

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

23i

luminar **OUTDOOR™**

56521

24 FT. 12 BULB COLOR-CHANGING LED OUTDOOR STRING LIGHTS



Visit our website at: <http://www.harborfreight.com>
Email our technical support at: productsupport@harborfreight.com

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠ WARNING

Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.

WARNING SYMBOLS AND DEFINITIONS	
	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.

IMPORTANT SAFETY INSTRUCTIONS

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

- a) **READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
- b) Do not use these products outdoors unless marked suitable for indoor and outdoor use. When products are used in outdoor applications, connect the product to a Ground Fault Circuit Interrupting (GFCI) outlet. If one is not provided, contact a qualified electrician for proper installation.
- c) Do not mount or place near gas or electric heaters, fireplace, candles or other similar sources of heat.
- d) Do not secure the wiring of the product with staples or nails, or place on sharp hooks or nails.
- e) Do not let lamps rest on the supply cord or on any wire.
- f) Do not use this product for other than its intended use.
- g) Do not hang objects from cord, wire, or light string.
- h) Do not close doors or windows on the product or extension cords as this may damage the wire insulation.
- i) Do not cover the product with cloth, paper or any material not part of the product when in use.
- j) Read and follow all instructions that are on the product or provided with the product.
- k) **SAVE THESE INSTRUCTIONS.**

Model No. 56521

Additional Safety Information

WARNING: Basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. Install in accordance with these instructions and current electrical codes such as the National Electric Code (NEC). This product has not been evaluated under section 590 of the NEC.

When used outdoors in wet conditions, ground fault circuit interrupter protection (GFCI) is to be provided on the circuits or outlets. Extension cords used must be a type rated for outdoor use, such as the following: SEW, SEOW, SEOOW, SOW, SOOW, STW, STOW, SJEW, SJEOW, SJEOOW, SJW, SJOW, SJOOW, SJTW, SJTOW, or SJTOOW. The connector cover should always be in place to prevent the entry of water (unless a string light connector is inserted).

POWER SUPPLY

CAUTION! Risk of electric shock. Avoid making connections or disconnections when the equipment is wet. Do not use with extension cord near water or where water may accumulate. Do not submerge.

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

1. String Lights are intended for installation indoors or outdoors.
2. String Lights must be supported by steel guide cables or other suitable supporting hardware such as S-hooks, screw hooks or zip ties (not included) whenever span distances exceed 24 feet (7.3m). See Installation on page 4.
3. Lights should be installed so that bulbs are facing down ONLY.
4. Do NOT secure light string to buildings or other structural supports using nails, staples, or other sharp, conducting materials. DO NOT DAMAGE THE WIRE.
5. Avoid damage to the insulation during installation. Do NOT pierce or compromise wire's or socket's outer covering, jacket or sheathing.
6. Periodically inspect wire and sockets for degradation due to weather, UV light or other damage. Promptly replace light string.
7. **WARNING: - RISK OF ELECTRIC SHOCK!!** Disconnect power supply at source prior to wiring, replacing light bulbs or servicing in any way.
8. Do not link more than 4 string lights together.
9. Keep proper footing and balance at all times during installation.
10. Verify that installation surface has no hidden utility lines before drilling, driving screws.
11. Maintain labels and nameplates on the String Light. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
12. Do not install old and new batteries together. Do not install alkaline, carbon-zinc or rechargeable batteries together. Position batteries in proper polarity. Do not use swollen or leaking batteries.
13. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



SAVE THESE INSTRUCTIONS.

Specifications

Controller Input	120 VAC / 60Hz
Controller Output	5 VDC
Single LED Wattage	0.8W
Single String Wattage	15W
Maximum number of String Lights that can be connected together	4
Remote Control Battery	AAA x2

Suitable for wet location use.

Installing/Replacing LED Bulbs



Read the **ENTIRE** IMPORTANT SAFETY INSTRUCTIONS section at the beginning of this manual including all text under subheadings therein before set up or use of this product.



