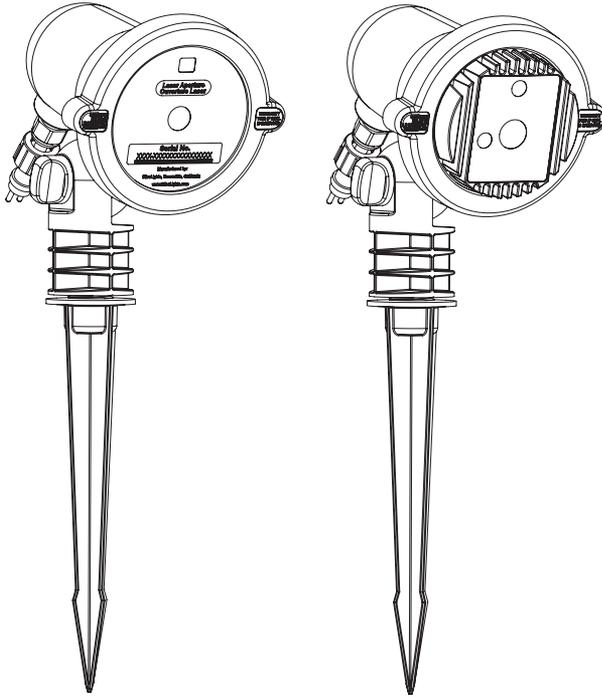


BlissLights

Perma Bright™ Laser



L-Series & LED Series

User's Guide

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CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This laser product is certified as a CLASS 2M laser product, and adheres to the requirements of the US Federal Laser Product Performance Standard (FLPPS) contained in the regulations in 21 CFR Subchapter J.

Avoid direct viewing of a CLASS 2M laser energy as it can be hazardous. For reference, the FLPPS requirements for demonstration laser products, like laser pointers, are limited to CLASS 2M levels of laser energy. This product uses diffractive optics to scatter the beam energy. This scattering effect causes the energy concentration to drop below the exposure limits for momentary or accidental viewing at a relatively short distance from the laser aperture. As with all bright light-sources, when you operate this device in unsupervised general public areas, it is recommended that up-close access to the BlissLights be restricted or prevented.

This laser display device incorporates a CLASS 3B laser system which, by itself, may be hazardous. However, this laser display device incorporates a protective housing and diffractive holographic optics in the machine design such that there is no exposure or human access to laser radiation during operation or maintenance above the CLASS 2M limits. Each individual laser beamlet's power is under 1mw, which is less than a standard laser pointer.

UNDER NO CIRCUMSTANCES shall attempts be made to open the protective housing or operate the device if the aperture window is damaged.

All service to this laser display device requiring the protective housing to be opened and/or removed shall be performed by BlissLights service personnel or their authorized agents. Opening the BlissLights protective housing voids the warranty.

NO LASERS SHOULD BE POINTED INTO THE SKY WITHIN 10 NAUTICAL MILES OF AN AIRPORT. IF YOU ARE LOCATED WITHIN THIS SPECIFIC PERIMETER, WE RECOMMEND THE LASERS BE POINTED DOWN AT THE GROUND SO NO STRAY BEAMS ARE PROJECTED INTO THE AIR. CHECK WITH YOUR LOCAL AIRPORT OR COUNTY GUIDELINES FOR FURTHER INFORMATION.

INTRODUCTION

Thank you for purchasing the Perma Bright. The Perma Bright is a unique outdoor light fixture that uses new Perma Bright laser and holographic technology to project thousands of pin-points of light. See the "fireflies" dance in the garden, create a fun and mesmerizing ambience or add some extra allure to a low voltage landscape lighting system or holiday display. We hope you enjoy this incredibly unique lighting experience.

