

ABBA

LIGHTING USA

12V Landscape Light Specialist



PL54

5 WIRE

INSTALLATION GUIDE

www.ABBALightingUSA.com

RATED VOLTAGE 12V AC/DC

Congratulations on your purchase of this high-quality product! We want to ensure that you have the best possible experience with it, so we kindly ask that you take a moment to carefully read and follow all instructions before assembly, installation, and use. By doing so, you'll not only guarantee correct function and safety, but also optimize the full potential of this exceptional product. Thank you for choosing us as your trusted provider of top-notch products - we truly appreciate your business!

IMPORTANT SAFETY INSTRUCTIONS

LIGHTEN LAMP IS **HOT!**

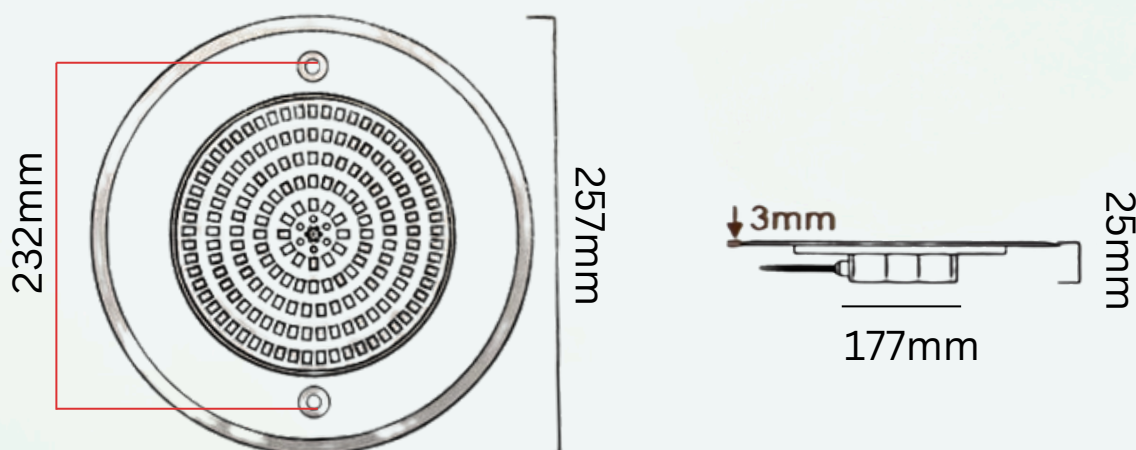
WARNING: TO REDUCE THE RISK OF FIRE OR INJURY TO PERSONS:

- ✔ Installation and maintenance of this product must be performed only by a licensed certified electrician or a qualified service technician.
- ✔ This product must be installed in accordance with the requirements set forth by your government standards or local authorities.
- ✔ This light is designed for use only when fully submerged in water.
- ✔ Never handle this product with wet hands or feet.
- ✔ Never operate this light for more than 30 seconds unless it is completely submerged in water.
- ✔ All lights must be disconnected from the main electricity supply before performing any maintenance operations.
- ✔ The light installation depth must range between 1 ~ 10 meters.
- ✔ The maximum water temperature range for the light is -20°C to 35°C.

WARRANTY

The manufacturer guarantees this LED underwater light against defects in materials and workmanship for a period of five years from the date of purchase. This guarantee does not cover damage resulting from misuse, accidental damage, improper handling, or installation. It specifically excludes liability for direct, incidental, or consequential damages, including water entering the housing.

PARAMETER



INSTALLATION

1. PREPARATION FOR INSTALLATION

- A. Please ensure that the pool and its electrical system are in full compliance with the current National Electrical Code (NEC) and all relevant local ordinances.
- B. This light is specifically designed for installation in new pools, as well as for replacing existing surface-mounted lights or niche fixtures in current pools.
- C. Please use only high-quality stainless steel screws or the screws provided with the light.

D. The light must be used or operated only while fully submerged underwater. Never switch on the light if it is not submerged.

2. INSTALLATION GUIDELINES

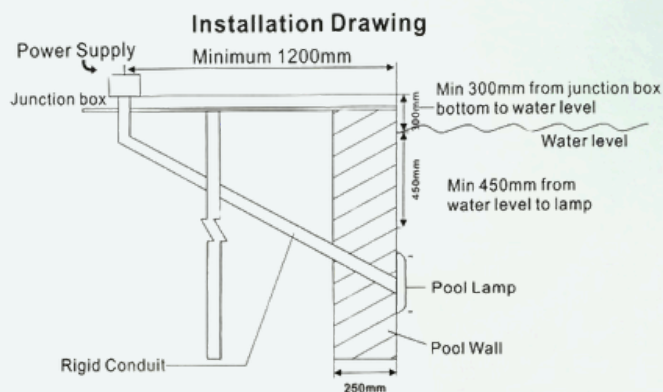
A. Ensure that the bracket is installed on a vertical wall of the pool.

B. Ensure that the top of the light is positioned at least 450mm below the normal water surface.





C. Reserve at least 150mm of backup wire coiled at the back of the light to facilitate convenient replacement.

D. The junction box or the 12V low-voltage transformer should be positioned at least 300mm above the water surface, at least 200mm above the ground, and at least 1200mm away from the edge of the pool.

E. To achieve synchronization, ensure that all lights are installed correctly according to the model and specifications of the light being replaced.



