

# USER MANUAL

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# 1. IMPORTANT SAFETY AND INSTALLATION INSTRUCTION

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

1. Only a 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 to prevent accidents.
4. All units are required to be disconnected from the main electricity before any maintenance.
5. For safety and proper installation, ensure that those parts supplied with the products are used.
6. Never handle with wet hands and feet.
7. This unit is designed for use only when fully submerged in freshwater, connecting with a safety transformer.
8. This product should be installed according to your local electrical installation ordinance and regulation.
9. Due to the corrosive nature of unbalanced pool chemicals, please keep your pool water acid-base balanced before 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 manufactory or this service agent, or a similarly qualified person to avoid a hazard.
11. Check that there is enough cable behind the light to allow for servicing above water, preferably at ground-level poolside.
12. Never operate this underwater light for more than 1 minute unless it is submerged in water.
13. Your light requires cleaning at any time, be sure to a mild detergent or other ways that don't damage the light.
14. Maximum Depth for light installation at 1.2 meters.
15. Maximum water Temperature Range for light operation 0 ~ 25°C.
16. The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

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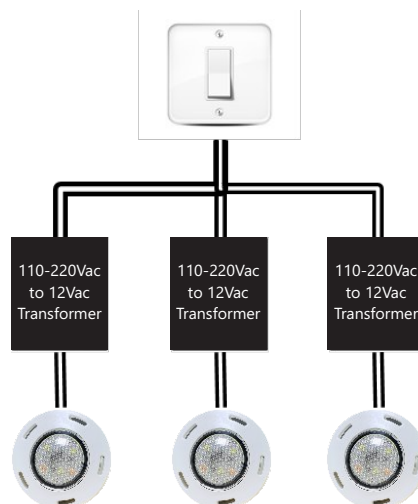
## 2. PRODUCT INTRODUCTION

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EAGLE EYE is a slim high efficiency LED light with powerful 18W output. The nicheless design allows installing the light to 1.5 inch/50mm PVC pipes, suction fittings, or wall conduits. An easy-change lens cover provides a handy option for switching the lighting effects. Eagle eye has built in Basic on/off Mode and Colortouch Mode for colour control which are fully operated under 50Hz and 60Hz input voltage frequency. Both mode are compatable with all Emaux E-Lumen X series. The light has individual RGB colour, warm white and cool white LEDs which provides 15 different colour mode for you to choose.

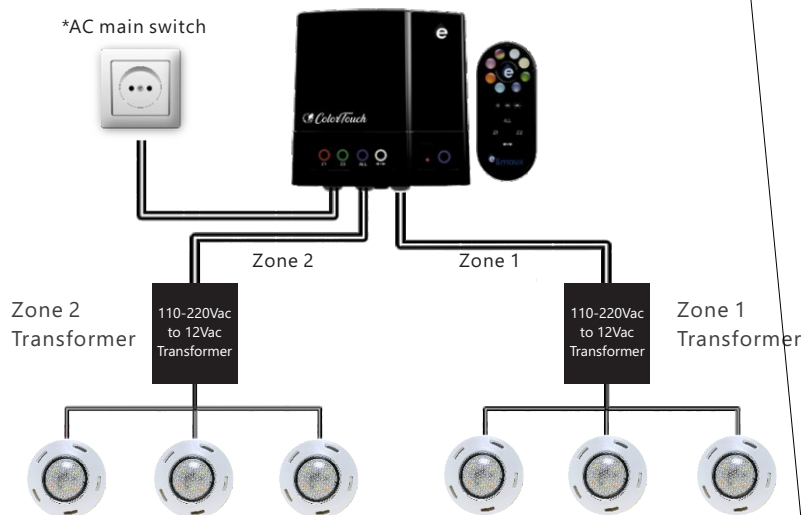
### 2.1 BASIC ON/OFF MODE

When the light is direct connected to transformer, use main switch on/off to change color.



