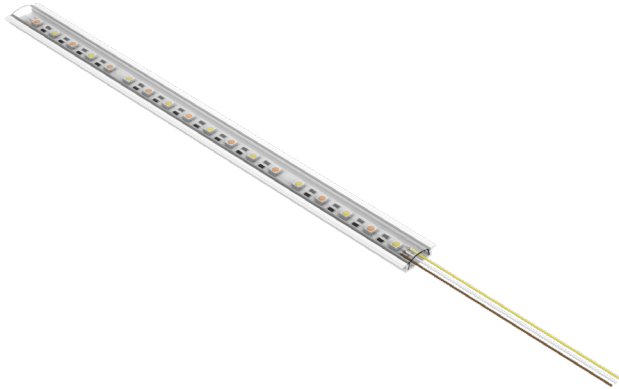


# ZUDA Recessed Low

A8-ZUDA-RCL



## GENERAL FEATURES

<b>Applications</b>	Accent, Decorative, Surface, Recess, Pendant Lighting
<b>Lens</b>	Clear, 50% Semi-Frosted, or 100% Frosted
<b>Viewing Angle</b>	120°
<b>Length</b>	Built to Order (+/- 1/8" Tolerance)
<b>Construction</b>	Aluminum Extrusion
<b>Weight</b>	0.085 lbs per foot
<b>Mounting</b>	Mounting Channel
<b>Listing</b>	Dry, Wet, or IP67 Location UL2108, CSA C22.2 #9 UL8750, CSA250
<b>Driver</b>	Remote (Sold Separately)
<b>Temperature Ratings</b>	Operating / Startup: -20° to 48°C (-4° to 120°F) Storage: -40° to 76°C (-40° to 170°F)
<b>Installation Link</b>	

## ELECTRICAL

<b>Dimming</b>	DMX
<b>Maximum Run (Class 1 Applications)</b>	26' (4.5W) 33' (3.6W)
<b>Maximum Run (Class 2 Applications)</b>	21' (4.5W) 26' (3.6W)
<b>Luminaire Voltage</b>	24V DC

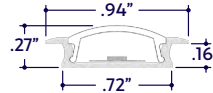
## PRODUCT INFORMATION

- For accent, decorative, surface, recessed, or pendant lighting.
- 24 Volts DC for easy and safe installation.
- Long life, energy efficient LEDs.
- Can be ordered to specific lengths for when exact dimensions are known  
**Example:** 10 x 10'6"
- Plug and light system.
- Lead wires are typically 36" long and exit on one end.

## 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



## ELECTRICAL REQUIREMENTS

- Luminaires require a 24 Volt DC remote driver.
- To calculate driver size, determine Watts per Foot.  
**Example:** 4.5W per Foot
- Determine Length in Feet.  
**Example:** 10'
- Calculate Load: Multiply Watts per Foot x Length in Feet  
**Example:** 4.5W x 10' = 45W
- Choose a driver from catalog.  
**Example:** 60 Watt Driver
- Determine maximum driver distance using Maximum Wire Length Table on drivers page.  
**Example:** 45 watts is between 40W and 60W. Using #14 wire, maximum distance is 37' from driver to first LED.

## INSTALLATION RECOMMENDATIONS

- Luminaires must be mechanically attached directly to mounting surface using mounting clips, channels, or other appropriate means. Refer to installation step by step pages for details.
- Conduit raceway should be sleeved at one end for low voltage wires going to driver.

