

## LIGHT OPENING FIGURE

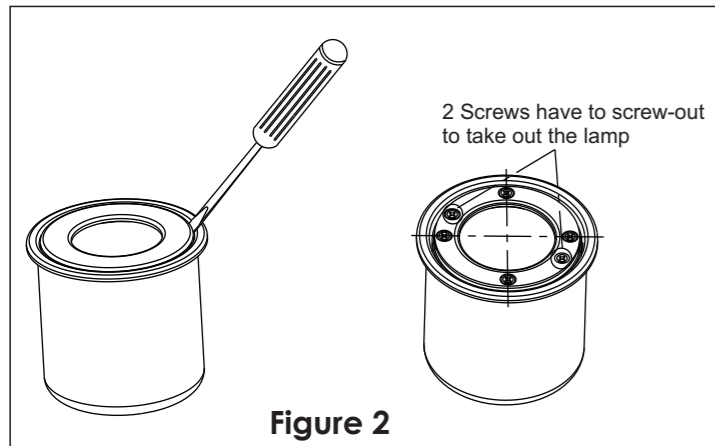


Figure 2

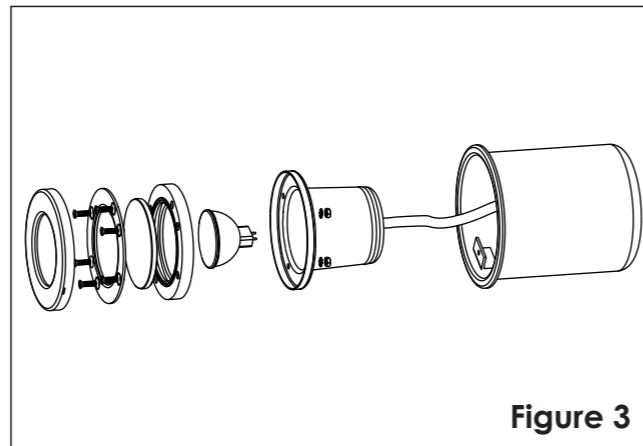


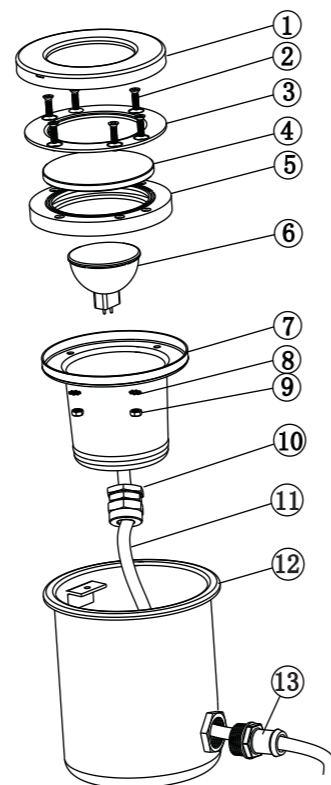
Figure 3

### Lamp Replacment

1. Using screwdriver to remove the Face Plate (#1).
2. Using the cross screwdriver to remove 2 screws which hold the lamp together in the Housing (#12).
3. Taking out the lamp from the Housing (#12), remove 4 screws and nuts (4 sets)
4. Remove the Face Ring (#3), Waterproof Washer (#5) and Glass.
5. Replace the light bulb.

## REPLACEMENT PARTS FIGURE

| Key No. | Part No. | Description  | Qty |
|---------|----------|--|-----|
| 1       | 03017055 | Face Plate   | 1   |
| 2       | 03011168 | M4*20 Screw  | 6   |
| 3       | 03017054 | Face Ring  | 1   |
| 4       | 87012009 | Lights Lens  | 1   |
| 5       | 02021038 | Waterproof Washer  | 1   |
| 6       | 04011001 | MR16 Halogen Lamp 12V/20W                                  | 1   |
| 6       | 04011016 | MR16 (18 Bulbs) LED 12V/1W Panel (Automatic Colour Change) | 1   |
| 6       | 04011015 | MR16 (18 Bulbs) LED 12V/1W Panel (White-Colour)            | 1   |
| 7       | 89042801 | Light Encasing   | 1   |
| 8       | 03012020 | M4 Washer  | 4   |
| 9       | 03013004 | M4 Nut   | 4   |
| 10      | 89044302 | Waterproof Fittings for Cable                              | 1   |
| 11      | 04013004 | 2.5M Cable   | 1   |
| 12      | 03017068 | Light Shell (90mm)   | 1   |
| 12      | 03017069 | Light Shell (110mm)  | 1   |
| 13      | 01171106 | Joint for Wire & Pipe                                      | 1   |



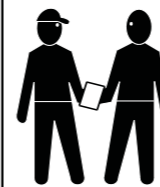
## UL-F20; LED-F20 UL-FL20; LED-FL20



### USER MANUAL AND INSTALLATION INSTRUCTION

- A. Danger and Warning Notice
- B. General Information
- C. Installation Instruction
- D. Replacement Parts

## DANGER AND WARNING NOTICES



- Installation must be installed by a licensed or certified electrician or serviceman in accordance with the national and local electrical code and all applicable ordinances.
- Before installation, please read and familiarise yourself with the Danger and Warning Notices indicated in this manual.
- Always turn off the power supply to the underwater light before installation and servicing.
- Improper installation, operation or servicing may create electrical hazard which can result in severe injury, death or damage to property. It is important to follow the instructions provided in this manual and to comply with the national and local regulations, ordinances, electrical and safety code.
- Visit [www.emauxgroup.com](http://www.emauxgroup.com) for more information.

