Tresco

LIGHTING

BY REV·A·SHELF®

Lighting Specification Guide
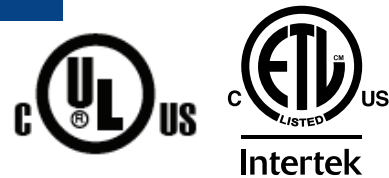
Product Information

Product Color Finishes

Tresco's lighting products are available in eight standard color finishes:
White, Black, Chrome, Gold, Nickel, Antique Brass, Aluminum and Oil Rubbed Bronze. Please refer to the individual
Product Pages for color availability of each product.

White (WH)	Black (BL)	Chrome (CH)	Gold (GD)	Nickel (NI) (brushed)	Antique Brass (AB)	Aluminum (AL) (mill)	Oil Rubbed Bronze (ORB)

ETL and UL – Testing, Inspection and Certification

- Both are independent non-profit labs, not government agencies or government funded
- ETL is the largest worldwide
- UL is the largest in the USA
- Both are Nationally Recognized Testing Laboratories (NRTL) as recognized by OSHA
- Both are recognized by local inspectors throughout North America.
- No Mark is better than the other.

Tresco Products Tested and Certified for Canada and the United States

ETL or UL marks serve as proof of product compliance to Canadian and U.S. standards. When products bear these marks, it indicates to the consumer that the products have passed a complete and thorough set of tests and certification requirements.

All TRESCO® lighting *systems* are registered and certified by ETL and/or UL. In addition, a majority of our individual lighting *components* (lights , power supplies, and accessories) are also registered and certified by ETL and/or UL.

* The ETL Mark is a registered trademark of Intertek. The UL Mark and Recognized Component Mark are registered trademarks of Underwriters Laboratories Inc.

UL's Recognized Component Mark

The UL Recognized Component Mark is used on components that are a part of larger products or systems. It is certified by UL to both Canadian and U.S. requirements.

Salesmen Displays and Sample Kits

Portable Salesmen Displays and Sample Kits are available for purchase. Ask your representative how to order them for your sales staff!

A Guide to LED Lighting

What is LED Lighting?

LED (light emitting diode) is a semiconductor diode formed by creating a (+)/(-) junction between materials. Upon applying a forward voltage the two meet at the junction and energy is released. This energy is in the form of light and heat.
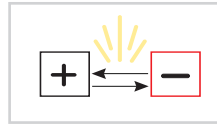
Does LED get hot?

Yes. Unlike traditional light sources the heat generated by a LED is not radiated from the surface. The heat is generated at the (+)/(-) junction. This temperature typically ranges from 35°C (95°F) to 65°C (149°F) depending on the LED being used. It is extremely important to keep junction temperature as low as possible. A 14°C (25°F) increase in junction temperature over a manufacturers recommendation can result in a 50% decrease in the life of the LED. Controlling the heat is done via circuitry and heat-sinking within the fixture design.
* The heat-sink is a metal contact (commonly aluminum) on the LED to absorb the heat.

HEAT   COOL
COOL   COOL
No heat-sink   With heat-sink*
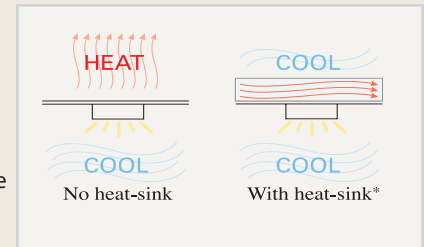
Can LEDs be dimmed?

LEDs work on the principle of constant current (amperage). As the current increases the LED output increases (junction temperature also increases). As the current decreases the LED output decreases.   Because the junction temperature decreases when the LED is dimmed the LED may actually experience longer life. Dimmable LED systems, however, are solely dependent on the driving mechanism and circuit board construction. *Consult manufacturer before attempting to dim.*

How is LED life determined?

Recent guidelines have split LED life into two categories: *Useful Life* and *End of Life*.
Useful life is determined at the point when the LED is emitting 70% of its original light output. LED gradually dims over time. Therefore, the LED itself will continue to emit light well beyond the 70% threshold. The end of the life is the point when the LED fails to emit light. Some manufacturers advertise 25, 50, or even 100,000 hours of life without further defining the number. Consult manufacturer to determine if the number advertised is the useful life or end of life.

