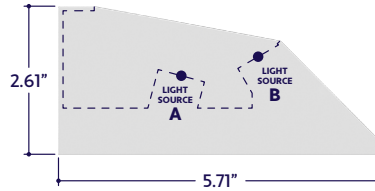


READ ENTIRE GUIDE BEFORE STARTING INSTALLATION

Important Notice: Verify correct luminaire was received with correct color temperature, voltage, and wattage before cutting or installing. ALUZ will not be responsible if incorrect luminaire is installed.

END VIEW / DIMENSIONS



GENERAL FEATURES

Applications	Knife Edge Cove Lighting
Lens	Clear
Length	Built to Order (+/- 0.25" Tolerance)
Construction	Aluminum Extrusion
Finish	White Powder Coated
Weight	1.5 lbs per foot
Mounting	Direct Mount / Mud-In
Listing	Dry or Damp Location UL1598, CSA C22.2#250.0 UL8750, CSA250 UL2108, 67.1.9, 60.4, CSA C22.2 #9
Driver	Remote
Closet Rating	Up to 4 Watts per Foot Maximum
Temperature Ratings	Operating / Startup: -20° to 48°C (-4° to 120°F) Storage: -40° to 76°C (-40° to 170°F)
Installation Link	

ELECTRICAL

Dimming	0-10V, DMX, DALI (Type 6)
Maximum Run* (Class 2 Applications)	36' (2W), 28' (3W), 21' (4W), 14' (6W), 10' (8W), 8' (10W), 7' (12W), 6' (14W)
Luminaire Voltage	120-277VAC (UNV)

* Maximum Runs refer to each light source. Runs ordered with mismatched light source wattages will be built to the smaller max run.

COMPATIBLE CONTROL INTERFACES

- 0-10V
- DALI2
- DMX
- Acuity Controls / nLight
- eldoLED
- Distech Controls
- Legrand
- Wattstopper
- Pass & Seymour
- Leviton
- Crestron / Cresnet / SolarSync
- Eaton
- Tridonic / Bluetooth

PRODUCT INFORMATION

- Cove and accent lighting.
- 24 Volts DC for easy and safe installation.
- Long life, energy efficient LEDs.
- Available in 2 Watts up to 14 Watts Per Foot per light source.
- Can be ordered to specific lengths for when exact dimensions are known. **Example:** 10 x 10'6". Product is shipped in luminaire segments up to 8' long.
- Available for indoor (**DRY**) and (**DAMP**) rated installations.

ELECTRICAL REQUIREMENTS

- Low voltage luminaires requires a remote driver. The driver may be mounted within luminaire channel or in a remote location. Do not mount driver within luminaire channel if it will not be accessible after installation is complete.
- Drivers are 120V - 277V (**UNV**) Input Voltage and 24VDC Output Voltage
- To calculate driver size, determine Watts per Foot. **Example:** 4W per Foot
- Determine Length in Feet. **Example:** 20'
- To calculate Load, Multiply Watts per Foot x Length in Feet **Example:** 4W x 20' = 80W. The Load of the driver is 80 Watts.
- Maximum load for a Class 2 low voltage luminaire is 96 Watts

INSTALLATION TOOLS REQUIRED

- Electric Hammer Drill
- 14.4 to 28 Volt Cordless Drill
- Phillips Bits
- Utility Knife
- Electrical Cord
- Marker
- Wire Stripper
- Long Nose Pliers
- Drill Bits - Concrete or Wood
- Electrical Three Ways
- Safety Glasses
- Measuring Tape
- Laser Line or Chalk Line

WARNING

When using luminaires for any application, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury. Luminaires must be installed in accordance with the NEC or CEC as applicable. ALUZ will not be responsible for damage or malfunction caused by the following:

- Ensure power is off before installation begins, during replacements, additions, or repairs.
- Do not use luminaires if damaged, such as broken boards, loose connections, or frayed wire insulation. Inspect before installing.
- Do not install luminaires in hazardous locations.
- Do not operate outdoor luminaires during daytime hours.
- Do not cover luminaires with any material. Covering may cause LEDs to overheat, melt, or ignite.
- Do not paint on or over fixture lens or LEDs.
- Paint or any other substance on lens or LEDs will cause a shift in color temperature.
- Soffit must be evenly painted with a neutral white to avoid color shift.
- Do not modify luminaires in the field.
- Do not overlap luminaires in any way. (Fig. 1)
- Luminaires have line voltage risk of shock. Consult factory for any malfunctions. Do not attempt to repair.
- Only use luminaire with specified rated voltages. Do not exceed the specified voltage for any luminaire.
- Do not use extrusion as a raceway for additional wire. Non-factory feed through wires inside luminaire will void warranty.
- Ground Fault Circuit Interrupter (GFCI) protections should be provided on circuits or outlets when luminaire is used for outdoor applications.
- Surge protector must be set up for electrical power system to avoid damaging lighting system.
- Do not make wiring connections without referring to wiring diagrams.
- Do not cut wire while energized. (Fig. 2)
- Do not connect DC output from remote drivers in parallel. Parallel connections interfere with dimming capabilities and result in feedback that damages drivers. (Fig. 3)
- Always mount channels and mounting clips on flat, even surfaces.
- Do not exceed maximum run lengths.
- Always follow sequence labeling for continuous runs. Continuous run segments are labeled in alphabetical order.
- Polarity of continuous run segments must be aligned.
- Do not assemble continuous runs prior to installing into mounting clips. Each segment must be installed one by one into mounting clips. The weight of the assembled segments will put strain on junctions, causing the board, pin, or terminals to break.
- Do not install continuous runs without a mounting clip at each junction between two luminaire segments.
- Do not secure luminaire with nails or like means that might damage the wiring inside. Only secure by using mounting clips.
- Do not mount luminaire inside tanks or enclosures of any kind.
- Do not install downward facing luminaires without set screws.
- Do not use improper screw head type on mounting clips. It will cause the mounting clip to open up and become dysfunctional.
- Do not modify mounting clips.
- Do not weld mounting clips to surface. Mounting clips must be mechanically attached with screws appropriate for mounting surface and weight of luminaire.
- Do not mount fixture with less than the minimum number of mounting clips required. See mounting clips section for details.
- Do not install mounting clips on uneven surfaces. Use shims to level out height of mounting clips if necessary.
- Do not install mounting clips after luminaires have been assembled. Install mounting clips first, then install luminaire into mounting clips.
- Do not force luminaire into a space that is too small.
- Do not force luminaire with cord grip into soffit. (Fig. 4)
- Do not install luminaire at an angle within a cove. Only install fixtures straight within a cove. (Fig. 5)
- Do not bend extrusion around radius.
- Do not submerge dry or wet location luminaire in any liquid.
- Do not install wet location in outdoor coves without proper drainage. (Fig. 6)
- Do not install luminaire in any area that is continuously exposed to flowing or pooling water, such as underneath drain pipes, sprinklers, fountains, misters, etc.
- Do not cut, puncture, or penetrate aluminum housing, end caps, or lens covers.
- Do not drop, bang, or rest weight upon luminaire.
- Do not apply excessive pressure to any part of luminaire.
- Do not remove end caps from luminaire.
- Do not bend power cord or continuous connector past permitted bend radius. Bending past permitted bend radius will break the seal of the cordgrip or damage the insulation. 3.5" minimum bend radius for Wet Location. 1.5" minimum bend radius for Dry Location (Fig. 7)
- Do not install in places where the power cord is subject to continuous flexing.
- Do not twist continuous connector or power cord.
- Do not hold, carry, or suspend luminaire by the power cord.
- Do not install on ceilings without mounting clips and set screws. (Fig. 8)

FIGURES

Figure 1

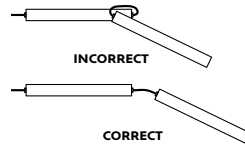


Figure 2

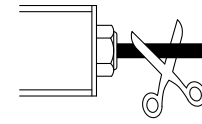


Fig. 3

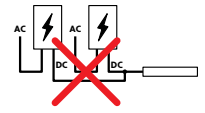


Figure 4

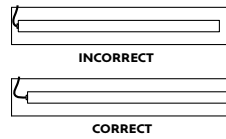


Figure 5

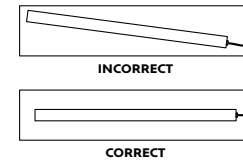


Figure 6

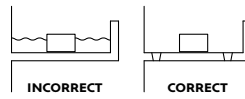


Figure 7

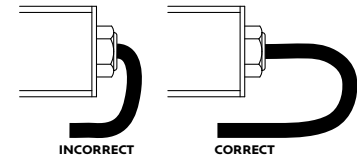
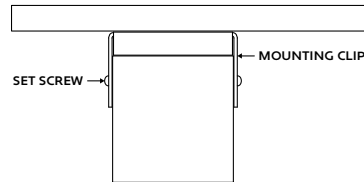


Figure 8



CLEANING MATERIALS

The use of solvents and/or cleaners which are not compatible with polycarbonate will result in the softening, crazing, and/or cracking of the plastic part. This is especially true of polycarbonate lamps and mounting bases which may be under stress in their normal applications.

