

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.

QUICK SPECS / MODELS

| | | |
|-----------------------|---------------------------|----------------------------|
| Input | 24VDC Constant Voltage | |
| Power | Standard | 1.22W/ft. (1.0W/cut point) |
| | Plus | 2.44W/ft. (1.4W/cut point) |
| Max Run | Standard | 65 ft. |
| | Plus | 32 ft. |
| Ambient Temp † | -4° - 122°F (-20° - 50°C) | |

† Do not install product in environment outside listed temperature.



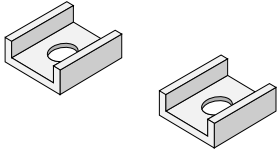
HYDROLUME[®] SLIM 24V LED Strip Light

INSTALLATION GUIDE

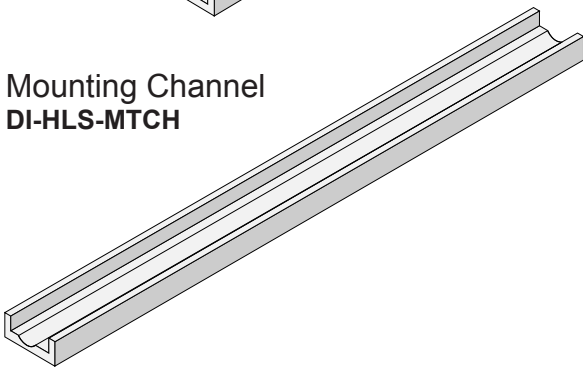
PRE-INSTALLATION

ADDITIONAL ACCESSORIES

Mounting Bracket
DI-HLS-MTBR

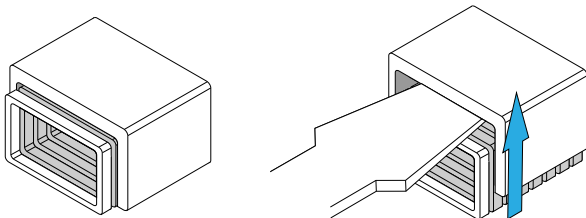


Mounting Channel
DI-HLS-MTCH

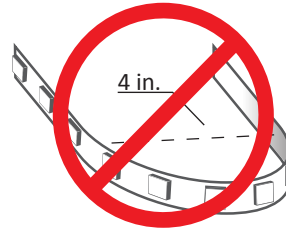


CONNECTOR COMPRESSION

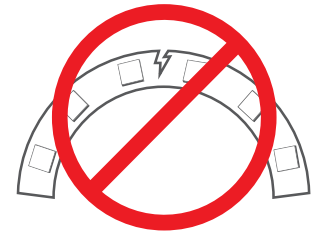
HYDROLUME[®] Connectors may become compressed during shipping. To decompress, insert flathead screwdriver under top of connector and apply upward pressure until pins are completely removed from opening.



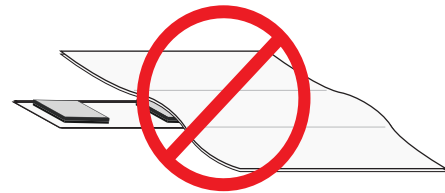
HANDLE PRODUCT WITH CARE!



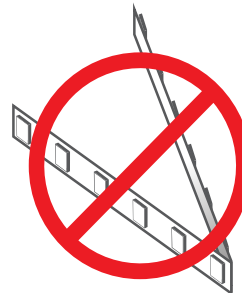
DO NOT BEND LED STRIP LIGHT TO A DIAMETER LESS THAN 4 INCHES.



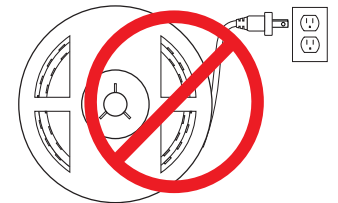
DO NOT BEND LED STRIP LIGHT ON A HORIZONTAL PLANE.



DO NOT COVER STRIP LIGHT WITH ANY MATERIALS.



DO NOT FOLD, CREASE, OR TWIST LED STRIP LIGHT.

