



KEYSTONE

LED LIGHTING



48-inch LED Direct-Wire Wrap Light User Manual

Model Number—WL4-4000

Revision1016–Ver.1.0

☆ Easy Installation

☆ 4,000 lumens

⚠ WARNING



Failure to comply with the Safety Precautions in this manual could result in death or serious injury.

Read this Manual Before Installation or Operation

This manual provides installation, operation, and troubleshooting information about the LED light fixture.

- The illustrations and specifications may differ from the actual product. **Keystone Group** reserves the right to make changes to the light without notice.
- Do NOT attempt to install or operate until instructions and safety precautions are read and completely understood.
- The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions or situations.
- If problems arise with the operation of the light, refer to *Troubleshooting* in the back of this manual or contact **Keystone Group** at (303) 652-6164 Monday through Friday 7am to 4pm Mountain Time or at our website at www.KeystoneLEDLighting.com.







Purchase Location _____ Purchase Date _____





SAFETY

Safety Symbols

The safety symbols shown below will be used throughout this manual to indicate areas of danger or general notification. Please review the symbols and definitions.



Safety Symbols and Definitions	
	WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	NOTICE is used to address practices not related to physical injury.
	High Voltage symbol indicates hazard of electrical shock.
	Safety Alert symbol indicates a potential personal injury hazard.
	Alert symbol indicates practices not related to physical injury.

Electrical Safety Precautions

	
	Failure to comply with the following Electrical Safety Precautions could result in death or serious injury.


- Turn Off the power at the circuit breaker or fuse box. Do NOT rely on a wall switch alone to turn Off the power.
- Consult a local licensed electrician or electrical contractor if you are not sure about the installation.
- Always install wiring connections in accordance with local codes, ordinances, and the National Electrical Code.
- Connect the light fixture wiring to a properly installed and grounded UL listed junction box.
- Verify the supply voltage is correct before installing: 120 VAC.
- Cap all wire-to-wire connections with UL listed wire connectors.
- Do not touch or install the light fixture while in contact with standing water.

Personal Safety Precautions

	
	Failure to comply with the following Personal Safety Precautions could result in death or serious injury.



- Wear ANSI-approved impact safety glasses when drilling holes for installation.
- Please dispose of packaging materials and account for all small parts, as these can be hazardous to small children.
- If a ladder is used, it should be supported by an assistant.
- Allow the light fixture to cool completely before handling.

General Safety Guidelines

	
	Failure to comply with the following General Safety Guidelines could result in death or serious injury.

- Do not mount the unit against flammable surfaces.
- Do not use it in areas with limited ventilation or high ambient temperatures.
- Keep combustible and other flammable materials away from the light fixture and lens cover.

Equipment Guidelines

	
	Failure to comply with the following Equipment Guidelines could result in equipment damage.

- Never connect the components with the power On.
- Do not mount or support the product in a manner that can cut the outer jacket or damage the wire insulation.
- Avoid covering LED products with insulation, foam, or other materials that will prevent convection or conduction cooling.
- Never connect an LED product directly to dimmer packs, occupancy sensors, timing devices, or other related control devices, unless individual product specifications deem otherwise.
- Unless the individual product deems otherwise, do not exceed the product's maximum temperatures.
- LED products are Polarity Sensitive. Ensure correct polarity during installation by connecting matching wire colors.

