HQUA

Instruction Manual

For Spa Light

HQUA-PN02DC

Section 1   Safety Information

Electrical Safety
Negligence to these instructions may result in serious injury or death.   **Always disconnect the power to the spa light at the circuit breaker before**   **servicing the light. Failure to do so could result in death or serious injury due to**   **the electrical shock.**   **Grounding Plug**   • This product use **12V-15V AC** as the power source, which must be grounded and protected by a ground-fault circuit interrupter (GFCI) to reduce the risk of electrical shock. Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.   • Do not use an appliance leakage current interrupter (ALCI) in place of a GFCI since the ALCI will not protect people.   **Electric Shock**

• To reduce the risk of electric shock, do not open the light when someone in the spa pool.

• Do not throw, drop or drag the product heavily.

• Always disconnect the electrical outlet before removing, cleaning, servicing or making any adjustment to the product.

• Do not try to repair the LED light or transformer on your own.

• There is no need to worry about the leak damage if you find out the water go inside the LED light. There is a waterproof layer to avoid the failure.

• Do not disassemble the lens of the LED light or try to remove and damage the waterproof layer on the surface of LEDs. Figure 1.

Figure 1.

Other Cautions

• Do not stare directly at the light emitted by this product. Long-term gaze may result in glare and other eye diseases.

Section 2   General Information

HQUA-PN02DC is a dimmable and color changing pool/spa LED light, which is easy to install and safe to use. Fit for 6 inches standard small wet niche. Replace the old fixture with this LED light.

It needs 12V-15V AC to power. Due to the resistance of the electric cord, it might

need higher voltage input depending on the length of the cords. 0-30' electric cord only needs 12V AC input. 30-60' needs 13V AC input. 60'-100' needs 14V AC input.100' needs 15 AC input.

The voltage on the LED board would be 12V DC, which is not harmful for human body at all. It could provide enough Illumination equal to the 150W incandescent bulb.

Hereby, we will introduce the structure, specification and installation of the unit.

2.1 System Components

Full Waterproof LED light Assembly with 100' cord and Face Ring

LED Driver and RGBW control system M4-3A with a waterproof junction box

2.2 Specification

Item Name	Wattage	Volts	White Luminous flux	Color Changing	Dimmable
PN02DC	15W	12V-15V AC	1250lm	YES	YES

2.3 Installation

Precaution

Keep people out of the spa pool when you operate the installation.

Always turn off the main electrical switch or circuit breaker.

1. Remove the old face ring, then remove the light assembly from the niche. Put it on the pool deck.

2. Please disassemble the old light and disconnect the wires. Use a fish tape reel puller to remove the old electric cord. You have to do so because we use 5C cable for the RGBW system.

3. Please open the waterproof junction box of the M4-3A receiver, and disconnect the outlet (5 pin side). Pull the new electric cord out from the power supply side through the conduit and reserve enough cords on the LED light side so you could replace the light in the future. (We suggest 10 ft long electric cord remained)

We would provide light assembly and waterproof connector as a replacement kit. Cut the old electric cord, strip each wire and re-connect them with our LED light replacement by a 5C connector (PN1005). You could just replace the LED light without replacing the whole electric cord which is in a good condition.

Figure 2.

4. Using a rag to dry the water on the open side of the electric cord. Please follow the wiring rules to connect the wires with the outlet of the M4-3A controller:

