



EssentialLEDs Linear – LightRun Installation Instructions

WARNING: FIXTURES MUST BE INSTALLED USING CLASS 2 POWER UNIT FROM CONSTANT CURRENT DRIVER CHART PROVIDED BELOW.

INSTALLATION OR USE OF FIXTURES WITH OTHER THAN THE UNITS LISTED MAY CAUSE ELECTRICAL SHOCK, FIRE OR PERMANENT PRODUCT DAMAGE.

This Product Must Be Installed in Accordance with the Applicable Installation Code by a Person Familiar with the Construction and Operation of the Product and the Hazards Involved.

EssentialLEDs LightRun linear products must be installed using Constant Current LED drivers specifically designed for use with LED products, per product warranty. Visual Lighting Technologies offers a variety of Constant Current LED drivers for use with EssentialLEDs **LightRun** Linear products, ranging from 6w to 100w. Depending on the size and configuration of your application, one or more drivers will be supplied with your order. Size and number of drivers needed will be determined by the configuration of your application, which has been designed to use the drivers as efficiently as possible. All drivers are ETL Listed when used as part of an EssentialLEDs **LightRun** Linear system.

Because of the variable drive currents possible with the **LightRun** product, desired lumen output should be determined at the time of system design. **All fixtures are labeled with wattage use for all three drive currents;** wattage total for a system should not exceed 80% of the driver capacity provided for that system.

See chart below to determine wattage use for LightRun fixtures:

Code	Fixture Lengths	350mA Driver (305 lm/ft)	500mA Driver (435 lm/ft)	700mA Driver (610 lm/ft)
8	8.50" [216mm]	2.28w	3.26w	4.56w
12	12.55" [319mm]	3.42w	4.89w	6.84w
16	16.22" [412mm]	4.56w	6.51w	9.12w
20	20.07" [510mm]	5.70w	8.14w	11.4w
24	23.62" [600mm]	6.84w	9.77w	13.68w
28	27.79" [706mm]	7.98w	11.4w	15.96w
32	31.65" [804mm]	9.12w	13.02w	18.24w
36	35.51" [902mm]	10.26w	14.66w	20.26w
40	39.37" [1000mm]	11.40w	16.29w	22.8w
44	43.22" [1098mm]	12.54w	17.91w	25.08w
48	47.08" [1196mm]	13.68w	19.54w	27.36w

Select the correct Class 2 Power Unit (Constant Current LED driver) from chart provided on page 3

General Notes Re: Installation of EssentialLEDs LightRun Linear

- EssentialLEDs Linear products are suitable for surface or recessed installation.
- EssentialLEDs are shipped in protective plastic sleeves; to prevent damage or scratching, products should remain in packaging until installation.
- Before beginning installation, study the layout and circuit structure as specified in the application plans and insure that each circuit is assigned to an appropriately-sized driver. Using drivers or power supplies other than those supplied by VLT will **VOID PRODUCT WARRANTY**.
- For **any single piece** or **any combined pieces** of EssentialLEDs LightRun, if total wattage exceeds driver capacity by even a small amount, **the next size driver must be used!** (i.e. 42 LEDs x .25w = 10.5 watts: **Must Use 25w 24v Driver!**)
- Before connecting EssentialLEDs to power supply, insure correct polarity of wiring to avoid damage to the LED board: Red = +, Black = -. **Constant Current LEDs MUST BE WIRED IN SERIES. SEE SCHEMATICS ON PAGE 4.**
- EssentialLEDs must be installed only in locations that conform with the stated IP rating and within the Operating Ambient Temperature range of -22° to 95° F [-30° to 35° C]. EssentialLEDs LightRun linear products are intended for interior, dry or damp locations only.
- **EssentialLEDs LightRun fixtures cannot be daisy-chained.**

Mounting Options

LightRun

LightRun is a highly specialized display lighting fixture that diffuses the LED light for a soft, flat illumination. There is one fixed clip and one adjustable clip option for the **LightRun** fixture; in addition the fixed clip can be combined with the adjustable bracket.