### 2.2 COLORTOUCH MODE

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



## 3. LIGHT SPECIFICATION

### 3.1 Electrical

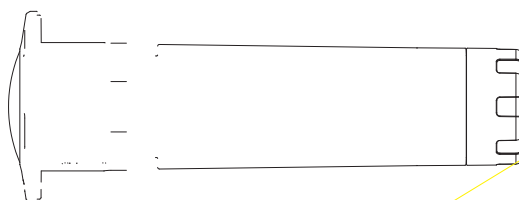
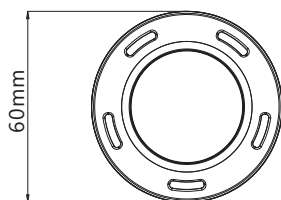
- Operation Voltage Range: AC 11V to 15V (12V typical)
- LED Color: RGB, Warm White (3000K) and Cool white (6500K)
- Operation Frequency: 50 / 60 Hz
- Max Power Rating: 18W
- Mode of operation: NO/OFF Mode and ColorTouch Mode

There are six different installation types for Eagle Eye:

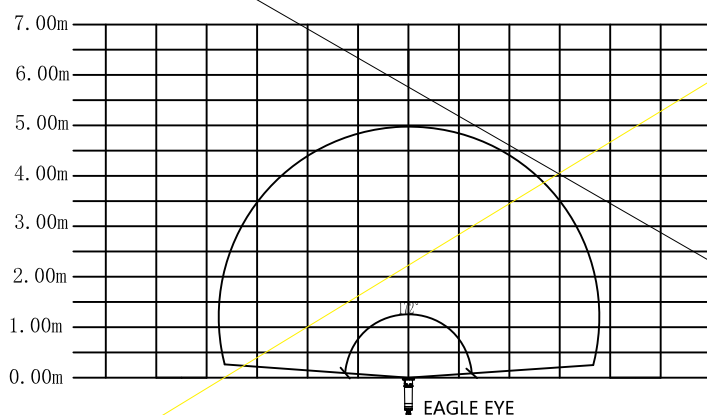
EAG18	1) PVC Conduit
	2) Vinyl pool / Fiberglass Pool (with EM2836A/E)
	3) Panel Pool / Timber Pool (with EM2836A/E)
	4) Concrete Pool (with EM2831A/E)
	5) Concrete Pool with Conduit (with EM2831A/E+EM2841)
	6) Concrete Pool + liner (with EM2831A/E+ EM2841)

