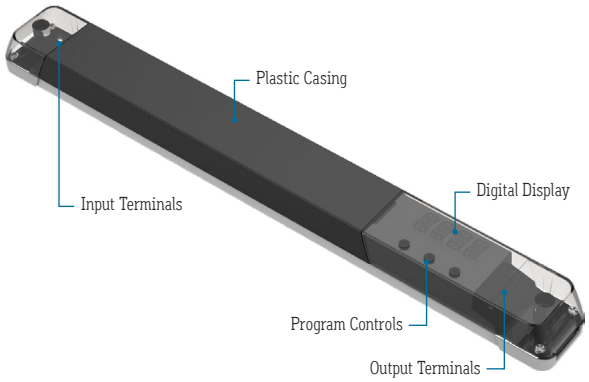
CALIFORNIA ACCENT LIGHTING INC

DRV100-E

INSTALLATION INSTRUCTIONS

Overview



READ ENTIRE GUIDE BEFORE STARTING INSTALLATION

IMPORTANT NOTICE: VERIFY CORRECT LUMINAIRE WAS RECEIVED WITH CORRECT COLOR TEMPERATURE, VOLTAGE, AND WATTAGE BEFORE CUTTING OR INSTALLING. CALI WILL NOT BE RESPONSIBLE IF INCORRECT LUMINAIRE IS INSTALLED.

WARNING

- Turn off electricity before wiring
- Only qualified personnel should install the unit
- Installation must comply with the NEC
- Ensure the unit has suitable input voltage, output voltage, and output wattage for your application

COMPATIBLE PRODUCTS

AlumLEDs Series

- ALS50T
- ALS50T-C
- ALS50T-R
- ALS50T-MI
- ALS210T
- ALS210T-FC
- ALS210T-LP
- ALS250T
- ALS250T-FC
- ALS450T
- ALS500T
- ALS500T-DBR
- ALS500T-DPM
- ALS500T-RMW
- ALS500T-SMQ
- ALS500T-SMR
- ALS500T-SQ
- ALS500T-SWM
- ALS600T
- ALS600T-AD
- ALS800T
- ALS900T

LipLEDs Series

- LLED8300
- LLED8350
- LLED8500
- LLED8550
- LLED8600
- LLED8650

AisleLITE Series

- AIL1700
- AIL1800
- AIL2000

StepLITE Series

- STL6125
- STL6150
- STL6175
- STL6200
- STL6400
- STL6500
- STL6550
- STL6600
- STL6700

WallLITE Series

- WL6950

INSTALLATION TOOL REQUIRED

- Electric Hammer Drills (optional)
- 14.4 to 28 Volt Cordless Drills
- Phillips Bits - Sufficient Quantity
- Utility Knife
- Electrical Cords
- Marker
- Wire Strippers
- Long Nose Pliers
- Drill Bits - Concrete or Wood
- Electrical Three Ways
- Safety Glasses
- Measuring Tapes
- Chalk Line

FEATURES	
APPLICATIONS	RDM LED Lighting
BEST USE	Remote Driver
CONSTRUCTION	Plastic Housing
FINISH	Black
WEIGHT	1.55 lbs
SIZE	15.27" (L) x 1.65" (W) x 1.18" (H)
MOUNTING	Mounting Holes
DIMMING	
DIMMING PROTOCOL	DMX, DALI
DIMMING RANGE	100% - 0.1%
ELECTRICAL	
INPUT VOLTAGE	Universal Voltage (120V - 277V AC)
INPUT FREQUENCY	50 / 60 Hz
MAX INPUT CURRENT	1.05A @ 120V / 60 Hz
OUTPUT VOLTAGE	12V - 24V DC
OUTPUT POWER	100 Watts
OUTPUT CURRENT	2.8A
ELECTRICAL	
CLASS	2
RATING	Indoor
LISTING	UL 1310, UL 8750
OPERATING TEMPERATURE	-20°C to +50°C
TCASE	70°C
DMX	E1.11 – 2008, USITT DMX512-A, ANSI E1.20
DALI	EN 62386-101/102/207
RoHS	RoHS3 (Directives 2011/65/EU-2015/863/EU)
MAX THD	< 10% At Full Load
POWER FACTOR	> 0.94 At Full Load
EFFICIENCY	83% At Full Load
PROTECTIONS	Surge, Circuit

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DRIVER

MOUNTING

- Drivers must be mounted with at least 10" if free flow air space for proper ventilation.
- Never mount the driver on or above heat radiant objects.
- The maximum ambient temperature should not exceed +50°C (122°F)

- Remove plastic covers from driver. There is one mounting hole on the bottom surface of the enclosure at either end.
- Mount enclosure to surface using appropriate screws (by others) for surface material and weight of driver. Ensure screws do not interfere with wiring or function of driver. Always use two screws to mount driver to surface.