INSTALLATION

Parts

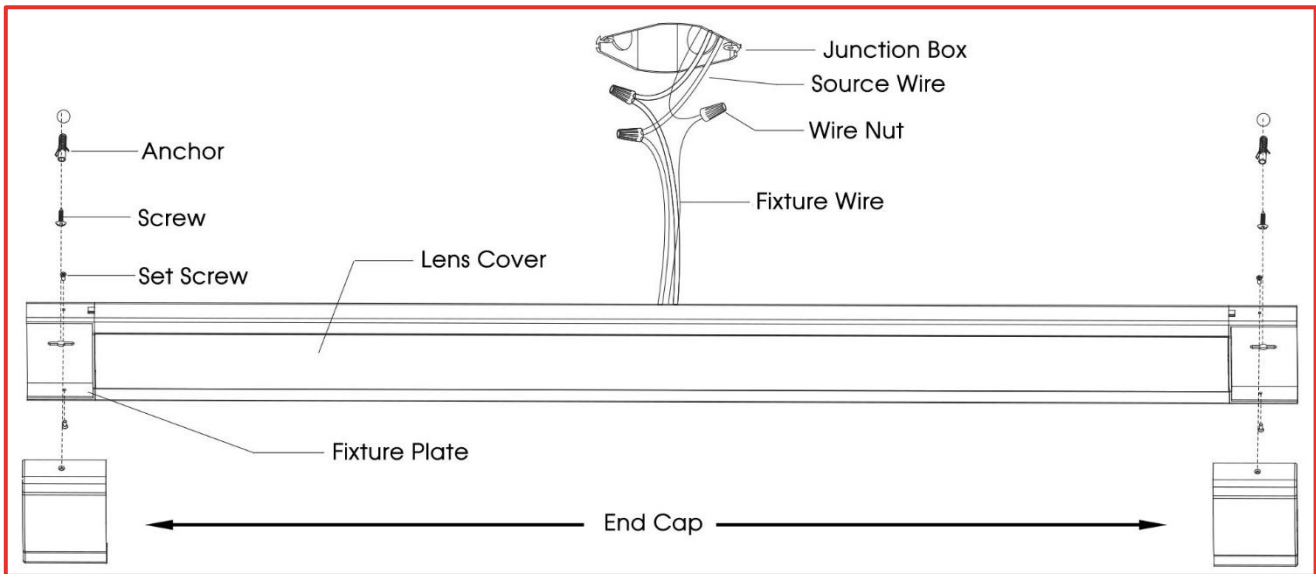


Figure 1: Parts Exploded View

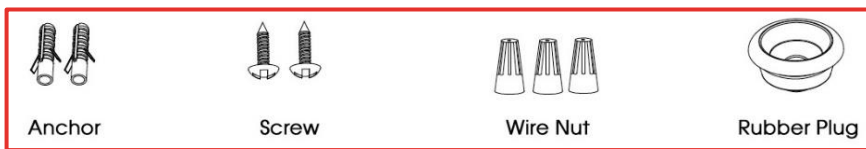


Figure 2: Installation Parts

Parts	Qty.
Light Fixture	1
End Cap	2
Anchor	2
Screw	2
Wire Nut	3
Set Screw	4
Rubber Plug (optional)	1
Fixture Plate	1

Location Selection

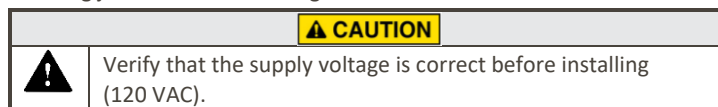
Important! This product is intended for indoor use only.

Tools Needed

- Phillips #1 screwdriver
- Phillips #2 screwdriver
- Needle-nose pliers (if necessary)
- Wire stripper (if necessary)
- Hammer
- Pencil or pen
- Drill
- 1/16-in. and 3/16-in. drill bits
- Voltage tester
- Ladder
- Safety glasses

Setup and Preparation

1. If possible, select an existing junction box for ceiling or wall installation.



2. Correctly position the light fixture for either ceiling or wall installation.
 - a. Select a suitable dry mounting location (for indoor use only).
 - b. Make sure that the mounting surface can support the weight of the fixture.
3. If an existing light fixture is being replaced, carefully remove the old light fixture with the power turned Off.

End Cap Removal

Remove the end caps before mounting and wiring the light fixture.

1. Handle the light fixture carefully to avoid scratching the lens cover.
2. Use a Phillips #1 screwdriver to remove the two set screws from each end cap, and carefully set them aside.

Important! The set screws are very small.
3. Remove the two end caps by lifting the corners near the lens cover, and set them aside.