Light Output

Useful   End of Life
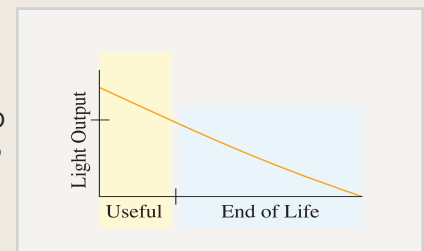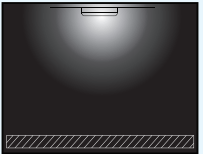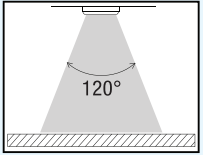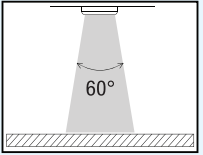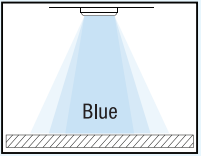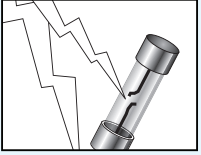
Good vs. bad LED suppliers
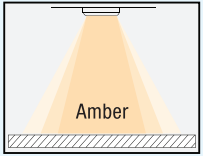
Currently there are around 10 major, well-known light emitting diode manufacturers. These manufacturers take all precautions necessary to create high quality LEDs. Static/dust free clean rooms, the use of high grade phosphors and resins, controlled humidity/environment are all factors among many that can affect LED production. In addition, proper binning (grouping of LEDs based on similar parameters) ensures each and every shipment of LED is the same. Low-end LED manufacturers do not take these issues or steps seriously and thus inferior LEDs find their way into the market. Many LED fixture manufacturers will either highlight the fact they use a major supplier or will furnish the information upon request.

What is IES data?

IES stands for Illuminating Engineering Society. They are the recognized technical authority on illumination. The IES sets forth standards and procedures for approved testing laboratories to follow when analyzing luminaires. These standards and procedures are used to produce accurate measurements of luminaire characteristics such as: luminous flux, electrical power, luminous intensity distribution, chromaticity and other photometric data. All Tresco IES data in the following pages was performed by a certified testing laboratory and to the appropriate IES Standard.

All product dimensions and specifications are subject to change without prior notice.
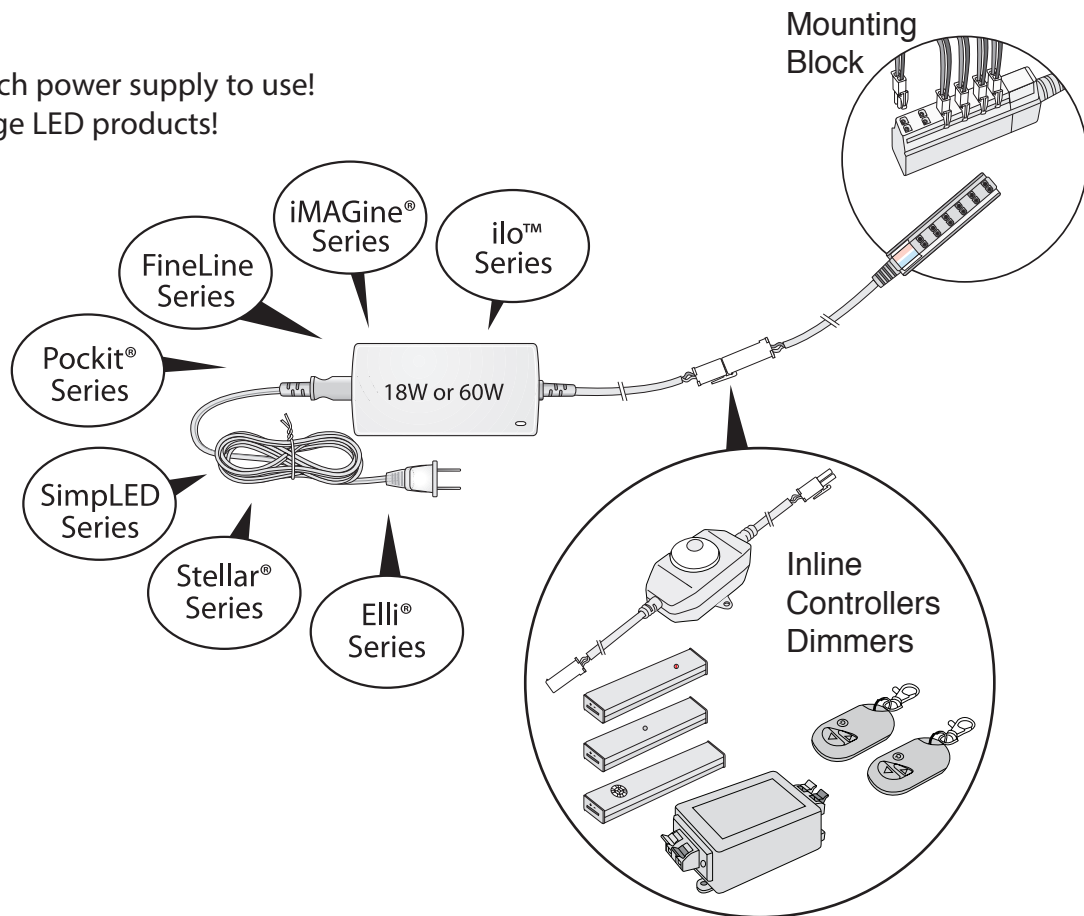
Tresco Outshines the Competition