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

WIRING CONNECTIONS

- Always refer to wiring diagrams before making wiring connections. If there is a discrepancy in the information, contact technical support.
- Use cabling rated for DMX or DALI systems when applicable.
- Only use UL approved wire nuts to make wiring connections.

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
100	80W	53.3'	40'	32'	26.6'	22.2'	20'	17.7'	16'	14.5'	13.3'	12.3'

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.

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DIAGRAM OF DRIVER

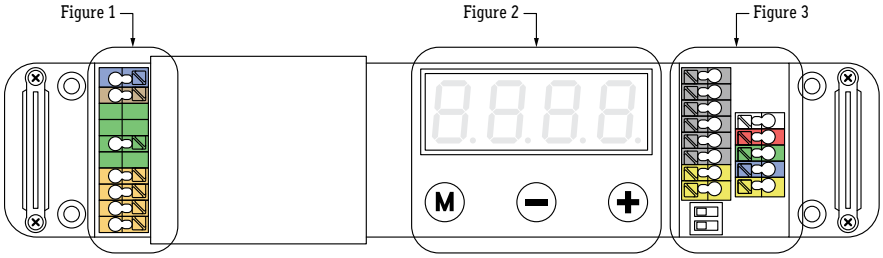


FIGURE 1 (Input)

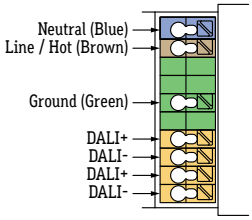


FIGURE 2 (Interface)

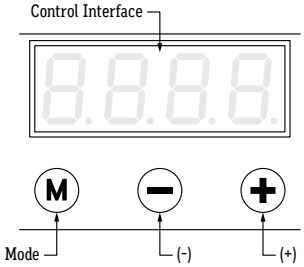


FIGURE 3 (DMX Output)

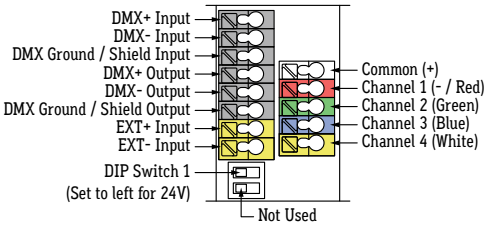
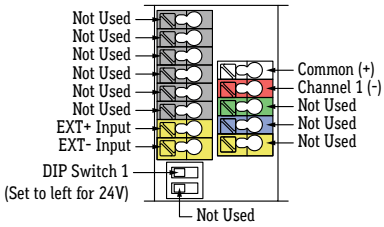
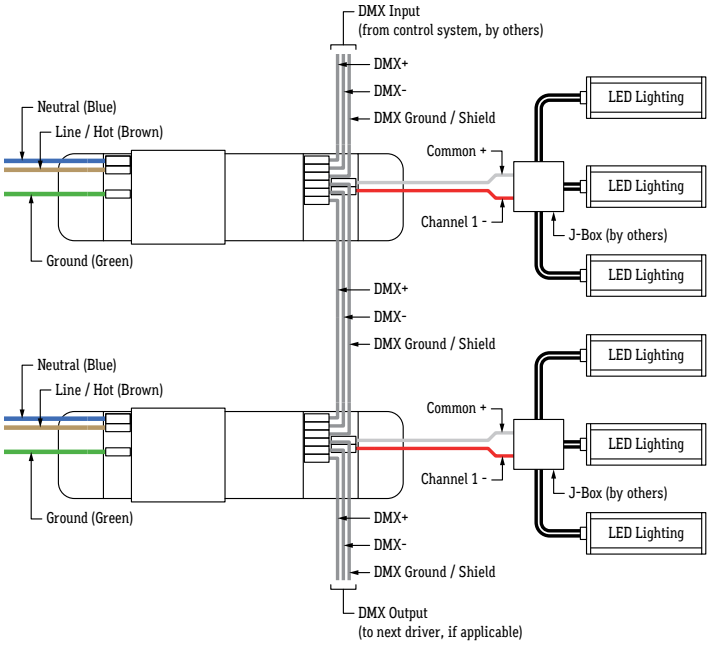


FIGURE 4 (DALI Output)