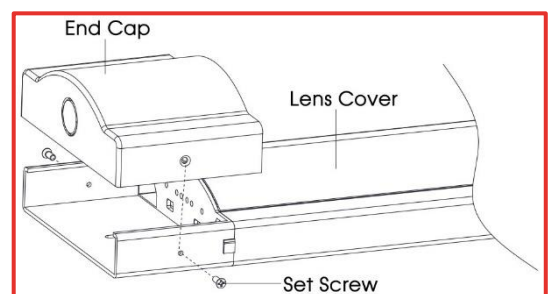



Figure 3: End Cap Removal

Mounting and Wiring

⚠ WARNING	
	Turn Off the power at the circuit breaker or fuse box. Do NOT rely on a wall switch alone to turn Off the power. Use a voltage tester to confirm that the power is Off.

1. Make sure that all parts and tools are present and within reach.
2. Align the light fixture and mark the location of the mounting holes on the ceiling or wall.

Note: It is recommended that two people complete Step 2.

 - a. Remove the end caps and set them aside (Refer to *End Cap Removal*).
 - b. Align the light fixture, making sure that the junction box is centered and completely covered.
 - c. Using a pencil, put a mark in the same side of the keyhole slot on each end (Refer to Figure 5).
 - d. Set the light fixture aside.
3. Drill a pilot hole at each mark.
 - a. If you are mounting the light fixture to bare wood, or wood behind drywall, drill a 1/16-in. (1.6-mm) pilot hole for the screw.
 - b. If you are mounting the light fixture to drywall, drill a 3/16-in. (4.8-mm) pilot hole, and insert a drywall anchor.
 - Tap the anchor gently with a hammer until it is flush with the drywall.
 - c. Insert a screw into each hole or anchor with a Phillips #2 screwdriver, leaving a 1/8-in. (3.2-mm) clearance from the screw head to the mounting surface.
4. Prepare the source wires and the wires on the back of the light fixture.
 - a. The wire ends should be:
 - Straight
 - Stripped to 3/8 in. (9.5 mm)
 - Twisted tightly with no loose strands
5. Install the light fixture to the junction box.

Note: It is recommended that two people complete Step 5.

 - a. Position the light fixture base near the junction box.
 - b. Connect each pair of wires using the wire nuts.
 - i. The black source wire connects to the live (black) light fixture wire
 - ii. The white source wire connects to the neutral (white) light fixture wire
 - iii. The ground wire connects to the bare copper light fixture wire

Note: If a ground wire is not available, you will need to attach the bare copper light fixture wire to the grounding screw in the junction box.
6. Ensure that all wiring fits into the junction box, and the wires are not pinched when the light fixture is secured to the mounting surface.

Note: The wires are only accessible from one end of the light fixture.

 - a. If you are planning to link this light fixture to a second 48-inch LED Direct-Wire Wrap Light, ensure that the installed light fixture is positioned so that the end containing the wires is accessible.
7. Place the light fixture onto the screws using the keyhole slot and slide it to center the light fixture on the junction box.
8. Tighten the two screws with a Phillips #2 screwdriver.
9. If you are not linking to any other light fixtures, skip to Step 10 to complete the installation.

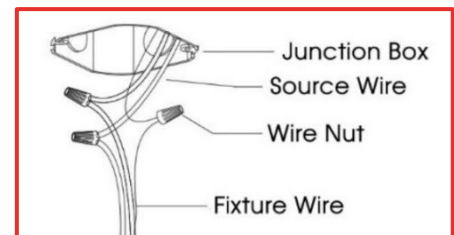


Figure 4: Wire Connections

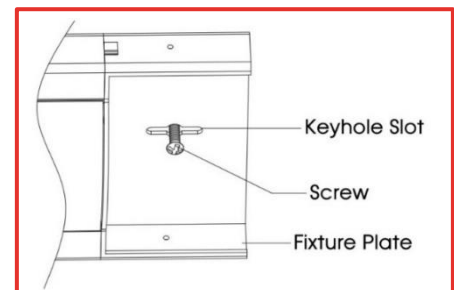


Figure 5: Installed Light with Two Screws

Linking Light Fixtures

Important! Ensure that the combined maximum amperage rating of the linked light fixtures does NOT exceed the circuit breaker rating.