COMPATIBLE WITH POLYCARBONATE

- Mild soap and water
- Mineral Spirits
- Isobutyl Alcohol
- VM and P Naphtha
- Varsol No.2
- Mexane
- Freone TF and TE-35
- Ethanol
- Dirtex
- 2% Sol. Reg. Joy
- 10% Sol Bon Ami
- White Kerosene
- Methyl Alcohol
- Heptane
- Petroleum Ether / 65°C
- Isopropyl Alcohol
- Lacryl PCL-2035
- Polycarbonate Cleaner

NOT COMPATIBLE WITH POLYCARBONATE

- Trichlor
- Gasoline
- Liquid Detergents
- Acetone
- Carbon Tetrachloride
- Pink Lux (Phosphate free)
- Triclene
- Chlorinated Hydrocarbons
- #1 & #3 Denatured Alcohol
- Methyl Ethyl Keytone (MEK)
- Texize-8006, 8129, 8758
- MIBK
- Liquid Cleaner - 8211
- Toluol
- Agitene
- Benzol
- Ajax
- Kleenol Plastics
- Lysol
- Staniisol Naphtha
- Oils
- Lemon Joy (phosphate free)
- Diversol
- Lestoil

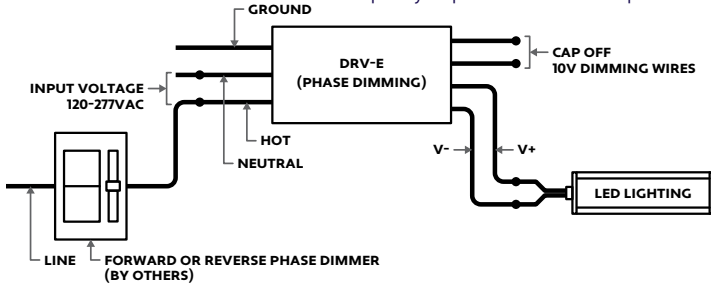
FORWARD / REVERSE PHASE DIMMING (PH)

Technical Requirements For Control Equipment

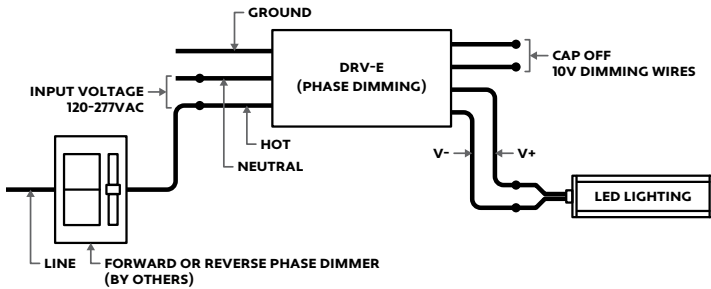
- Magnetic Low Voltage (MLV): Magnetic (core and coil, toroidal) transformer-supplied low voltage lighting.
- Electrical Characteristic: Inductive
- Special Requirements: Symmetric cycles ($VDC \leq 2$), smooth turn off (positive and negative periods are equal for safe MLV transformer operation).
- Phase dimmers must be compatible with LED loads.

PHASE DIMMER RATINGS

The stated VA (volt-ampere) rating is the rated capacity of the dimmer which includes the magnetic transformer heat losses and the lamp load. A transformer dissipates less than 20% of the connected load as heat. The lamp load plus the transformer loss determine the dimmer capacity required. See the example below.



PHASE DIMMING WIRING DIAGRAM



Notes: Wire colors vary based on model. See individual submittal for more information, or refer to wiring diagram on driver label. Confirm wire colors before connecting to power source. Cap off dimming wires individually for non-dimming applications. For best dimming performance, use a minimum load of 50% and a maximum load of 80%.

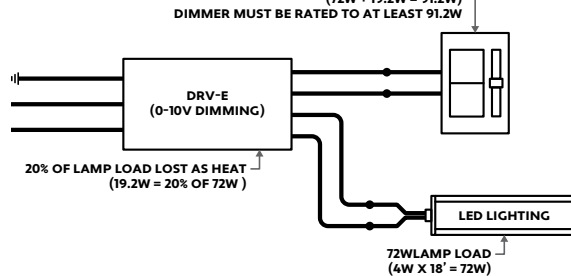
0-10V DIMMING (10V)

Technical Requirements For Control Equipment

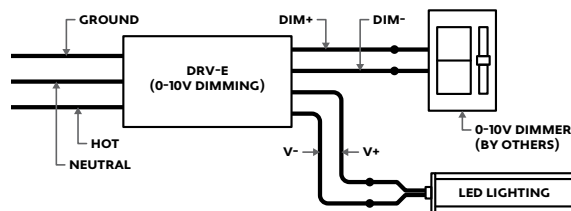
- The light output of the LEDs operated by the controllable LED driver is controlled by DC voltage applied to the control input leads (gray and violet). The actual response curve of LED driver current versus control voltage.
- The control device must be capable of accepting or sinking the DC current flow from the driver. The DC current from the driver that must be sunk by the control circuit is approximately 150uA (+50% for isolated dim interfaces, up to 1.5mA for non isolated dim interfaces).
- If the control bus is opened, or if the control device internally opens the control bus under some conditions, the voltage on the control bus will then be a function of the drivers, which is 10-15V. Maximum light output will be delivered under this condition.
- If the control bus is shorted either by a mechanical switch in the control or by the circuitry of the control device, or inadvertently in the wiring, the current on the control bus will be less than 1.5mA.
- As can be determined from the two items, simple two-level operation of the drivers can be achieved by proper usage and application of a simple open/closed switch on the control bus with maximum light being achieved when the switch is open and minimum light with the switch is closed.
- The driver is intended to be used with control voltages between 0-10VDC volts peak maximum on the driver control leads.
- Control equipment intended to control more than one driver must be capable of sinking the current supplied to the control bus by the maximum number of drivers specified for the control device. At any given level setting it must maintain control bus voltage constant within a range of +/-5% as the number of drivers connected to the control bus varies from a minimum of one driver up to the maximum number specified for the control device.
- Driver of various ratings may be mixed on the same control system.

0-10V DIMMER RATINGS

The stated VA (volt-ampere) rating is the rated capacity of the dimmer which includes the electronic transformer heat losses and the lamp load. A transformer dissipates less than 20% of the connected load as heat. The lamp load plus the transformer loss determine the dimmer capacity required. See the example below.



0-10V DIMMING WIRING DIAGRAM



MAXIMUM RUN BASED ON 80% LOAD OF ELECTRONIC DRIVER MAXIMUM WATTAGE

Driver Wattage	80% Load	1.5W Max Run	2W Max Run	2.5W Max Run	3W Max Run	3.6W Max Run	4W Max Run	4.5W Max Run	5W Max Run	5.5W Max Run	6W Max Run	6.5W Max Run
30	24W	16'	12'	9.6'	8'	6.6'	6'	5.3'	4.8'	4.36'	4'	3.69'
60	48W	32'	24'	19.2'	16'	13.3'	12'	10.6'	9.6'	8.7'	8'	7.3'
96	76.8W	51.2'	38.4'	30.7'	25.6'	21.3'	19.2'	17.1'	15.36'	13.9'	12.8'	11.8'
150	120W	80'	60'	48'	40'	33.3'	30'	26.6'	24'	21.8'	20'	18.4'
200	160W	106.6'	80'	64'	53.3'	44.4'	40'	35.5'	32'	29'	26.6'	24.6'
300	240W	160'	120'	96'	80'	66.6'	60'	53.3'	48'	43.6'	40'	36.9'

Note: Maximum Run refers to the total length of lighting that can be connected to a single driver. Maximum Runs for individual products still apply.

