Product Features

• Designed for architectural facade, bridge, and media display applications
• Saves up to 40% power consumption based on 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
Order Specification Guide

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>LENGTH</th>
<th>PIXEL/FOOT</th>
<th>VOLTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLB</td>
<td>1</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>MLB = Magic Linear Bar</td>
<td>2 = 2ft</td>
<td>3 = 3ft</td>
<td>4 = 4ft</td>
</tr>
</tbody>
</table>

3 = 3 pixels per ft.
24 = 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 / Manual

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
- 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)
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.)
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-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 Male 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-XX**  
XX = BK (black), WH (white)  
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.

<table>
<thead>
<tr>
<th>MADRIX 5 Key &amp; Software Cat No</th>
<th>MDRX-LC-SS</th>
<th>MDRX-LC-SE</th>
<th>MDRX-LC-SE</th>
<th>MDRX-LC-SP</th>
<th>MDRX-LC-5U</th>
<th>MDRX-LC-5M</th>
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</thead>
<tbody>
<tr>
<td><strong>Level</strong></td>
<td>START</td>
<td>ENTRY</td>
<td>BASIC</td>
<td>PROFESSIONAL</td>
<td>ULTIMATE</td>
<td>MAXIMUM</td>
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<tr>
<td><strong>DMX-Based Output</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMX Channels</td>
<td>1,024</td>
<td>4,096</td>
<td>16,384</td>
<td>65,536</td>
<td>262,144</td>
<td>1,048,576</td>
</tr>
<tr>
<td>DMX Universe Example</td>
<td>2</td>
<td>8</td>
<td>32</td>
<td>128</td>
<td>512</td>
<td>2,048</td>
</tr>
<tr>
<td>RGB Voxels Example</td>
<td>341</td>
<td>1,365</td>
<td>5,461</td>
<td>21,845</td>
<td>87,381</td>
<td>349,525</td>
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<tr>
<td><strong>DVI-Based Output</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>DVI Voxels</td>
<td>4,096</td>
<td>16,384</td>
<td>262,144</td>
<td>1,048,576</td>
<td>2,097,152</td>
<td>2,097,152</td>
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<tr>
<td>Render Resolution Example</td>
<td>64 X 64 PIXELS</td>
<td>128 X 128 PIXELS</td>
<td>512 X 512 PIXELS</td>
<td>1,024 X 1,024 PIXELS</td>
<td>2,048 X 1,024 PIXELS</td>
<td>2,048 X 1,024 PIXELS</td>
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## POWER SUPPLIES

### ADNM - NON DIMMING

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CAT NO</th>
<th>APPLICATION</th>
<th>PRIMARY VOLTAGE</th>
<th>SECONDARY VOLTAGE</th>
<th>CIRCUIT BREAKERS</th>
<th>MAX LOAD</th>
<th>CIRCUIT CAPACITY</th>
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</thead>
<tbody>
<tr>
<td>ADNM Series</td>
<td>ADNM-90-1-4-24-D</td>
<td>Indoor / Outdoor</td>
<td>100-277V AC</td>
<td>24V DC</td>
<td>1</td>
<td>90W</td>
<td>3.75A</td>
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<td>Class 2</td>
<td>ADNM-120-1-4-24-D</td>
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<td></td>
<td>1</td>
<td>96W</td>
<td>4A</td>
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<tr>
<td>Transformer</td>
<td>ADNM-240-2-4-24-D</td>
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<td>2x96W</td>
<td>2x4A</td>
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<td></td>
<td>ADNM-320-3-4-24-D</td>
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<td>3</td>
<td>3x96W</td>
<td>3x4A</td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
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<th>APPLICATION</th>
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<th>SECONDARY VOLTAGE</th>
<th>CIRCUIT BREAKERS</th>
<th>MAX LOAD</th>
<th>MIN LOAD</th>
<th>CIRCUIT CAPACITY</th>
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<tbody>
<tr>
<td>Infinity</td>
<td>INF-30-1-1.3-24</td>
<td>Indoor / Outdoor</td>
<td>100 - 277V AC</td>
<td>24VDC</td>
<td>1</td>
<td>30W</td>
<td>3W</td>
<td>1.3A</td>
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<td>Series</td>
<td>INF-60-1-2.5-24</td>
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<td>1</td>
<td>60W</td>
<td>6W</td>
<td>2.5A</td>
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<tr>
<td>Class 2</td>
<td>INF-96-1-4-24</td>
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<td></td>
<td>1</td>
<td>96W</td>
<td>9W</td>
<td>4A</td>
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<tr>
<td>Transformer</td>
<td>INF-192-2-4-24</td>
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<td></td>
<td>2</td>
<td>2x96W</td>
<td>2x9W</td>
<td>2x4A</td>
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<tr>
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<td>INF-288-3-4-24</td>
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<td></td>
<td>3</td>
<td>3x96W</td>
<td>3x9W</td>
<td>3x4A</td>
</tr>
</tbody>
</table>
**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 transfered to in-wall DMX control hardware. Please refer to TivoCue 10 User Manual for additional information.
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.

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