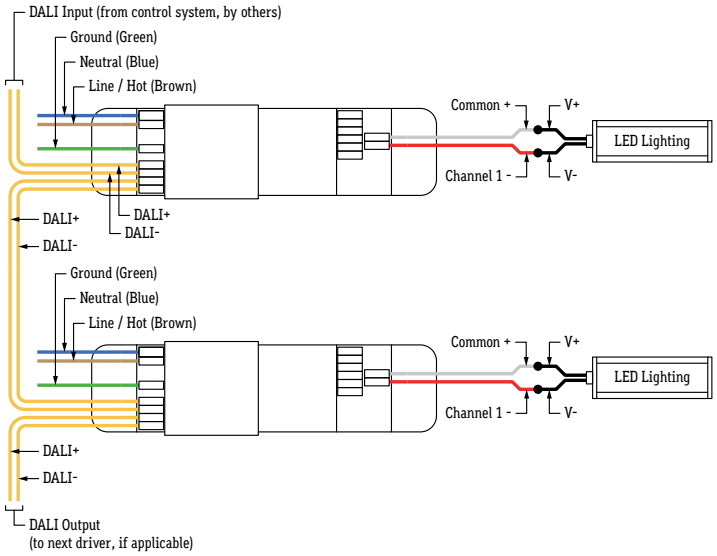
TYPICAL DAISY CHAIN LAYOUT (DMX STATIC COLOR)



NOTES (DMX)

- Default DMX address of each luminaire is 001. Consult third party DMX commissioner to modify at time of installation. CALI 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. CALI 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.

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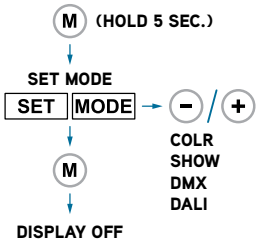
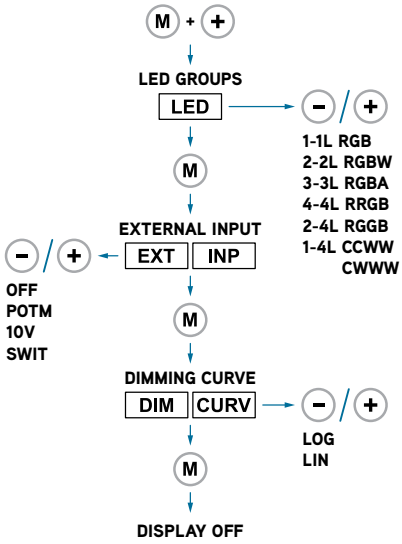
DRIVER

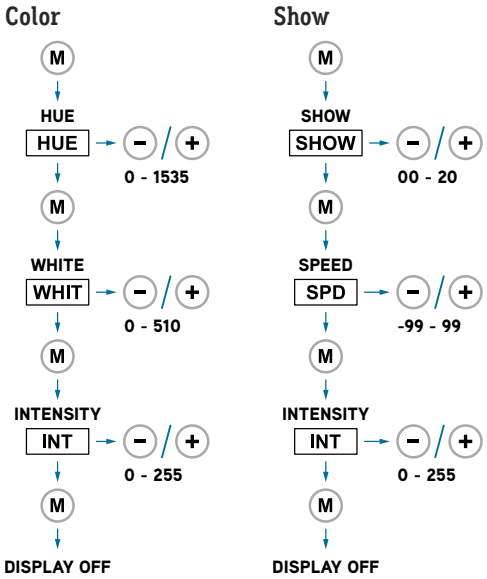
MODE OF OPERATION



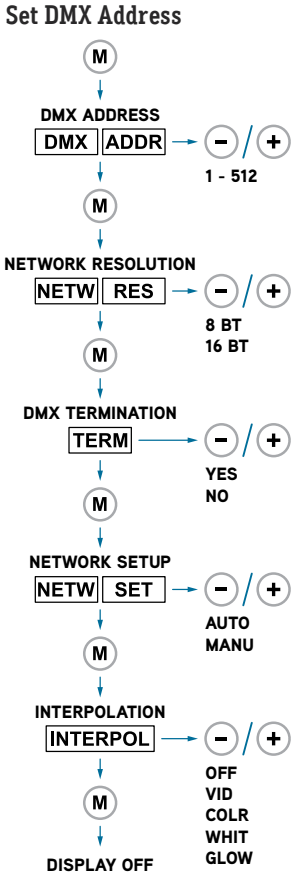
SET LED GROUPS

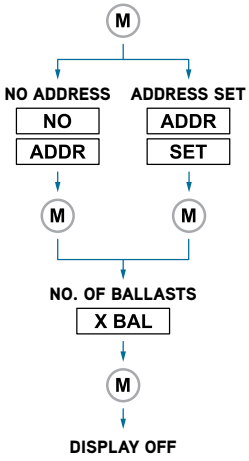


STANDALONE OPERATION (Color / Show)

