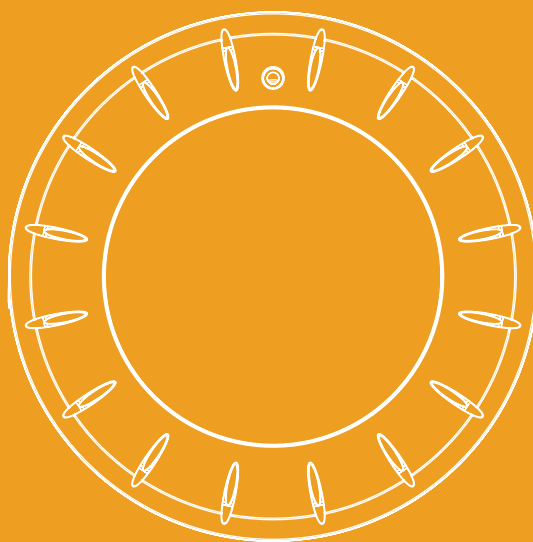




E-Lumen X SERIES

QUARTZ & QUARTZ(EM) Installation and Operation manual



USER MANUAL



RoHS
COMPLIANT
2002/95/EC



SAA

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1. IMPORTANT SAFETY AND INSTALLATION INSTRUCTIONS

Please read the manual carefully before commencing installation. This manual contains important information about the correct installation and operation of QUARTZ lights.

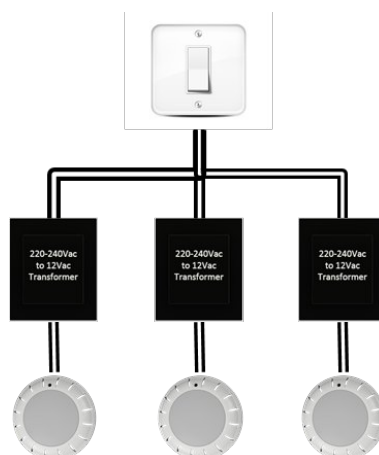
1. Only qualified electrician is allowed to carry out the installation of this product.
2. Avoid direct contact with electrical power.
3. Respect all regulations in effect for preventing accidents.
4. All units are required to be disconnected from the main electricity before any operation of maintenance.
5. For safe and proper installation, ensure that those parts supplied with the produce are used.
6. Never handle with wet hands and feet.
7. This unit is design for use only when fully submerged in fresh water, connecting with a safety transformer
8. This product should be installed according to your local electrical installation ordinances and regulations.
9. Due to the corrosive nature of unbalanced pool chemicals, please keep you pool water is acid-base balanced prior to installation, and ensure the longevity of these lights.
10. If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.
11. Check that there is enough cable behind light to allow for servicing above water, preferably at ground-level pool-side.
12. Never operate this Underwater Light for more than 1 minute unless it is totally submerged in water.
13. You lights require cleaning at any time, be sure to a mild detergent or other ways that don't damage to the lights.
14. Be sure power is off before installing or removing LED plate. Allow LED plate to cool before replacing.
15. Maximum Depth for Light installation at 1.2 meter.
16. Maximum Water Temperature Range for light operation 0 - 25°C

2. PRODUCT INTRODUCTION

The wall mount retrofit swimming pool underwater light is designed to latest LED lighting technology. There are two 30 second self-determine operating mode which is fully compatible to 50Hz or 60Hz input voltage frequency. When the lights use the same power source, they will be self-synchronize during color change mode without color alignmentreset. The light include RGB color LED, individual warm and cool white, 5 different LED color in total.

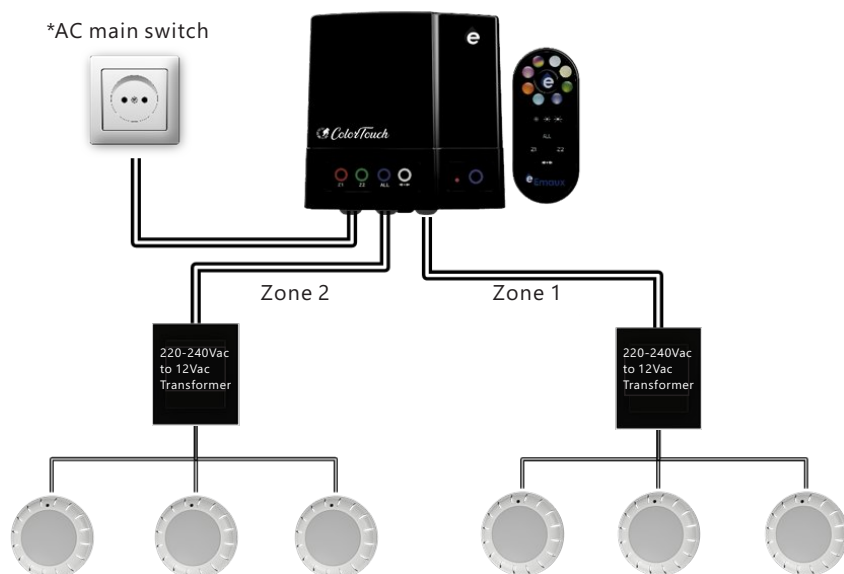
1) BASIC MODE

When the light is connected to the transformer directly, to on/off the main switch to controls the color changes



2) COLORTOUCH MODE

It need to cooperate with Color Touch Control Box to pick up color directly and adjust brightness. Without this control box, it will be self-determine to basic mode when 12Vac power is connected.