## INSTALLATION TOOLS REQUIRED

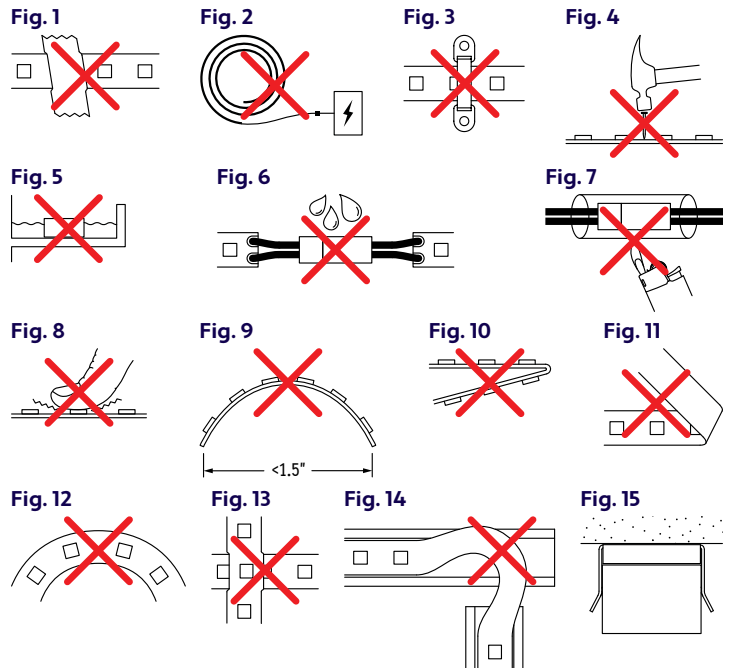
- Electric Hammer Drill
- 14.4 to 28 Volt Cordless Drill
- Phillips Bits
- Utility Knife
- Electrical Cord
- Marker
- Wire Stripper
- Long Nose Pliers
- Drill Bits - Concrete or Wood
- Electrical Three Ways
- Safety Glasses
- Measuring Tape
- Laser Line or Chalk Line

### WARNING

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

- Ensure power is off before installation begins, during replacements, additions, or repairs.
- Do not use LED Lightstrip if damaged, such as broken boards, loose connections, or frayed wire insulation. Inspect before installing.
- Do not install LED Lightstrip in hazardous locations.
- Do not cover LED Lightstrip with any material, as it may cause LEDs to overheat, melt, or ignite. (Fig. 1)
- 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 LED Lightstrip in the field.
- Do not overlap LED Lightstrip luminaires in any way.
- Only use LED Lightstrip with specified rated voltages. Do not exceed the specified voltage for any LED Lightstrip luminaire.
- Do not use LED Lightstrip extrusion as a raceway for additional wire. Non-factory feed through wires inside LED Lightstrip will void warranty.
- Ground Fault Circuit Interrupter (GFCI) protections should be provided on circuits or outlets when LED Lightstrip is used for outdoor applications.
- Surge protector must be set up for electrical power system to avoid damaging LED Lightstrip lighting system.
- Do not connect wires together, follow provided wiring diagrams.
- Do not cut wire while energized.
- Do not connect LED Lightstrip lightstrip to power source while spooled or coiled. (Fig. 2)
- Do not exceed maximum run lengths.
- Do not mount LED Lightstrip with staples, nails, or like means that might damage the insulation. Mount with double-sided tape and mounting clips.
- Do not install mounting clips over LED diodes. (Fig. 3)
- Do not penetrate LED Lightstrip lightstrip with any foreign object. (Fig. 4)
- Do not mount LED Lightstrip inside tanks or enclosures of any kind.
- 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 mount fixture with less than the minimum number of mounting clips required. See mounting clips section for details.
- Do not force LED Lightstrip into a space that is too small.
- Do not force LED Lightstrip with cord grip into soffit.
- Do not install LED Lightstrip at an angle within a cove. Only install fixtures straight within a cove.
- Do not bend extrusion around radius.
- Do not submerge dry or wet location LED Lightstrip in any liquid.
- Do not install wet location in outdoor coves without proper drainage. (Fig. 5)
- Do not install LED Lightstrip in any area that is continuously exposed to flowing or pooling water, such as underneath drain pipes, sprinklers, fountains, misters, etc.
- Do not install connectors without shrink tube for wet location. (Fig. 6)
- Do not use a lighter or open flame to heat shrink tube. (Fig. 7)
- Do not cut, puncture, or penetrate LED Lightstrip aluminum housing, end caps, or lens covers.
- Do not drop, bang, or rest weight upon LED Lightstrip.
- Do not apply excessive pressure to any part of LED Lightstrip lightstrip or LEDs. (Fig. 8)
- Do not bend LED Lightstrip 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. 1.5" minimum bend radius. (Fig. 9)
- Do not install LED Lightstrip lightstrip in a zig zag fashion. (Fig. 10)
- Do not fold, crease, or twist LED Lightstrip lightstrip. (Fig. 11)
- Do not bend lightstrip along a horizontal plane. (Fig. 12)
- Do not overlap LED Lightstrip at any location. (Fig. 13)
- Do not cross or overlap extrusions and twist lightstrip to overlap. (Fig. 14)
- Do not install LED Lightstrip 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 LED Lightstrip by the power cord.
- Do not install LED Lightstrip on ceilings without mounting clips. (Fig. 15)

