



TOKISTAR LIGHTING INSTRUCTION MANUAL

Fixture Type ___ - ___ - ___

Lightstrings With 8 VDC LEDs

General Description

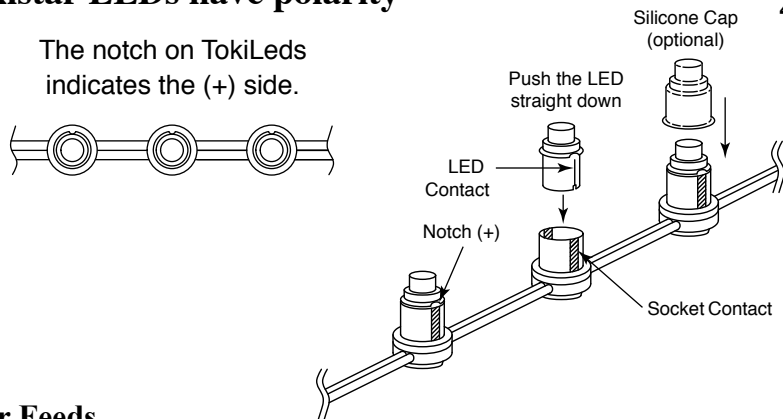
Tokistar's Lightstring Series is provided with 8 VDC LEDs. The LEDs are available at 0.1 watt and 0.2 watt. Each Lightstring fixture is labeled with its appropriate load.

FL - 310 - WW

Series	Socket Spacing		TokiLeds	
Code	Code	Inches (mm)	Code	Watts/Volts
FL	60	2.4" (60 mm)	WW	0.1 W / 8VDC
	110	4.25" (110 mm)	IW	0.1 W / 8VDC
	160	6.25" (160 mm)	WH	0.1 W / 8VDC
	210	8.25" (210 mm)	WW-HB	0.2 W / 8VDC
	310	12.25" (310 mm)	IW-HB	0.2 W / 8VDC
	410	16.25" (410 mm)	WH-HB	0.2 W / 8VDC
			WW-UB	0.4 W / 8VDC
			IW-UB	0.4 W / 8VDC
			WH-UB	0.4 W / 8VDC
			KLED-FF	0.2 W / 8VDC
			KLED-SF	0.2 W / 8VDC
			KLED-CF	0.2 W / 8VDC
			AM	0.1 W / 8VDC
			BL	0.1 W / 8VDC
			GR	0.1 W / 8VDC
			MG	0.1 W / 8VDC
			PL	0.1 W / 8VDC
			RD	0.1 W / 8VDC

Tokistar LEDs have polarity

The notch on TokiLeds indicates the (+) side.

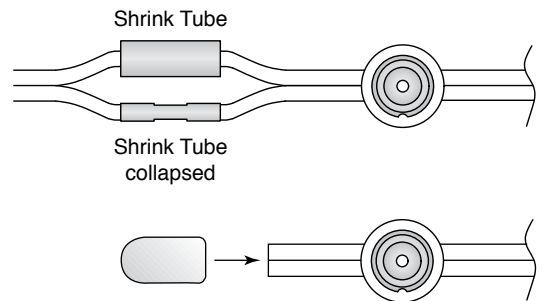


Power Feeds

Lightstrings may have been provided in bulk to be cut on site. If wire leads need to be soldered to the cut lengths, fit shrink tube over the soldered connections to insulate the conductors.

End Caps

End Caps insulate the ends of each length of Lightstring. If the fixture is trimmed, an end cap needs to be installed on the cut-end of the fixture with a permanently-bonding adhesive such as silicone.



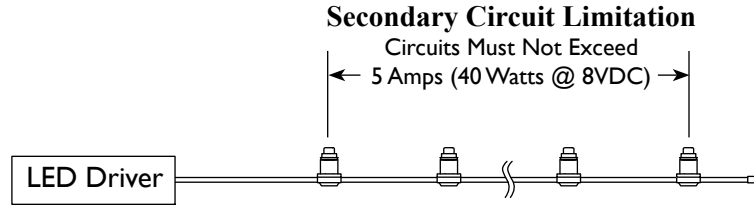
⚠ PRECAUTIONS

1. Read all instructions completely before beginning installation.
2. Turn off electricity before beginning installation.
3. All wiring is to be performed by a qualified electrician.
4. Installation must comply with the National Electrical Code, and all applicable codes.
5. Turn main supply to the LED Driver on only after all connections have been made and tested.
6. Use only LED Drivers provided by Tokistar with the system.
7. Certain adhesives produce a bi-product of corrosive gas during their curing process, and should not be used in conjunction with our LED Systems where the gas cannot be vented. Consult with the Sealant company for such applications.

TOKISTAR® LIGHTING

1015 E. Discovery Lane
 Anaheim, CA 92801
 TEL: 714 772 7005 FAX: 714 772 7014
 email: info@tokistar.com Website: tokistar.com

Secondary Circuit Wiring



Maximum Run Lengths

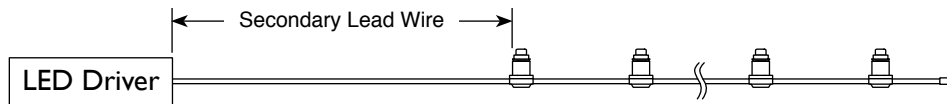
To minimize voltage drop and keep conductors safely within their rating, do not exceed the maximum lengths shown in the chart to the right for each independent length of Lightstring.