The two mode can't be applied at the same time.

3. LIGHT SPECIFICATION

3.1 ELECTRICAL

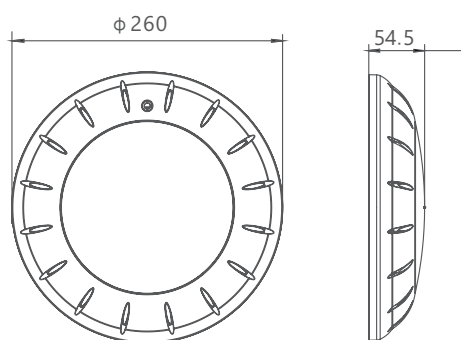
Operation Voltage Range: AC12-32V

LED Color: RGB + Warm White (3000K) and Cool White (6500K)

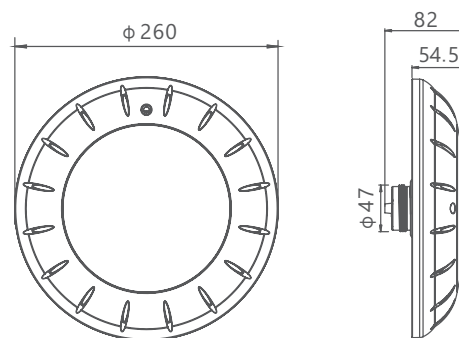
Operation Frequency: 50/60Hz

Max Power Rating: 25W

3.2 DIMENSIONS:



QUARTZ



QUARTZ(EM)

3.3 COLOR MODE

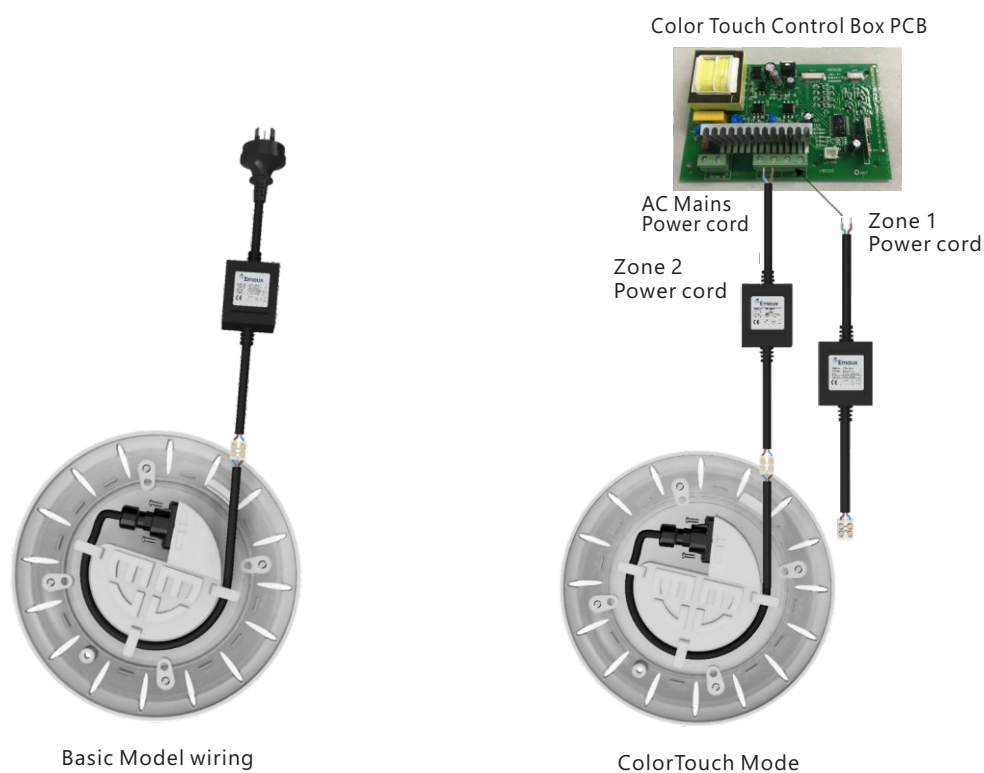
NO.	Trouble	Possible Solution
1	White	Cool White
2	Green	Single Green
3	Blue	Single Blue
4	Green + Blue	cyan
5	Red + Green + Blue	Pink
6	Red + Blue	purple
7	Mode A: Blue + Gradual Red	Blue>Red
8	Mode B: Green + Gradual Red	Green>Red
9	Mode C: Blue + Gradual Green	Blue>Green
10	Mode D: RGB Color Sequence	$G > B > B + G > G + R > R + B > R + G + B(P) > W > R$
11	Mode E: RGB Color Sequence	$R > G > B > B + G > G + R > R + G + B(P) > W$
12	Mode F: Auto Color Change	Slowly Change
13	Mode G: RGB Color Sequence	$R > R + G > G > G + B > B > R + G + B(P)$
14	Mode H: Rapid Auto Color Change	Rapid Change
15	Warm	Warm White