### FIGURES



### 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.

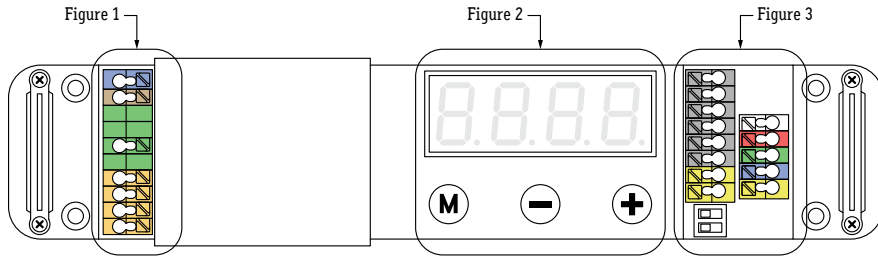
### COMPATIBLE WITH POLYCARBONATE

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

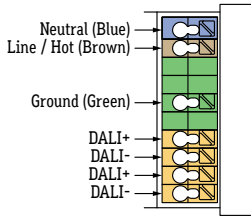
### NOT COMPATIBLE WITH POLYCARBONATE

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

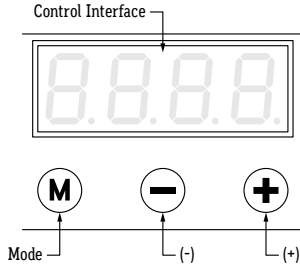
**DIAGRAM OF DRIVER**



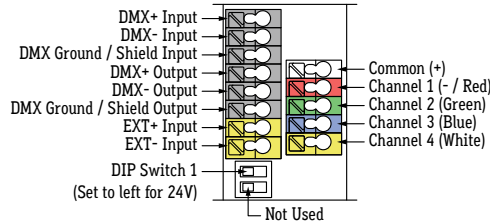
**FIGURE 1 (INPUT)**



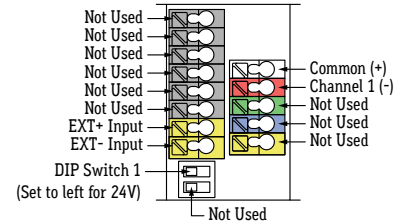
**FIGURE 2 (INTERFACE)**



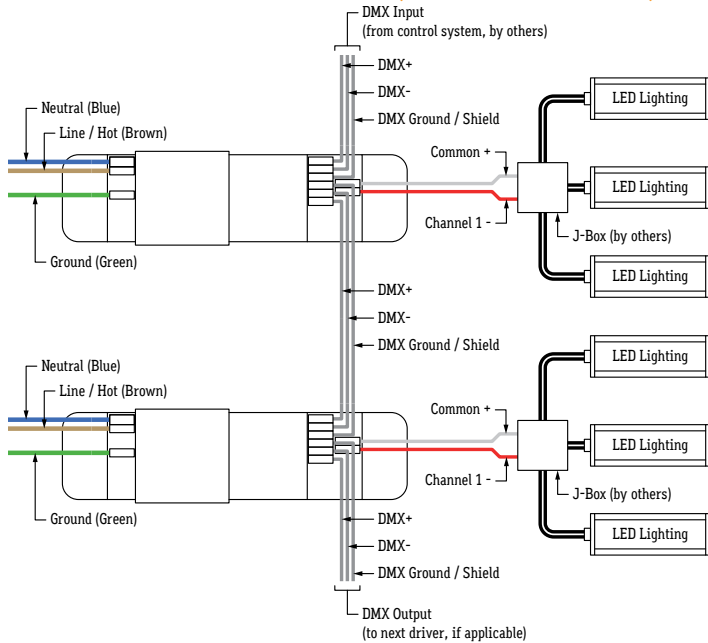
**FIGURE 3 (DMX OUTPUT)**



**FIGURE 4 (DALI OUTPUT)**



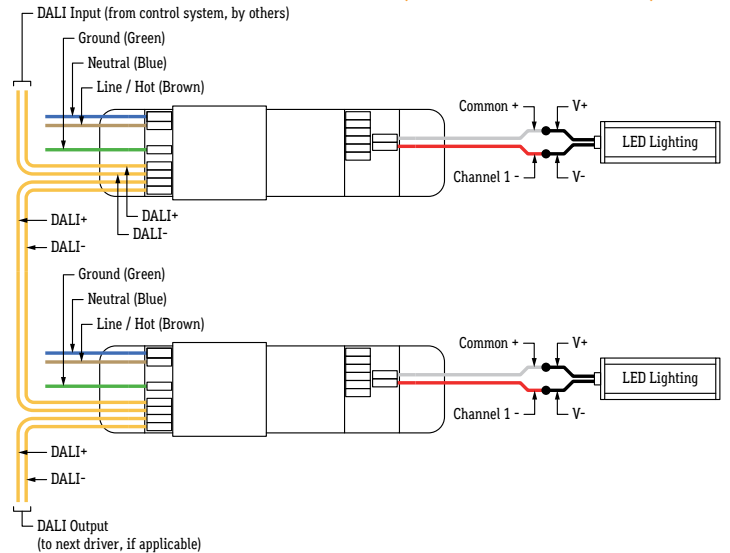
**TYPICAL DAISY CHAIN LAYOUT (DMX STATIC COLOR)**



**NOTES (DMX)**

- Default DMX address of each luminaire is 001. Consult 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 for each driver is 001.
- A DMX Control System (by others) must be used to operate the system.
- The last driver in a daisy chain sequence must be terminated.
- Up to 28 drivers may be daisy chained together using shielded cable specified for DMX wiring.
- Wire colors on diagram correspond to colors of driver terminals.
- Driver load not to exceed 96W.  
 It is recommended to only load drivers to 80% for best dimming performance.
- Ensure DIP Switch 1 is set to ON (Left) to activate 24V operation.

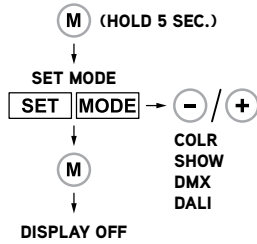
**TYPICAL DAISY CHAIN LAYOUT (DALI STATIC COLOR)**