MAXIMUM WIRE LENGTH TO PREVENT EXCESS VOLTAGE DROP

Wire Size	Load Wattage (W)													
	15	24	30	40	48	60	76	96	120	150	160	200	240	300
20 AWG	78'	49'	39'	31'	24'	19'	15'	12'	9'	7'	7'	5'	4'	3'
18 AWG	125'	78'	62'	49'	39'	31'	24'	19'	15'	12'	11'	9'	7'	6'
16 AWG	199'	124'	99'	78'	62'	49'	39'	31'	24'	19'	18'	14'	12'	9'
14 AWG	316'	197'	158'	125'	98'	79'	62'	49'	39'	31'	29'	23'	19'	15'
12 AWG	503'	314'	251'	199'	157'	125'	99'	78'	62'	50'	47'	37'	31'	25'
10 AWG	800'	500'	400'	316'	250'	200'	158'	125'	100'	80'	75'	60'	50'	40'
8 AWG	1273'	795'	636'	503'	397'	318'	251'	198'	159'	127'	119'	95'	79'	63'

MAXIMUM WIRING DISTANCE OF DRIVER TO LIGHTING

The maximum wiring distance of driver to LED Lighting refers to the wire used between the driver and first LED of the luminaire. If the wire gauge is inadequate for the wiring distance, the luminaire will receive decreased voltage, insufficient to power the LEDs. Refer to the table to determine appropriate wiring distances based on wire gauge and the LED load.



MOUNTING INSIDE AN ENCLOSURE

- Only mount drivers inside enclosures rated for your application
- Always ground drivers to enclosure
- Do not mount drivers without an enclosure
- Use enclosure knockouts and water-tight conduit fittings when applicable

DRIVER CARE

- Do not submerge drivers in any liquid
- Do not leave any exposed wires
- Do not cover driver without proper ventilation
- Do not install damaged driver
- Do not exceed maximum load

DIMMER TRIM VALUES

Set dimmer trim value as needed to prevent flickering and irregular dimming. Review dimmer specifications for trim value adjustment. Dimmers by others.

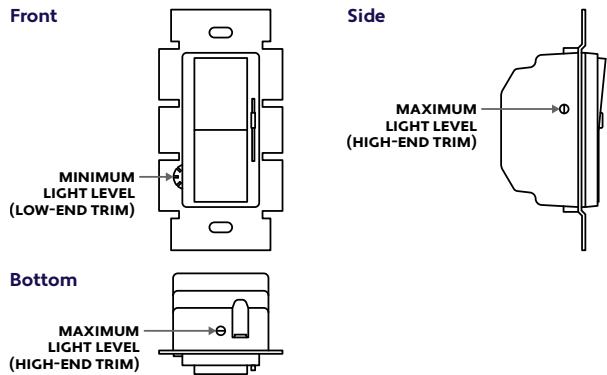
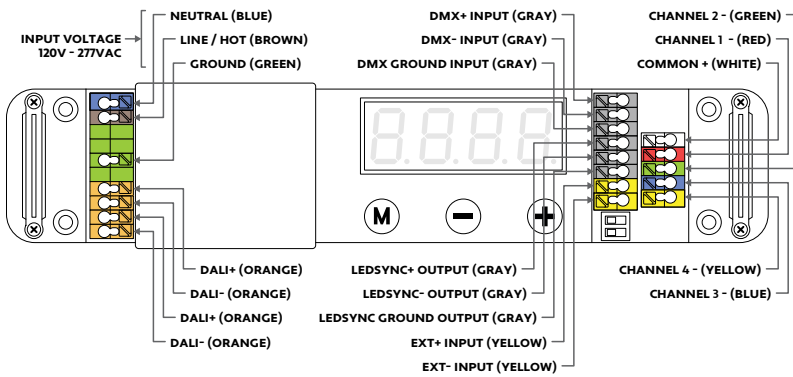
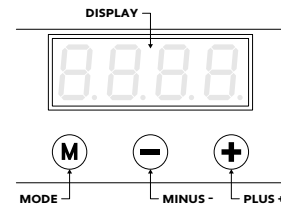


DIAGRAM OF DRIVER



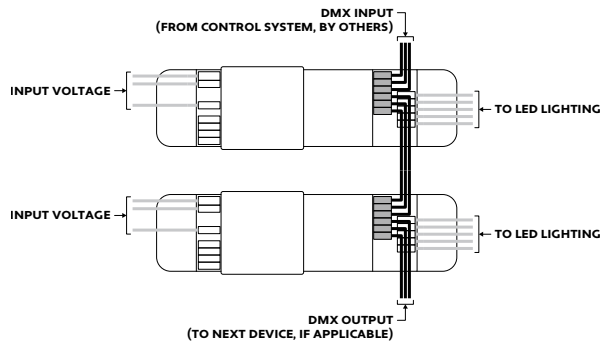
DIGITAL INTERFACE



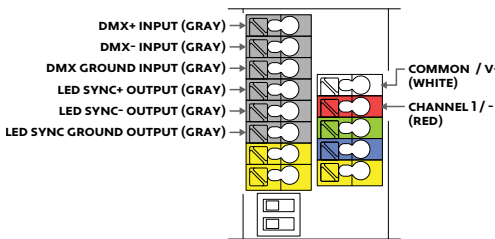
DMX NOTES

- Wire colors on diagram correspond to colors of driver terminals.
- Default DMX address of each luminaire is 001. Consult a third party DMX commissioner to modify at time of installation. ALUZ does not provide DMX commissioning.
- DMX Address must be set for each driver. Default DMX address is 001.
- A DMX Control System (by others) must be used to operate the lighting.
- The last driver in a daisy chain sequence must be terminated.
- Driver load not to exceed 100W.
- For best dimming performance, it is recommended to load drivers to a minimum of 50% (50W) and a maximum of 80% (80W).
- Up to 28 drivers may be daisy chained together using shielded cable specified for DMX wiring.
- Ensure DIP Switch 1 is set to ON (Left) to activate 24V operation.
- Do not apply voltage to any DMX wires or terminals. Only connect DMX signal wires to controllers or to DMX signal daisy chains.

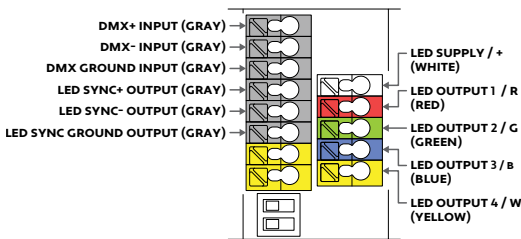
DMX Daisy Chain



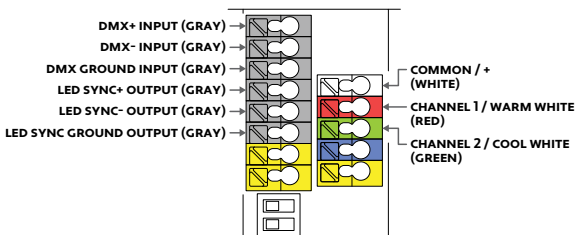
DMX Wiring: Static White



DMX Wiring: RGBW



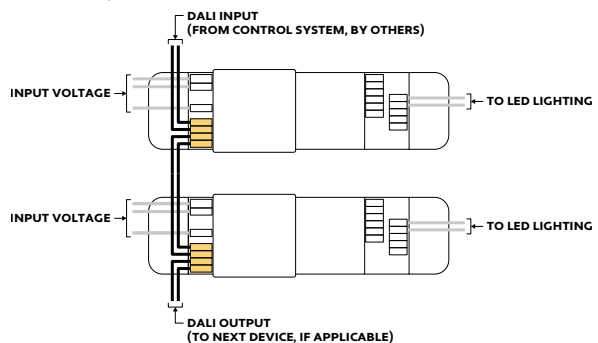
DMX Wiring: Dynamic White (DWH)



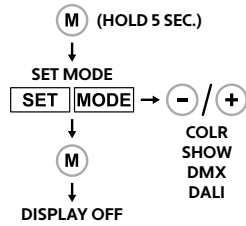
DALI NOTES

- Wire colors on diagram correspond to colors of driver terminals.
- DALI commissioning to be performed by a third party at time of installation. ALUZ does not provide DALI commissioning.
- DALI Address must be set for each driver.
- A DALI Control System (by others) must be used to operate the lighting.
- Driver load not to exceed 100W.
- For best dimming performance, it is recommended to load drivers to a minimum of 50% (50W) and a maximum of 80% (80W).
- Up to 28 drivers may be daisy chained together using shielded cable specified for DALI wiring.
- Ensure DIP Switch 1 is set to ON (Left) to activate 24V operation.

