF-J-30-1-1.3-24	Indoor / Outdoor	100 - 277V AC	24V DC	1	30W	3W	1.3A
	INF-J-60-1-2.5-24				1	60W	6W	2.5A
	INF-J-96-1-4-24				1	96W	9W	4A
	INF-J-192-2-4-24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



## Wiring Diagram - Offline

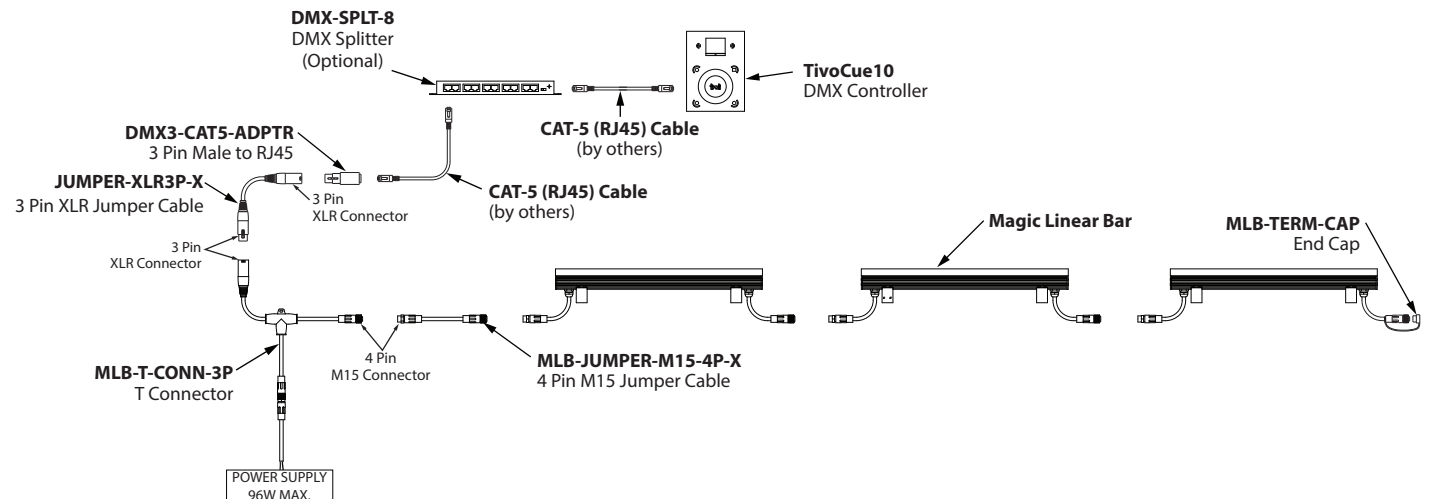
### ARNET-S

Programmed via MADRIX software and recorded directly to an ARNET-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)

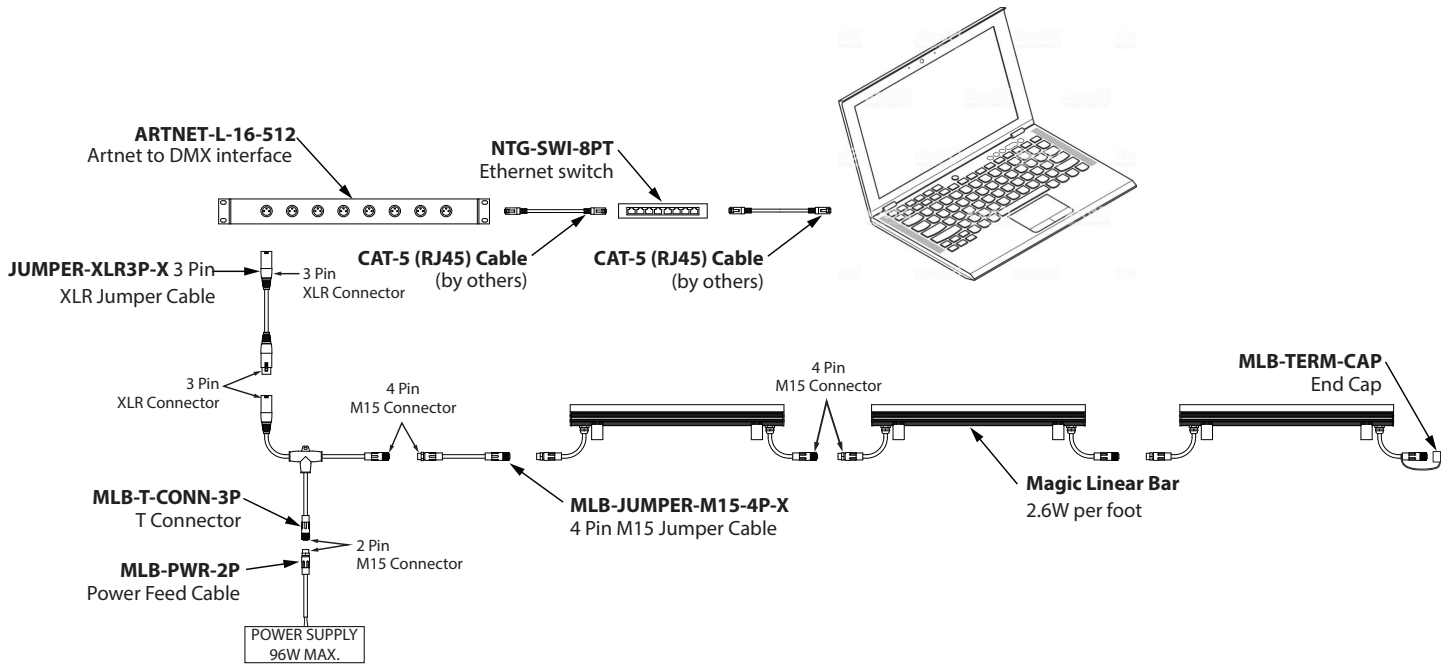
Programmed via CUE software and recorded to a MicroSD card for data transfer into TivoCUE control. This is a stand-alone feature with no need for network support by software (CUE) once recorded and transferred to in-wall DMX control hardware. Please refer to TivoCue 10 User Manual for additional information.



**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 Technical Support**

DMX projects can be difficult to setup and program when dealing with software and fixtures once you are on site. Tivoli offers technical support from initial contact up to installation and setup if needed. Please contact your local sales rep for pricing and provide details of desired technical support level for your project.



- Phone Support
- Website & Video
- PDF Documents

**In-House Customer Support**

sales@tivoliusa.com  
714-957-6101 (Engineering Tech Support)



- Travel To Site
- Program
- Test & Run System

**On-Site Live Support | Commission**