1. Attached each clip to mounting surface using screws provided.
2. Gently press extrusion into clips. Allow slight separation between pieces when placing pieces end-to-end.
3. When using adjustable clips, place extrusion into clips before bending to the desired angle.



Wiring

Feed wiring to driver according to installation plans; when determining placement of driver, avoid strain on fixture wiring.

Standard termination is 8ft. wire length (one pair, with male Tyco Mate 'n Lock connector; connector can be removed for hard wired installations. Wire exit for each fixture is located according to project specifications.

Two-foot and 8-foot starter cables are available for connection to driver leads. Two-way, 4-way and 8-way splitters are available for connecting multiple fixtures to one driver.

Placement of the drivers, and the routing of wires to the drivers, will vary from project to project. In some applications, conduit may be needed to provide a wiring chase, or wires may be routed through plenum areas. For more detailed instructions, please consult NEC codes and/or the plans for your specific installation.

Wiring Guidelines

Standard circuit diagrams for wiring EssentialLEDs **LightRun** linear products are provided below. Circuit Diagrams illustrate correct wiring schematics for a Single Branch Configuration without Dimmer, Multiple Branch Configuration without Dimmer, and Multiple Branch Configuration with Dimmer. (Dimmers sold separately)

Driver Selection

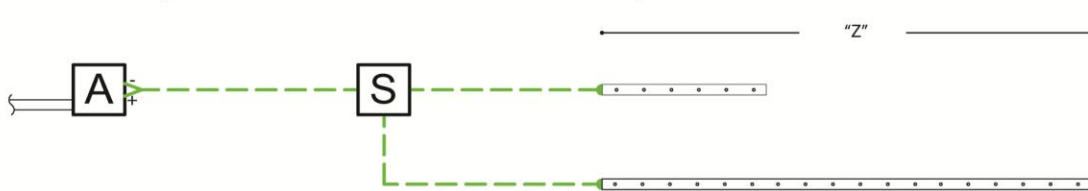
Driver	Manufacturer	Type	Capacity	Input Voltage	IP Rating
350/500/700mA					
SL036151-X	eldoLED	Constant Current/Dimmable/0-10v	30w	120-277 V 50/60Hz	IP64
SL056151-X	eldoLED	Constant Current/Dimmable/0-10v	50w	120-277 V 50/60Hz	IP64
SL106051-X	eldoLED	Constant Current/Dimmable/0-10v	100w	120-277 V 50/60Hz	IP64
PW056251-X	eldoLED	Constant Current/Dimmable/0-10v	50w	120-277 V 50/60Hz	IP64
PWR10651-X	eldoLED	Constant Current/Dimmable/0-10v	100w	120-277 V 50/60Hz	IP64
350mA					
66864 US	Lightech	Constant Current/Non Dimmable	6w	120-277 V 50/60Hz	IP67
66867 US	Lightech	Constant Current/Non Dimmable	10w	120-240V 50/60Hz	IP67
66885 US	Lightech	Constant Current/Dimmable to 10%	18w	108-132V 50/60Hz	IP67
700mA					
66866	Lightech	Constant Current/Non-Dimming	6w	120-277V 50/60Hz	IP67
66868	Lightech	Constant Current/Non-Dimming	10w	120-240V 50/60Hz	IP67
66884	Lightech	Constant Current/Dimmable to 10%	18w	120-277V 50/60Hz	IP67
66904	Lightech	Constant Current/Dimmable to 10%	36w	120-277V 50/60Hz	IP67