DALI Daisy Chain

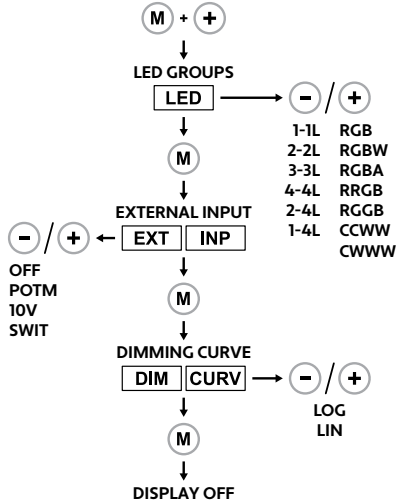


MODE OF OPERATION



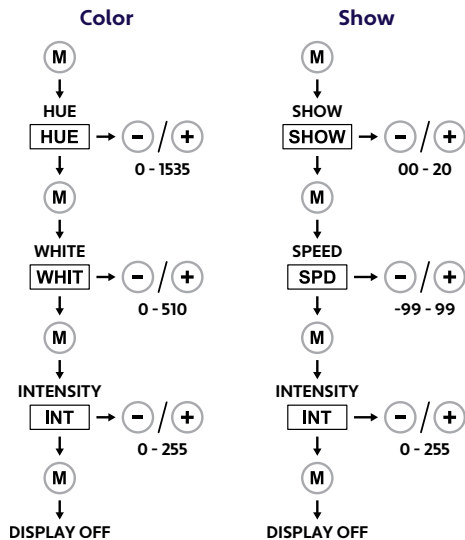
• Set Mode to DMX or DALI

SET LED GROUPS



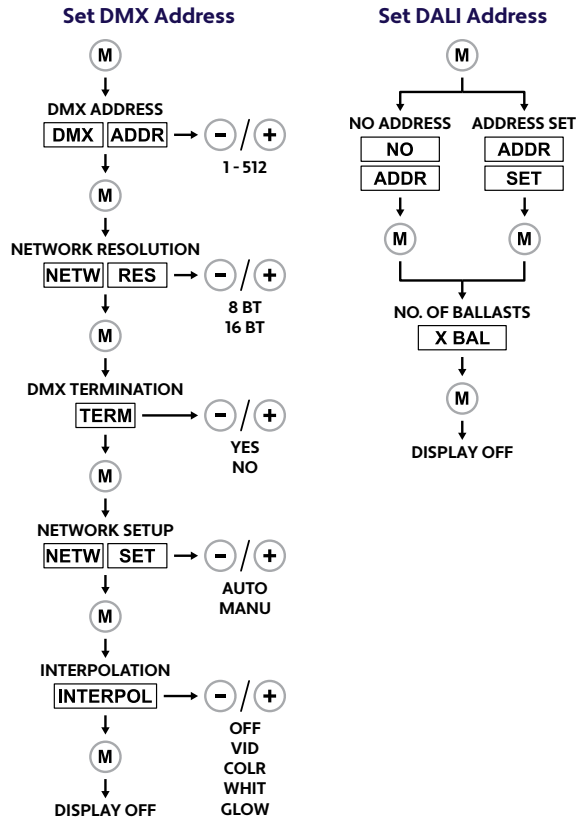
- Set LED Groups to RGBW for RGBW lighting.
- Set LED Groups to CCWW for Dynamic White lighting.
- Set LED Groups to 2-2L for Static White lighting.
- Set External Input to OFF.
- Set Dimming Curve to Linear.

STANDALONE OPERATION (Color / Show)



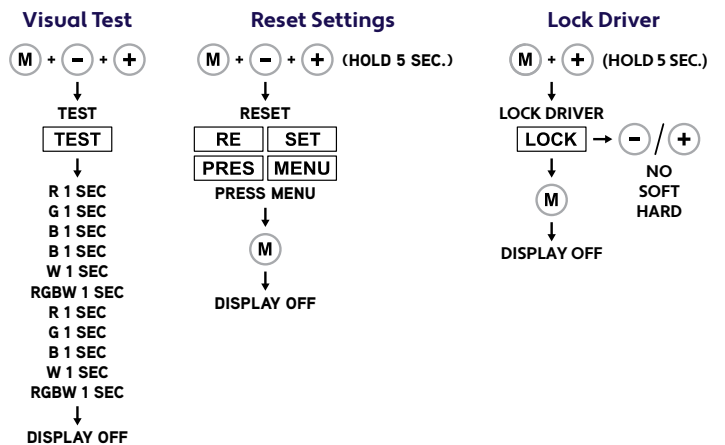
• Standalone Operation should only be used when a control system is not present to control the lighting (not recommended).

MODE OF OPERATION



• Consult with a third-party DMX or DALI professional to determine which settings are best for your application. ALUZ does not provide DMX or DALI commissioning.

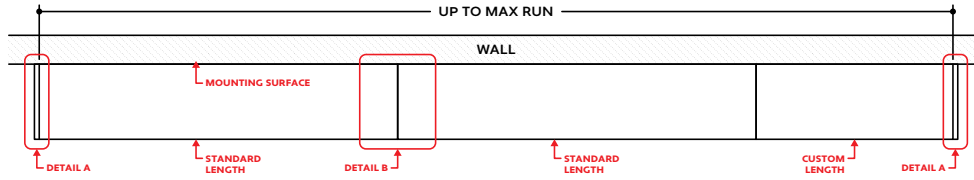
OTHER FUNCTIONS



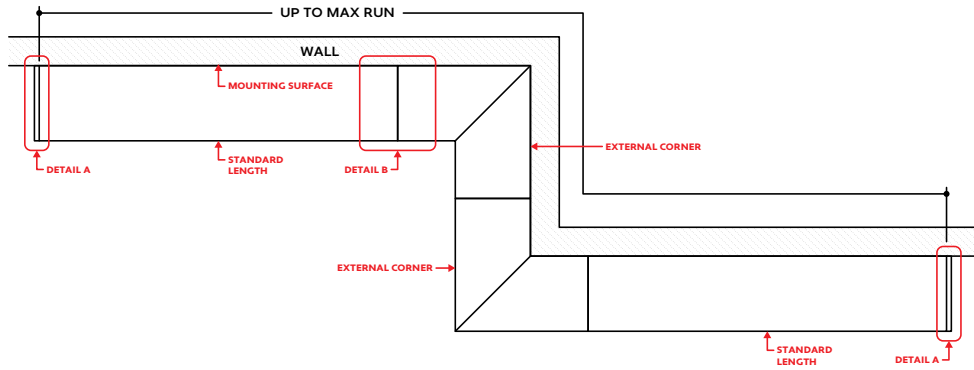
- Always perform the visual test function after wiring to ensure all channels are behaving appropriately.
- Reset driver to factory settings if necessary. It is recommended to reset each driver before adjusting settings for the first time.
- Lock driver if applicable (not recommended).