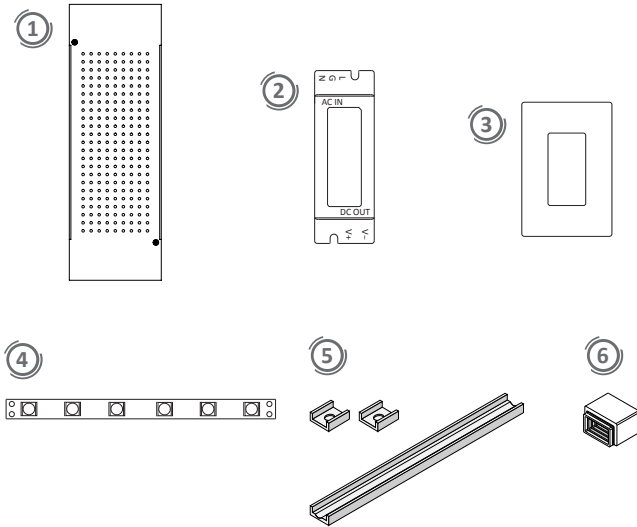


DO NOT POWER STRIP LIGHT WHILE ATTACHED TO SPOOL OR TIGHTLY COILED.

HYDROLUME® SLIM 24V LED Strip Light

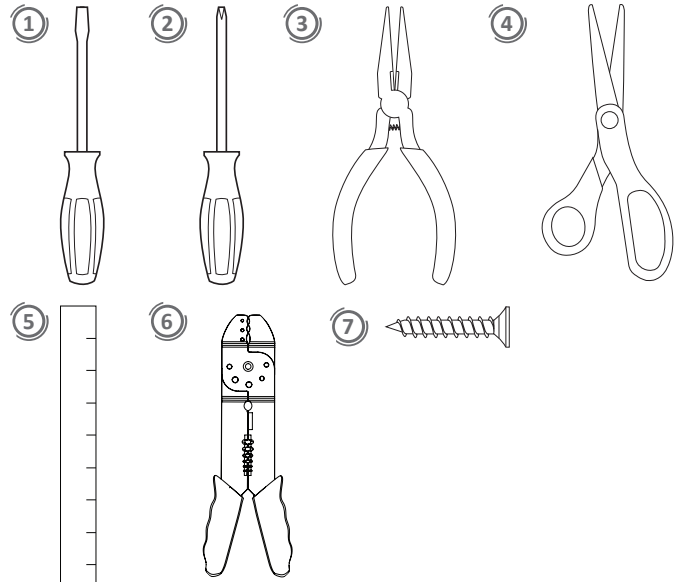
INSTALLATION GUIDE

REQUIRED COMPONENTS



1. Appropriate Junction Box
2. Class 2 rated Driver
3. Compatible Dimmer or Switch
4. HYDROLUME® SLIM LED Strip Light
5. HYDROLUME® SLIM Mounting Brackets or Channels
6. HYDROLUME® SLIM Connectors and other accessories

REQUIRED TOOLS



1. Flathead Screwdriver
2. Phillips-head Screwdriver
3. Pliers
4. Scissors
5. Ruler
6. Wire Stripper
7. Wood Screws

HYDROLUME[®] SLIM 24V LED Strip Light

INSTALLATION GUIDE

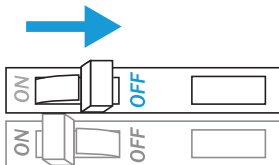
INSTALLATION

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

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

Refer to **SYSTEM DIAGRAMS**

WIRE GAUGE & VOLTAGE DROP

Ensure appropriate 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.)

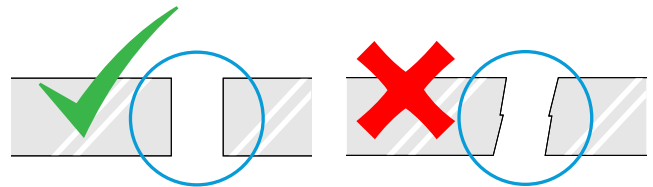
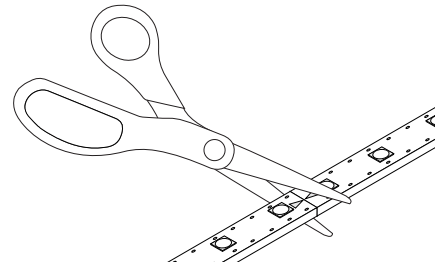
For more information, refer to system diagrams and voltage drop charts at the end of this document.