- a. Access the wires from the end of the original light fixture.

Important! Do NOT cut the double white wire.
 - b. Cut the black wire and the single white wire in half, and strip each wire end to 3/8 in. (9.5 mm).
 - c. To connect the second light fixture, pull the wires completely out of the appropriate end.

Note: It is recommended to place the optional rubber plug in the hole in the back of the second light fixture base.
 - d. Make sure that the second light fixture is positioned so that the wires can reach the wires from the first light fixture, and mount the second light fixture in the desired location, (Refer to Steps 2, 3, 7, and 8).

Note: Each light fixture has one end cap with knock-out holes that can be removed. Slide the appropriate end caps onto the light fixtures, being sure to route the wires from the second light fixture through the holes in each end cap.
 - e. Cut the wires of the second light fixture to the desired length.
 - f. Using the supplied wire nuts, connect the black wires from the first light fixture to the black wire of the second light fixture, and do the same with the white wires.
10. Replace all end caps, ensuring the wires are tucked in.
 11. Secure each end cap with the two small set screws using a Phillips #1 screwdriver.
 12. After the installation has been completed, turn On the power.

OPERATION

Wall Switch

Turn the light fixture On or Off using the switch that provides power to the light. If the light does not operate properly, refer to *Troubleshooting*.

TROUBLESHOOTING


Problem	Possible Cause	Corrective Action
Light does not come on when switch is turned On.	<ul style="list-style-type: none"> Power is not being delivered to the fixture. 	<ul style="list-style-type: none"> Verify the power is turned On at the switch and circuit breaker. Turn Off the power to the light fixture and verify that the product is properly wired. Verify that the line voltage is correct (120 VAC).
	<ul style="list-style-type: none"> Wiring inside the junction box is loose. 	<ul style="list-style-type: none"> Turn Off the power to the light fixture and properly connect any loose wiring.
	<ul style="list-style-type: none"> The switch is not working properly. 	<ul style="list-style-type: none"> Test or replace the switch.
Circuit breaker trips or fuse blows when light is turned On.	<ul style="list-style-type: none"> Wires are crossed or the power wire is grounded. 	<ul style="list-style-type: none"> Turn Off the power to the light fixture and properly connect any loose wiring.

PRODUCT INFORMATION

Specifications

Specifications			
Length	48 (1,219 mm)	LED Corrected Color Temperature (CCT)	4,000 K (Bright white)
Width	4-15/16 in. (125.5 mm)	Color Rendering Index (CRI)	> 80
Height	1-9/16 in. (39.5 mm)	Lifetime of LED	50,000 hours
Weight	3.2 lb (1.45 kg)	Operating Temperature	-4° to 122°F (-20° to 50°C)
Operating Voltage	120 VAC	Environment	Damp Rated (IP20)
Input Power	48 watts	Dimmable	No
Lumen Output	4,000 lm	Linkable	Yes
Luminous Efficacy	83 lm/W		

Maintenance

NOTICE	
	Failure to comply with the following guidelines could result in equipment damage.

- To clean the surface of the light, use mild soap and water.
- Do not use scouring pads, powders, steel wool, or any other abrasive materials.

Warranty

Keystone Group will cover any manufacturing defect for a period of three (3) years from the date of purchase with original proof of purchase. **Keystone Group** will either repair or replace your product at our discretion. The warranty is not transferable and is only valid to the original purchaser. This warranty does not apply to the following: acts of God, product that has been modified, opened, disassembled, or had an unauthorized repair, products not used in accordance with the provided instructions, damages caused by shipping, improper handling, accident, or misuse. The finish of any part of the product, scratches, weathering, corrosion, discoloration, or fading, are all considered normal wear and tear. This warranty does not cover any damages of merchandise in transit. Any damages need to be reported to the carrier, and a claim needs to be filed with the carrier.

FCC Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device must not cause interference.
- This device must accept interference received, including interference that may cause undesired operation.

A Keystone Group Product
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