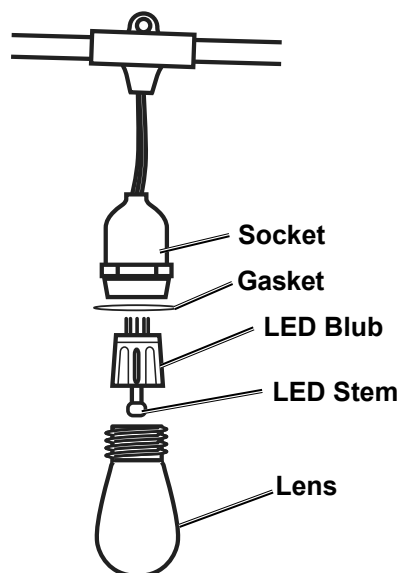
Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠ WARNING

TO PREVENT SERIOUS INJURY: Unplug the String Light from its electrical outlet before performing any procedure in this section.

Do not replace LED bulbs during rain or when wet.

1. Carefully remove existing lens by turning it counter clockwise. It should be tight to keep moisture out. Put lens aside.
2. Remove LED bulb by pulling on its LED stem. Discard old bulb.
3. Insert a new LED bulb by aligning its side guide to the grooves inside the socket. Gently push it in until flush with the socket.
4. Replace saved lens by carefully screwing it on clockwise until tight.



Installation



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

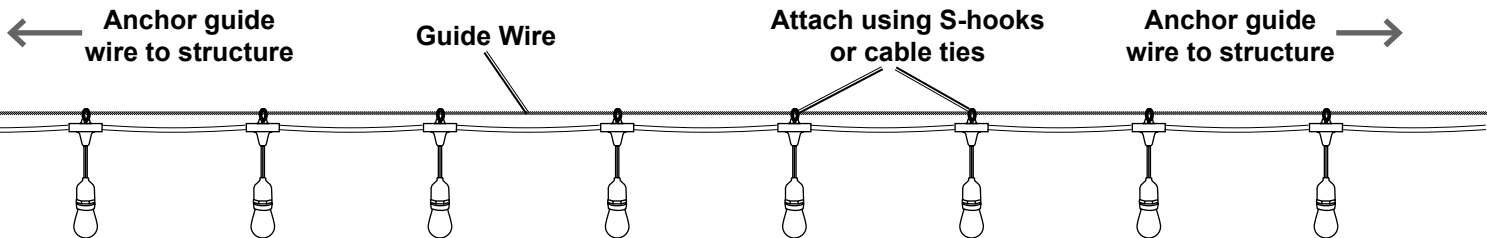
⚠ WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

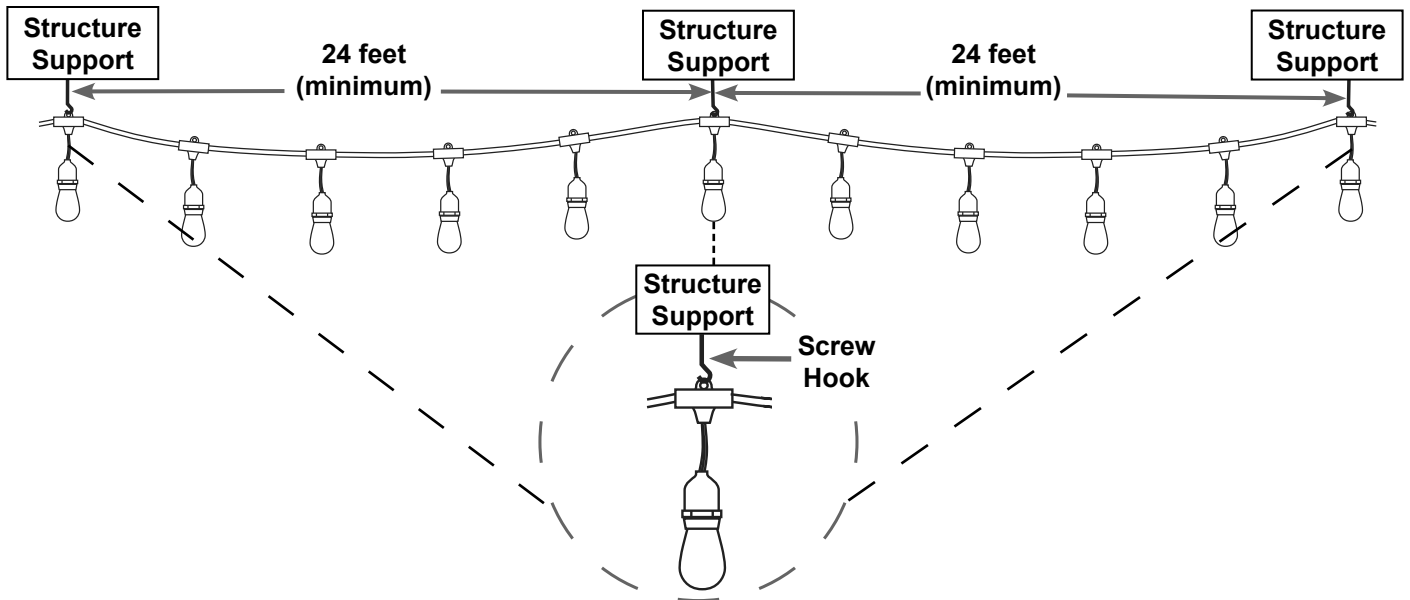
Do not plug Power Cord/Controller into AC outlet until installation is complete.