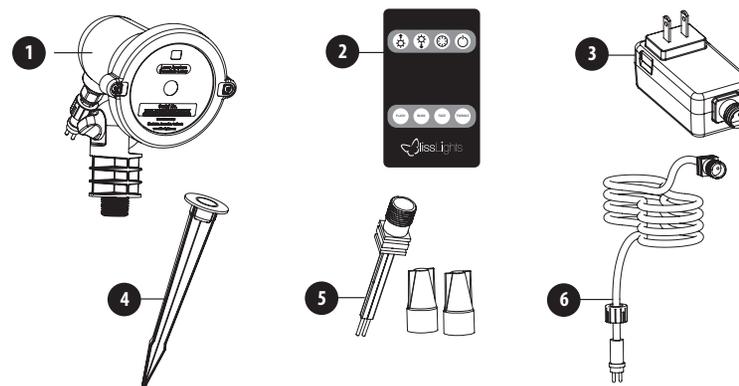
Each unit provides up to 2,500 square feet (50' x 50') of laser coverage, (LED fixture provides 15' x 15' of LED coverage in addition to laser coverage). It has maximum electrical usage of 4W (15W for LED-Series), which is more energy efficient than many landscape lights. The light is placed in a metal housing making it weather resistant. This is the perfect year-round light.

BEFORE YOU BEGIN

Immediately upon receiving the fixture, carefully unpack and check the carton contents to ensure that all parts are present and in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that the fixture must be returned to the factory, it is important that the fixture be returned in the original factory box. Please see parts list below for box contents.

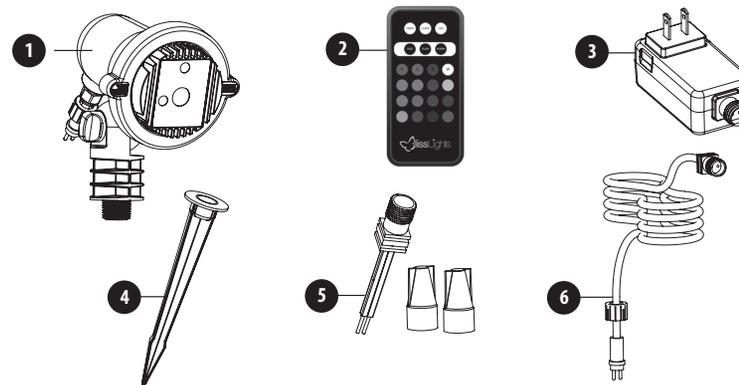
L-SERIES PARTS LIST:

- 1) 1 x Perma Bright Laser Fixture
- 2) 1 x Remote Control (CR2025 3 V Lithium Cell Battery Included)
- 3) 1 x Power Supply
- 4) 1 x Ground Stake
- 5) 1 x Landscape Lighting System Cable; Two (2) DryConn Waterproof Connectors
- 6) 1 x Extension Cord



LED-SERIES PARTS LIST:

- 1) 1 x Perma Bright Laser Fixture
- 2) 1 x Remote Control (AAA Batteries Included)
- 3) 1 x Power Supply
- 4) 1 x Ground Stake
- 5) 1 x Landscape Lighting System Cable; Two (2) DryConn Waterproof Connectors
- 6) 1 x Extension Cord



SETTING UP THE PERMA BRIGHT LASER

Before operating your laser projector, please read the "Before you Begin" section of this user's guide.

The Perma Bright Laser comes with an optional power supply, which allows you to plug the light directly into a GFCI outlet. You also may use the landscape lighting system cable to wire your Perma Bright Laser into a low voltage landscape lighting system. Please choose the set of instructions below that applies to your application.

OPERATING THE PERMA BRIGHT LASER

OPTION 1: INSTALL USING INCLUDED POWER SUPPLY

1. Attach the Stake (4) to the Perma Bright Fixture (1) head by twisting the Stake clockwise.
2. Connect the Perma Bright Fixture to the provided 10' Extension Cord (6), then connect the 10' Extension Cord to the provided Power Supply (3).
3. Connect the Power Supply to an available GFCI electrical outlet.
4. Place the light into the desired location.
5. Loosen the thumb screw on the side of the fixture and adjust the angle of the projected light. Retighten thumb screw.
6. Use the included Remote Control (2) to change the settings of the light output (See "Operating the Remote Control" section.)
7. To turn off the light, use the provided Remote Control or remove the power plug from the GFCI electrical outlet.