4. INSTALLATION

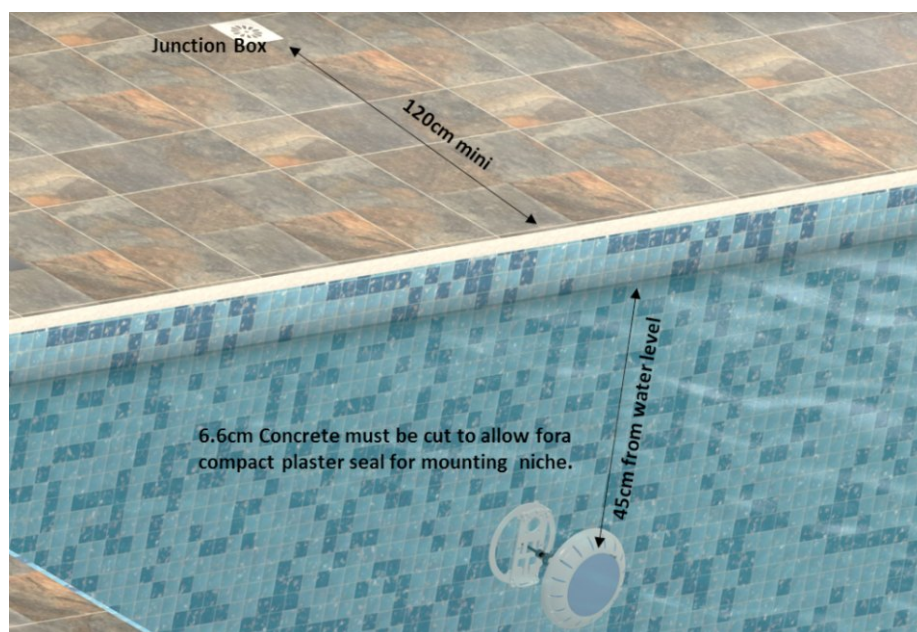
It is recommended to install a light every 20m², the approximate exposure area of each unit.

1. The lights should be installed in the direction that they will not shine directly into the house.
2. For training or competition pools, the lights must be installed on the sides in order to prevent swimmers from seeing any glare.
3. Nothing should be placed on the poolside directly above the lights for ease of future maintenance.
4. The cables connecting the lights and the transformers must be at least 6mm² and the distance between them must not exceed 30m; other wise the lights will not function properly.
5. Terminal blocks must meet the IEC60988-2-1 standard having the rated connecting capacity of 4,0mm² use of screw-type terminal at least 25A current rating, mounted on junction boxes inside.

4.1 WIRING DIAGRAM

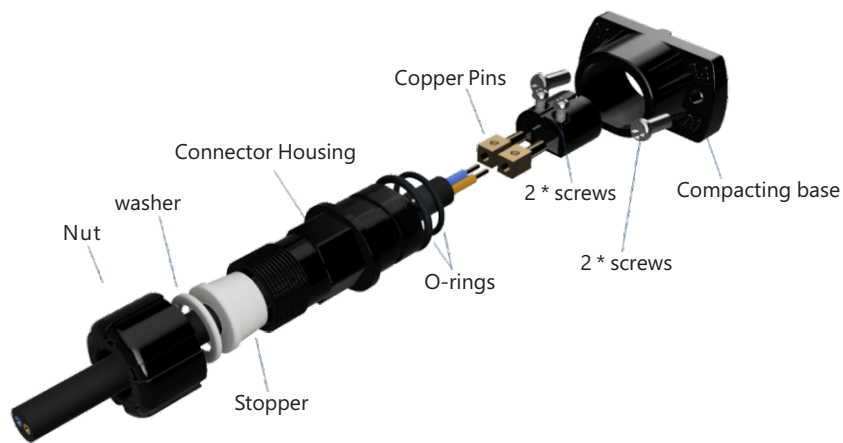


4.2 TYPICAL INSTALLATION LOCATION



4.3 RETROFIT CONNECTOR CABLE ASSEMBLE FOR QUARTZ LIGHT

Follow the individual part arrange to assemble the connector if necessary. Improper assemble will cause water leakage insider the lamp housing.



Screw the two screws on the compact base to the lamp housing by screw driver and wrap the exceed cable around the base on the lamp housing, to make sure there is enough cable length to take out the light out of water for future maintenance.