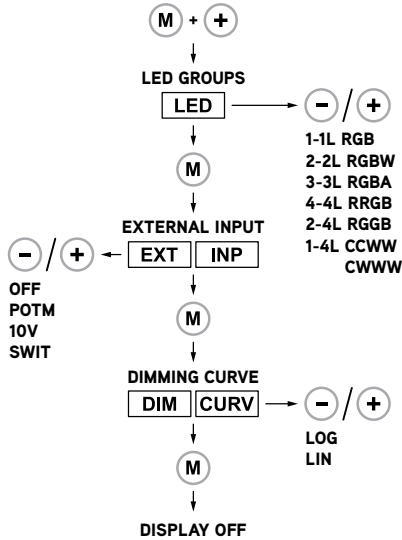
**NOTES (DALI)**

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

## MODE OF OPERATION

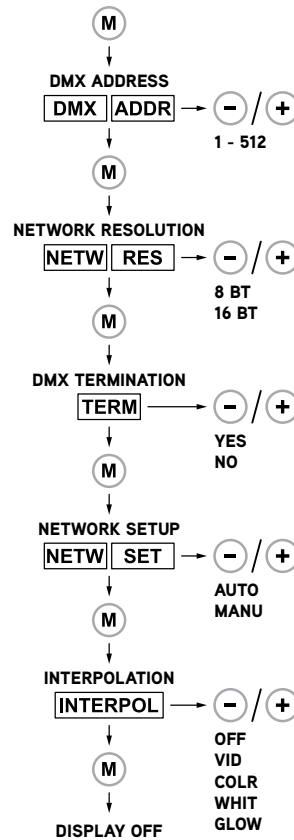


## SET LED GROUPS

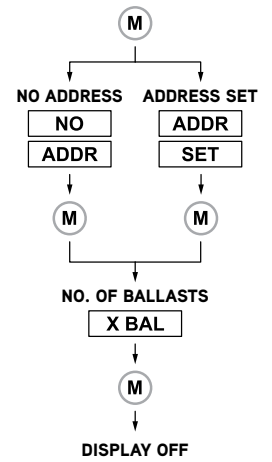


## STANDALONE OPERATION (Network Operation)

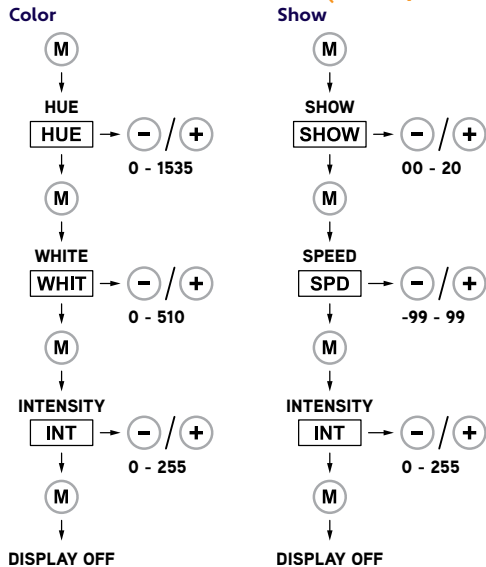
### Set DMX Address



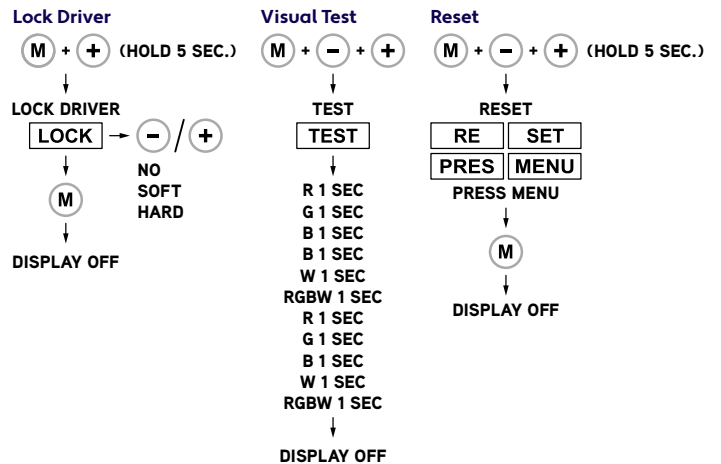
### Set DALI Address



## STANDALONE OPERATION (Color / Show)



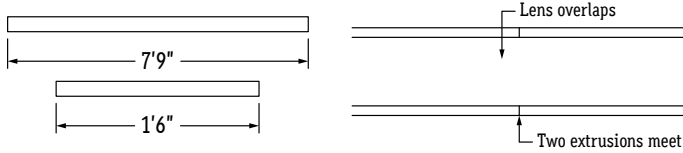
## OTHER FUNCTIONS



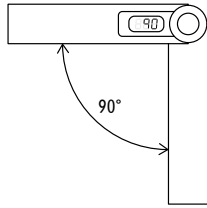
### EXAMPLE: 90° MITER

Miter cuts are only to be performed on unassembled dry location products. Do not attempt to modify wet location products.

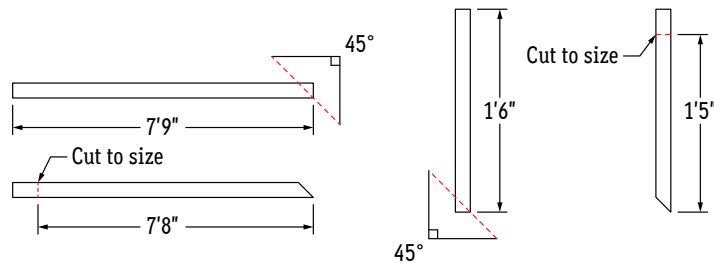
- 1 Measure area where mitered fixture will be installed. Cut extrusion and lens to size +1".  
**Example:** 7'8" extrusion to meet 1'5" extrusion. Cut extrusions to 7'9" and 1'6"  
**Note:** Plan your cuts so that lens will always overlap where two extrusions meet. Overlapping lenses helps keep extrusions in line and prevents light leaks.