OPTION 2: INSTALL AS PART OF A 12V LANDSCAPE LIGHTING SYSTEM

Important: Turn off power before installing light.

1. Attach the Stake (4) to the Perma Bright Fixture (1) head by twisting the Stake clockwise.
2. Connect the Perma Bright Fixture to the provided Landscape Lighting Cable (5).
3. Place the light into the desired location.
4. Using the Landscape Lighting Cable on fixture, splice into previously installed (or new) landscape lighting wire (see installation instructions on 2 pc. wire connector bag).
5. Loosen the thumb screw on the side of the fixture and adjust the angle of the projected light. Retighten thumb screw.
6. Use the included Remote Control (2) to change the settings of the light output.

INSTALLATION TIPS

- **Do not connect the light to a dimmer pack, as a dimmer accessory may damage the laser component.**
- Use only the manufacturer-provided power supply. When using in a landscape lighting system limit power supply to 12V.
- The darker the display area, the brighter your projection will appear. Try to avoid display areas with strong ambient light sources, such as commercial street lights or bright security flood lights.
- If you choose to mount the BlissLights for downlighting (e.g. from balcony railing, fence line, roof line, etc.), it is recommended that, for safety purposes, your lights are properly mounted using a suitable hanging clamp and safety cable.

OPERATING THE TIMER

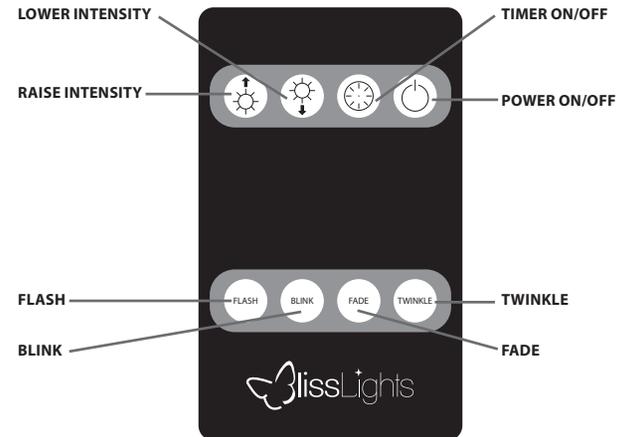
This light has a built-in timer that is designed to automatically shut off after 6 hours of operation. It will go into sleep mode for 18 hours and resume its operation thereafter. To enable the timer, press the timer button on the remote control (see operating the remote control on page 7 and 8). The laser will blink three times to signal that the timer is on. To turn the timer off, press the timer button again. The laser will then blink two times to signal that the timer is off.

OPERATING THE L-SERIES REMOTE CONTROL

Use the included infrared remote control to operate the light's features. Infrared signal does not go through solid objects, such as windows, walls, trees, shrubs, etc. Make sure there is a clear line of sight between you and the fixture. Point the remote control at the FACE of the light fixture, where the receiver is located. The remote operates up to 15' of unobstructed distance away from the face of the fixture.

- **Power:** Press to put the device in standby mode. Before entering standby mode, the device will save all current settings so that when the Power button is pressed again, the device will resume with the last mode before entering standby. This is the same behavior as unplugging the device. Whenever the device is unplugged or put into standby mode, all current settings are saved and will resume when the device is restarted.
- **Timer:** Press to turn the internal 6/18 timer on or off.
- **Intensity +/-:** Press the increase and decrease intensity buttons to change the intensity of the laser. There are five preset settings for intensity ranging from dimmest to brightest. The increase and decrease buttons only affect the intensity of the laser while in the default, one color mode. The laser will blink once it has reached the highest or lowest intensity setting.
- **Flash:** This mode creates a flashing sequence of light. Each push of the button cycles the effect through one of three different speeds: fast, medium and slow.
- **Blink:** This mode blinks in and out in a pulse effect. Each push of the button cycles the effect through one of three different speeds: fast, medium and slow.
- **Fade:** This mode cycles through a fading in-out transition. Each push of the button cycles the effect through one of three different speeds: fast, medium and slow.
- **Twinkle:** This mode creates a twinkle effect. Each push of the button cycles the effect through one of three different speeds: fast, medium and slow.

