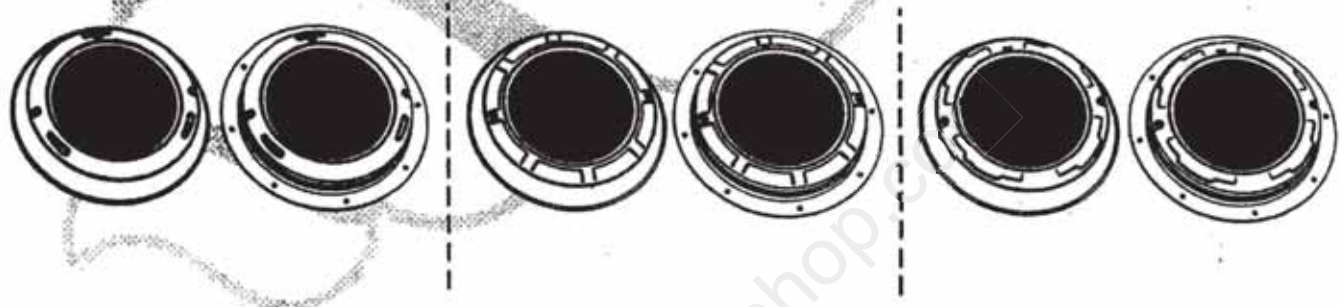


# WL-MAG / MBG / MCG SERIES UNDERWATER LIGHTS OPERATING INSTRUCTION

WL-MAG-LED072TB/TC	WL-MAG-LED144TB/TC	WL-MAG-LED252TB/TC	WL-MAG-LED324TB/TC
WL-MBG-LED072TB/TC	WL-MBG-LED144TB/TC	WL-MBG-LED252TB/TC	WL-MBG-LED324TB/TC
WL-MCG-LED072TB/TC	WL-MCG-LED144TB/TC	WL-MCG-LED252TB/TC	WL-MCG-LED324TB/TC



**III** IP68 0.6m  
ISO9001:2008 CE

**▲ CAUTION**

**RISK OF ELECTRICAL SHOCK OR ELECTROCUTION**

This underwater light must be installed by a licensed or certified electrician in accordance with the national Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installer, or other due to electrical shocks, and may also cause damage to property. Read and follow the specific instructions below.

**▲ WARNING**

Before installing this underwater light, read and follow all warning notices and instructions accompanying with this light. Otherwise it will result in severe injury, death, or property damage.

**▲ ATTENTION**

**IMPORTANT NOTICE**

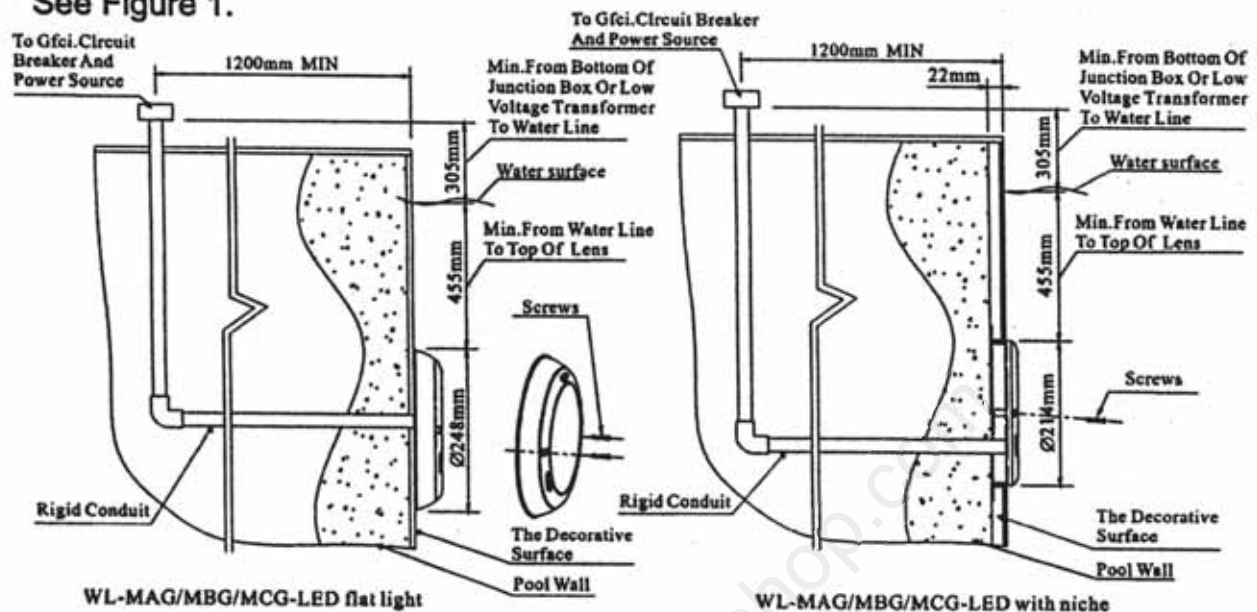
This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

(Read and Follow all the instructions)

# I Installing light fixture during new pool construction

A. The electrician must complete preparatory steps before light fixture is installed.

See Figure 1.



<Figure 1>

1. Ensure that the pool meets the requirements of the current National Electrical Code and all local codes and ordinances. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the underwater light is installed. Some of the requirements of the National Electrical code which the pool's electrical system must meet are as follows.
  - a. The lighting circuit must have a ground fault circuit interrupter (GFCI), and must have an appropriately rated circuit breaker, and its ground resistance should no more than  $0.1 \Omega$ .
  - b. The junction box (or, for 12 volt models, the low voltage transformer) must be located at least 30.5cm above water level and at least 120cm from the edge of the pool; see figure 1.
  - c. The niche must be properly installed so that the top edge of the underwater light's lens is at least 45.5cm below the pool water level. See Figure 1.