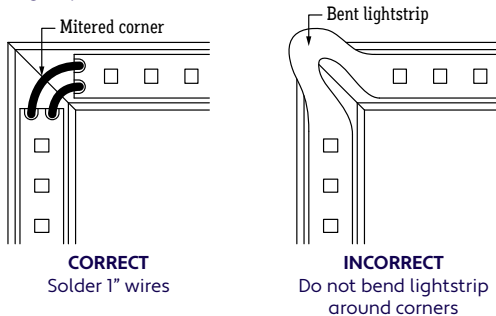
- 2 Measure angle where fixture will be mitered. Use an angle finder to determine exact angle.  
**Example:** 90° Angle



- 3 Divide measured angle by 2 ( $90^\circ \div 2 = 45^\circ$ ). Set miter saw to 45° and cut the end of each extrusion and lens where they will intersect. Verify the miter closes properly and fits in area, then trim excess extrusion on the end without the miter to exact size.

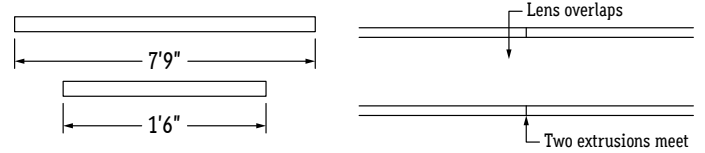


- 4 Use a small segment of wire to solder lightstrips between mitered extrusions. Do not bend lightstrip to turn corner. Refer to application guidelines for soldering steps.

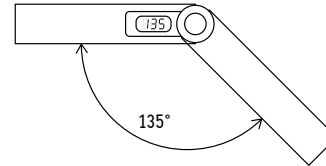


### EXAMPLE: 135° MITER

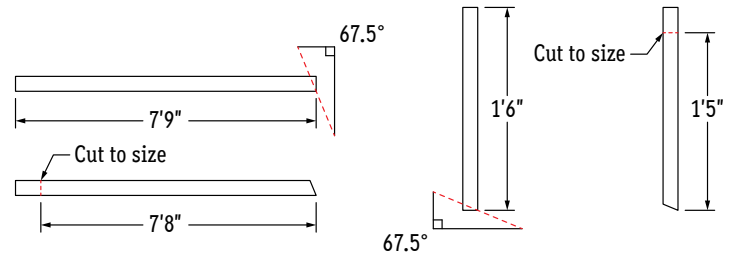
- 1 Measure area where mitered fixture will be installed. Cut extrusion and lens to size +1".  
**Example:** 7'8" extrusion to meet 1'5" extrusion. Cut extrusions to 7'9" and 1'6"  
**Note:** Plan your cuts so that lens will always overlap where two extrusions meet. Overlapping lenses helps keep extrusions in line and prevents light leaks.



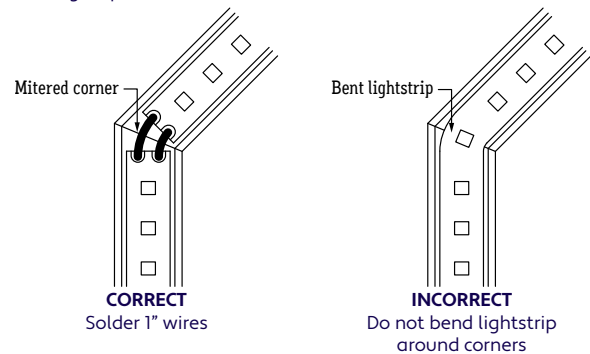
- 2 Measure angle where fixture will be mitered. Use an angle finder to determine exact angle.  
**Example:** 135° Angle



- 3 Divide measured angle by 2 ( $135^\circ \div 2 = 67.5^\circ$ ). Set miter saw to 67.5° and cut the end of each extrusion and lens where they will intersect. Verify the miter closes properly and fits in area, then trim excess extrusion on the end without the miter to exact size.



- 4 Use a small segment of wire to solder lightstrips between mitered extrusions. Do not bend lightstrip to turn corner. Refer to application guidelines for soldering steps.

