

HALCO LIGHTING TECHNOLOGIES, 2-YEAR LIMITED WARRANTY (For LLCP-12, LLCP-120, LLCS-12, LLCS-120)

Halco Lighting Technologies ("Halco") warrants the above-referenced model numbers of Halco ProLED® Color-Changing LED Pool and Spa Lamp (the "Product") to be free from defects in material and workmanship, under normal use, conditions and service, for a period of two (2) years from the original date of purchase, subject to the terms specified herein. If during the warranty period, the Product fails to operate due to a defect in material or workmanship, Halco will, at its option, repair or replace the Product at no charge.

TERMS AND CONDITIONS

This warranty is available to the original purchaser of the product(s) only. This warranty applies only when products are properly installed in an in-ground pool; any other use voids the warranty. Products must be used in lighting equipment designed and approved for the application and in environmental conditions within the normal specified operating range. This warranty does not apply to any abnormal use of product(s), use in violation of any applicable standard, code or instructions for use in installations including those contained in the latest National Electrical Code (NEC), the Standards for Safety of Underwriters Laboratory, Inc. (UL), Standards for the American National Standards Institute (ANSI). This warranty will not apply in the event of conditions demonstrating abnormal use or stress, freezing, operating when not fully submerged, under/over voltage/current conditions, excessive switching cycles or operating hours or outside the recommended operating conditions. This warranty does not apply to color shifts or dimming caused by emissions and/or LED color shifts and dimming that naturally occurs over time. Warranty conditions: If the product operates for 15 or more hours per day or continuously for 24 hours per day, the product warranty period stated shall be reduced to half the stated period. This warranty does not cover damage occurring during shipment, damage or failure resulting from alteration, accident, acts of God, theft, abuse, negligent installation, improper service, unauthorized repairs, freezing or where adequate care has not been taken to prevent damage to the product(s). Tampering with any internal component of this product(s) will void the warranty.

This warranty gives you specific rights. You may have other rights that vary according to the laws of your state.

LIMITATION OF LIABILITY

THE FOREGOING SHALL CONSTITUTE THE EXCLUSIVE REMEDY OF THE PURCHASER AND IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OR TRADE. THE LIABILITY OF HALCO UNDER THIS WARRANTY SHALL BE LIMITED TO THE REPLACEMENT, REPAIR OR PRO-RATED CREDIT OF THE PRODUCT(S) AS STATED HEREIN. HALCO IS NOT RESPONSIBLE FOR SHIPPING OR TRANSPORTATION COSTS RELATED TO OBTAINING WARRANTY SERVICE. IN NO EVENT SHALL HALCO BE LIABLE FOR ANY OTHER COSTS OR DAMAGES, INCLUDING LOST PROFITS OR REVENUES, LABOR CHARGES OR FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES.

Halco reserves the right to change the warranty, and/or warranty period without prior notice and without incurring obligation.

To obtain warranty service, retain the failed Product; retain the installation invoice showing product purchase price and contact Halco ProLED® Pool Customer Service at 800.374.1927



Norcross, Georgia

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Installation and Operation Guide

Halco ProLED® Color-Changing LED Pool and Spa Lamp



**IMPORTANT SAFETY INSTRUCTIONS
READ, FOLLOW AND SAVE THESE INSTRUCTIONS**

TECHNICAL SUPPORT

Halco ProLED® Pool Customer Service at:

800.374.1927

Halco ProLED® Color-Changing LED Replacement

Pool Lamps installation manual and operation guide for following part numbers: LLCP-120 and LLCP-12

Spa Lamps installation manual and operation guide for following part numbers: LLCS-120 and LLCS-12

Halco ProLED® Color-Changing LED Pool and Spa lamps offer a variety of microprocessor controlled lighting effects that will instantly transform your pool or spa into a color-rich paradise.

This owner's manual contains important information on installing and using your new Halco ProLED® Color-Changing LED Pool or Spa lamp. Please read it carefully and keep it in a safe place for future reference.

The installation steps in this owner's manual are intended as guidelines. For specific instructions on how to replace a pool and spa lamp, please refer to the original manufacturer's pool light installation manual before proceeding.