Brown to R

Half Yellow Half Green to G
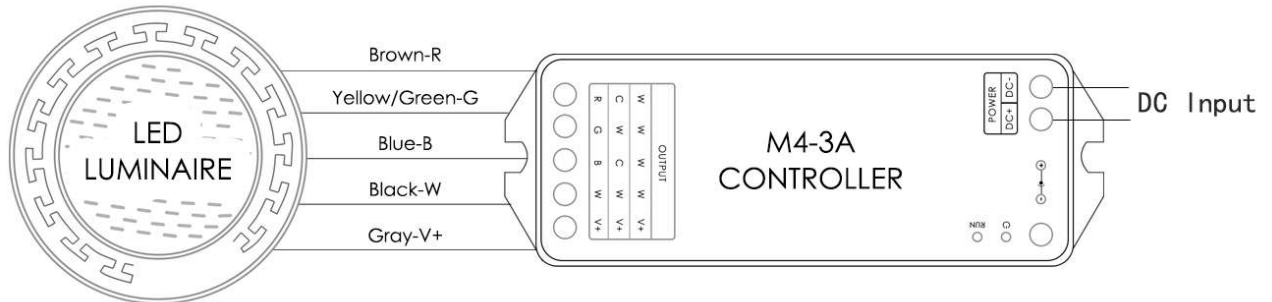
Blue to B

Black to W

Grey to V+

Figure 3.

5. Roll remain electric cords around the LED light assembly, put it into the wet niche. Screw on the face ring to secure the light assembly into the niche. Figure 4.

Figure 4.

6. Insert the 2C input wire from the LED driver in the waterproof box into your current Pool light transformer(we didn't provide in this product, but you could search Pool light transformer online to find one; This link provide a suggestion product if you need one).

https://www.amazon.com/dp/B089ZWPQ1Y

7. Apply the power and learn how to control the LED light as follows:

2.4 M4 Remote Controller Operation
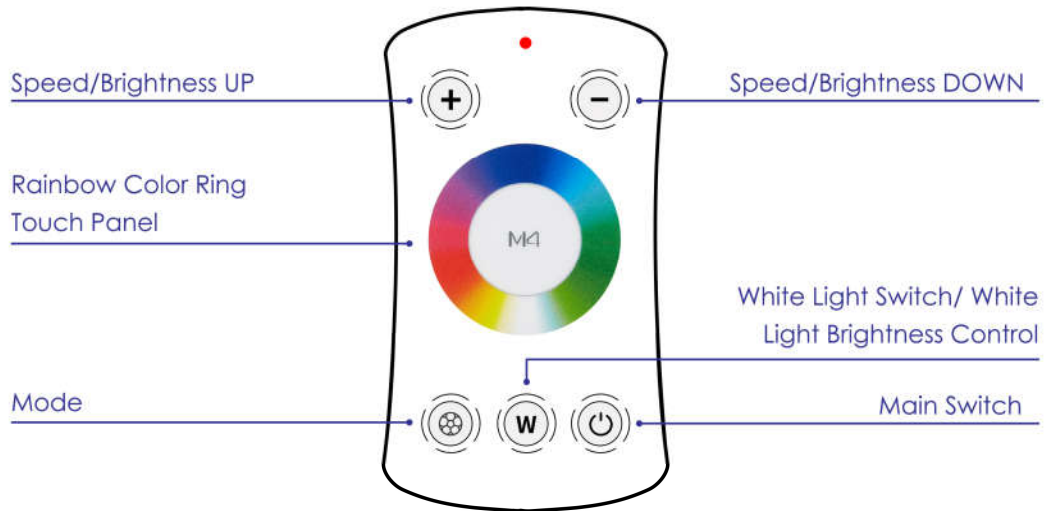
Figure 5.

The Instruction of the Control Modes:

No.	Mode	No.	Mode
1	RED	7	White
2	GREEN	8	3-Colors Jump Change
3	Blue	9	7-Colors Jump Change
4	Yellow	10	3-Colors Flashing
5	Purple	11	7-Colors Flashing
6	Cyan	12	Black

In Mode 1-7 : "+" and "–" control the brightness

In Mode 8-11: "+" and "–" control the changing speed

When there is no operation about 30 secs, the controller will fall into sleep to save power.

Any button would wake the controller.