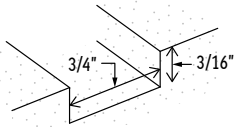


# ZUDA Recessed Low

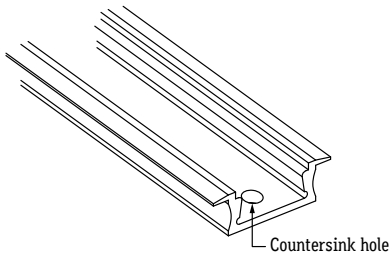
## A8-ZUDA-RCL

### Mounting Fixture (Dry Location Mounting Channel)

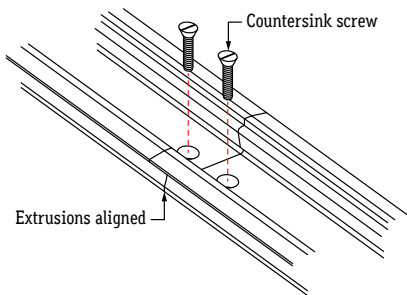
- 1 Measure area where luminaire will be installed. Use a laser line to create a reference line along installation area, ensuring consistent alignment of mounting channels.
- 2 Cut a 3/4" x 3/16" channel along installation area, using the reference line as a guide.



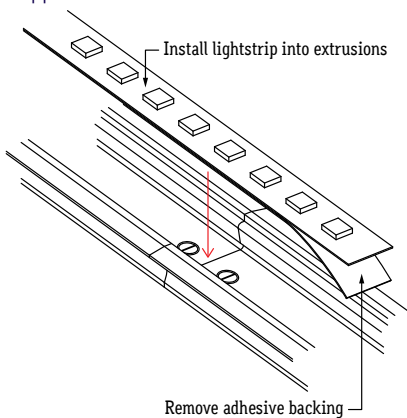
- 3 Lay extrusions along channel and drill at least 3 countersink holes per extrusion. Drill additional holes as needed.



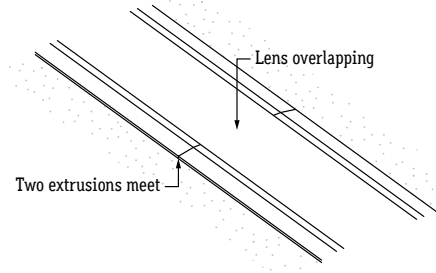
- 4 Screw extrusions to surface using countersink screws.  
**Note:** Ensure extrusions are aligned. Misalignment will prevent lens from snapping in.



- 5 After all extrusions have been securely mounted, remove adhesive backing from lightstrip and adhere in place along extrusion channel, ensuring lightstrip is secure inside extrusion.  
**Note:** Refer to Application Guidelines to ensure correct installation.



- 6 If applicable, connect disconnects between luminaires or solder connectors using the steps from Application Guidelines.
- 7 Install lens into extrusion, overlapping where two extrusions meet. Plan your cuts so that the lens will always overlap where two extrusions meet. Overlapping lenses helps keep extrusions aligned and prevents light leaks.

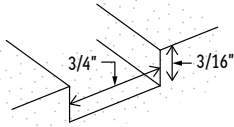


- 8 Perform a continuity test before connecting luminaire to power source.

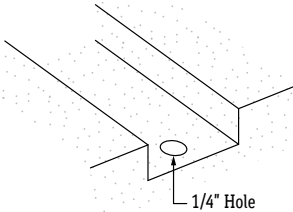
# ZUDA Recessed Low

## A8-ZUDA-RCL

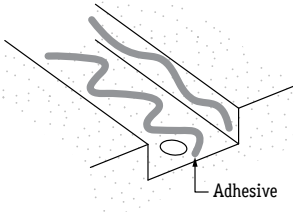
- 1 Measure area where luminaire will be installed. Use a laser line to create a reference line along installation area, ensuring consistent alignment of mounting channels.
- 2 Cut a 3/4" x 3/16" channel along installation area, using the reference line as a guide.