WARNING

Permanent damage to the low voltage 12VAC lamp will occur if installed on a 120VAC circuit.

WARNING

Remove warning label from Halco ProLED® Color-Changing lens before installation.

ATTENTION

12V HALCO ProLED® COLOR-CHANGING OWNERS!

A socket voltage range of 12.0 – 14.0 will achieve optimal brightness.

DANGER! RISK OF ELECTRICAL SHOCK OR ELECTROCUTION!

Always disconnect power to the pool light at the circuit breaker panel before attempting to service the lamp. Failure to do so could result in serious injury or death due to electrical shock. Refer to the original manufacturer's pool light installation manual before proceeding. As with any electrical device, installation and service should always be performed by a qualified individual. This device is not intended for use in anything other than in-ground pools and spas.

RATED LAMP LIFE

The illumination generated by Halco ProLED® Color-Changing and Spa lamps are based on Light Emitting Diode (LED) technology. The average expected lamp life is rated up to 50,000 elapsed time hours under normal operating conditions. [Pool Water Temperature: 33°F to 97°F (1°C to 36°C)].

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SAFETY PRECAUTIONS

- Do not open, service or tamper with any internal component of the Halco ProLED® Color-Changing LED Pool or Spa lamp. Doing so will void the warranty. Follow each instruction in this owner's manual and pay careful attention to all warnings.
- Do not directly expose or immerse the Halco ProLED® Color-Changing LED Pool or Spa lamp in water without containing it in a proper, watertight, NRTL (nationally recognized testing laboratory) approved pool light housing and niche assembly.
- Keep the pool light housing dry.
- Handle the Halco ProLED® Color-Changing LED Pool or Spa lamp with care. Be careful not to drop the unit, or permanent damage can occur, which would void the warranty.

POOL & SPA LIGHT HOUSING COMPATIBILITY

LLCP-120, LLCP-12, LLCS-120, LLCS-12

Halco ProLED® Color Changing LED Pool and Spa lamps must be installed in a compatible NRTL pool light housing. Compatible NRTL light housings include:

Pool Light Housings: Hayward® Astrolite™ SP058 Series, Pentair® Amerlite 784 Series, Swimquip 05086 Series, J&J Electronics TPL-P Series

Spa Light Housings: Hayward® Astrolite II SP059 Series, Pentair® SpaBrite™ Series

Automation Systems. Halco ProLED® Color-Changing lamp integrates with most pool automation systems*

* Operates effectively with Jandy® and Pentair® automation systems. Systems need to be programmable to operate Pentair Intellibrite® 5G LED Color.

IMPORTANT NOTE

READ THIS BEFORE ATTEMPTING INSTALLATION.

Your Halco ProLED® Color-Changing lamp is not an ordinary light bulb. It is a valuable electronic device that is not designed to come in direct contact with water. An improper installation that results in water leakage into the light housing can permanently damage the Halco ProLED® Color-Changing lamp. Please read these installation steps and the original manufacturer's light installation manual carefully before proceeding.

Halco ProLED® Color-Changing lamps are recommended for installation by a qualified pool or spa professional. Halco ProLED® Color-Changing lamps cannot be used with dimming systems. Doing so will void the warranty.

STEP 1

Remove light housing from niche

Make sure power to the light is turned off at the circuit breaker. Carefully remove the existing light housing from the niche assembly and place it on the pool deck. There should be enough power cord to do this easily. If there is not enough power cord to allow the light housing to reach the pool deck surface, call your local pool service company.

DANGER! RISK OF ELECTRICAL SHOCK OR ELECTROCUTION!

Always disconnect power to the pool or spa light at the circuit breaker panel before attempting to service the light. Failure to do so could result in serious injury or death due

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to electrical shock. Refer to the original manufacturer's pool or spa installation manual before proceeding. As with any electrical device, installation and service should always be performed by a qualified individual.

Verify that your Halco ProLED® Color-Changing lamp voltage rating (120VAC or 12VAC) matches your electrical system's voltage requirements before proceeding with installation.

STEP 2

Remove old lamp

Access the old lamp according to the original manufacturer's light installation manual. Remove the screws and/or loosen the clamp that holds the face plate and lens in place. Carefully remove the lens from the light housing. Take care not to damage the surface of the light housing body that makes contact with the silicon gasket.