### 3.2 Dimensions

#### 3.2.1 EAG18



#### 3.2.2 Light Intensive Chart



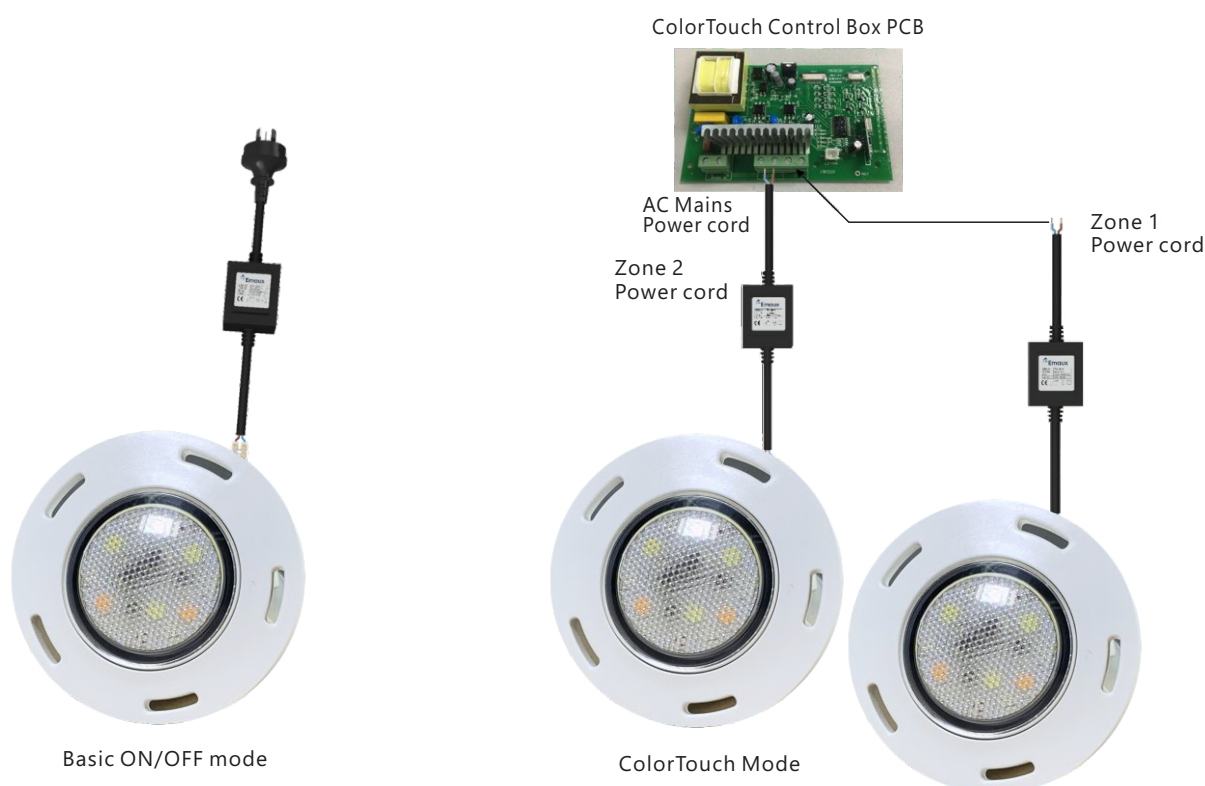
### 3.3 Color mode

NO.	Mode	NO.	Mode
1	Cool White	9	Mode C: Blue+Gradual Green
2	Green	10	Mode D: RGB Color Sequence
3	Blue	11	Mode E: RGB Color Sequence
4	Green+Blue	12	Mode F: Auto Color Change
5	Red+Green	13	Mode G: RGB Color Sequence
6	Red+Green+Blue	14	Mode H: Rapid Auto Color Change
7	Mode A: Blue+Gradual Red	15	Warm White
8	Mode B: Green+Gradual Red		

## 4. INSTALLATION

1. It is recommended to install a light every 20m<sup>2</sup>, the approximate exposure area of each unit.
2. Lights should be installed in the direction that they will not shine directly into the house.
3. For training or competition pools, lights must be installed on the side to prevent swimmers from seeing any glare.
4. Nothing should be placed on the pool side directly above the lights for ease of future maintenance.
5. Cables connect between each Eagle eye and transformer must be at least 1mm<sup>2</sup> (AWG18) and the distance between them must not exceed 150ft (50m); otherwise the lights will not function properly.
6. Qualified electrician should take the responsibility to decide wire which can fulfil operating condition for this light when more than one Eagle eye is connect to transformer.

### 4.1 Wiring diagram

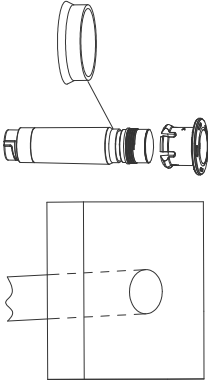
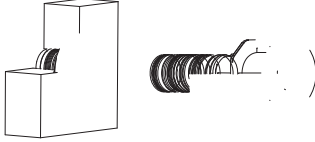