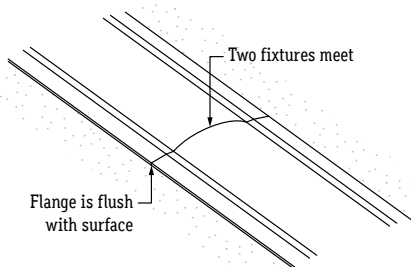
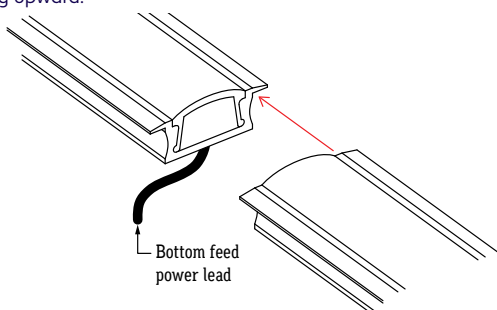
- 3 Lay assembled luminaires along channel and drill a 1/4" hole where each power lead will be routed to power source.



- 4 Apply adhesive to sides and bottom of channel.



- 5 Install luminaires into channel. Route power leads through each 1/4" hole and gently press luminaires into channel, ensuring they adhere and flange is flush with surface.  
Tip: Place a heavy object on top of each luminaire to prevent them from bowing upward.



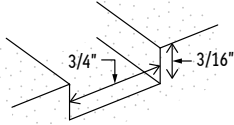
- 6 If applicable, connect disconnects between luminaires or solder connectors using the steps from Application Guidelines.
- 7 Perform a continuity test before connecting luminaire to power source.

# ZUDA Recessed Low

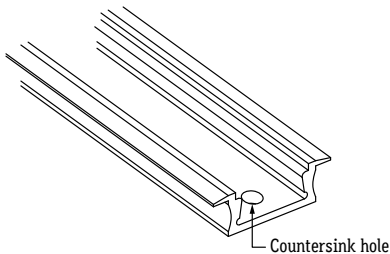
## A8-ZUDA-RCL

#### Mounting Fixture (Wet Location Unassembled Mounting Channel)

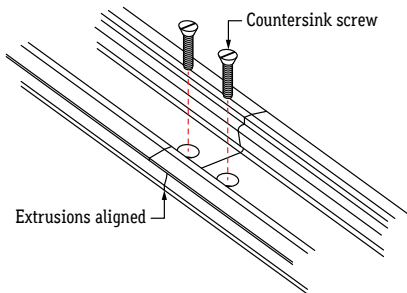
- 1 Measure area where luminaire will be installed. Use a laser line to create a reference line along installation area, ensuring consistent alignment of mounting channels.
- 2 Cut a 3/4" x 3/16" channel along installation area, using the reference line as a guide.



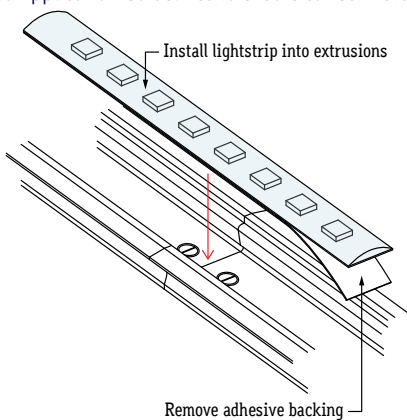
- 3 Lay extrusions along channel and drill at least 3 countersink holes per extrusion. Drill additional holes as needed.



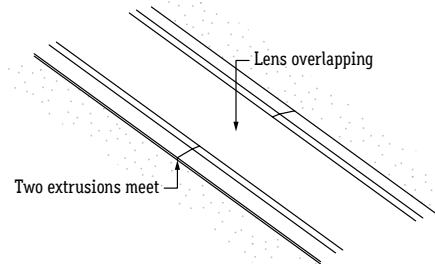
- 4 Screw extrusions to surface using countersink screws. **Note:** Ensure extrusions are aligned. Misalignment will prevent lens from snapping in.



- 5 After all extrusions have been securely mounted, remove adhesive backing from lightstrip and adhere in place along extrusion channel, ensuring lightstrip is secure inside extrusion. **Note:** Refer to Application Guidelines to ensure correct installation.



- 6 If applicable, connect disconnects between luminaires or solder connectors using the steps from Application Guidelines.
- 7 If applicable, connect disconnects between luminaires or solder connectors using the steps from Application Guidelines.
- 8 Install lens into extrusion, overlapping where two extrusions meet. Plan your cuts so that the lens will always overlap where two extrusions meet. Overlapping lenses helps keep extrusions aligned and prevents light leaks.



- 9 Perform a continuity test before connecting luminaire to power source.