Compare	TRESCO LED	BIG BOX LED
Brightness	3x Brighter 3X Brighter	
Wider Light Spread	120° 120° Light Spread	60° 60° Light Spread

	TRESCO LED	BIG BOX LED
Natural Color	Amber Amber Cast	Blue Blue Cast
Glare	No Glare No Glare	Glare/Hotspot Glare
Safety	Surge Protectant Surge Protectant Automatic Reset	Internal Fuse Blows

Universal Power Supply

Truly Universal
No guessing which power supply to use!
Fits all low-voltage LED products!

Mounting Block

iMAGine® Series
ilo™ Series
FineLine Series
Pockit® Series
18W or 60W
SimpLED Series
Stellar® Series
Elli® Series

Inline Controllers Dimmers

L-DC-ELT18-CON 12V DC and L-DC-ELT60-CON 12V DC Power Supplies

12V DC power supply, equipped with mounting block that allows for easy snap-in connections. Power supply is also supplied with a standard 110/120V cord and plug.

Features:
- Short-circuit protection*
- 12V DC output, constant voltage
- Overload protection*
- RFI protection
- 50,000-hour life power supply
- Dimmable on trailing edge (12V side)

Automatic reset (no fuses)
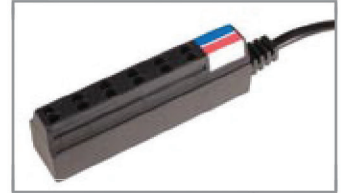
ALL PARTS INCLUDED WITH PURCHASE OF POWER SUPPLY

L-DC-ELT18-CON 12V DC

L-DC-ELT60-CON 12V DC

Male/female connections for ease of installation and attachments of extensions, dimmers and round switches.
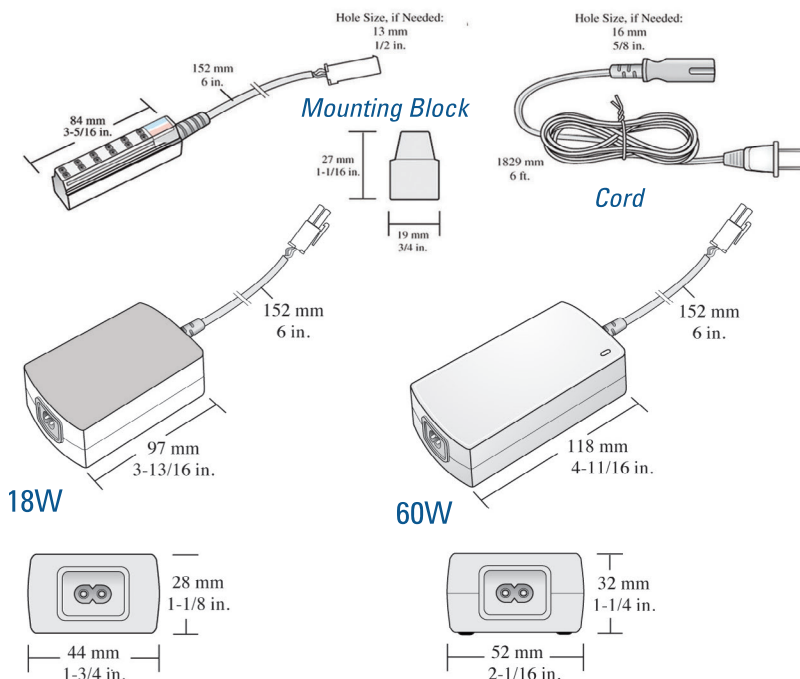

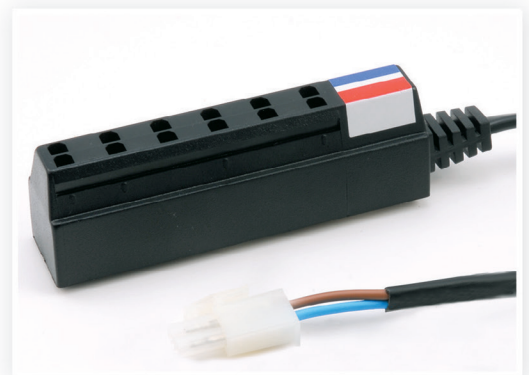Mounting block allows for quick connections of light fixtures. Holds up to six fixtures.

Power supply is supplied with a standard 110/120V 6' cord and plug.

POWER SUPPLY SPECS

Hole Size, if Needed: 13 mm 1/2 in.

Hole Size, if Needed: 16 mm 5/8 in.

152 mm 6 in.

84 mm 3-5/16 in.

Mounting Block

27 mm 1-1/16 in.