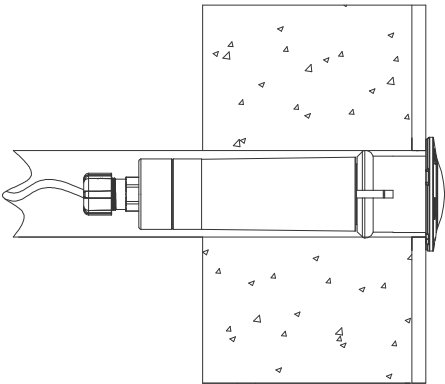
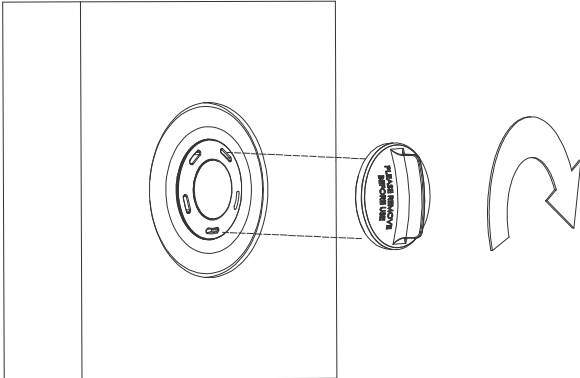
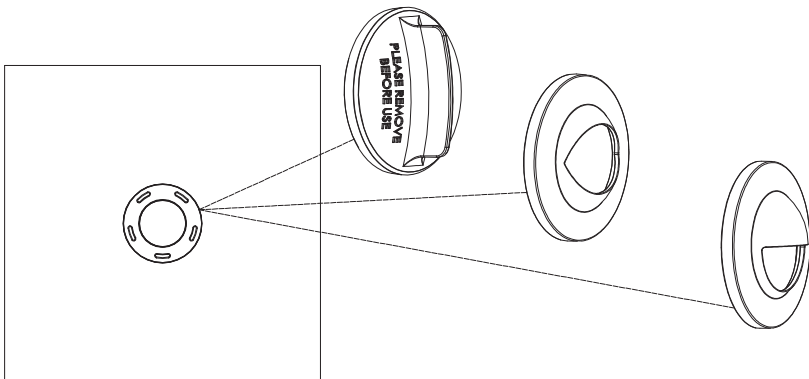
## 5. LAMP INSTALLATION

<p>1) Concrete Pool with PVC conduit</p>	<p>2) Vinyl pool / Fiberglass Pool (with EM2836A/E)</p>
<p>3) Panel Pool / Timber Pool (with EM2836A/E)</p>	<p>4) Concrete Pool (with EM2831A/E)</p>
<p>5) Concrete Pool with Conduit with EM2831A/E+EM2841</p>	<p>6) Concrete Pool + liner (with EM2831A/E+ EM2841)</p>

### Installation Steps:

PVC Pipe	Concrete/ Panel/ Timber/ Vinyl pool / Fiberglass Pool
<p>1) PVC pipe: Prepare the correct Front fitting unit (A: PN10, B: PN16, 1.5" Class 12/15)</p>	<p>1) Prepare the correct Front fitting unit</p>

PVC Pipe	Concrete/ Panel/ Timber/ Vinyl pool / Fiberglass Pool
<p>2) Pipe diamemter should matech with Front fitting unit and assemble with the rubber ring if necessary (the rubber ring can improve the feeting for the light to pipe)</p>	<p>2) Install Screwthread body (Concrete pool) or Install Screwthready body (Opening Hole 60mm)</p>
	
<p>3) Run the cord (with Eagle eye connector) though the conduit to the transformer of junction box location and then remove the protective cap.</p>	
<p>4) Make sure two O-ring are well assemble, then Connect the light and cord together and turn clockwise to lock.</p>	
<p>5) Wrap the cord and insert the light into conduit directly.</p>	

PVC Pipe	Concrete/ Panel/ Timber/ Vinyl pool / Fiberglass Pool
6) Insert the light fully into the conduit (conduit)	6) Use the protective cover to tighten the light into Screwthread body
	
7) Cover the protective cover to protect the light or cover the "eagle eye" or "moon" over the light for shadow effect.	
	