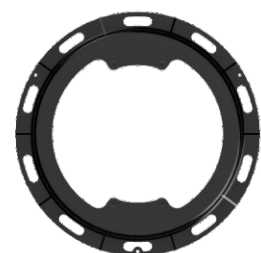


5. QUARTZ LIGHT INSTALLATION

5.1 CONCRETE POOL



Mounting adaptor

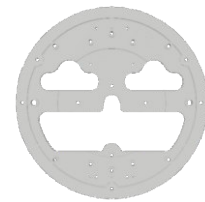


Mounting Niche

1. The light must only be installed on a flat or concave surface.
2. Pre-Install or install the mounting ring on the surface of the pool by tighten it with 4 screws.
3. Lead the 12Vac power cord outside the wall. Assemble the waterproof connector and plug into the lamp power socket as per waterproof connector assemble drawing.
4. Screw the mounting adaptor on the top of mounting ring and place the lamp over it.
5. Screw the lamp with M5x25 screw provided.

5.2 RETROFIT REPLACEMENT

Reverse the remote and open the battery compartment by pushing the right hand side lock inward. The remote use CR2032 battery that life time is around six months.

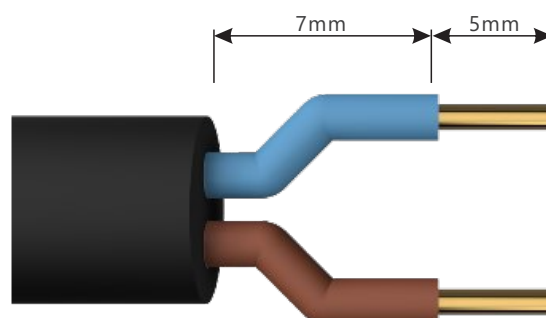


Retrofit plate

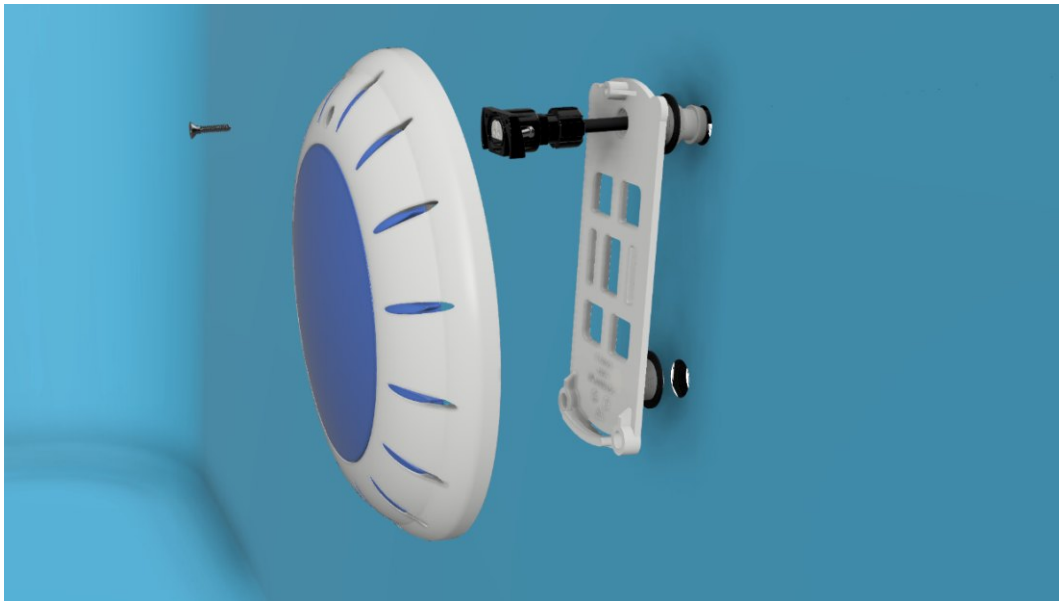


Mounting Adaptor

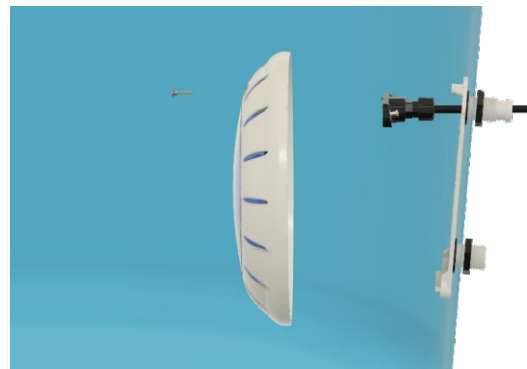
1. Pull out the existing lamp out of the water follow the original lamp instruction.
2. Cut the cable and remove the lamp.
3. Lead the 12Vac power cord outside the wall and reform the cable as figure. Assemble the waterproof connector and plug into the lamp power socket as per waterproof connector assemble drawing.
4. Mount the retrofit plate on the top of existing third parties mounting ring. There are couple of third parties marking on the plate for screwing.
5. Screw the mounting adaptor on the retrofit plate
6. Screw the mounting adaptor on the top of mounting ring and place the lamp over it.
7. Screw the lamp with M5x25 screw provided.