1829 mm 6 ft.

19 mm 3/4 in.

Cord

152 mm 6 in.

152 mm 6 in.

97 mm 3-13/16 in.

118 mm 4-11/16 in.

18W

60W

28 mm 1-1/8 in.

32 mm 1-1/4 in.

44 mm 1-3/4 in.

52 mm 2-1/16 in.

Expand Your Lighting System

Add a mounting block to utilize the full capacity of the power supply.

EXAMPLE: 60-Watt power supply could power (60) 1W POCKIT or (20) 3W POCKIT lights
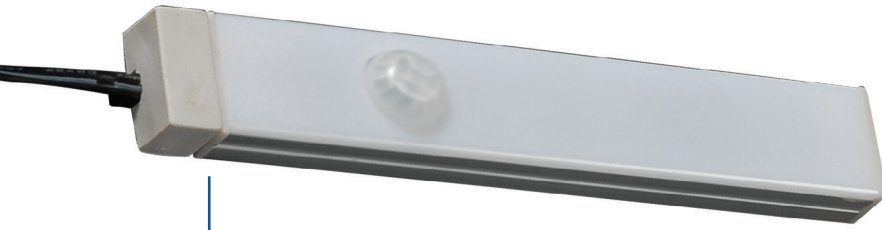
SIMPLED
IR Motion Sensor
(works by human motion)

• Energy Saving
• Great for Closets
• Desks/Workstation
• Showrooms
• Retail Displays

SIMPLED
Photo Sensor
(activates lights to "on"
when in dark environment)

• Children's Furniture (night light)
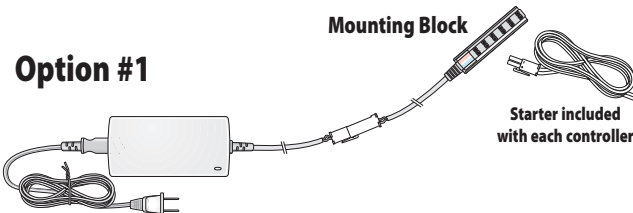• Bathrooms (floating vanity)
• Hospital
• Safety Light

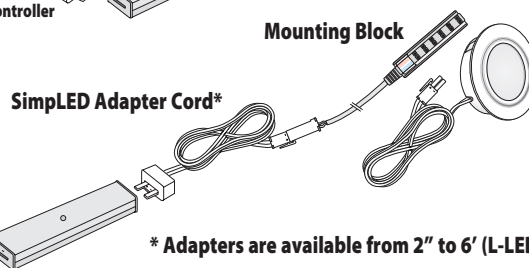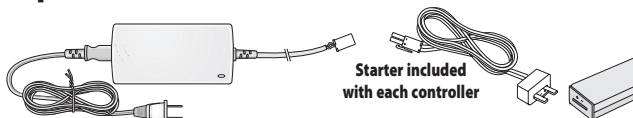**SIMPLED**
4-Step Touch Dimmer
(Low-Med-High-Off)

• Blue indicator light
  to help locate sensor in the dark
• Control the intensity of the light

How to use SimpLED Controllers with other Tresco 12V DC Systems:

Mounting Block

SimpLED Adapter Cord*

Option #1

Mounting Block

Starter included with each controller

Mounting Block

SimpLED Adapter Cord*

Option #2

Starter included with each controller

* Adapters are available from 2" to 6' (L-LED-SMPADP-XX) - See page 290

Tresco Remote Control LED Dimmers feature radio-frequency, remote-control dimming to adjust lights from anywhere in the room — up to 9 meters (30 feet). The remote control provides on/off power and dims lights from 100%–1%.

Dedicated Remote Control Dimmer:

- Controls up to 8 amps/96 Watts of LED lighting.
- Can be used with either 18W or 60W DC power supplies.
- Features a built-in memory that recalls the last setting when turned on again.
- Comes with two remote controls (one extra, as a backup) that are synchronized to control the same dimmer.
- Can use multiple dimmers in the same room with independent controlling of each.

L-LED-DIMRMT-12V8A

Universal Remote Control Dimmer:

- Controls up to 8 amps/96 Watts of LED lighting.
- Can be used with either 18W or 60W DC power supplies.
- Features a built-in memory that recalls the last setting when turned on again.
- Comes with two remote controls (one extra, as a back up)
- Can use multiple dimmers in same room with single remote control for universal dimming.

L-LED-DIMRMT-12V8A-U

Manual In-Line Rotary Dimmer:

- 4 Amps 48W capacity
- 100–0% dimming
- On/Off power
- 2M (79") input lead snaps into power supply mounting block with male AMP® connector
- 8" output lead connects to run of lights with female AMP® connector
- 64mm (2-1/2") x 32mm (1-1/4") x 25mm (1")

L- LED-DIMCON-WH/BL

*black and white finish