Press and hold the power button for 10 seconds to end effects and return the light to constant on function.



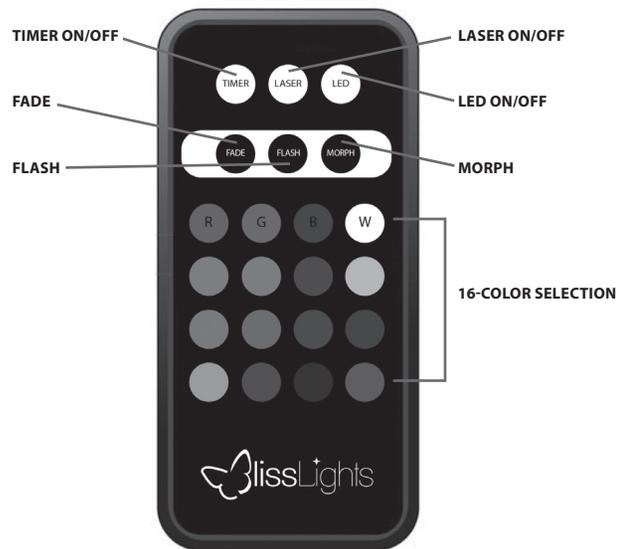
Remote FCC Compliance:

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: 1. this device may not cause harmful interference, and 2. this device must accept any interference received, including interference that may cause undesired operation.

OPERATING THE LED-SERIES REMOTE CONTROL

- **Timer:** Press to turn the internal 6/18 timer on or off. It will blink twice to signal that the timer is off and three times to signal that it is back on.
- **Laser:** Press to turn the laser light on or off.
- **LED:** Press to turn the LED light on or off.
- **Fade:** This mode fades the LED through an individual color of your choosing. To deactivate this mode, press the Fade button again. The LED will now be on a solid color with no effect.
- **Flash:** This mode flashes the LED through the 16 LED colors. To flash a single color, choose the desired color from the 16-color selection. To deactivate this mode, press the Flash button again. The LED will now be on a solid color with no effect.
- **Morph:** This mode morphs the LED through the 16 LED colors. When choosing a single color on this mode, the light will enter into the Fade mode. To deactivate this mode, press the Morph button again. The LED will now be on a solid color with no effect.
- **16-Color LED Selection:** Press through the 16-color options to get the desired color for the LED.

Press and hold the power button for 10 seconds to end effects and return the light to constant on function.



Remote FCC Compliance:

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: 1. this device may not cause harmful interference, and 2. this device must accept any interference received, including interference that may cause undesired operation.

PRECAUTIONARY TIPS FOR THE REMOTE CONTROL

- The remote control should be kept dry and away from heat sources. Avoid humidity. If the device responds erratically to the remote control, or doesn't respond at all, check the battery.
- Do not subject the remote control to undue physical stress, such as striking or dropping it.
- Do not attempt to clean the remote control with a volatile solvent. Wipe it with a clean, damp, soft cloth when cleaning.

PRECAUTIONARY TIPS FOR L-SERIES REMOTE BATTERY INSTALLATION

- Do not ingest the battery.
- Non-rechargeable battery is not to be recharged.
- Battery is to be inserted with the correct polarity.
- Exhausted battery is to be removed from the product.
- Only use CR2025 3 V lithium cell replacement battery.
- Do not take the battery apart, do not heat the battery, and do not throw it into a fire.
- Keep the battery away from children and pets.
- When not using the remote control for an extended period of time, remove the battery and store in a cool, dry place at room temperature.

