

E-Lumen X

Retrofit Underwater Light

INSTRUCTION MANUAL

CONTENTS

WARNING -----	2
PRODUCE DESCRIPTION -----	3
CONTROL -----	4
INSTALLATION NOTES -----	5
INSATALLATION -----	7
MAINTENANCE AND TROUBLE SHOOTING -----	11
REPLACEMENT PARTS -----	12

WARNING

Please read the manual carefully before commencing installation. This manual contains important information about the correct installation and operation of E-Lumen X lights.

— Before

- Only qualified electrician is allowed to carry out the installation of this product.
- Avoid direct contact with electrical power.
- Respect all regulations in effect for preventing accidents.
- All units are required to be disconnected from the main electricity before any operation of maintenance.
- For safe and proper installation, ensure that those parts supplied with the produce are used.
- Never handle with wet hands and feet.
- This unit is design for use only when fully submerged in fresh water, connecting with a safety transformer
- This product should be installed according to your local electrical installation ordinances and regulations.
- Due to the corrosive nature of unbalanced pool chemicals, please keep your pool water is acid-base balanced prior to installation, and ensure the longevity of these lights.
- 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.

— Use

- Check that there is enough cable behind light to allow for servicing above water, preferably at ground-level pool-side.
- Never operate this Underwater Light for more than 1 minute unless it is totally submerged in water.
- Your lights require cleaning at any time, be sure to use a mild detergent or other ways that don't damage the lights.
- Be sure power is off before installing or removing LED plate. Allow LED plate to cool before replacing.
- Maximum Depth for Light installation at 1.2 meter.
- Maximum Water Temperature Range for light operation 0 - 25°C

PRODUCT DESCRIPTION

— SPECIFICATION

Electrical Specification :

- 1) Standard Voltage : AC12-32V
- 2) Frequency : 50/60Hz
- 3) Power : 25W
- 4) Mode of operation : ON/OFF Mode or E-Direct control box

— COLOR CHANGE

NO.	Mode	Description
1	White	Cool White
2	Green	Single Green
3	Blue	Single Blue
4	Green+Blue	cyan
5	Red+Green	Pink
6	Red+Green+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 Colour Sequence	G>B>G>G+R>R+B>R+G+B(P)>W>R
11	Mode E: RGB Colour Sequence	R>G>B>B+G>G+R>R+G+B(P)>W
12	Mode F: Auto Colour Change	Slowly Change
13	Mode G: RGB Colour Sequence	R>R+G>G>G+B>B>R+G+B(P)
14	Mode H:Rapid Auto Colour Change	Rapid Change
15	Warn	Warn White

CONTROL

- 1) When the light is connected to the transformer directly, the on/off switch controls the colour changes (Associating a light with a transformer and an on/off switch is recommended; If you want all the lights to change colour at the same time, install a master switch, Figure 1).
- 2) If applicable, when the light is connected to the transformer and the transformer to the optional control box, the control panel on the control box and its remote control controls the colour changes (See the Control Box Manual for details).

Attention: It is the light with ON/OFF mode and control mode of E-Direct. The light auto detect E-Direct control box. When light is connected to E-Direct Control Box, you can choose a particular color and adjust light brightness by E-Direct remote.

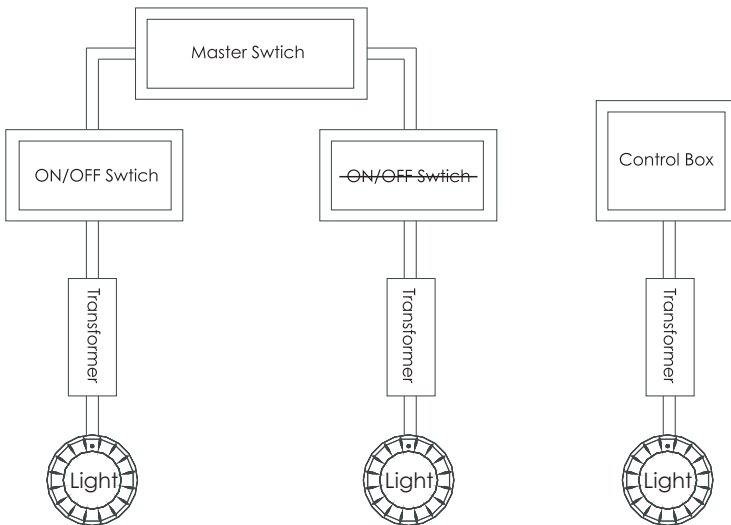


Figure 1

INSTALLATION NOTES

- 1) The light have retrofit. You should follow the procedures closely when installing the light.
- 2) It is recommended to install a light every 20m², the approximate exposure area of each unit.
- 3) The lights should be installed in the direction that they will not shine directly into the house.
- 4) For training or competition pools, the lights must be installed on the sides in order to prevent swimmers from seeing any glare.
- 5) Nothing should be placed on the poolside directly above the lights for ease of future maintenance.
- 6) If the wires are connected inside the lights, you must seal the connections with leak-proof tapes or products with the same function.
- 7) The cables connecting the lights and the transformers must be at least 6mm² and the distance between them must not exceed 30m (Figure 2); otherwise the lights will not function properly.
- 8) 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 rated current , mounted on junction boxes inside. See Figure2-1.

