SAFETY & WARNINGS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Do not modify or disassemble this product beyond instructions or the warranty will be void.
4. Do not use if there is any damage to the fixture or wiring. Inspect periodically.
5. Do not submerge in liquids or use the product in the vicinity of standing water or other liquids.
6. Do not install near areas with exposure to salt water or chlorinated water.
7. Do not install in direct sunlight.
8. Do not attempt to fix this product in the field.
9. Failure to follow safety warnings, and installation instructions will void the warranty for this product.

QUICK SPECS / MODELS

<table>
<thead>
<tr>
<th>SKU</th>
<th>DI-DMX-DCO-24V96W-277</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>120VAC / 277VAC 50/60Hz</td>
</tr>
<tr>
<td>Power Output</td>
<td>80W - 96W</td>
</tr>
<tr>
<td>Ambient Temp †</td>
<td>-4° - 176°F (-20° - 80°C)</td>
</tr>
<tr>
<td>Environment</td>
<td>Indoor / IP20</td>
</tr>
</tbody>
</table>

† Do not install product in environment outside listed temperature.

*NOT FOR USE IN SUBMERSIBLE APPLICATIONS, OR WITHIN 5 FEET OF A SWIMMING POOL.*
REQUIRED TOOLS

1. Phillips-head Screwdriver
2. Flat Head (Standard) Screwdriver
3. Wire Stripper (Recommended)

INSTALLATION

1. TURN POWER OFF AT CIRCUIT BREAKER

   SHOCK HAZARD! May result in serious injury or death.
   Turn power OFF at circuit breaker prior to installation.

2. UNSCREW AND REMOVE COVER FROM DECODER

   Use a phillips-head screwdriver to unscrew cover.
**INSTALLATION (CONT.)**

3 CONNECT 120VAC / 277VAC LINE VOLTAGE WIRES TO INPUT OF DECODER

Insert each wire into the corresponding terminal.*

*Note: Terminals labeled “NC” have no connection and are not used.

Insert each wire into the corresponding terminal.

**FASTEN DECODER COVER**

Use a phillips-head screwdriver to fasten cover.

**CONNECT LEDS TO DECODER**

Use flat head screwdriver to press down on white terminal tab while inserting wire. Release terminal to secure wire.

**TURN POWER ON AT CIRCUIT BREAKER**

For further details, refer to **SYSTEM DIAGRAMS** on page 4.
SYSTEM DIAGRAMS

The following diagrams are provided as example system designs. For information regarding larger systems or systems not pictured below, please see our web page or contact technical support. Always review each component installation guide for detailed and up-to-date wiring instructions. Install in accordance with national and local electrical codes.

RGB(W) INSTALLATION

SINGLE COLOR INSTALLATION

RGB(W) DETAILS

SINGLE COLOR DETAILS

K-RANGE DETAILS

96W DMX Driver + Decoder

Input: 120VAC / 277VAC, 1.2A Max
Output: 24VDC, 96 Watt Max
4 CH x 24W Max

DMX512 COLOR CONTROLLER

AC 120VAC / 277VAC
50/60Hz

LED OUTPUT

DMX512 INPUT

tc = 75°C
TEMP RANGE: -20°C - +50°C

BLACK (V+)
RED (V-)
GREY (V+)
WARM WHITE (V-)
COOL WHITE (V-)

BLACK (V+)
RED (V-)
GREEN (V-)
BLUE (V-)
WHITE (V-)

BLACK (V+)
RED (V-)
GREEN (V-)
BLUE (V-)
WHITE (V-)

BLACK (V+)
RED (V-)
GREEN (V-)
BLUE (V-)
WHITE (V-)

DMX DECODER AND DRIVER
INSTALLATION GUIDE
DATA CONNECTION

DATA CONNECTION DETAILS

PINOUT CONNECTION GUIDE

The following diagrams/tables indicate the appropriate connections for patching your own CAT5/RJ45, and XLR-3 splice cables. These diagrams are for general reference and may slightly differ between different cable manufacturers.

PROGRAMMING

SETTING DMX ADDRESS

Each DMX decoder or DMX luminaire needs to be addressed correctly so the controller can distinguish between each decoder. To pair a DMX decoder or luminaire to a specific zone of the controller (1-3), set each decoder/luminaire to one of the following addresses:

- Zone 1: Set to address '001' (will be fixed to address 001 – 004)
- Zone 2: Set to address '005' (will be fixed to address 005 – 008)
- Zone 3: Set to address '009' (will be fixed to address 009 – 012)

Each zone of the controller is fixed with 4 DMX addresses to control the 4 channels:

CH1 – Red, CH2 – Green, CH3 – Blue, CH4 – White or X.

Example of DMX Addressing Display

Digital Display

0005

Back Enter Up Down

Once DMX address is set on luminaire or DMX decoder, ensure to Press Zone 1, 2, or 3 on the controller to control desired zone.
JUNCTION BOX INSTALLATION

Fasten DMX Decoder and Driver to Lo-Pro Junction Box.

Additional information on compatible junction boxes can be found on the Diode LED web site at: www.DiodeLED.com.

TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift in brightness and/or kelvin</td>
<td>• Ensure an appropriate gauge of wire is installed between strip light and LED driver. See VOLTAGE DROP CHARTS.</td>
</tr>
<tr>
<td>Some LEDs are not functional</td>
<td>• Ensure strip light has not been bent excessively, which could damage circuitry.</td>
</tr>
<tr>
<td></td>
<td>• Ensure strip light has not been submerged in any liquid for any amount of time.</td>
</tr>
<tr>
<td>Lights are flickering</td>
<td>• Ensure a compatible color controller is installed. Check for loose connections.</td>
</tr>
<tr>
<td>Lights are turning on/off repeatedly</td>
<td>• Ensure DMX DECODER and DRIVER is not overloaded. An overloaded driver will trip the internal auto-reset repeatedly, turning the system on/off.</td>
</tr>
</tbody>
</table>

TOOLS & RESOURCES

DMX DECODER AND DRIVER SPECIFICATION SHEET
For full specifications.