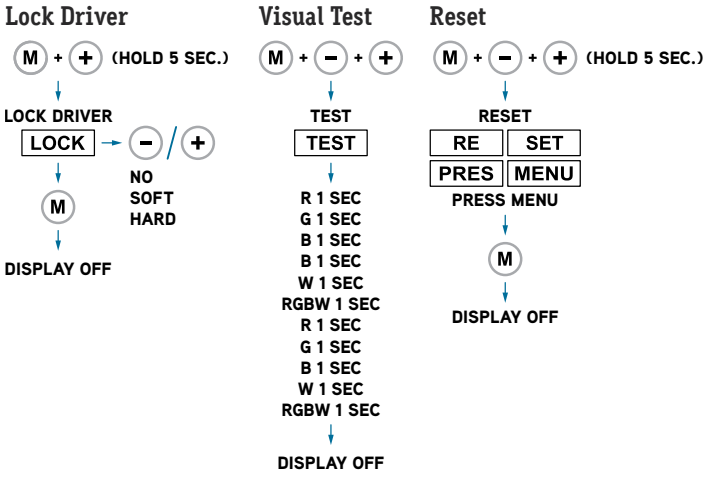


STANDALONE OPERATION (Network Operation)





OTHER FUNCTIONS



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DRIVER

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

TROUBLESHOOTING TIPS

- Do not reset the breaker multiple times.
- If the unit is overloaded, the breaker will trip, shutting off the driver and lighting.
- If the breaker reset button has been held down by hand or any type of pressure such as tape, or if the breaker has been reset multiple times without troubleshooting, the unit will:
  1. Burn the input or output wires due to high amperage caused by overload.
  2. Damage the lighting.

Check Load

To calculate driver size, follow the steps below.

- Determine Watts per Foot of LED Lighting. This can be found on the ETL label.
  Example: 4 Watts per Foot (4W)
- Determine Length in Feet of LED Lighting. This can be found on the ETL label.
  If product is field cut, it must be measured to determine length.
  Example: 16'
- Calculate load by multiplying Watts per Foot by Length in Feet.
  Example: 4W x 16' = 64 Watts
- If load exceeds 100 Watts, divide the power to another driver.
- **Note:** Only load drivers to 80% capacity for best dimming performance.
  See Maximum Run table on previous page for details.

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 fixture.
Use a multimeter or continuity tester to perform the steps below.

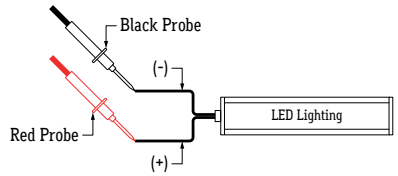
- Always perform a continuity test before connecting lighting to power source.
- Malfunctions are not always as obvious as the lights not turning on.
- A short or malfunction in the line or fixture will cause damage over time, ultimately damaging the lighting and voiding warranty.

1. Turn power off before beginning. Verify power is turned off by using a non-contact circuit tester. Touch the probe of the tester to positive wire of the power source. The tester will light up if an electrical current is detected.

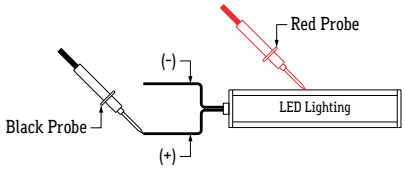
2. Setup your tester. First insert the black probe lead into the COM jack, then insert the red probe lead into the VΩ jack.

3. Verify that your tester is functional by touching probes together. The tester should light up, beep, or read 0Ω (ohms) of resistance.

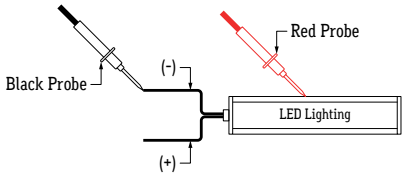
4. Touch the red probe to the positive (+) wire and the black probe to the negative (-) wire. If a conductive path is formed between the positive and negative wires, the multimeter will beep, flash, or read 0Ω (ohms). Troubleshoot to identify the malfunction in the line. If there is no conductive path, the multimeter will not show any feedback.



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



7. Set voltmeter to DC voltage and test power source. Confirm the correct voltage before connecting lighting to power source. If voltage reading is more than 1 volt higher than the marked output voltage, there is a problem with the power source or driver.

8. Connect power connector to power source. If LEDs do not turn on, flip polarity (+ -) or power source connection to power connector.

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