4 CREATE A HYDROLUME[®] SLIM STRIP LIGHT CONNECTION

4.1 CUTTING HYDROLUME[®] SLIM LED STRIP LIGHT TO LENGTH

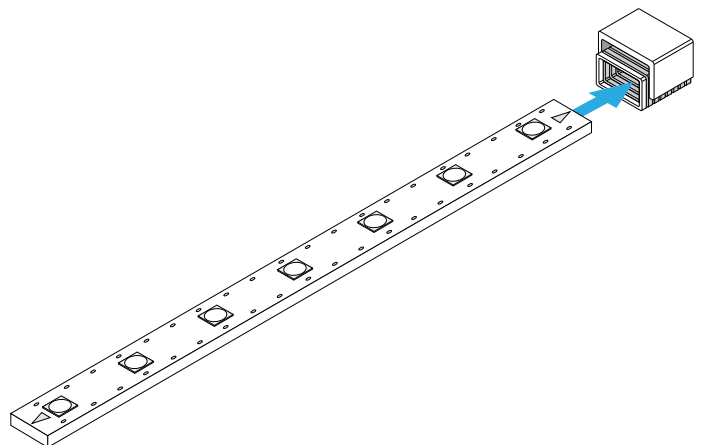
Using a pair of scissors, cut HYDROLUME SLIM LED Strip Light at the cut point only.

Note: Ensure that your cut is as vertical as possible, and that there are no jagged edges. This will help the strip fit correctly within the connector correctly.



4.2 INSERT HYDROLUME[®] SLIM LED STRIP LIGHT INTO CONNECTOR

Note: HYDROLUME[®] SLIM LED Strip Light may be connected from either end with compatible accessories.



HYDROLUME® SLIM 24V LED Strip Light

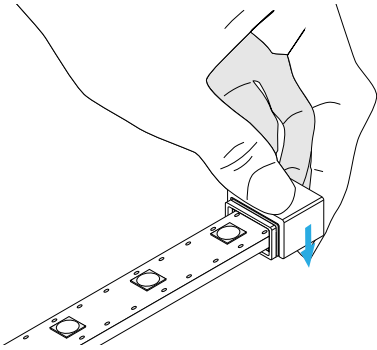
INSTALLATION GUIDE

INSTALLATION (CONT.)

****IMPORTANT****

4.3 SECURE CONNECTOR TO HYDROLUME SLIM

Using your thumb, press gently on the top of the connector until connector is gripping strip light.



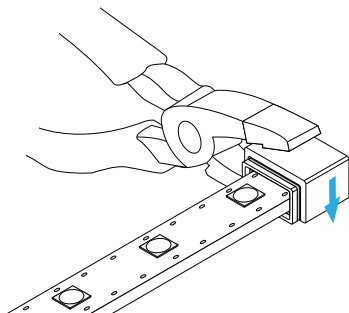
WARNING: DO NOT step on strip light to secure connector. This will result in damage to the strip light and/or connector.



4.4 FINISH CRIMPING CONNECTOR TO STRIP LIGHT

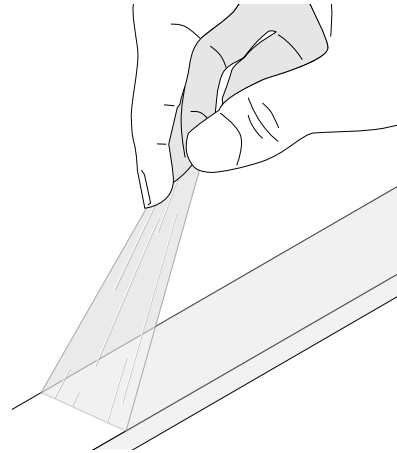
Using a pair of pliers, apply even pressure to top and bottom of connector until it is securely fastened to strip light.