DESIGN GUIDELINES

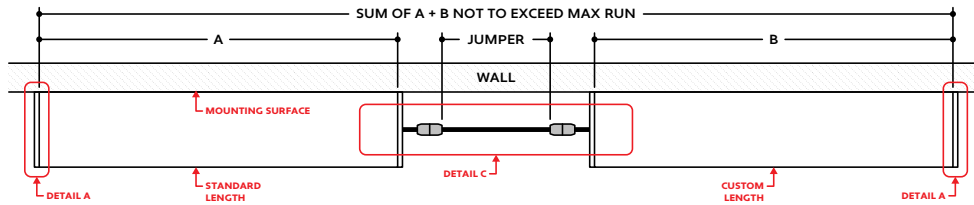
Individual Run



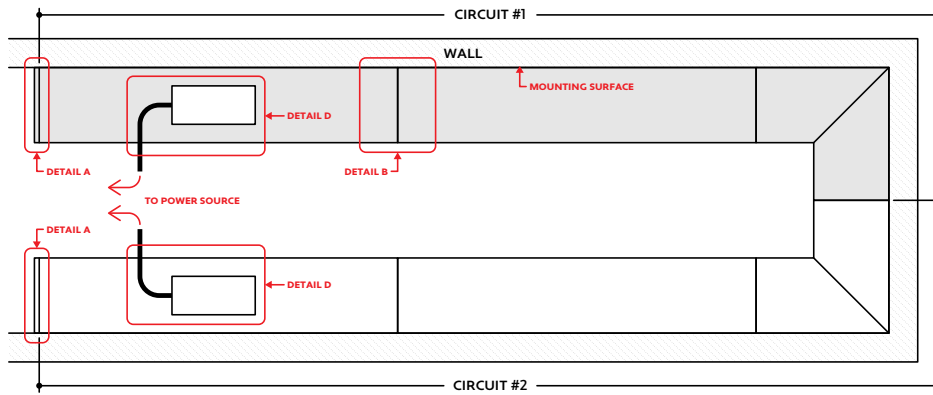
Run with Mitered Corners



Run with Jumper Cables



Continuous Run Exceeding Maximum Run

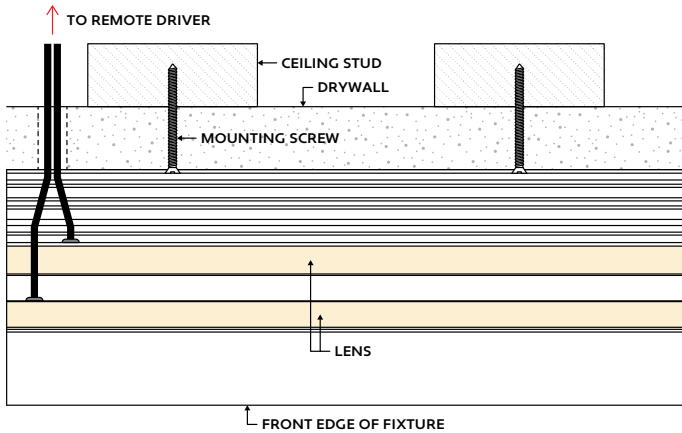


KEY

- Detail A End Cap:** An end cap is used to terminate each run at either end.
- Detail B Continuous Connection:** Luminaire segments are connected using an included continuous connector. See installation instructions for details.
- Detail C Continuous Connector (Jumper):** Used to span a corner or traverse a gap, corner, or obstacle in the installation area.
- Detail D Driver:** The driver may be mounted within the luminaire. See installation instructions for details.

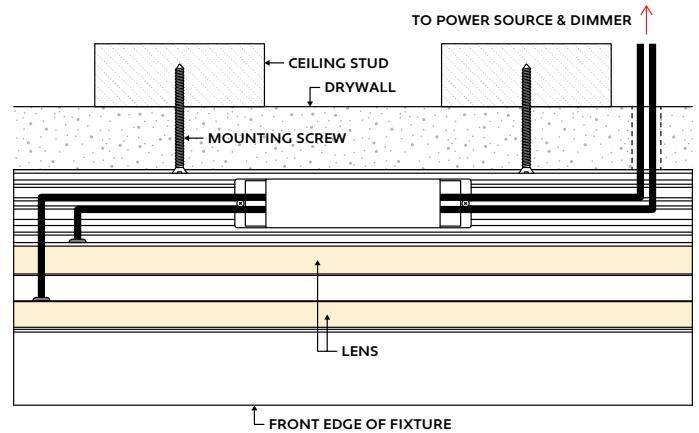
Note: Drawings not to scale. Product may differ from examples shown.

REMOTE DRIVER



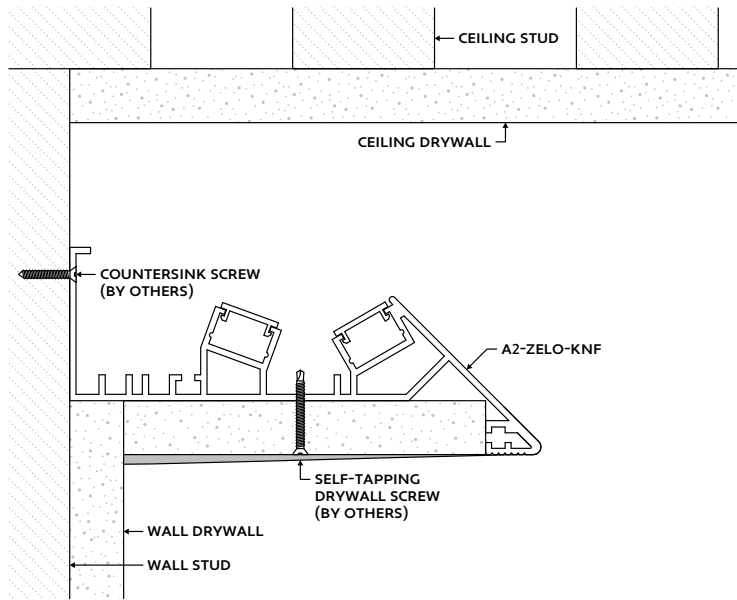
- Fixtures with remote driver have power leads that feed through the wall to the driver. Drill holes in wall and fixture as needed. Only use plenum rated wire for connections made inside walls.
- Fixture shown with both light sources in use. Some fixtures may only have one light source.

INTEGRAL DRIVER

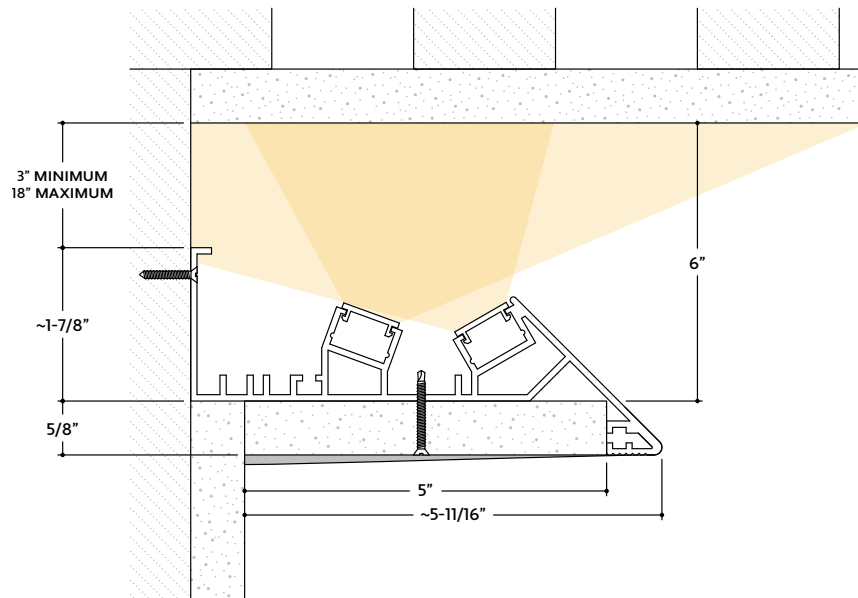


- Fixtures with integral driver have power and dimming leads that feed through the wall to power source and dimming system.
- Fixture shown with both light sources in use. Some fixtures may only have one light source.