## Installation accessories:

Pool type	Emaux Part number	Item
Vinyl pool / Fiberglass Pool (with EM2836A/E)	91601516	EM2836A TS 1.5" Solvent
	91601517	EM2836E TS 50mm Solvent
Panel Pool / Timber Pool (with EM2836A/E)	91601516	EM2836A TS 1.5" Solvent
	91601517	EM2836E TS 50mm Solvent
Concrete Pool (with EM2831A/E)	91601508	EM2831A 1.5" Solvent
	91601509	EM2831E 50mm Solvent
Concrete Pool with Conduit with EM2831A/E+EM2841	91601508 91602501	EM2831A 1.5" Solvent Conduit EM2841 1.5"/50mm Solvent
	91601509 91602501	EM2831E 50mm Solvent Conduit EM2841 1.5"/50mm Solvent
Concrete Pool with liner (with EM2831A/E+ EM2841)	91601508 111000007 91602501	EM2831A 1.5" Solvent Rubber ring D93Xd59X1.5(x2pcs) Conduit EM2841 1.5"/50mm Solvent
	91601509 111000007 91602501	EM2831E 50mm Solvent Rubber ring D93Xd59X1.5(x2pcs) Conduit EM2841 1.5"/50mm Solvent

Please contact Emaux distributor to order



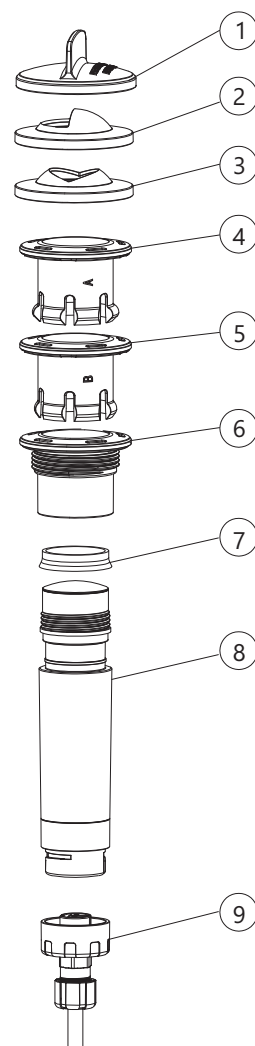
## 6. MAINTENANCE AND TROUBLESHOOTING

1. Do not leave the light on longer than 1 minute when the light is not in water.
2. Before switching on the light, check whether the sealing O-ring and screw tightening for the water prove functional and whether the circuit boxes are running properly.
3. 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.
4. Warranty will be voided if the Emaux Eagle eye underwater light was dismantled by unauthorized personnel.
5. Do not remove the light protection cap before the Eagle Eye starts operation.

Trouble	Possible solution
The light brightness dimmed	Check the voltage output from transformer Check the brightness control if ColorTouch control box is connected Check connections between the light and transformer and control box. Contact qualified electrician to test
The light does not light up	Check fuse Check the voltage output from transformer Check connections between the light and transformer and control box Contact qualified electrician to test

## 7. SPARE PART LIST

Item NO.	Part No.	Description	Qty
1	440650009	Protective cover	1
2	440650011	Half Moon cover	1
3	440650010	Eagle Eye cover	1
4	440650006	Sleeve A (for 50mm PVC Pipe PN10)	1
5	440650007	Sleeve B (for 50mm PVC Pipe PN16, 1.5 inch CLASS 12/CLASS 15)	1
6	E043005	Sleeve (for EM2831A/E, EM2836A/E TS)	1
7	111040091	Rubber ring	1
8	E043006	12 LEDs Light Body 18W Color (EAGLE EYE)	1
9	E043007 (E043001)	Adapter 2.5m cable (Adapter 7ft cable)	1
	E043008 (E043002)	Adapter 15.5m cable (Adapter 50ft cable)	1
	E043009 (E043003)	Adapter 30.5m cable (Adapter 100ft cable)	1
	E043010 (E043004)	Adapter 46m cable (Adapter 150ft cable)	1



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## 8. TERM OF THE WARRANTY

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As the original purchaser of this equipment has purchased from Emaux Water Technology Co Ltd, through an Authorized International Distributor or Dealer, warrants its products free from defects in material and workmanship under normal use during the 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 resellers. This limited warranty does not extend to any product that has been damaged or rendered defective

(a) As a result of an 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 OUTLINED IN THIS WARRANTY, EMAUX MAKES NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE EMAUX EXPRESS DISCLAIMS ALL WARRANTIES NOT STATED IN THIS LIMITED WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED TO THE TERM OF THIS EXPRESS LIMITED WARRANTY.



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