

LED LIGHTSTAR REELS

Installation instructions for LLSR Series 12V DC operation

WARNING: These products may represent a possible shock or fire hazard if improperly installed or attached in any way. Products should be installed in accordance with these instructions, current electrical codes, and/or the current National Electric Code (NEC). Use this product only with a 12V DC regulated power supply (driver).

WARNINGS: READ ALL INSTRUCTIONS BEFORE YOU START:

CAUTION - To reduce risk of fire, electric shock, or injury to persons, pay close attention to this manual and stay within its guidelines when using this product. Before use, note that this product requires a 12 DC power input. Ensure that the voltage of the power supply (driver) is a *regulated 12V DC output!* To avoid "AC flicker" do not use an AC transformer since LEDs require DC.

CAUTION:

1. Do not cover this product as the covering may cause rope to overheat, melt, or ignite.
2. Do not operate the Lightstar Reel while it is tightly coiled.
3. Do not submerge Lightstar product light in liquids, or use the product in the vicinity of standing water or other liquids.
4. Do not route the cord or Lightstar product through walls, ceilings, doors, windows, or any similar part of the building structure.
5. Secure this flexible light using non-metallic brads or factory recommended mounting track (sold separately).
6. Do not secure this product with staples, nails, or like means that may damage the insulation.
7. Do not use if there is any damage to the PVC jacket. Inspect periodically.
8. Do not install on gates or doors, where subject to continuous flexing.
9. Do not install in tanks or enclosures of any kinds.
10. Avoid over-tensioning lightstar reel cable, parallel or perpendicular (too much strain on the cable may compromise the ingress protection).
11. Ensure that all power connections, and bare ends are properly sealed with dielectric grease and shrink tube/electrical tape to preclude the entrance of water (outdoor applications).
12. Lightstar product can be cut between LEDs. Before making any cuts or servicing in any way, be sure power source is disconnected!
13. This product is for decorative use only. Not to be used by children as a toy. Keep out of reach of small children.
14. **Do not exceed 200ft maximum run distance in any single run.**

CAUTION - To reduce the risk of fire, electric shock, or injury to persons:

WARNING: When using outdoor portable lighting products, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

1. Use weatherproof wire nuts at all power connections when using outdoors.
Cover end of wire for all applications, so there are no exposed conductors. Tightly seal to keep out water if using in outdoor applications.
2. Make sure 12V DC power supply has a regulated 12V output - not an AC output! See also below for recommended drivers.
3. Make sure the power supply has overload and overcurrent protection for any application. When using in outdoor applications, the power supply must be rated for outdoor use, or enclosed in an approved enclosure.

RECOMMENDED DRIVERS AND MAXIMUM RUN LENGTHS FOR LIGHTSTAR PRODUCT:

INDOOR USE		OUTDOOR USE	
Driver	Maximum run	Driver	Maximum run
LED-DR60-12	166ft (54W*)	ELV-60J-12	166ft (54W*)
LED-DR100-12	200ft** (65W)	ELV-80J-12	200ft** (65W)

*Best practices include 90% loading of drivers (in this case, 60W x .9 = 54W).

**The max run is limited by the Lightstar maximum limit of 200ft in any single run, rather than the capacity of the driver.