PRECAUTIONARY TIPS FOR LED-SERIES REMOTE BATTERY INSTALLATION

- Do not ingest the batteries.
- Non-rechargeable batteries are not to be recharged.
- Batteries are to be inserted with the correct polarity.
- Exhausted batteries are to be removed from the product.
- Do not mix old and new batteries. Install only new batteries of the same type.
- Do not mix Alkaline, standard (carbon zinc), or rechargeable (NiCad, NiMH, etc) batteries.
- Only use AAA batteries.
- Failure to insert batteries in the correct polarity, as indicated in the battery compartment, may shorten the life of the batteries or cause batteries to leak.
- Do not take the batteries apart, heat them, or throw them into a fire.
- Keep the batteries away from children and pets.
- When not using the remote control for a long period of time, remove and store batteries in a cool, dry place at room temperature.

BATTERY DISPOSAL

Please, always dispose of batteries at a suitable recycling point.

Note: Batteries should be recycled or disposed of as per provincial and local guidelines.

L-SERIES PRODUCT SPECIFICATIONS

Accessories	Landscape lighting system cable
Dimensions	13"H x 5"L x 4"W
Housing	Metal
Laser Classification	Class 2M
Laser Wavelength	515 nm (Green), 445 nm (Blue), 660 nm (Red)
Maintenance	Maintenance free
Power Consumption	4W, continuous operation 24/7
Power Supply Input	110 V AC (with transformer)
Light Input	12V
Operating Temperature	-40°F to 90°F
Operation	Outdoor
Projection Coverage	Up to 50' x 50' Laser Coverage
Remote Control Functions	Power on/off, timer on/off, flash, blink, fade and twinkle
Timer	6/18 timer (on for 6 hours/off for 18 hours)
Warranty	Five-year limited warranty

LED-SERIES PRODUCT SPECIFICATIONS

Accessories	Landscape lighting system cable
Dimensions	13"H x 5"L x 4"W
Housing	Metal
Laser Classification	Class 2M
Laser Wavelength	515 nm (Green), 445 nm (Blue), 660 nm (Red)
Maintenance	Maintenance free
Power Consumption	15W , continuous operation 24/7
Power Supply Input	110 V AC (with transformer)
Light Input	12V
Operating Temperature	-40°F to 90°F
Operation	Outdoor
Projection Coverage	Up to 50' x 50' Laser Coverage, Up to 15' x 15' LED Coverage in addition to Laser Coverage
Remote Control Functions	Power on/off, timer on/off, flash, fade, morph and 16 color LED selection
Timer	6/18 timer (on for 6 hours/off for 18 hours)
Warranty	Five-year limited warranty
LED	10W RGB, with 16 color selection

TROUBLESHOOTING

How to avoid IR interference:

If the movement of the lasers start and stop randomly, there is a wireless signal interference (i.e. radio control toys, remote controls for TV or entertainment systems, automatic vacuums, etc.). To verify if this is the case, please try covering the window at the bottom of the front lens with your finger to block stray infrared signals from entering the fixture. If this corrects the problem, please check the other electronic products running in the room to determine where the stray signals are coming from.

LIMITED WARRANTY

King Innovation® Perma Bright L-Series and LED Series Lighting Fixtures are guaranteed against faulty materials or workmanship for a period of five years from date of purchase. Any part returned to us within this warranty period showing defects in material or workmanship will be renewed or replaced F.O.B. factory without charge. The liability of the Company is limited to the repair or replacement of the defective parts. In no case will the Company be liable for damage or loss incurred because of interruption of service or for consequential damages, labor, or expense required to repair or replace defective units. This warranty, which is given expressly and in lieu of all other warranties, expressed or implied, or merchantability and fitness for particular purpose, constitutes the only warranty made by the Company.

Please retain your original receipt. Perma Bright Laser Lights with the original receipt will maintain the 5 year limited warranty from purchase date as stated above. When original receipt cannot be provided, the 5 year limited warranty period will start on the date of manufacture.

Record the serial number and date of purchase in the space below.

Serial Number: _____

Date of Purchase: _____