5.3 ELECTRICAL



Vinly and Fiberglass mounting plate



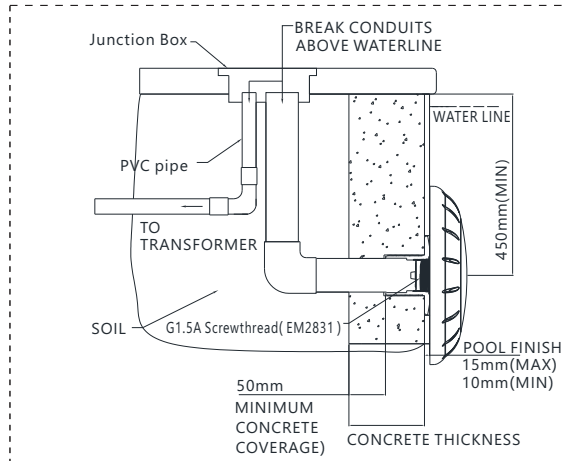
mounting diagram section

1. Make 2 holes on the pool wall according the adaptor mounting plate holes dimension.
2. Place the O-rings between the Mounting Plate and the pool wall and tighten it with the Nut on the other side of the pool wall.
3. Put the cable sequentially through the sealing Nut, the sealing O-ring and the cable hole on the mounting plate; then tighten the Nut.
4. Wrap exceed cables around the lamp base to make sure there is enough cable length to take the lamp out of pool surface for future maintenance. Then, hang the light onto the Mounting Plate and tighten the screw which provided.

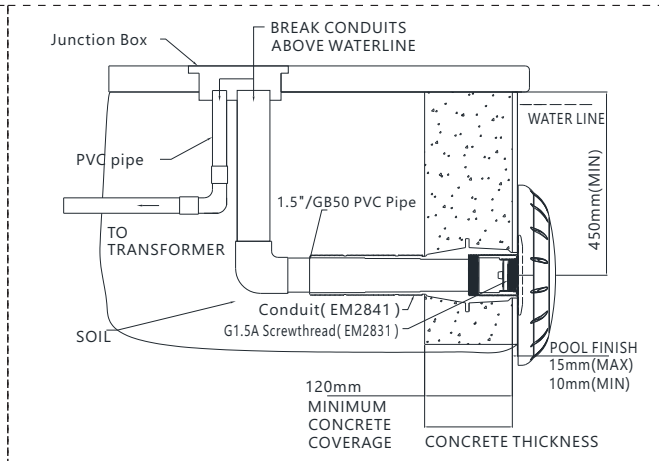
6. QUARTZ(EM) LIGHT INSTALLATION

6.1 QUARTZ(EM) LIGHT

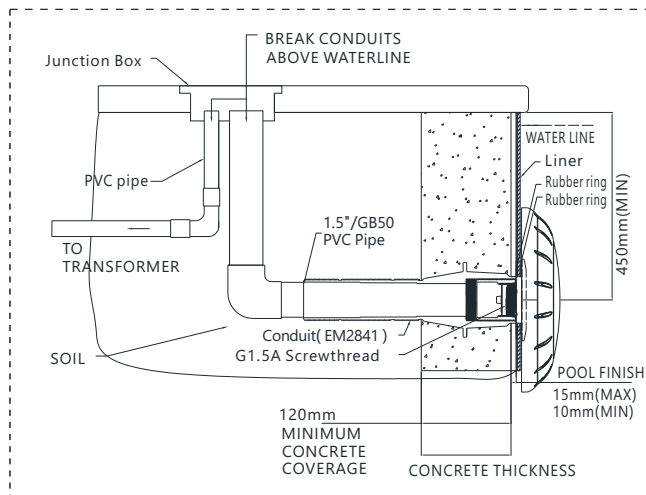
1) QUARTZ (EM)(Concrete Pool)



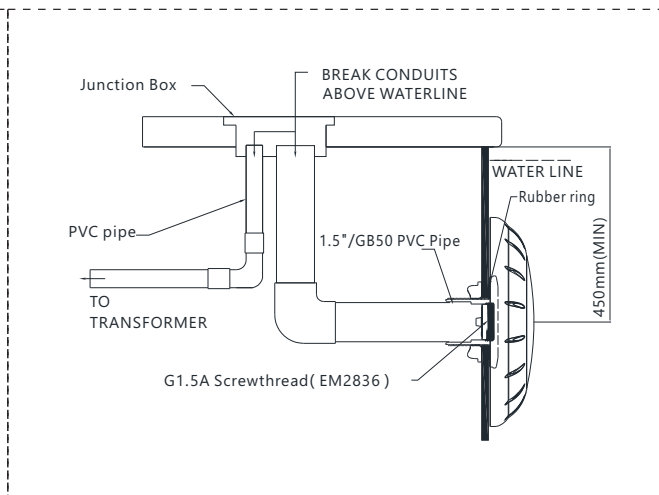
2) QUARTZ (EM)(Concrete Pool with Conduit)