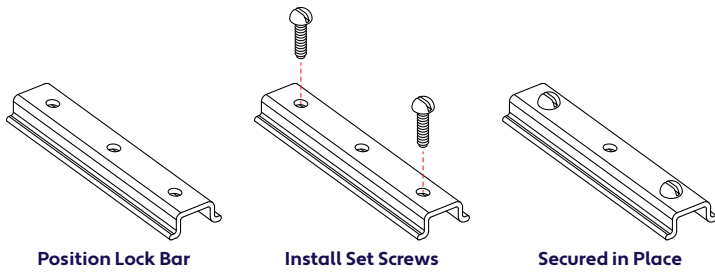
DIAGRAM OF ASSEMBLY



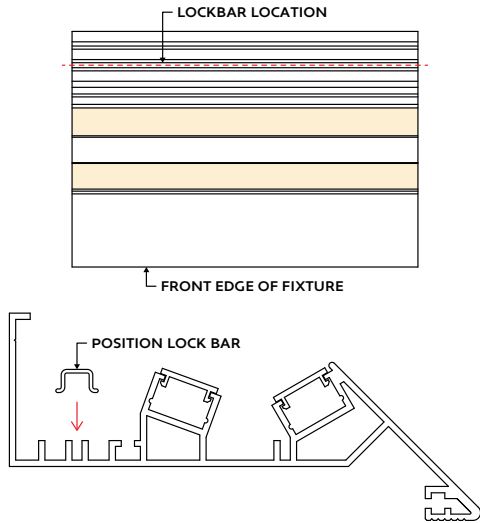
DIMENSIONS



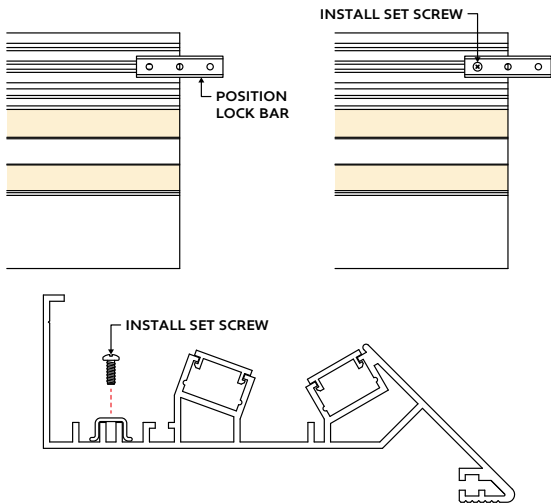
OVERVIEW



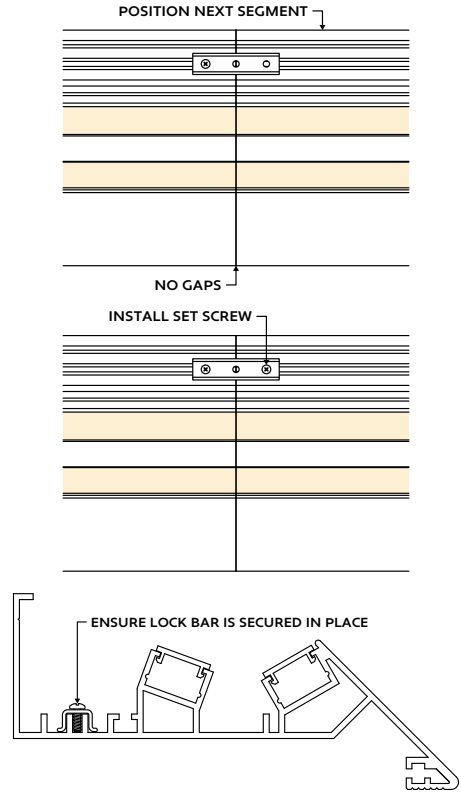
- 1 Identify location where the lock bar will be installed. The dotted red line below indicates which features the lock bar will overlap.



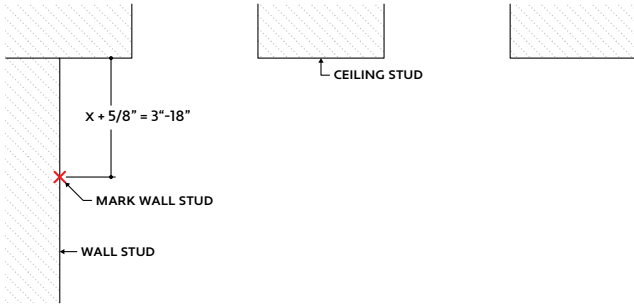
- 2 Position lock bar with the center hole even with the edge of the fixture segment, then install lock bar to secure in place.



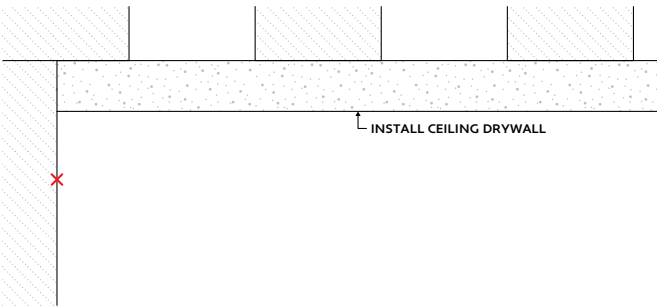
- 3 Position the next fixture segment in place and butt together leaving no gaps, then use another set screw to secure in place. **Tip:** Have one person hold the fixture segments in place, while another person secures the lock bar with set screws.



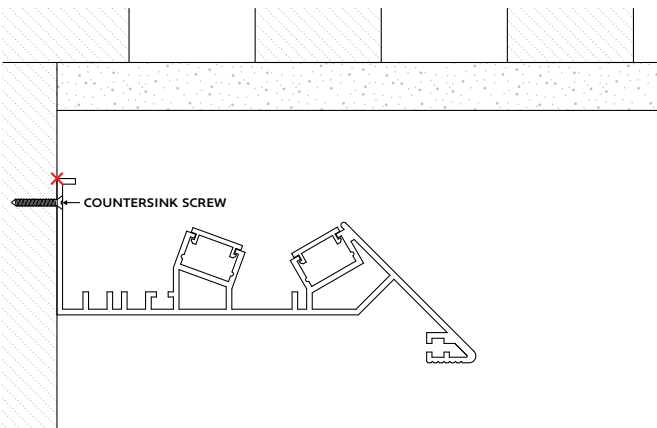
- 1 Prepare installation area. The walls must be free of drywall before installing. If possible, hang ceiling drywall before installation.
- 2 Measure between 3" and 18" below ceiling studs and mark each wall stud in the installation area. Be sure to account for the 5/8" ceiling drywall. Use a laser line to ensure accurate relation to the ceiling, then draw a reference line connecting each mark along the wall studs.
Note: Distance from ceiling to top of fixture varies. Refer to **Cove Guidelines** for details.



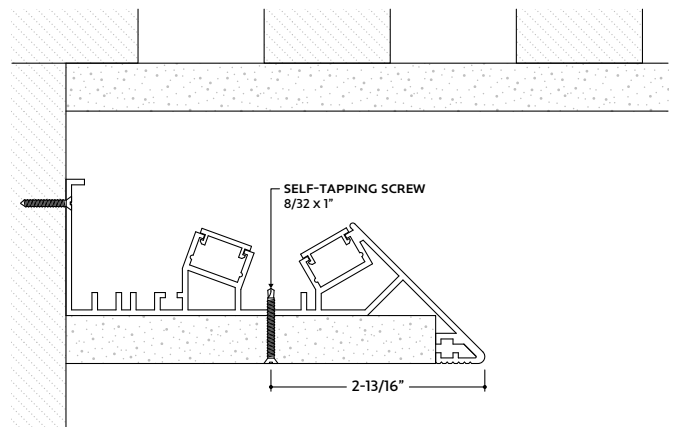
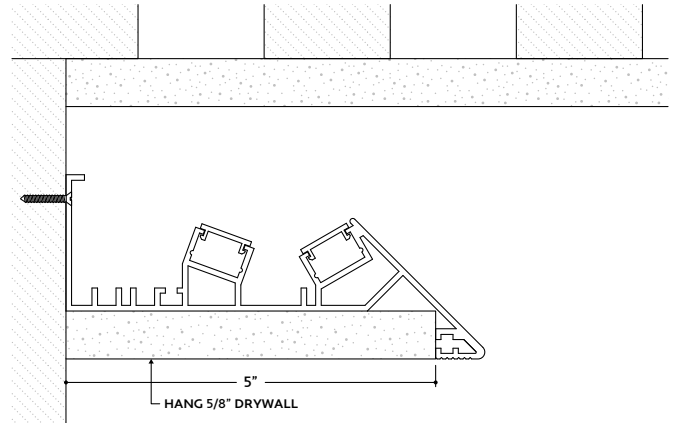
- 3 Hang the ceiling drywall using appropriate mounting hardware (by others). Ensure the ceiling drywall extends to the wall stud.