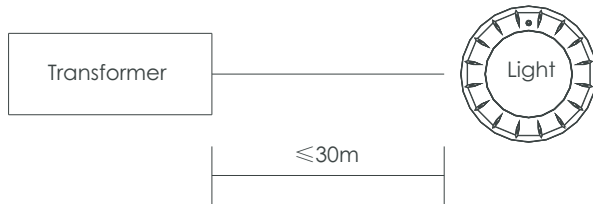


Figure 2

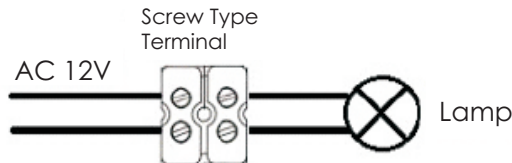


Figure 2-1

INSATALLATION

A) Preparing to Install

- 1) Before installation, a circuit system diagram must be designed by a certified engineer.
- 2) The circuit system must comply with local laws and regulations and must be carried out by qualified electricians.
- 3) Make sure the voltage is 12-32V and the terminal box is at least 120cm from the poolside (Figure 3).
- 4) Upon installation, top of the light must be at least 45cm from water surface (Figure 3).
- 5) Switch off the Pool lighting system power.

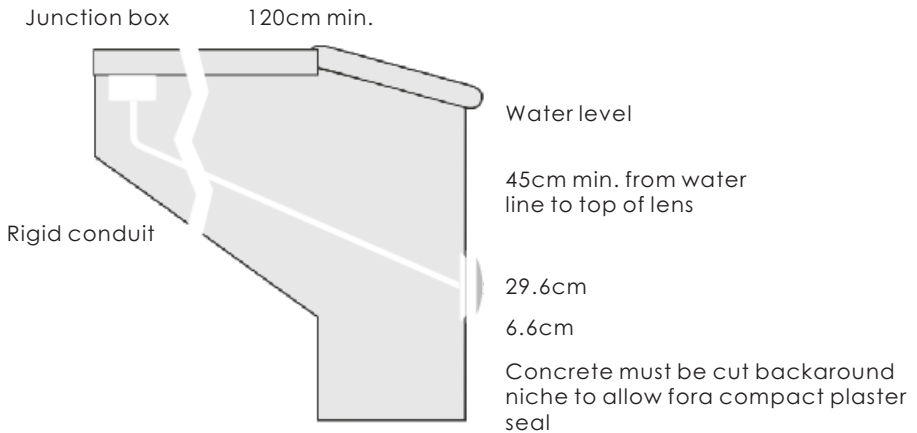


Figure 3

B) Installation Guide of Retro-fit connector

- 1) Unscrew the existing light and pull out from the pool.
- 2) The existing cable as close to the light as possible to reserve enough length for replacement light.
- 3) Remove the power cable coating recommended length. Figure 4



Figure 4

4) Assemble Retrofit connector. First, the cable thru Nut, Washer, Pressing Base in order (Attention: there are five sized stoppers), Connector Housing. Put Two sized O-Ring to Connector Housing. And insert two Copper Pins to Connector Internal, the power cable is thrued Copper Pins and hold it tight by the screws. Pull the cable back and Tighten Nut, the front face is kepted the frush for Connector Housing and Connector Internal. Figure 5

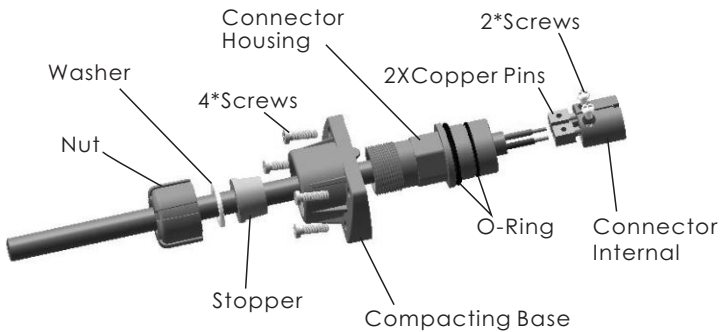


Figure 5

5) Insert Four screws to screw holes of Pressing Base. Figure 6

6) Plug the connector into the light connection interface tight and tight the four screws. Figure 7