Note: Attachment hardware, such as hooks or nylon cable ties, sold separately.

1. If attaching to **GUIDE WIRE**, attach the ring at the back of **every** bulb holder to the guide wire using a S-hook or nylon tie (sold separately).



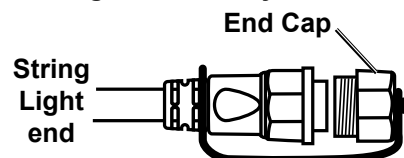
2. If a guide wire is not used, connect securely to **STRUCTURE** at the **beginning and the end** of **EACH** String Light using screw hooks (sold separately).



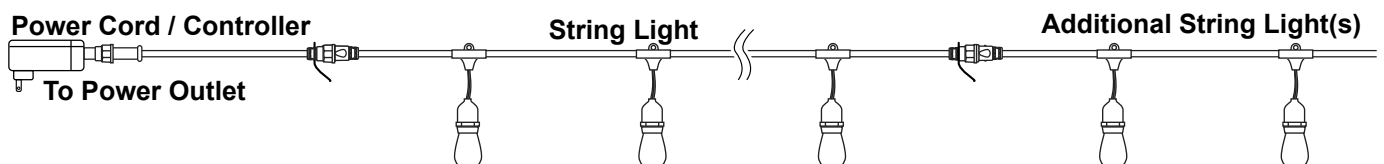
Connecting Controller and Multiple String Lights

Note: Do not connect Power Cord / Controller until all String Lights are connected and secured.

1. Connect String Lights together by connecting the female end connector of one string to the male end connector of another string. Align the grooves inside the connectors and tighten securely.
2. **At the end of the last string, attach the end cap and tighten securely.**

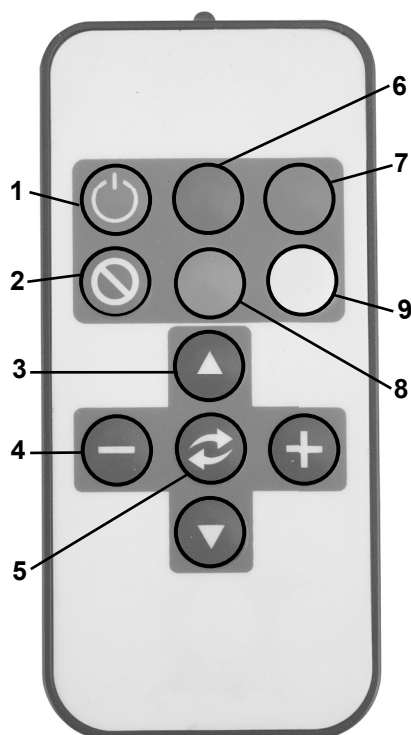


3. Connect Power Cord to Controller and then attach them to the String Lights.



Operation

1. Check that the Power Cord / Controller is connected to the String Lights then connect to 120 VAC outlet.
2. Use the Remote Control to turn lights on/off. Also use it to select color and mode changes.
3. Point the Remote Control at Controller and press selection buttons as desired.



Button	Selection
1	ON: Turns lights on.
2	OFF: Turns lights off.
3	BRIGHTNESS: Press ▲ / ▼ to choose brightness level (only works in single color mode).
4	SPEED: Press – / + to decrease or increase color changing speed (only works in color combination mode).
5	MODE: Press to select a color combination.
6	RED: Press to change light color to red.
7	GREEN: Press to change light color to green.
8	BLUE: Press to change light color to blue.
9	WHITE: Press to change light color to white.