STEP 3

Inspect your light housing for signs of wear

Inspect the rubber grommet where the power cord enters the light for excessive deterioration. Inspect the light housing, the tensioning clamp, and face ring for warping, dents and excessive rust. Do not install Halco ProLED® Color-Changing lamp into a light housing that appears to be damaged from prolonged exposure to pool water or mishandling.

STEP 4

Dry the light housing and lens

Make sure the inside of the light housing and glass lens are completely dry by wiping them down with a clean rag.

STEP 5

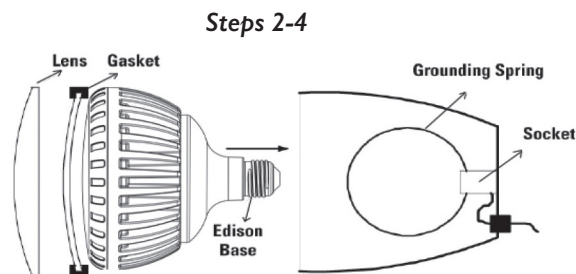
Install Halco ProLED® Color-Changing lamp

Remove the old lamp and discard. Carefully screw the Halco ProLED® Color-Changing lamp into the socket.

STEP 6

Reassemble the light housing

Proceed by cleaning any gasket residue from the light housing body. A clean surface is necessary for the new gasket to seat properly and prevent leakage. Install a new Guardian gasket onto the glass lens. Failure to install a new lens gasket could result in water leakage which can permanently damage the Halco ProLED® Color-Changing lamp and cause serious injury or death due



⚠ WARNING

ALWAYS USE A NEW GUARDIAN LENS GASKET WHENEVER REASSEMBLING YOUR LIGHT HOUSING.

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to electrical shock. Set the lens and faceplate in the light housing and re-assemble. Tighten the screws or clamp slightly, allowing the gasket to seal evenly.

STEP 7

Submerge assembled light into the water

Once the screws or clamp are tight, submerge the assembled light housing in the water and visually check that air bubbles are not escaping from the gasket area. Should bubbles appear, immediately remove the light housing from the water and reset the gasket and lens. Once you are satisfied that there are no air leaks, complete the installation by wrapping the cord around the light housing and re-attaching the light housing to the niche assembly.

STEP 8

Check for air bubbles when light is turned ON

Reconnect power to the light by resetting the circuit breaker to the "ON" position. Go back to the light location and check for air bubbles rising to the surface from the light housing for at least 10 minutes. It is important that the lamp is turned on during this time. If you do not see air bubbles rising to the surface at any time during the 10 minute inspection process, the housing is holding its water tight seal and the installation is complete.

You are now ready to enjoy your new Halco ProLED® Color-Changing LED lamp.

If you do see air bubbles rising to the surface at any time during the inspection process, immediately remove the Halco ProLED® Color-Changing lamp from the housing and reset the gasket and lens. Make sure that the Halco ProLED® Color-Changing lamp and light housing are completely dry before reassembling.

If the light housing continually leaks water after 2 or more attempts at installation, replacement of the light housing may be necessary.

For LLCP-120 and LLCP-12 Halco ProLED® Color-Changing LED Pool Lamps and LLCS-120 and LLCS-12 Halco ProLED® Color-Changing LED Spa Lamps

CHOOSING COLORS AND LIGHT SHOWS

Halco ProLED® Color-Changing LED Pool and Spa lamps are pre-programmed and synchronous with each other while offering a wide array of lighting effects and options. There are seven different light shows (1-7 on light show list) and five solid colors (8-12 on light show list) to choose from, as well as a Color Lock (13 on light show list) and Return (14 on light show list) feature which allows you to 'lock' the light on a color shown during an active light show and can return to the last locked color effect.

Lamp light shows are selectable by turning the existing pool light switch off and on, known as power cycling.

LIGHT SHOWS

Your Halco ProLED® Color-Changing LED lamp has seven light shows from which you can choose. (See full description of light shows on sections 8 and 9 on other side).

