

Manta Ray Installation Instructions

<u>WARNING:</u> Lighting fixtures must be installed in accordance with all local codes or the National Electrical Code (NEC). Failure to do so could result in very serious injury. The lighting fixture could also be damaged.

<u>SAFETY WARNING:</u> When the fixture lamp is on it becomes very HOT! As a result, metal parts around the lamp will also become very HOT! This could burn fingers or hands upon contact! Care should be taken not to mount fixtures where children can reach them. Lower wattage lighting fixtures lower this risk.

WARNING: Fixtures are NOT for use in swimming pools or spas!!! Under water fixtures are for use in ponds and water gardens.

Safety Measures

- Disconnect transformer from electrical supply before installation or service to prevent electrical shock.
- DO NOT perform service while standing in or near water.
- Lighted lamp is hot. Turn off/unplug and allow lamp to cool before replacing.
- Do not touch hot lens, guard or enclosure.
- Keep lamp away from material that may burn.
- Do not operate fixture if there is any presence of water in the fixture.

<u>Note:</u> These fixtures are designed for use with a 12-volt landscape lighting system and require a 12v MAGNETIC transformer, purchased separately.

Installation

- 1. Disconnect transformer from electrical supply before installation, to prevent electrical shock.
- 2. Plan the desired layout of your fixtures carefully, ensuring that the 20ft cable will be able to reach the low voltage line.
- 3. Secure the fixtures in the desired positions by wedging the bases under a rock or ledge.
- 4. Adjust the angle of the fixture to the desired direction and tighten the nut down.
- 5. Run the power cable to the low voltage line and hide by covering it with gravel, placing it along the rocks of the water feature, and/or burying it underground.
- 6. Make sure that ends of power cables are watertight.
- 7. Attach power cable to low voltage line or directly to transformer (not included), using preferred connecting hardware.
- 8. Turn power on and adjust the position and angle of the fixtures to get the desired lighting effect.

 (Note: final adjustment is better done when it is dark out, to better see how and where the light from the fixtures is falling.)