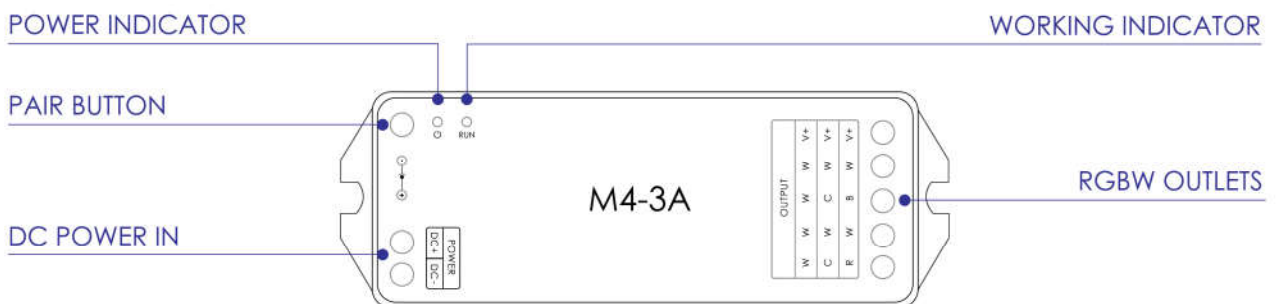Instruction of M4-3A RGBW Control Converter/Receiver

Figure 6.

The Converter/Receiver M4-3A and Remote Controller M4 are already paired. If you find the connection is failed. You might need to reset the connection:

1. Press the pair button for over 5 seconds. It would delete the pair.
2. Click the pair button for a short time, the operating indicator would keep working, click any button on the remote controller M4. It would flash a few times, and pair successfully.

Section 3   Troubleshooting

Problem	Cause	Solution
There is water inside the light.	It is acceptable and safety.	Nothing needs to do. Unique waterproof layer will protect the light.
The LED pool light does not light up at the beginning.	No power supply.	Check the power source.
	Loose Connection.	Check the connection part in step 2.
	The LED pool light is damaged somehow.	Contact HQUA for more help.
The LED pool light does not light up or it is dim after a while.	The power cord is loose.	Check the wiring connection first without power supplying.
	LED lights failed	Contact HQUA for more help.
	The GFCI is tripped.	Contact HQUA for more help.
RC01 controller is not working.	Battery Dead	Look for 23A/A23 battery to replace the old one.

Section 4　After-Sales Service

　　Should you need any support, or have any questions about the system, please contact our Technical Support team via **hqua.tech@gmail.com** and we will be glad to assist you. We sincerely hope that you enjoy the benefits of bright and safe pool/spa illumination with HQUA inground swimming pool/spa light.

Our Commitment

Specific Warranty Coverage

2-Year Limited Warranty for LED Spa light

HQUA warrants that the LED spa light is free from defects of material and workmanship for a period of 2 years from the date of purchase. During this period, HQUA will repair or replace, at its option, any defective parts covered by the warranty. Please return the defective part to your dealer for claim.

General Conditions and Limitations

None of the above warranties covers damage caused by improper use or maintenance, accidents, acts of God or minor scratches/imperfections that do not materially impair the product operation. The warranties do not cover products that are not installed as described in the applicable User Manual either. Parts repaired or replaced under these warranties will be covered up to the end of applicable warranty period.

The above warranties include the cost of shipment and handling of returned items. The limited warranties described above are the only warranties applicable to the HQUA series products. These limited warranties outline the exclusive remedy for all claims based on a failure or defect of any the products, whether the claim is based on contract, tort (including negligence), strict liability or otherwise. These warranties are in lieu of all others regardless of written, oral, implied or statutory ones. Without limitation, no warranty of merchantability or of fitness for a particular purpose shall apply to any of these products.

Part Number List

Part Number	Description
PN02DCL	RGBW Led Light Assembly 15W,12V AC/DC
PN01CS	M4-3A Control System
PN01CS01	M4 Remote Controller
PN01CS02	M4-3A Control Receiver
PN02CS03	Waterproof Junction Box for M4-3A Receiver
PN01DCC	5C×22 AWG,100' Weatherproof Electric Cord
Accessories	
PN1001	#10-24 x 1-1/4 in. Phillips Flat Head Stainless Steel Sheet Metal Screw with washer
PN2002	6" face ring for PN02 LED light
PN2004	6" Curve Stainless Steel Washer
PN2003	6" silicone seal
PN1005	5C 22AWG Waterproof Connector

………Part Number List……………The End…………..……………………………..