## GENERAL INFORMATION

- A. Make sure the electrical systems of your fountain comply with National and Local regulations, ordinances, electrical and safety code.
1. Example of some National and Local code requirement:
    - i. The electrical circuit must have a Ground Fault Circuit Interrupter (GFCI), and have an suitable circuit breaker
    - ii. The junction box for underwater lights must locate at least 20 cm above water level and at least 120cm from the edge of the fountain.
- B. Installation or servicing of the electrical system and the light must be by a licensed electrician or a certified serviceman in order to meet or exceed the National and Local requirement before the housing is installed.
- C. The User Manual and Installation Instruction contain important information about the safety issue, installation procedure and operation of the product. This information should be shared with the owner, installer and operator of this equipment.
- D. The User Manual and Installation Instruction should be kept for future references.

## INSTALLATION INSTRUCTION

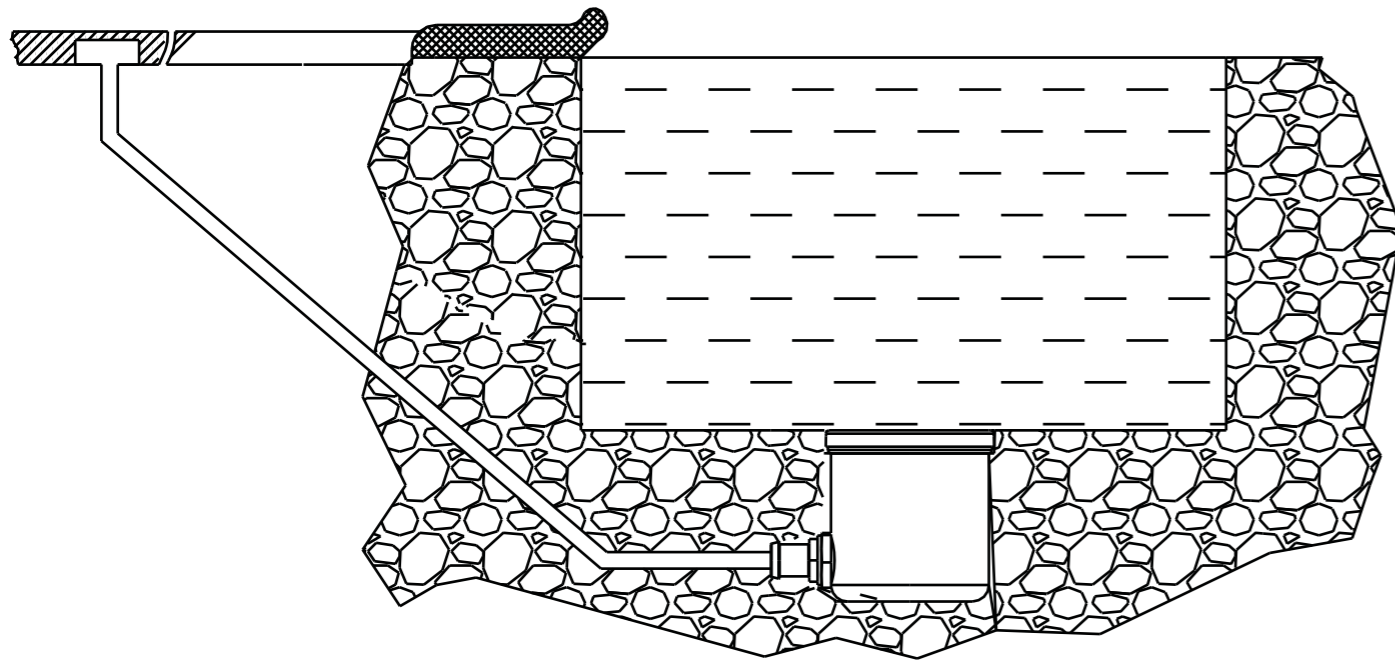


Figure 1.

1. The electrician must follow the preparatory steps before the installation of light fixture.
2. Make sure that the electrical system of your fountain complies with all National and Local Electrical Code. A licensed or certified electrician must install the electrical system to meet or exceed those requirements before the installation of the light fixture. Some of the national and local electrical codes are list below:
  - The lighting circuit must have a Ground Fault Circuit Interrupter, or for low voltage lights a listed light transformer, and have an appropriately rated circuit breaker.
  - The junction box or (12 volts lights and the low voltage transformer) must be located at least 20 cm above water level, at least 10cm above ground level, and at least 120cm from the edge of the fountain, please check Figure 1)
  - All the accessories and metal parts within 152cm of the fountain must be electrically bonded properly.
  - The light must be properly installed so that the top of the underwater light's lens is at least 45.5cm below the surface of the water in the fountain; please refer to Figure 1.
  - The wet niche must be properly electrically bonded and grounded via the No.8 AWG ground connector located at the rear of the niche; please see Figure 1

**NOTE: The fountain electrical system must meet all applicable requirements; the electrician should also consult the local building agency**

- This light is to be installed in Fountain and water feature pond only.

### Light Installation

1. Turn off all power supply.
2. Embed the Light Housing (#12) to the pre-marked location.
3. Connect the cord into the junction box as required by feeding the cord through the Light Housing (#12).
4. Remove the Face Plate (#1) and align the lamp to the Light Housing (#12) and fasten using the 2 screws provided.
5. Assemble the Face Plate (#1).