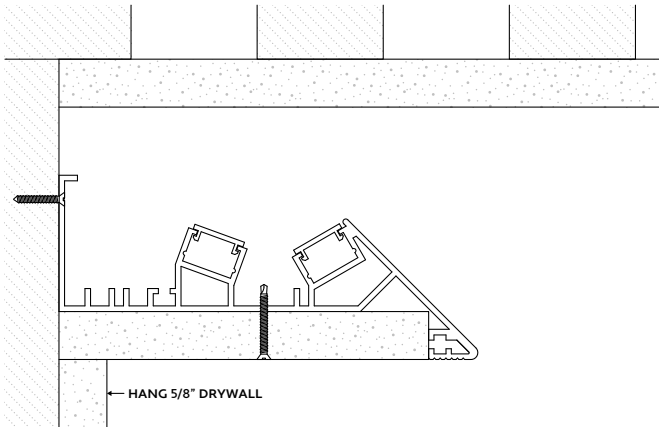
- 4 Mount fixtures to wall studs. Always mount corner segments first. Use at least 1 screw per 2', rounded up. Mount each corner segment with 4 screws total, 2 on each side. Ensure all fixtures are aligned before proceeding.
Note: Use Lock Bars to connect fixture segments if applicable. Refer to **Lock Bar Installation** for details.



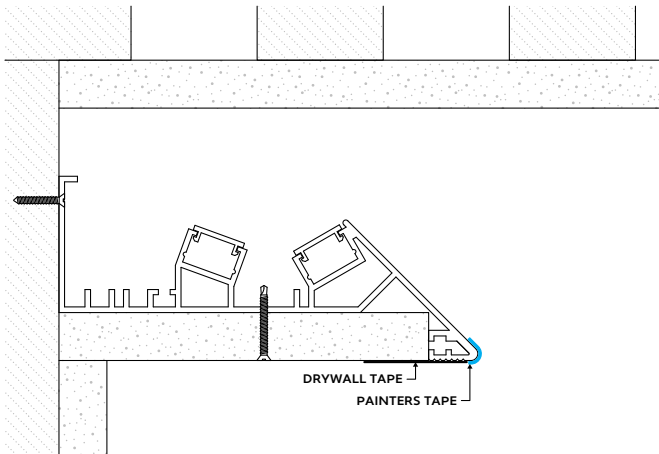
- 5 If applicable, make wiring connections between fixture segments. Ensure connected runs do not exceed load of power supply.
Note: Refer to **Electrical Requirements** for details on calculating load.
- 6 If using an integral driver, continue to step 8. If applicable, make wiring connections from fixture to remote driver. Route lead wires from fixture through the wall and make splice connections to driver inside a junction box (by others). Verify fixture wiring diagram before connecting.
Note: Only use plenum rated wire to make connections within walls.
Note: Refer to **Wiring Assembly & Wiring Diagrams** for details.
- 7 Perform a continuity test before connecting to power source. Refer to **Continuity Test** for details.
- 8 Verify wire colors from wiring diagram, then connect fixtures to power source. Drivers used for this product may vary. Always confirm wiring diagram from driver installation instructions before connecting.
- 9 Turn on the lighting and test functionality. Ensure that all fixtures are working and dimming properly. If there is an issue with the lighting, troubleshoot to discover the problem.
- 10 After lighting is confirmed to be working, cut 5" wide sections of drywall and install underneath fixture. Secure the drywall to the fixture using 1" self-tapping countersink drywall screws (by others). Mount screws 2-13/16" away from front edge of fixture to avoid damaging the lighting.
Note: Must use 5/8" drywall.



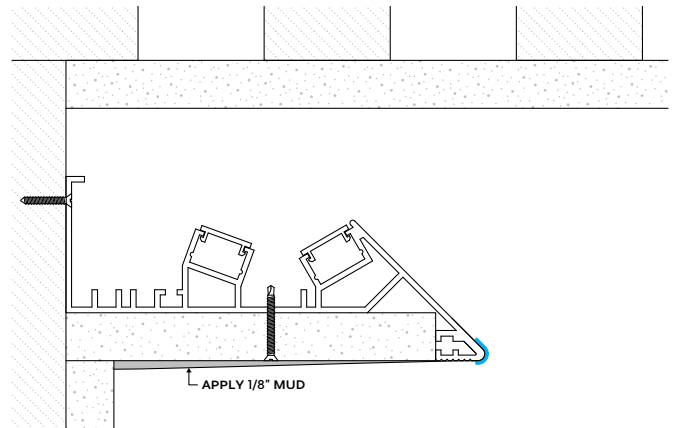
- 11** Hang drywall along area below fixture. Hang the drywall using appropriate mounting hardware (by others).



- 12** After installation is complete, prepare fixture for mud application. First, apply drywall tape over fixture flange and drywall, then use painters tape to mask off the front edge of fixture.
Note: Only use ultra-thin drywall tape. Do not overlap drywall tape.



- 13** Apply mud until flange and drywall tape are completely covered and smooth. Allow to dry completely before painting or sanding. Do not use any pre-mixed mud compounds.
Note: Ensure lenses are adequately protected from paint or spray.

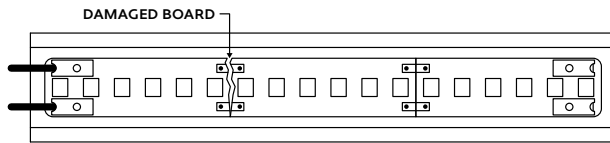


TROUBLESHOOTING TIPS

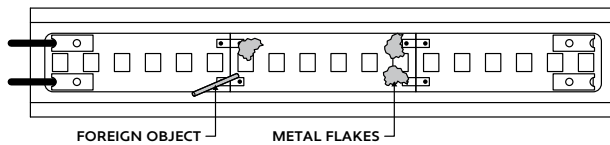
- Do not reset the breaker multiple times.
- If the unit is overloaded, the breaker will trip, shutting off the driver and lights.
- If the breaker reset button has been held down by hand or any type of pressure, such as duct tape, or if the breaker has been reset multiple times without troubleshooting, the unit will:
 - Burn the driver bobbin.
 - Burn the thermal or magnetic breaker.
 - Burn the driver lead wires due to high amperage caused by overload.
 - Short circuit in line which will not allow the breaker to reset.
 - Damage the lighting.

1 Turn off power before beginning. Verify power is off by using a not contact circuit tester (by others).

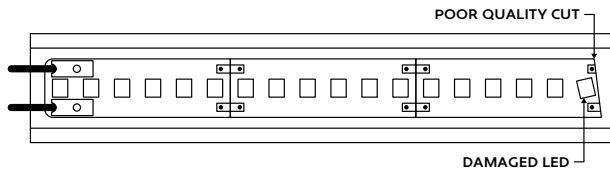
2 Check the board for damage, such as cuts, punctures, twisting, or crushing. If there is excessive damage to the board, it must be replaced.



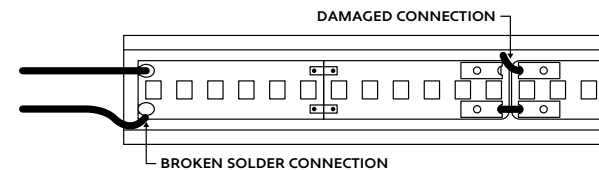
3 Check the run for any particles that may cause a short. Check the end cap, power connector, and board for any metal flakes or shavings. Clear the run of any shavings or particles if present, then perform a continuity test to confirm the short has been eliminated.



4 Check board cuts to ensure they are clean. Frayed, split, or sloppily cut boards can damage the circuit, resulting in flickering, dimness, or LED outages.



5 Check terminal connections between LED boards. If a terminal is loose, damaged, or absent, the board must be replaced. Check soldered connections to LED boards, if applicable.



6 Check connections in the line. Ensure all splice connections are secure and properly sealed with shrink tube and silicone for outdoor applications. Ensure that wiring is not bent past the permitted wiring bend radius (1.5").