Circuit Diagram

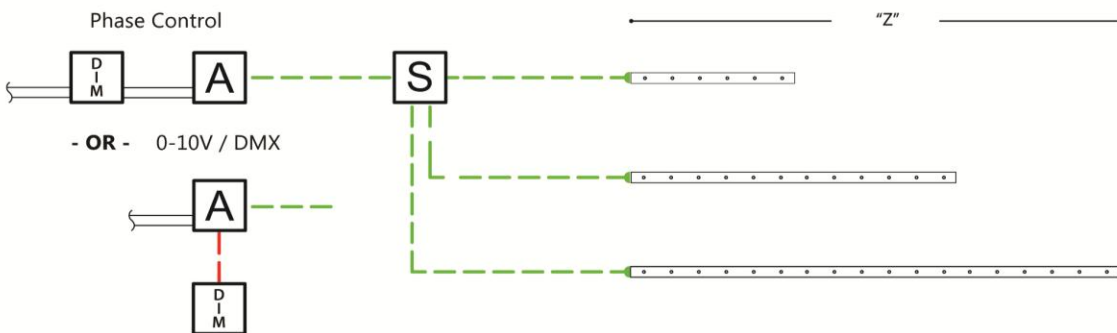
NON-DIM (SHOWN IN SINGLE BRANCH CONFIGURATION)



NON-DIM (SHOWN IN MULTIPLE BRANCH CONFIGURATION)



DIMMABLE (SHOWN IN MULTIPLE BRANCH CONFIGURATION)



Driver Load	Total Nominal Inches of Light Run		
	Driver Current		
	350mA	500mA	700mA
6w	20"	-	-
10w	32"	-	-
18w	48"	-	32"
30w	48"	48"	48"
36w	-	48"	48"
50w	60"	60"	60"
100w	60"	60"	60"

SYMBOLS

- A** Constant Current Driver
- DIM** Phase Control, 0-10v, DMX Dimmer
- S** 2 or 4 way Constant Current Splitter in-series connection

WIRING

- Line Voltage Input
- (2) 20AWG - 33' max total length
- Interconnect Wire
- 0-10v or DMX control wires
- EssentialLEDs Light Run Fixture

SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING

When using an electrical furnishing, basic precautions should always be followed, including the following:

WARNING – To reduce the risk of burns, fire, electric shock, or injury to persons:

1. Unplug from outlet before putting on or taking off parts.
2. Close supervision is necessary when this furnishing is used by, or near children, invalids, or disabled persons.
3. Use this furnishing only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.
4. Never operate this furnishing if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the furnishing to a service center for examination and repair.
5. **Keep electrical cord(s) away from heated surfaces and control cord(s) to avoid tripping hazards.**
6. Never operate the furnishing with the air openings blocked. Keep the air openings free of lint, hair, and the like.
7. Never drop or insert any object into any opening.
8. Do not use outdoors.
9. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
10. To disconnect, turn all controls to the off position, then remove plug from outlet.
11. For loading always put heavier items at the bottom and not near the top in order to help prevent the possibility of the furnishing tipping over.

WARNING: Risk of Electric Shock – Connect this furnishing to a properly grounded outlet only. See Grounding Instructions.

GROUNDING INSTRUCTIONS FOR ALL GROUNDED, CORD-CONNECTED PRODUCTS:

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

This product is for use on a nominal 120-volt circuit and has a grounding plug. Make sure that the product is connected to an outlet having the same configuration as the plug. No adapter should be used with this product.

GROUNDING INSTRUCTIONS FOR A PERMANENTLY CONNECTED PRODUCT:

This product must be connected to a grounded metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the product.

Cleaning and Maintenance

DANGER – To reduce the risk of electric shock always unplug this furnishing from the electrical outlet before cleaning.

Cleaning

To clean EssentialLEDs **LightRun** linear products, wipe all surfaces with a soft damp cloth. **DO NOT** use solvents or other harsh chemicals. **DO NOT** use water or cleaning products on **LightRun** lenses.

LightRun fixtures have no user serviceable parts; when not in use, LightRun fixtures and system driver components should be stored in a cool, dry location.