Figure 6

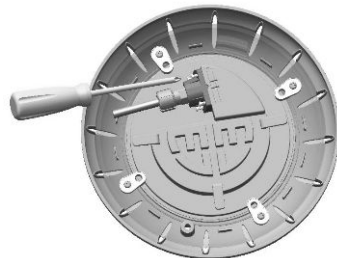
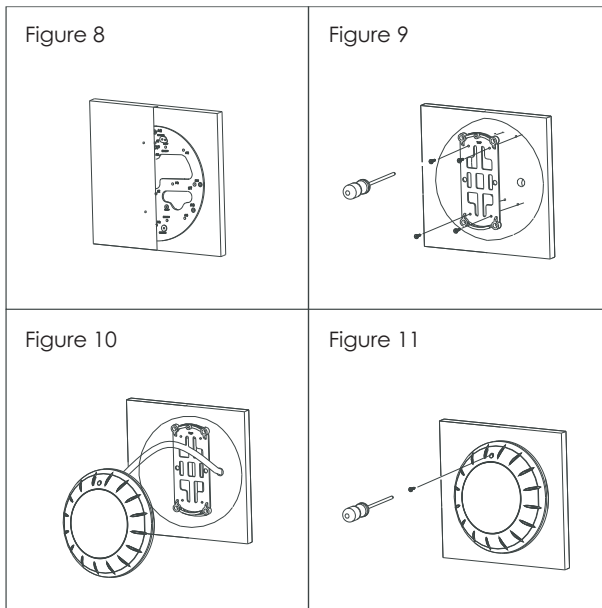


Figure 7

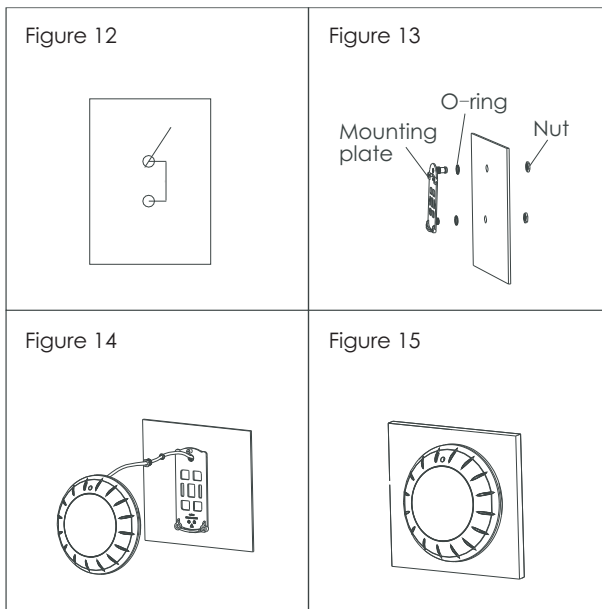
C) Vinyl Pool Installation and Retro-Installation

- 1) Retro plate into the concrete wall or install on other part , making sure that it is parallel to the side of the pool. Or Retro Plate install on other types plate, and replace other lights. (Figure 8).
- 2) Place the Mounting Plate on the concrete wall and tighten it with 4 screws. The conduit must be next to the Mounting Plate (Figure 9).
- 3) Note that the light must only be installed on a flat or concave surface.
- 4) Wrap extra cables behind the light to make sure it could be taken to the pool surface for future maintenance (Figure 10).
- 5) Hang the light onto the Mounting Plate and tighten the screws (Figure 11).
- 6) The wire connections inside the terminal box must be sealed by leak-proof tapes to prevent water from leaking into the terminal box through the cables.



D) Fiberglass Pools / Vinyl Pools Installation

- 1) Refer to section "Preparing to Install".
- 2) Make 2 holes on the pool wall (Figure 12).
- 3) 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 (Figure 13).
- 4) Put the cable sequentially through the sealing Nut, the sealing O-ring and the cable hole on the mounting plate; then tighten the Nut (Figure 14).
- 5) Wrap extra cables behind the light to make sure it could be taken to the pool surface for future maintenance. Then, hang the light onto the Mounting Plate and tighten the screws (Figure 15).



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 it connects, D-E-Direct control box.
The light is not work	Check connected locations of the cable. Check fuses at switchboard. Replace light panel. Contact qualified electrician to test.
After power on , Light up and not lit a few seconds	Check transformer. Contact qualified electrician to test.

REPLACEMENT PARTS

Item No.	Part No.	Description	Qty
1	03011058	The light is dim	1
2	440256797	White Plastic Lid	1
		Gray Plastic Lid	1
		Blue Plastic Lid	1
		Stainless Steel Lid	1
3	E042601	20 LEDs Panel 25W Color	1
4	440526797	Fastener	4
5	3011364	M4*12 Flat head self-tapping screw	4
6	E042602	Retro-fit connector	1
7	E042603	Retro Pool Fitting	1