**Note: It is not recommended to use your fingers or hands to finish securing HYDROLUME® Slim connectors. Uneven pressure will result in insecure connections.*



5 REMOVE PROTECTIVE FILM FROM HYDROLUME® SLIM

Clear protective film is included on back of HYDROLUME® SLIM. Peel film from Strip Light before mounting.

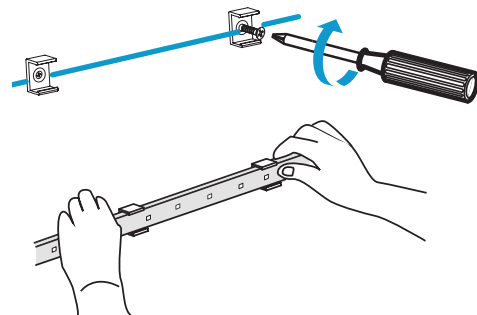


6 MOUNT HYDROLUME® SLIM TO SURFACE

See mounting options a, & b (below).

a) HYDROLUME® SLIM MOUNTING BRACKETS

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



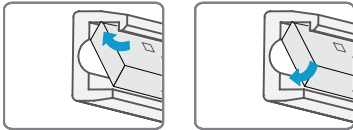
HYDROLUME[®] SLIM 24V LED Strip Light

INSTALLATION GUIDE

INSTALLATION (CONT.)

b) HYDROLUME[®] SLIM MOUNTING CHANNEL

Mount channel to desired surface using minimum 2x M2.9 (#4) screws or similar size (not provided). Once channel is mounted, firmly press HYDROLUME[®] SLIM into channel pressing one end to the other.



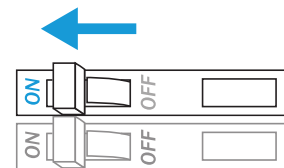
7) ATTACH CONTROL AND DRIVER

Verify compatible driver is installed. Utilize applicable wiring when installing outdoors. (Use of wet location-rated junction box recommended)

8) REVIEW SYSTEM

Ensure all polarities are correct and connections are secure.

9) TURN POWER ON AT CIRCUIT BREAKER



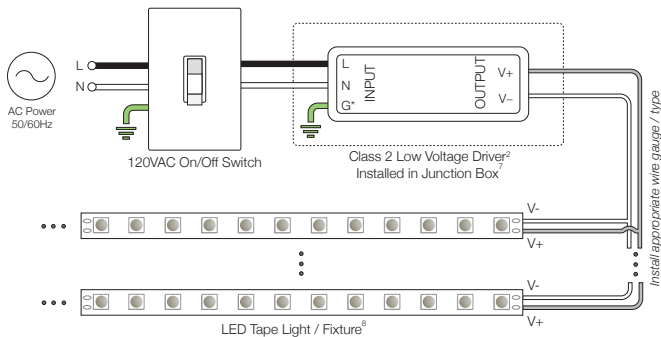
HYDROLUME[®] SLIM 24V LED Strip Light

INSTALLATION GUIDE

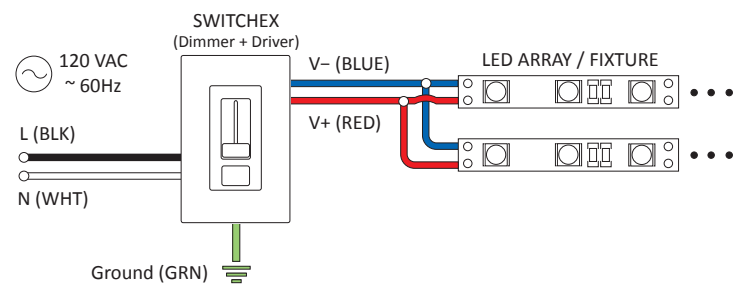
SYSTEM DIAGRAMS

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.