Spacing	0.1 Watt LED	0.2 Watt LED	0.4 Watt LED
2.40" (60 mm)	63' (19 M)	40' (12 M)	20' (6 M)
4.25" (110 mm)	84' (26 M)	63' (19 M)	35' (11 M)
6.25" (160 mm)	101' (31 M)	75' (23 M)	52' (15 M)
8.25" (210 mm)	116' (36 M)	87' (26 M)	56' (17 M)
12.25" (310 mm)	142' (43 M)	106' (32 M)	69' (21 M)
16.25" (410 mm)	164' (50 M)	122' (37 M)	82' (25 M)

Recommended Lead Wire Size

The distance from the LED Driver to the fixture, and the load of the fixture, will determine the proper size of secondary wire. The chart to the right indicates recommended wire size based upon the driver being loaded to its full capacity of 5 Amps/40 Watts.

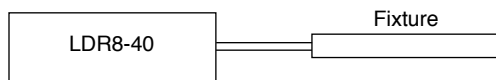
Secondary Lead Wires	
Wire Size	Wire Length
#16 AWG	12' (3.6 M)
#14 AWG	20' (6.1 M)
#12 AWG	30' (9.1 M)
#10 AWG	45' (13.7 M)



LED Driver Installation

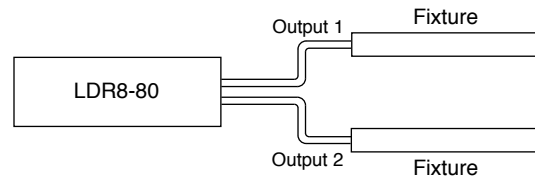
LDR8-40

This 40 Watt UL Recognized Class 2 LED Driver converts an AC input into an 8 VDC output. Refer to the manual provided with the LED Driver for detailed installation instructions.



LDR8-80

This dual output Class 2 LED Driver has two independent 40 Watt outputs. Refer to the manual provided with the LED Driver for detailed installation instructions.



Tokistar Lightstrings are ETL Listed when operated from our LED Drivers.



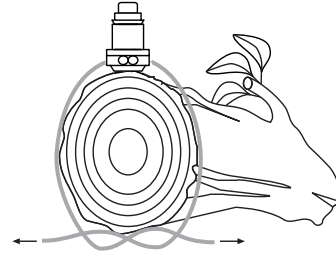
Part#	Input Volts	Output Volts	Output Ratings
LDR8-40	100~240	8 VDC	1 @ 5 Amps
LDR8-80	100~240	8 VDC	2 @ 5 Amps

Mounting Fixtures

The proper mounting device is determined by the surface the Lightstring is being attached to.

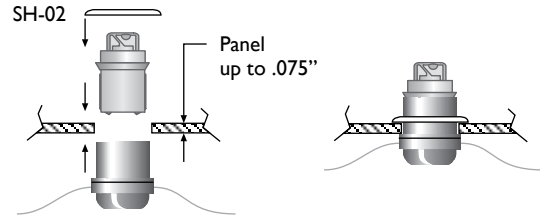
Option 1 - Part#: NSY-TP

Clear elastic nursery tape may be used to secure Lightstrings to branches without inhibiting growth.



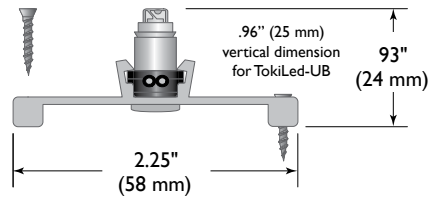
Option 2 - Part#: SH-02 Stainless Steel Fastener

The SH-02 fastener is used to securely attach Lightstring sockets to panels through a 3/8"Ø hole.



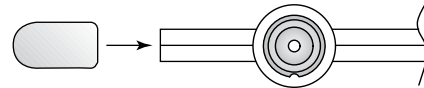
Option 2 - Part#: SL-MB-BK Mounting Bracket

These mounting brackets provide a secure, convenient means of attaching Lightstrings to a variety of surfaces.



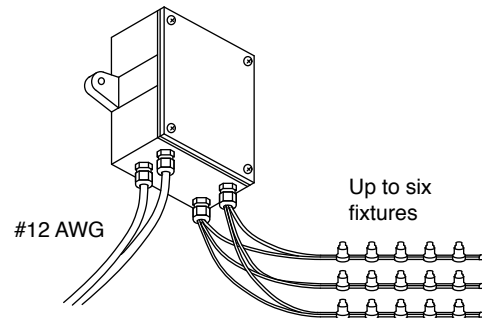
Part#: EC-FL Vinyl End Caps

Lightstrings may be cut to size on site. Vinyl end caps insulate the end of the wire.



Part#: HC-10 Junction Box

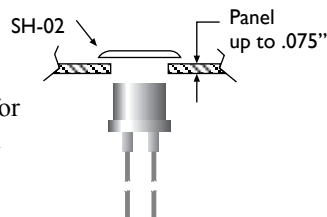
This gasketed junction box accepts #12 AWG Landscape Cable, which may be spliced to 6 independent Lightstring fixtures.



For applications requiring independent points of light, our FL-200 and FL-300 sockets are provided with a 12" lead wire.

Part#: FL-200 Socket

This is a back-mount socket for use with the SH-02 fastener. Hole size 3/8"Ø.



Part#: FL-300 Socket

For front-mount applications, this socket remains close to flush to the surface. Hole size 3/8"Ø.