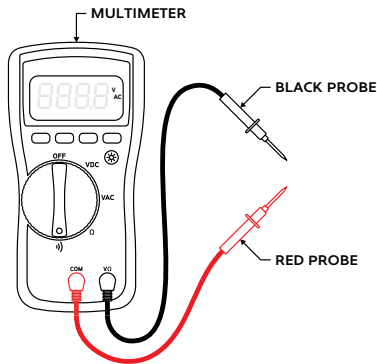
7 Check the run for any water inside end cap, power connector, or lightstrip. If water or condensation is present, the lightstrip must be replaced.

CONTINUITY TEST

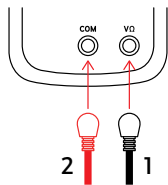
A continuity test is performed to determine if electricity can pass through two points on an electrical circuit. This helps identify shorts or malfunctions in the line or luminaire. Use a multimeter or continuity tester to perform the steps below.

- Always perform a continuity test before connecting to power source.
- Malfunctions are not always as obvious as the lights not turning on.
- A short or malfunction in the line or luminaire will cause damage over time, irreparably damaging the lighting and voiding warranty.

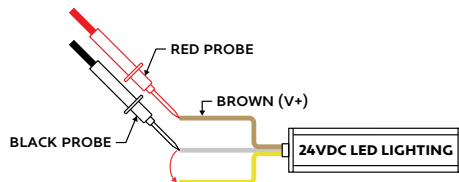
EXAMPLE OF MULTIMETER (BY OTHERS)



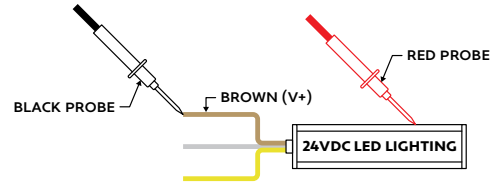
- 1 Turn off power before beginning. Verify power is off by using a non-contact circuit tester (by others). Touch the probe of the tester to the positive wire of the power source. The tester will light up if an electrical current is detected.
- 2 Setup your multimeter tester (by others). First, insert the black probe lead into the COM jack, then insert the red probe lead into the VΩ jack.



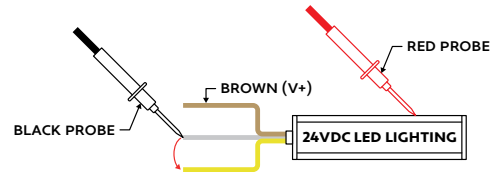
- 3 Verify multimeter is functional by touching probes together. The multimeter should beep, flash, or read 0Ω (ohms) of resistance.
- 4 Touch the red probe to the brown wire and the black probe to the white wire, then the yellow wire. If a conductive path is formed between the brown wire and any other wire, the multimeter will beep, flash, or read 0Ω (ohms) of resistance. Troubleshoot to identify the malfunction in the line. If there is no conductive path formed, the multimeter will not show any feedback.



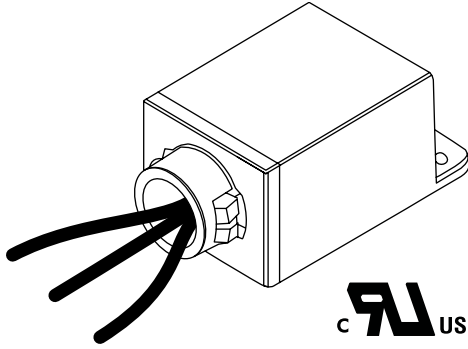
- 5 Touch the red probe to the luminaire extrusion and the black probe to the brown wire. If a conductive path is formed between the extrusion and the brown wire, the multimeter will beep, flash, or read 0Ω (ohms) of resistance. Troubleshoot to identify the malfunction in the line. If there is no conductive path, the multimeter will not show any feedback.



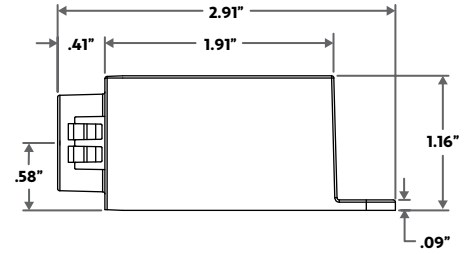
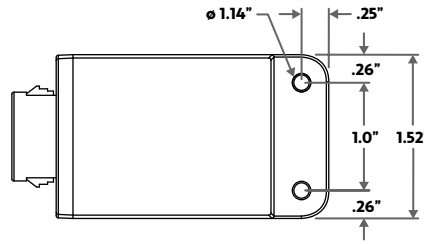
- 6 Touch the red probe to the luminaire extrusion and the black probe to the white wire, then the yellow wire. If a conductive path is formed between the extrusion and the other wires, the multimeter will beep, flash, or read 0Ω (ohms) of resistance. Troubleshoot to identify the malfunction in the line. If there is no conductive path, the multimeter will not show any feedback.



- 6 Set multimeter to DC voltage and test power source. Confirm the correct voltage before connecting luminaire to power source. If the voltage reading is more than 1 volt greater than the marked output voltage, there is a problem with the power source or driver.
- 6 Connect luminaire to power source via power connector. If LEDs do not turn on, flip the polarity (+/-) or power source connection to power connector.



CASE DIMENSIONS



SURGE PROTECTOR SPECIFICATIONS

Model	Input Voltage	Surge Protection Level	Mounting	Enclosure Material	Input Needs	Input Frequency
ALS-SP	120V - 277V	0kV, 10kA, ANSI C62.41 Category C	SnapLOCK / Footed	Polycarbonate	6", 18AWG stranded, 105°C stripped, 3/8" tinned	60Hz

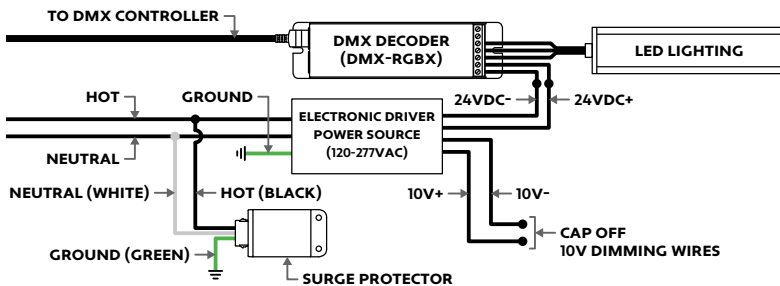
PRODUCT FEATURES

The Surge Series are 3-leaded devices that protect Line-Ground, Line-Neutral, and Neutral-Ground in accordance with IEEE / ANSI C62.41.2 guidelines. Protects against surges according to IEEE C62.41.2 C High (10kA and 10kV). Surge current rating = 10,000 Amps using industry standard 8/20 Sec wave. Surge Location Rated Category C3. UL Recognized Component in the United States and Canada (UL1449). Type 4 Surge Protection Device. High temperature, flame retardant plastic enclosure, 85°C maximum surface temperature rating. Thermally Protected Transient Over-voltage Circuit.

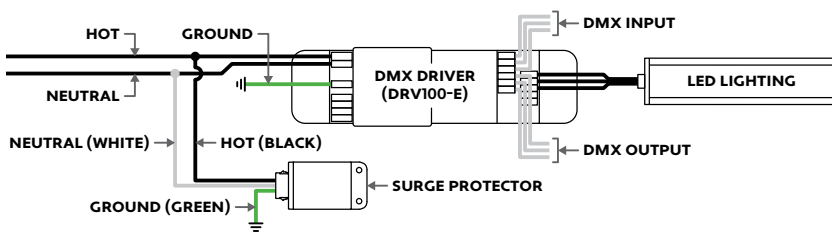
PRODUCT SPECIFICATIONS

The Surge series of products are designed to be used in conjunction with LED Drivers and fixtures to provide an additional level of protection against powerline disturbances in industrial, commercial and residential applications where surge protection to IEEE C62.41.2 is required.

DMX DIMMING WITH DECODER WIRING DIAGRAM



DMX DIMMING WITH ALL-IN-ONE DRIVER WIRING DIAGRAM



DALI DIMMING WITH ALL-IN-ONE DRIVER WIRING DIAGRAM