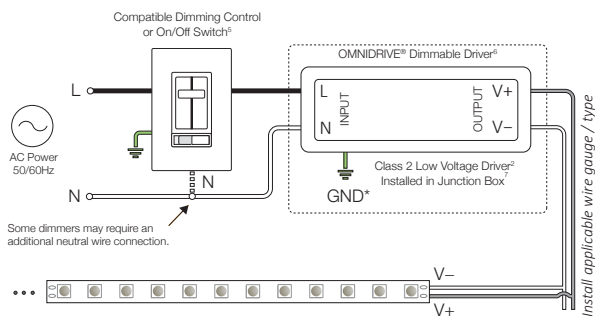
Traditional ON/OFF Switch System



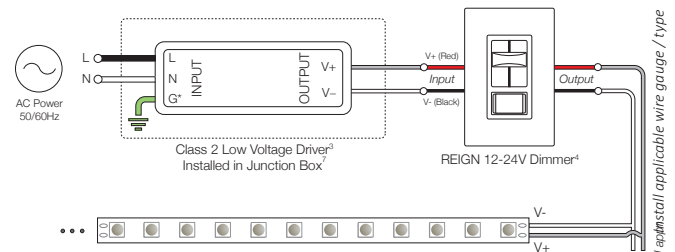
SWITCHEX[®] Dimmer/Driver System



OMNIDRIVE[®] Electronic Dimmable Driver System



REIGN[®] 24V Dimmer System



1. Driver may not require a fault ground connection. Refer to driver specifications for additional information.
2. Install a compatible Class 2 constant voltage driver. Refer to each driver specification sheet for full power ratings & load deratings.
3. 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.
4. 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.
5. 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.
6. Ensure to load the driver at least 60% of the labeled load for proper dimming performance (required for dimmable installations only).
7. Refer to driver or controller specifications for a compatible junction box.
8. See fixture specifications for maximum series run limits.

HYDROLUME[®] SLIM 24V LED Strip Light

INSTALLATION GUIDE

VOLTAGE DROP CHARTS

For best performance and lumen output, ensure proper wire gauge is installed to compensate for voltage drop of low voltage circuits.

24V Voltage Drop & Wire Length Distance Chart

| Wire Gauge | 10 W .42 A | 20 W .83 A | 30 W 1.3 A | 40 W 1.7 A | 50 W 2.1 A | 60 W 2.5 A | 70 W 2.9 A | 80 W 3.3 A | 100 W 4.2 A |
|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| 22 AWG | 53 ft. | 27 ft. | 17 ft. | 13 ft. | 11 ft. | 9 ft. | 8 ft. | 7 ft. | 6 ft. |
| 18 AWG | 134 ft. | 68 ft. | 45 ft. | 33 ft. | 27 ft. | 22 ft. | 19 ft. | 17 ft. | 14 ft. |
| 16 AWG | 215 ft. | 109 ft. | 72 ft. | 54 ft. | 43 ft. | 36 ft. | 31 ft. | 27 ft. | 22 ft. |
| 14 AWG | 345 ft. | 174 ft. | 115 ft. | 86 ft. | 69 ft. | 57 ft. | 49 ft. | 43 ft. | 36 ft. |
| 12 AWG | 539 ft. | 272 ft. | 181 ft. | 135 ft. | 108 ft. | 90 ft. | 77 ft. | 68 ft. | 56 ft. |
| 10 AWG | 784 ft. | 397 ft. | 263 ft. | 197 ft. | 158 ft. | 131 ft. | 112 ft. | 98 ft. | 82 ft. |

TROUBLESHOOTING

| | |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shift in brightness and/or kelvin | <ul style="list-style-type: none">Ensure an appropriate gauge of wire is installed between strip light and LED driver. See VOLTAGE DROP CHARTS. |
| Some LEDs are not functional | <ul style="list-style-type: none">Ensure strip light has not been bent excessively, which could damage circuitry.Ensure strip light has not been submerged in any liquid for any amount of time. |
| Lights are flickering | <ul style="list-style-type: none">Ensure a compatible driver and/or dimming control is installed. Check for loose connections. |
| Lights are turning on/off repeatedly | <ul style="list-style-type: none">Ensure driver is not overloaded. An overloaded driver will trip the internal auto-reset (of driver) repeatedly, turning the system on/off. |

Voltage Drop Chart Guide

- 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 18 AWG to eliminate excess voltage drop.



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