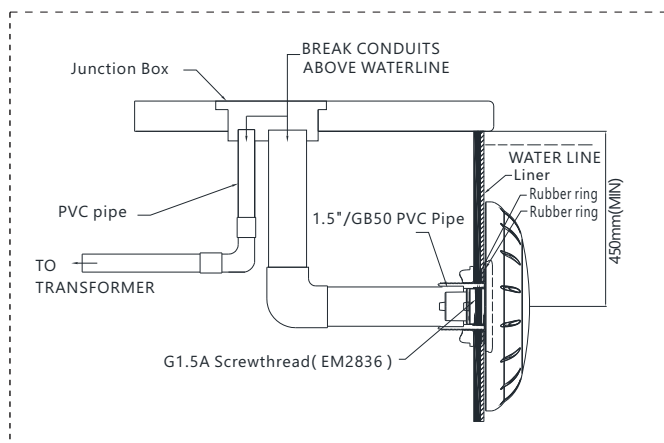
3) QUARTZ (EM)(Concrete Pool+Liner)



4) QUARTZ (EM)(Vinyl Pool/Fiberglass Pool)

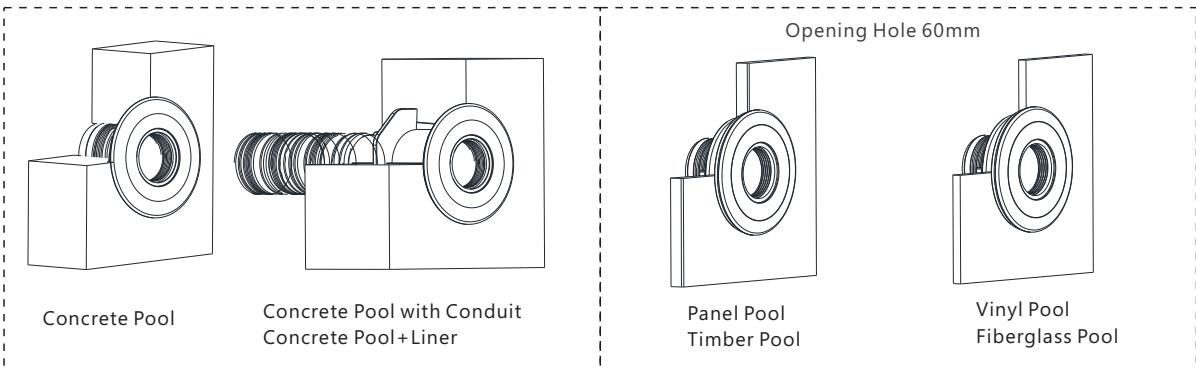


5) QUARTZ (EM)(Panel Pool/Timber Pool)