1. Tranquil
2. Strobe
3. Deep Space
4. Emerald Seas
5. Stars and Stripes
6. Sunset
7. Galaxy

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SOLID COLORS

Your Halco ProLED® Color-Changing LED lamp has five static colors available for you to experience.

Available solid colors are:

- 8. Blue
- 9. Green
- 10. Red
- 11. Lilac White
- 12. Pink

COLOR LOCK AND RETURN

Your Halco ProLED® Color-Changing LED light fixture can stop a light show and “color lock” on a color shown during an active light show and can also return to the last locked color effect.

- 13. ColorLock
- 14. Return

HOW TO CHANGE LIGHT SHOWS

Changing light shows: Power cycle pool light switch off/on as many times needed to match the desired light show's specified number. Example: If you are on (10) Red and want to display (3) Deep Space light show, power cycle three (3) times to select and activate Deep Space.

Select Solid Colors:

Similar to selecting an light show (as described above), power cycle pool light switch off/on as many times needed to match the desired solid color's specified number. Example: if you are on (6) Sunset and want to display (11) Lilac White, power cycle eleven (11) times to select and display Lilac White.

NOTE: During power cycle process, before the selected light show or color is displayed, there will temporarily be no illumination. This is normal during the switching process.

Color Lock feature:

You can select a non-standard solid color at any time by activating the “color lock” feature. The color lock feature allows you to stop at any color shown during an active light show. To “lock” onto a solid color, power cycle the pool light switch off/on thirteen (13) times when the desired color is displayed during the active light show.

Return feature:

You can return to the last color locked color effect while in a light show mode or fixed solid color by activating the “return” feature. To return to the last color locked color effect, power cycle fourteen (14) times, and after approximately five seconds the last saved color lock effect will be displayed.

Memory Mode:

When your Halco ProLED® Color-Changing lamp is turned off for longer than 10 seconds, the last active light show or solid color will be stored into memory. The next time the power is turned on, the fixture will flash white for 3 seconds before displaying the saved memory light show or solid color.

NOTE: Your Halco ProLED® Color-Changing lamps are “synchronous”, meaning that multiple Halco ProLED® Color-Changing lamps on the same light mode will sync together so they all display the same light show or solid color at the same time. However, all of the lamps must be on the same electrical circuit for this feature to be operational.

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HalcoProLED® Color-Changing lamps may not synchronize with any other brand of pool/spa manufactures lamps or fixtures. Halco ProLED® Color-Changing lamps are able to synchronize with Halco ProLED® Color-Changing Series light fixtures. Please consult a qualified electrician to determine your specific pool and spa circuit configuration.

DESCRIPTION OF LIGHT SHOWS AND SOLID COLORS

1. TRANQUIL (FACTORY DEFAULT LIGHT SHOW):

Show: Rapid cross-fades between white, magenta, blue and green.

Cycle: 16 second color sequence cycle through with rapid cross-fade between colors. Fixture will stay on each solid color for 4 seconds before moving to the next.

2. STROBE:

Show: Quick and random flashes through all five solid colors.

Cycle: 1/2 second color sequence cycle with fast change between colors

3. DEEP SPACE:

Show: Slow cross-fade through all five solid colors.

Cycle: Two minute color sequence cycle with slow cross-fade between colors. Fixture will hold on each solid color for 8 seconds before moving to the next.

4. EMERALD SEAS:

Show: Slow cross-fade between green and blue.

Cycle: 24 second color sequence cycle with slow cross-fade between solid colors.

5. STARS AND STRIPES:

Show: Cross-fade through red, white and blue only.

Cycle: 11 second cycle with quick cross-fade between colors. Light will stay on each solid color for 3 seconds before moving to the next.

6. SUNSET:

Show: Cross-fade through orange, red and magenta only.

Cycle: 24 second color sequence cycle with cross-fade between solid colors.

7. GALAXY:

Show: Cross-fade transition through all five solid colors.

Cycle: 2 second color sequence cycle with fast change between colors.

(TIP: The Deep Space show is the best show to use in order to practice using the Color Lock feature of the light.)

ATTENTION

As part of your normal maintenance program, Halco Lighting Technologies recommends that all light fixtures be inspected and replaced as necessary to ensure proper operation of your Halco ProLED® Color-Changing lamps.

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