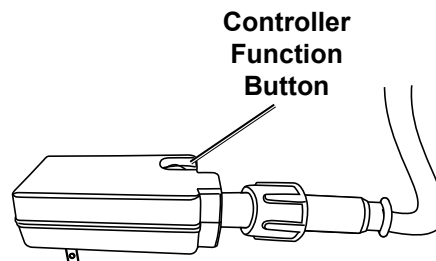
Programming and Resetting the Remote Control

1. Reset the Remote Control if it is not working properly or has been replaced.
2. To Reset, turn power OFF by unplugging the Power Cord / Controller.
3. Press and hold the Remote Control's ON button.
4. While holding down the ON button, plug power cord back into the outlet and point the Remote Control at the Controller.
5. The String Light's bulbs should flash 3 times signifying the Remote Control has been successfully reprogrammed.
6. Release the On button.

Using the Controller to Select Color Mode

1. Instead of the Remote Control, the button on back of the Controller (connected to power cord) may be used to select color mode.
2. Press the Controller Function Button to cycle through colors and color combinations.

Note: When Controller is powered on, it will start at the last color mode.



Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

Cleaning, Maintenance, and Lubrication

BEFORE EACH USE, inspect the general condition of the tool. Check for:

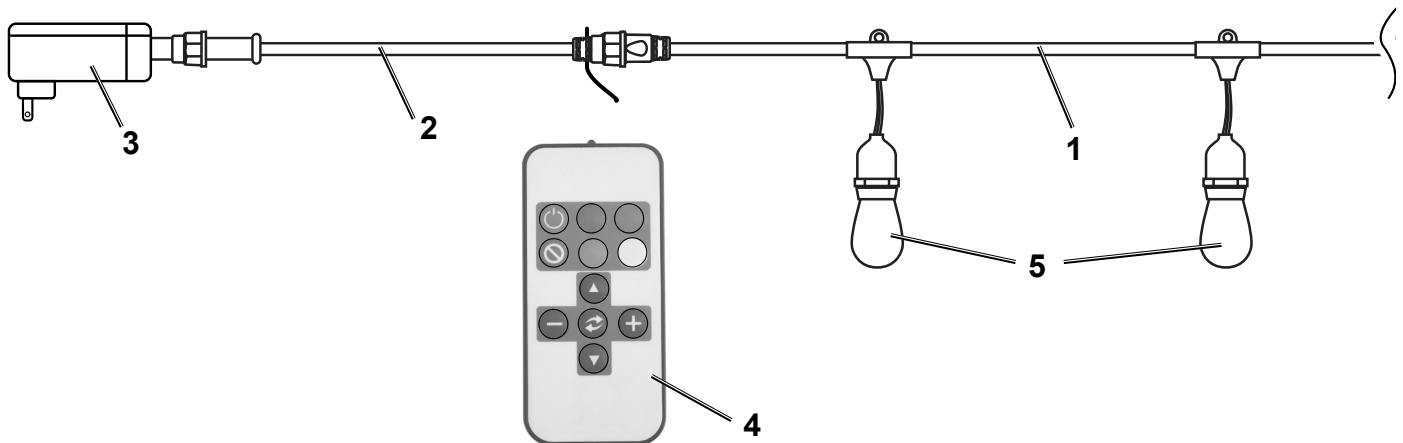
- loose hardware,
- misalignment or binding of parts,
- cracked or broken parts, and
- any other condition that may affect its safe operation.

Replacing Batteries in the Remote Control

1. Remove back cover.
2. Remove batteries and replace with same, following proper polarity.
3. Replace back cover.
4. Program the Remote Control by following the procedure on page 6.

Parts List and Diagram

Part	Description	Qty
1	String Light (24 ft. L)	1
2	Power Cord	1
3	Controller	1
4	Remote Control	1
5	LED Bulb (2 are spares)	14
6	Battery (not shown), AAA	2



PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state

Record Product's Serial Number Here:

Note: If product has no serial number, record month and year of purchase instead.

Note: Replacement parts are not available for this item.

Note: Reference UPC 193175507662.



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