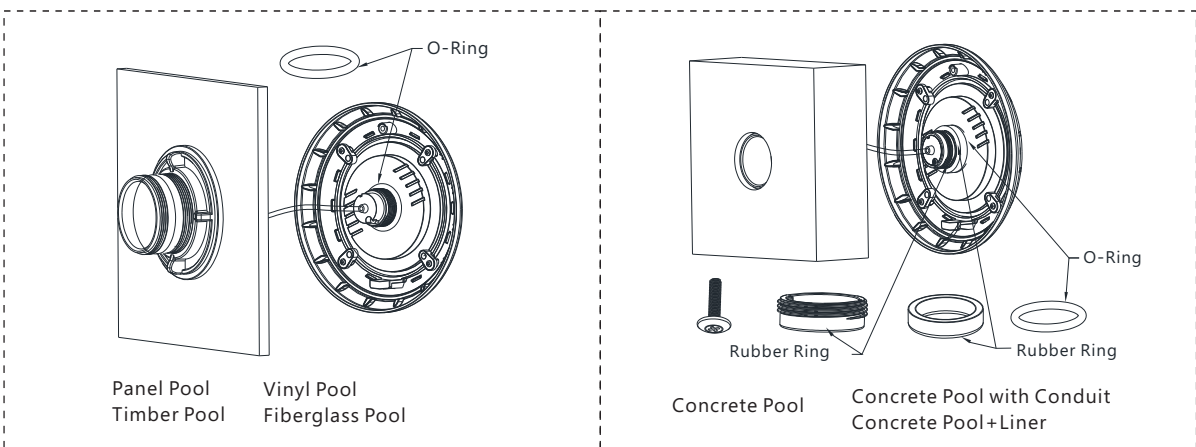


6.2 QUARTZ(EM) Installation Step:

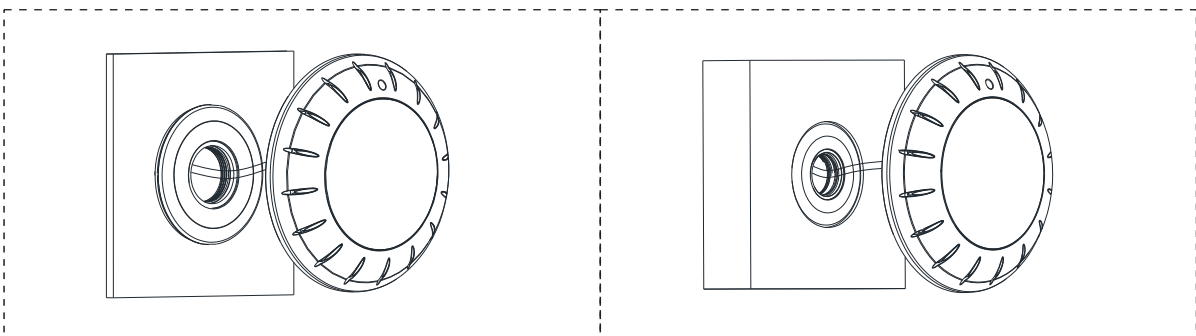
1. Install EM2836/EM2831/EM2841 fitting.



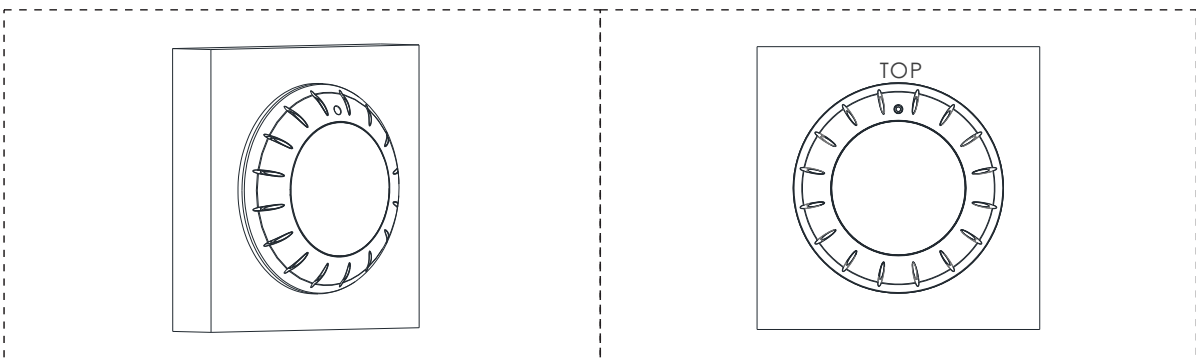
2. Check the O-Ring on screwthread.



3. The cable through the fitting.



4. Screw light, Adjust the tightness by O-Ring, and "Screw hole" upwards.



7. MAINTENANCE AND TROUBLE SHOOTING

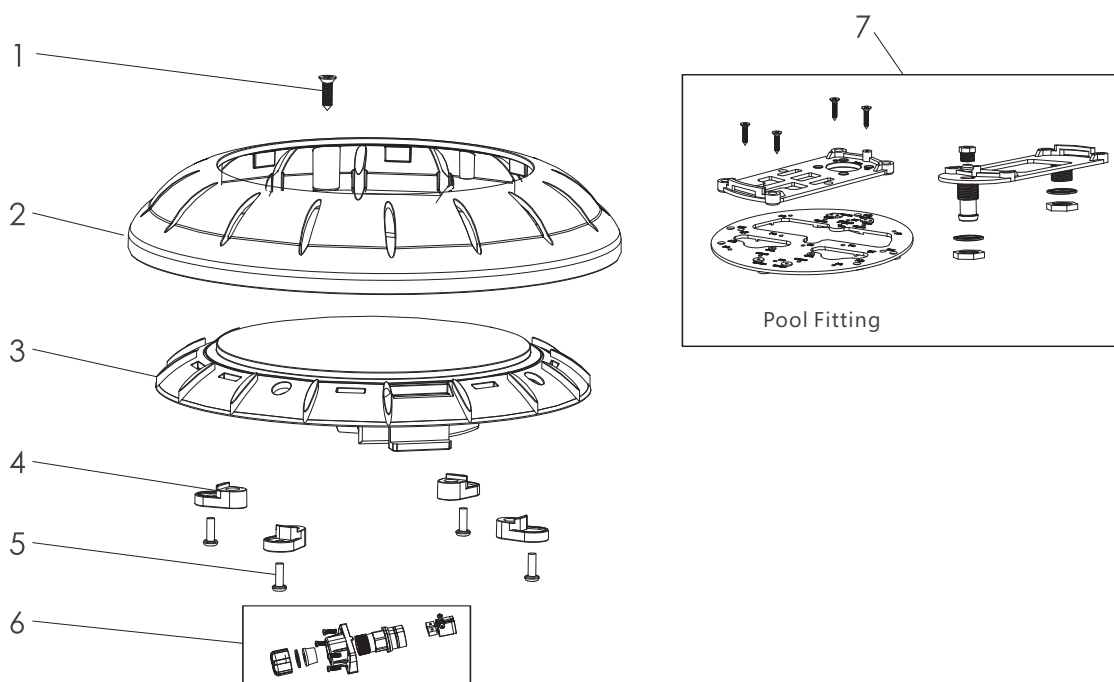
1. Do not leave the lights "on" above water for longer than 1 minute.
2. Do not leave the lights directly under sunlight. Fill the pool with fresh water as soon as possible after the lights are installed.
3. Before switching on the lights, check whether the lights are fully submerged underwater and the circuit boxes are running properly.
4. This unit does not need any kind of maintenance. If it is not working properly, please contact EMAUX authorized dealer where you purchase the unit from.
5. Warranty will be voided if the Emaux Underwater Light was dismantled by unauthorized personnel.

