SAFETY & WARNINGS
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 submerge, or install within 5 feet of a swimming pool.
5. All plastics are affected by the elements and may shift in color and other properties after product installation, particularly with direct exposure to sun, chlorinated water, and other chemicals.
6. Only install with a Listed Class 2 DC LED driver.
7. To avoid Voltage Drop, ensure wire gauge used with LED Strip Light is sufficient to keep under 3% voltage drop.
8. Do not exceed maximum run recommended for Strip Light.
9. Diode LED Strip Light is designed to be cut at designated cut points only. Cutting anywhere other than the cut points will result in damage to the Strip Light.
10. Failure to follow safety warnings, and installation instructions will void the warranty for this product.

HANDLE PRODUCT WITH CARE!

DO NOT POWER STRIP LIGHT WHILE ATTACHED TO SPOOL OR TIGHTLY COILED.

DO NOT BEND LED STRIP LIGHT TO A DIAMETER LESS THAN 4 INCHES.

DO NOT BEND LED STRIP LIGHT ON A HORIZONTAL PLANE.

DO NOT FOLD, CREASE, OR TWIST LED Strip Light.

DO NOT COVER STRIP LIGHT WITH ANY MATERIALS.

QUICK SPECS / MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Input</th>
<th>Power</th>
<th>Max Run</th>
<th>Ambient Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI-24V-HL**</td>
<td>24VDC</td>
<td>Standard 1.13W/ft. (0.65W/cut point)</td>
<td>Standard 81.5 ft.</td>
<td>-4° ~ 122°F (-20° ~ 50°C)</td>
</tr>
<tr>
<td>DI-24V-HLP**</td>
<td>24VDC</td>
<td>Plus 2.04W/ft. (1.2W/cut point)</td>
<td>Plus 32.6 ft.</td>
<td></td>
</tr>
</tbody>
</table>

** Indicates model and CCT
† Do not install product in environment outside listed temperature.

ADDITIONAL ACCESSORIES

Mounting Bracket
DI-HL-MTBR

Stake Bracket
DI-HL-STBR

Mounting Channel
DI-HL-MTCH

CONNECTOR COMPRESSION
HYDROLUME Connectors may become compressed during shipping. To decompress, insert flathead screwdriver under top of connector and apply upward pressure until pins are completely removed from opening.
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. DETERMINE LOCATION TO INSTALL COMPONENTS

Refer to **SYSTEM DIAGRAMS**

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

3. CREATE LENGTHS OF HYDROLUME STRIP LIGHT

Using a pair of scissors, cut HYDROLUME LED Strip Light at cut point between arrows.

4. CREATE HYDROLUME STRIP LIGHT SPLICE CONNECTORS

a. CUT END OFF OF FLEXIBLE EXTENSION

Using a pair of scissors, cut one end off a Hydrolume Flexible Extension Cable.

b. STRIP WIRES FROM END OF CONNECTOR

Using a pair of wire strippers, remove outer insulation and strip back wires inside HYDROLUME Flexible Extension Cable.

c. CONNECT TO A POWER SUPPLY

Using the newly created Splice Connector, wire power supply to end of HYDROLUME LED Strip Light.

Note: For detailed installation information, refer to the System Diagrams on page 4. (Use of wet location rated junction box recommended)

WIRE GAUGE & VOLTAGE DROP

Ensure applicable wire is installed between driver, fixture, and any controls in between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.).
**INSTALLATION (CONT.)**

**CREATE HYDROLUME SLIM STRIP LIGHT CONNECTIONS**

Note: HYDROLUME® connectors are single use only. Once secured, **DO NOT** remove connector. If connector comes loose, it must be replaced. Contact Diode LED for assistance.

- INSERT HYDROLUME LED STRIP LIGHT INTO CONNECTOR
  
  *For use with Cable Jumper, Splice, I, L, T, and X-Connectors.*
  
  Note: HYDROLUME LED Strip Light may be connected from either end with compatible accessories.

