User Manual

Part Number:

WKU-120RGB

Underwater RGB LED Boat Light

Features

316L Marine Grade Stainless Steel   Over-Temp Protection
Poly-Carbonate Lens   Waterproof IP68
5 Ft Power Wire (18AWG)

Specifications

120W RGB LED Underwater Boat Light	
Input Voltage	9 ~ 15 VDC
Current Draw	8.0A @ 13.5VDC
Total Power Consumption	108W @ 13.5VDC
Operating Temperature	-22°F~122°F (-30°C~50°C)
LED Lifetime	50,000 Hours
LED Brand	CREE
Warranty	3 Years
Dimensions	5.02 in L (12.75cm), 3.15 in W (8cm) 0.67in H (1.7cm)
Weight	1.78 lb (0.81kg)

Parts Included

Underwater Boat Light
1- (WKU-120RGB)
2- M5 Machine screws
2- M5 Flat washers
2 - M5 Locking Nuts
2 - M5 Self Tapping screws
2- Neoprene washers
2-Neoprene T washers

Recommended Tools (not included)

Drill and Drill Bits   Lint Free Cloths
#2 Phillips Screwdriver   Masking Tape
Heavy Grit Sandpaper   Marine Sealant
Isopropyl/Denatured Alcohol
Pencil **(Wax Pencil recommended for fiberglass)**

Caution

LIGHTS MUST BE SUBMERGED TO AVOID OVERHEATING. USE OUT OF WATER WILL DECREASE LED LIFETIME AND CAUSE EARLY FAILURE. LIGHTS HAVE OVER TEMPERATURE PROTECTION (FOR TESTING PURPOSES ONLY) AND WILL SHUT OFF WHEN MAX TEMP (194 F / 90 C) IS REACHED. DO NOT OPERATE LIGHTS OUT OF WATER FOR MORE THAN 2 MINUTES FOR TESTING. LIGHTS WILL BE HOT IF OPERATED OUT OF WATER FOR EXTENDED PERIODS. INSTALLATION OF LIGHTS MUST BE DONE WHILE BOAT IS OUT OF WATER AND DRY. WK IS NOT RESPONSIBLE FOR ANY INJURY OR PROPERTY DAMAGE INCURRED DUE TO IMPROPER INSTALLATION.

Installation Instructions

TIP: Know your hull; most common type is fiberglass.
Wood, metal and carbon fiber are other less common hull types.
For metal or carbon fiber hull, first be sure to mount an insulating material between metal or carbon fiber surfaces and lights to prevent galvanic corrosion. If the hull of your boat is metal or carbon fiber surface,you can use the plastic flat washers between hull and back of light.
If uncertain about type of hull, please contact boat manufacturer for assistance.

Installation Instructions (continued)

1. Determine desired mounting location on boat's transom. Be sure to check actual draft water level if operating LED lights at speed. (See Diagram Below)
    Recommended mounting depth between 6-8" below waterline for best effect. Be sure that mounting location is free of any obstructions before drilling through hole. Mark center of desired location.
2. Drill 1/4" through hole in center of desired location and feed power wire through hole into boat. Hold light flush against transom, mark location for mounting screws, then remove light.Drill pilot holes for mounting screws to prevent cracking in fiberglass hulls.
3. Use heavy grit sandpaper to rough up the surface and to remove any debris from drilling. Clean area using alcohol and lint free cloth.
4. Apply uniform layer of marine sealant to back side of light, especially around mounting holes and wire connection. Also apply marine sealant to transom surface around pilot and through holes.
5. Feed power wire back through 1/4" hole into boat and press light against transom using uniform pressure. Install mounting screws with included neoprene washers and tighten light to transom.
6. Use sealant that has squeezed out from beneath light to create complete seal around outer edge of light. Remove any excess sealant.
7. Connect Black (positive) wire from Light to V+ on Controller. Connect remaining negative wires from Light to Controller. Connect Red to R, Green to G and Blue to B.
8. Connect positive (RED) wire to positive battery terminal through fuse to switch (see diagram below). Connect negative (BLACK) wire to negative battery terminal. Marine grade heat shrink butt connectors and ring terminals are recommended.
9. Ensure light is solidly attached to hull and that marine sealant has fully cured prior to putting boat in water. Lights may be tested briefly while out of water. Lights will overheat and shut down if operated out of water for more than testing.

Important: Read all instructions prior to installation.

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Part Number:

WKU-120RGB

Installation Instructions (continued)

4.65in [118.11mm]

Ø.20in [5.08mm] TYP.

.39in [9.78mm] TYP.

.67in [17.02mm]

.21in [5.24mm]

Ø3.15in [80.01mm]

5.02in [127.38mm]

INCLUDED PARTS

58"L CORD

Ø.25in [6.35mm]

2x M5 RUBBER WASHER

2x M5 X 25MML PHILLIPS THREADDING SCREW

Bluetooth Control Box

Scan the QR code to download App (IOS 7 or Android 4.3 above)

Bluetooth control box	
Input Voltage	DC 12V or 24V
Output power	Max:360W
Waterproof	IP67
Material	Aluminium
Size	126*82*28(mm)
Bluetooth Transmit distance	10M