Trouble	Possible Solution
The light is dim	Check voltage of transformer. Check brightness control of remote if color touch control box is connected.
The light is not working	Check mains input power and power cord. Check fuses at switchboard. Replace lamp Contact qualified electrician to test.
After power on, Light up and not lit a few seconds	Check transformer. Contact qualified electrician to test.

8. REPLACEMENT PARTS

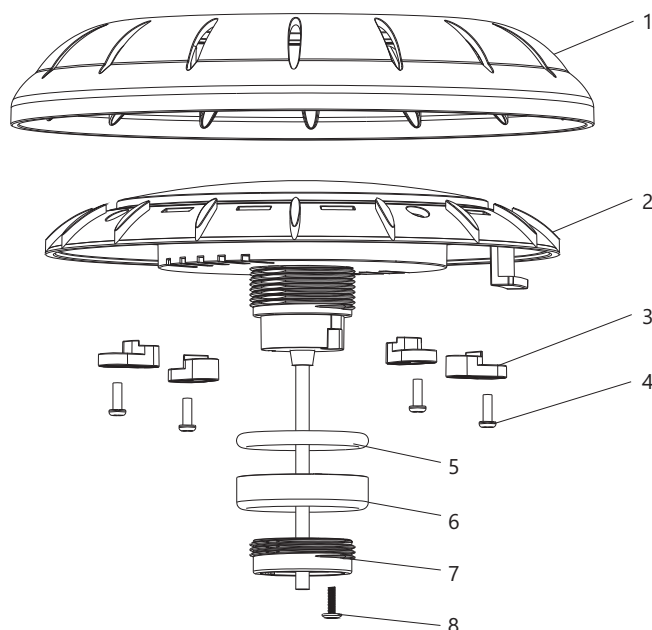
QUARTZ Light:

Item No.	Part No.	Description	Qty
1	03011058	M5 * 25 Flat head self-tapping screw	1
2	440256797	Rim Face Ring white	1
		Rim Face Ring Gray	1
		Rim Face Ring Blue	1
		Rim Face Ring Stainless Steel	1
3	E042601	20 LEDs Panel 25W Color	1
4	440526797	Fasteners	4
5	3011364	M4*12 Roundhead self-tapping screws	4
6	E042602	Retro-fit connector	1
7	E042603	Retro Pool Fitting	1



QUARTZ(EM) Light:

Item No.	Part No.	Description	Qty
1	440256797	White face ring	1
	440256797	Grey face ring	1
	440256797	Blue face ring	1
	440256797	Transparent face ring	1
	440536797	Stainless face ring	1
2	E042605	20 LEDs Panel 25W Color QUARTZ(EM) 2.5M	1
3	440526797	Fastener	4
4	3011364	M4*12 Flat head self-tapping screw	4
5	111040072	O-Ring (vinyl pool/concrete pool)	1
6	111040073	Rubber Mat(concrete pool)	1
7	440650004	Fitting(concrete pool)	1
8	112010112	Screw M3X12(concrete pool)	1



9. TERMS OF THE WARRANTY

As original purchaser of this equipment have purchased from Emaux Water Technology Co Ltd, through Authorized International Distributor or Dealer, warrants its products free from defects in materials and workmanship under normal use during warranty period. The warranty period begins on the day of purchase and extends only to the original purchaser. It is not transferable to anyone who subsequently purchases the product from you. It excludes all expendable parts.

During the warranty period, Emaux authorized reseller will repair or replace defective parts with new parts or, at the option of Emaux, serviceable used parts that are equivalent or superior to new parts in performance.

This Limited Warranty extends only to products purchased from Emaux authorized reseller. This Limited Warranty does not extend to any product that has been damaged or rendered defective (a) as a result of accident, misuse or abuse;

(b) as a result of an act of God;

(c) by operation outside the usage parameters stated herein;

(d) by the use of parts not manufactured or sold by Emaux;

(e) by modification of the product;

(f) as a result of war or terrorist attack; or

(g) as a result of service by anyone other than Emaux authorized reseller or authorized agent.

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY, EMAUX MAKES NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. EMAUX EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED IN THIS LIMITED WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED TO THE TERMS OF THIS EXPRESS LIMITED WARRANTY.

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