- CRIMP CONNECTOR TO TAPE LIGHT
  
  Using a pair of pliers, apply even pressure to top and bottom of connector until it is securely fastened to strip light.

- SEAL END OF HYDROLUME LED STRIP LIGHT

  **ADD NON-ACIDIC NEUTRAL SILICONE ADHESIVE TO END CAP**
  
  All ends of HYDROLUME LED Strip Light must be sealed with **non-acidic neutral silicone adhesive/sealant** (Diode SKU: DI-WPSL not included) and HYDROLUME end caps. Acidic adhesive may damage the phosphor of LED Chips.

  **SECURE END CAP ONTO HYDROLUME LED STRIP LIGHT**
  
  Slide end cap onto HYDROLUME Strip Light.
7 MOUNT HYDROLUME TO SURFACE.
See mounting options a, b & c (below).

a HYDROLUME Mounting Brackets
Mark placement for HYDROLUME Mounting Brackets — roughly 12 inches apart. Fasten brackets with M2.9 (#4) screw or similar size (not provided). Once mounted, fasten HYDROLUME to brackets.

Slide bracket into stake at desired angle to position HYDROLUME strip. Press stakes into ground roughly 12 - 16 inches apart. Once stakes are planted into ground, firmly press HYDROLUME strip light into brackets.

b HYDROLUME Stake Brackets

Install Garden Stake

Shift in brightness
and/or kelvin

31-41cm
12”-16”

8 ATTACH CONTROL AND DRIVER
Verify a compatible driver is installed (refer to Specification Sheet). Utilize applicable wiring when installing outdoors. (Use of wet location rated junction box recommended)

9 REVIEW SYSTEM
Ensure all polarities are correct and connections are secured.

10 TURN POWER ON AT CIRCUIT BREAKER

<table>
<thead>
<tr>
<th>Shift in brightness and/or kelvin</th>
<th>• Ensure applicable AWG (gauge) is installed between strip light and LED driver. See VOLTAGE DROP CHARTS.</th>
</tr>
</thead>
<tbody>
<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>Lights are flickering</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 turning on/off repeatedly</td>
<td>• Ensure driver is not overloaded. An overloaded driver will trip the internal auto-reset (of driver) repeatedly, turning the system on/off.</td>
</tr>
</tbody>
</table>
SYSTEM DIAGRAMS

The following diagrams are provided as example system designs. For information regarding larger systems or systems not pictured below, please see our website 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.

Traditional ON/OFF Switch System

SWITCHEX® Dimmer/Driver System

OMNIDRIVE® Electronic Dimmable Driver System

REIGN® 12-24V Dimmer System

* Driver may not require a fault ground connection. Refer to driver specifications for additional information.

** Install a compatible Class 2 constant voltage driver. Refer to each driver specification sheet for full power ratings & load deratings.

*** Install a Class 2 constant voltage driver compatible with a low voltage PWM controller/dimmer switch. Refer to each driver specification sheet for full power ratings & load deratings.

**** Determine the number of low voltage outputs of the driver when installing multiple PWM controllers/dimmer switches. No more than one PWM controller/dimmer switch can be attached to a single output of the driver.

^ Install a compatible dimming control or switch. See the ‘Electronic Dimmable Driver / Dimmer Compatibility List’ for compatible dimming controls. See the dimming control manufacturer installation guide for complete wiring instructions.

^^ Ensure to load the driver at least 60% the labeled load for proper dimming performance (required for dimmable installations only).

‡ Refer to driver or controller specifications for a compatible junction box.

‡‡ See fixture specifications for maximum series run limits.
VOLTAGE DROP CHARTS
For best performance and lumen output, ensure proper wire gauge is installed to compensate for voltage drop of low voltage circuits.