Note:This Bluetooth controller can only drive up to 360w boat lights

APP

4G 10:21 82%

Groups

SYSTEM

ALL DEVICES
0 device(s) 0 connected

USER DEFINED

All on   All off   Add Group   TIMER
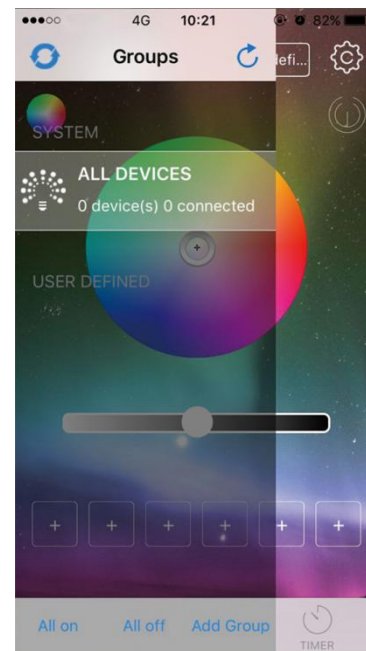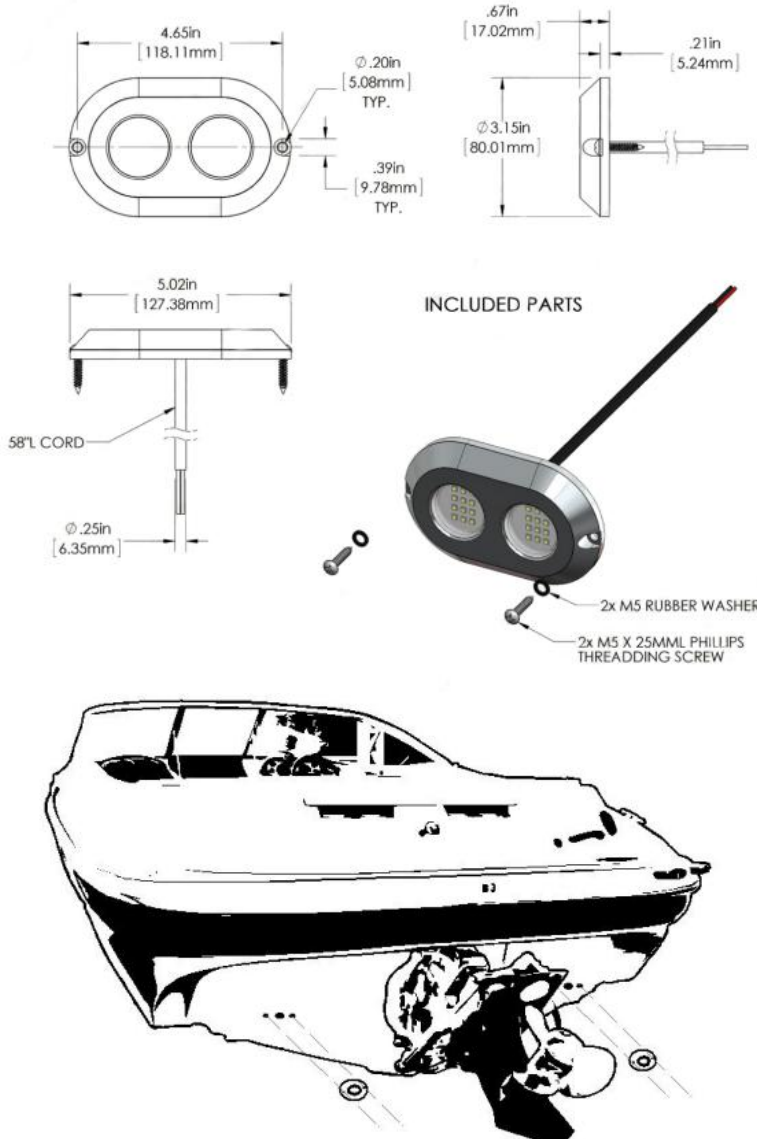
Main function :

Setting

Hand automatic switching

Switch

Selection of color

Refresh

Add Group   DIY add group
Timer   Time switch
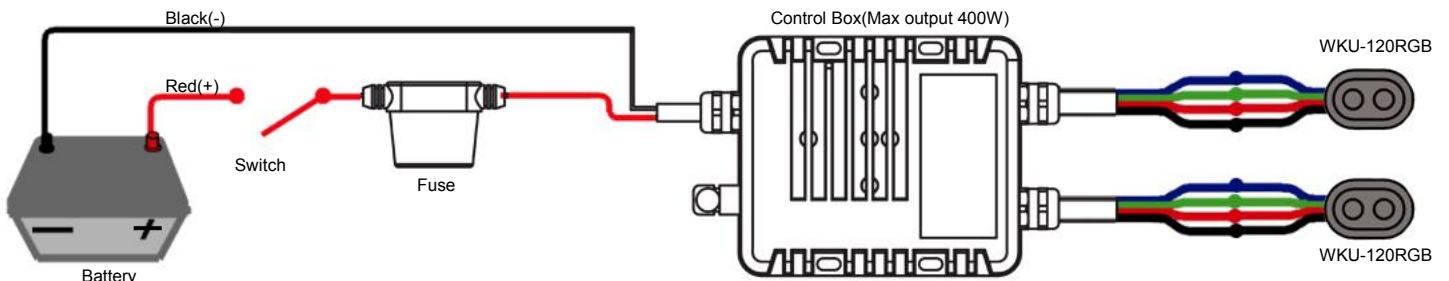
Other function:
RGB color changing
Dimming 1~100%
Musical color changing
Voice control color changing
Color customization
Color cross fade
Single color gradual change
Output frequency

Wiring Diagram

Black(-)

Red(+)

Switch

Fuse

Battery

Control Box(Max output 400W)

WKU-120RGB

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Bluetooth pairing steps:
The control box is powered on, open the phone Bluetooth,open the APP, APP will automatically connect to the Bluetooth controller, APP display 1device,1 connected, lights can be normal control
Connection:
1, Check whether the device is powered, whether the phone Bluetooth is turned on, please do not connect the Bluetooth controller to your Bluetooth setting.
2, APP click to refresh to see if the connection can be successful. If not, exit APP from the background, and re-power the controller , reopen the APP.
3, Keep your phone and the controller no more than 10 meters