### ▲ Note

The pool or spa electrical system can be verified with a Pool and Spa Electrical Qualification Test kit. The electrical system inspection using this kit must be performed by trained and certified personnel.

2. To be certain that pool's electrical system can be verified with a Pool and Spa Electrical Qualification Test Kit, the electrician should also consult the local building department.
- B. The following are steps to perform after the electrical system requirements are met.
1. Feed cord through conduit to Junction Box, leaving at least 120cm of cord the light fixture to coil around the light; See Figure 1. This 120cm of cord around the light allows the light to be serviced after the pool is filled with water.
  2. Cut the redundant cord at the Junction Box, to make connections easier.
  3. Connect all three wires to the corresponding circuit wires in the Junction Box, and secure the

Junction Box cover in place.

**▲ Warning**

Never operate this light for more than 10 seconds unless it is totally submerged in water. Without total submersion, the light assembly will get extremely hot, which may result in serious burns or in breakage of the lamp or lens. This may result in serious injury to pool users, installer, or bystanders, or in damage to property.

4. Replace the light assembly into niche and tighten special pilot screw.

**▲ Warning**

We advise to only use the stainless screws accompanying the light, if you don't use the supplied screws, it may result in electrical shock, which may cause serious damages to swimmers, installer or others.

5. Fill the pool until the underwater light is completely submerged in water before operating the light for more than 10 seconds. Turn on main switch or circuit breaker, as well as the switch which operates the underwater light itself, to check for proper operation.

## II. Repair points for attention

**▲ Danger**

Always disconnect power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to installer, servicemen, pool users, or others due to electrical shock.

1. Turn off the main switch or circuit breaker, as well as the switch.
2. A new lamp.

**▲ Warning**

Replace lamp with a similar type and wattage. Failure to do so will damage the light assembly and may cause an electrical shock resulting in serious injury to pool users, installers or others, and at the same time it may damage the equipment.

3. To remove light assembly, remove the special pilot screw at top of face ring, remove light assembly from niche, and place assembly on deck.
4. Replace the lamp with base.
5. Place the face ring on the light body firmly, turn the seal screw to ensure a correct seal.
6. Put the light assembly into the niche and tighten the special pilot screw.

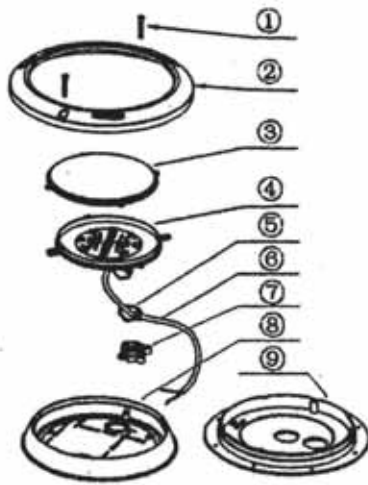
**▲ Warning**

Use only the special screw provided with this underwater light. This screw mounts and electrically grounds the housing securely to the mounting ring and wet niche. Failure to use the screw provided could create an electrical hazard which could result in death or injury to pool users, installers or others due to electrical shock.

7. Fill pool until the underwater light is completely submerged in water before operating the light for more than 10 seconds. Turn on main switch or circuit breakers, as well as the switch which specifically operates the underwater light, to check for proper operation.

**▲ Warning**

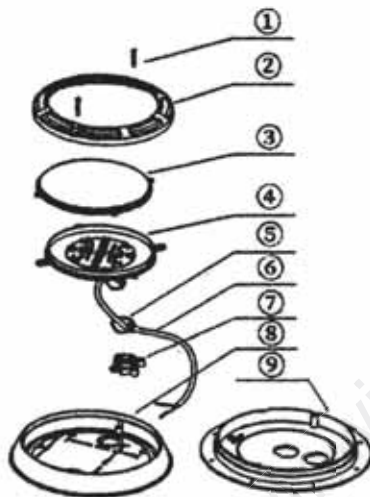
8. When using, the creepage-protect-switch must be tested at least once per month, which can ensure the switch work normally.
9. When using, prohibit anybody from stepping on the light, for fear that the distortion of the light makes the lens break up, which may cause accidental injury and loss.



WL-MAG-LED < Figure 2 >

Item	Description
①	Screws
②	Face ring
③	Lens
④	LED lamp with base
⑤	Seal
⑥	Cable
⑦	Seal Cap
⑧	Bracket
⑨	Niche

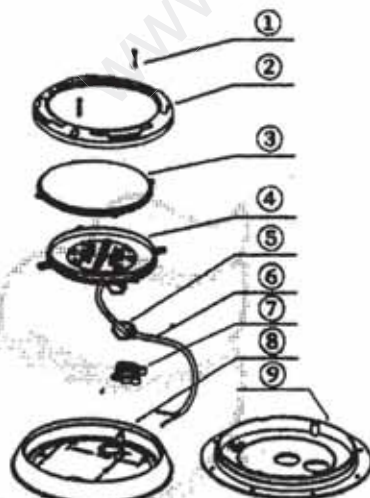
< chart 1 >



WL-MBG-LED < Figure 2 >

Item	Description
①	Screws
②	Face ring
③	Lens
④	LED lamp with base
⑤	Seal
⑥	Cable
⑦	Seal Cap
⑧	Bracket
⑨	Niche

< chart 1 >



WL-MCG-LED < Figure 2 >

Item	Description
①	Screws
②	Face ring
③	Lens
④	LED lamp with base
⑤	Seal
⑥	Cable
⑦	Seal Cap
⑧	Bracket
⑨	Niche

< chart 1 >