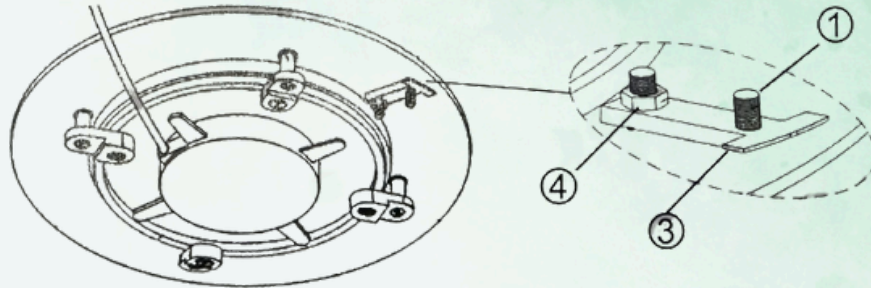
3. INSTALLATION

No.	Name	Image	Qty
①	Metric screws		2
②	US screws		1
③	Buckle		1
④	Non-slip nut		1

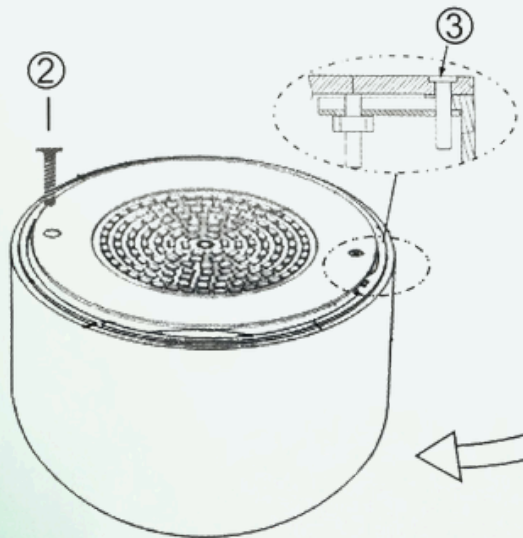
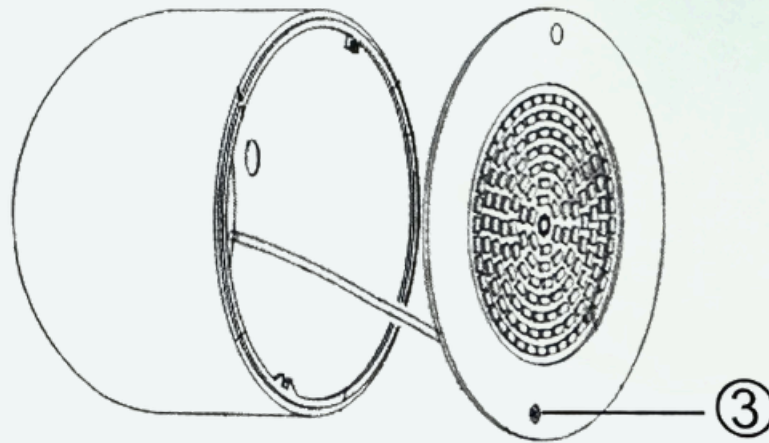
Note: Use US screws for Pentair and Hayward niches. For other niches, use metric screws. The niche is not included with this product.



LED LIGHT REPLACEMENT FOR PENTAIR & HAYWARD

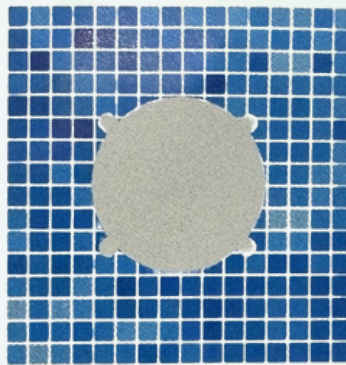
1. INSTALL THE SCREWS



2. INSTALL THE POOL LAMP TO THE NICHE

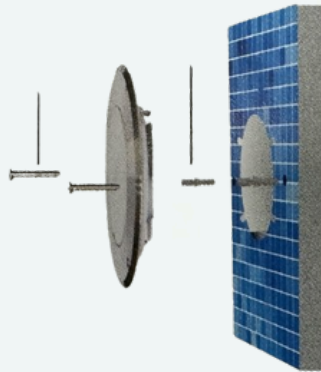


No.	Name	Image	Qty
⑤	Rubber stopper		2
⑥	Self-propelled screw		2



1. Drill a hole

Install the screws



Finished



WIRING DIAGRAM

DC TRANSFORMER IS REQUIRED FOR THE OPERATION OF THIS POOL LIGHT

RGBW CONTROLLER AND REMOTE

Please connect the wires as follows:

Black to V+, Red to R, Green to G, Blue to B, White to W

For the transformer side, connect V+ to the positive terminal and V- to the negative terminal.



COMPATIBLE WITH



AND



Please download the Smart Tuya app to your phone to control the light and access all available features.

For detailed installation instructions, please refer to our YOUTUBE CHANNEL ABBA LIGHTING USA which you can follow along while watching.

MAINTENANCE AND REPLACEMENT

- A. This light requires no maintenance and is designed for single use. Replacement is necessary if it becomes defective, as repair is not possible.
- B. Before servicing, always disconnect the power at the circuit breaker and ensure there is no power supplied to the light.
- C. To replace the light, detach it from the bracket and ensure the new light matches the same switch.

CAUTION!

- The transformer's output must be 12V AC. Avoid using electronic transformers, as they may damage the light. Use industrial frequency transformers or square transformers instead.
- The person responsible for installation should possess the necessary qualifications for this type of work.
- Avoid direct contact with electrical currents.
- Adhere to current standards for accident prevention
- Compliance with IEC 364-7-702 standards is mandatory for wiring in buildings, special wiring, and swimming pools.
- Replace the lamp only when disconnected from the electrical power system.
- Do not handle electrical components with wet feet.