Example: 12V Voltage Drop & Wire Length Distance Chart

<table>
<thead>
<tr>
<th>Wire Gauge</th>
<th>10 W</th>
<th>20 W</th>
<th>30 W</th>
<th>40 W</th>
<th>50 W</th>
<th>60 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 AWG</td>
<td>34 ft.</td>
<td>17 ft.</td>
<td>11 ft.</td>
<td>8 ft.</td>
<td>6 ft.</td>
<td>5 ft.</td>
</tr>
<tr>
<td>16 AWG</td>
<td>54 ft.</td>
<td>27 ft.</td>
<td>18 ft.</td>
<td>13 ft.</td>
<td>10 ft.</td>
<td>9 ft.</td>
</tr>
<tr>
<td>14 AWG</td>
<td>86 ft.</td>
<td>43 ft.</td>
<td>29 ft.</td>
<td>21 ft.</td>
<td>17 ft.</td>
<td>14 ft.</td>
</tr>
<tr>
<td>12 AWG</td>
<td>134 ft.</td>
<td>68 ft.</td>
<td>45 ft.</td>
<td>34 ft.</td>
<td>27 ft.</td>
<td>22 ft.</td>
</tr>
<tr>
<td>10 AWG</td>
<td>199 ft.</td>
<td>99 ft.</td>
<td>66 ft.</td>
<td>49 ft.</td>
<td>39 ft.</td>
<td>33 ft.</td>
</tr>
</tbody>
</table>

1. Determine load size. Let’s assume load is 55 W. Round up to nearest load.
2. Determine distance from driver to load. Let’s assume the distance is 20 ft.
3. It’s recommended to install 12 AWG to eliminate excess voltage drop.

24V Voltage Drop & Wire Length Distance Chart

<table>
<thead>
<tr>
<th>Wire Gauge</th>
<th>10 W</th>
<th>20 W</th>
<th>30 W</th>
<th>40 W</th>
<th>50 W</th>
<th>60 W</th>
<th>70 W</th>
<th>80 W</th>
<th>100 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 AWG</td>
<td>134 ft.</td>
<td>68 ft.</td>
<td>45 ft.</td>
<td>33 ft.</td>
<td>27 ft.</td>
<td>22 ft.</td>
<td>19 ft.</td>
<td>17 ft.</td>
<td>14 ft.</td>
</tr>
<tr>
<td>16 AWG</td>
<td>215 ft.</td>
<td>109 ft.</td>
<td>72 ft.</td>
<td>54 ft.</td>
<td>43 ft.</td>
<td>36 ft.</td>
<td>31 ft.</td>
<td>27 ft.</td>
<td>22 ft.</td>
</tr>
<tr>
<td>14 AWG</td>
<td>345 ft.</td>
<td>174 ft.</td>
<td>115 ft.</td>
<td>86 ft.</td>
<td>69 ft.</td>
<td>57 ft.</td>
<td>49 ft.</td>
<td>43 ft.</td>
<td>36 ft.</td>
</tr>
<tr>
<td>12 AWG</td>
<td>539 ft.</td>
<td>272 ft.</td>
<td>181 ft.</td>
<td>135 ft.</td>
<td>108 ft.</td>
<td>90 ft.</td>
<td>77 ft.</td>
<td>68 ft.</td>
<td>56 ft.</td>
</tr>
<tr>
<td>10 AWG</td>
<td>784 ft.</td>
<td>397 ft.</td>
<td>263 ft.</td>
<td>197 ft.</td>
<td>158 ft.</td>
<td>131 ft.</td>
<td>112 ft.</td>
<td>98 ft.</td>
<td>82 ft.</td>
</tr>
</tbody>
</table>

Example: 12V Voltage Drop & Wire Length Distance Chart

Determine load size. Let’s assume load is 55 W. Round up to nearest load.
Determine distance from driver to load. Let’s assume the distance is 20 ft.
It’s recommended to install 12 AWG to eliminate excess voltage drop.