## LED Landscape Lighting — Transformers

## **MODEL OT-75W**





## WARNING

# WARNING — THE INSTALLATION MUST BE CARRIED OUT BY A QUALIFIED ELECTRICIAN.

- 1. Mounting the transformer outdoors is recommended.
- 2. If mounted indoors, then codes should be followed that apply to indoor wiring especially for wires that pass through exterior walls
- 3. Transformer is designed for above ground installation only
- 4. Transformer MUST be mounted in a vertical orientation with the bottom plate at least 1 feet from the ground

#### **Application Notice**

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, READ THE INSTRUCTIONS BELOW:

- 1. Transformer MUST be installed in accordance with the National Electric Code and local code specifications. Failure to follow these codes and installation will void the warranty and may result in serious injury and/or damage to the fixture
- 2. Install the Transformer at least 5 feet (1.5m) from pool or spa and at least 10 feet (3.05m) from a fountain
- 3. This Transformer MUST be connected to GUCCI-protected receptacle.
- If the receptacle is outdoors, then it MUST be protected by an in use weatherproof cover
- 4. It is normal for the unit to become hot. DO NOT allow contact with PVC or plastic sidings. In hot climates, avoid mounting in direct sunlight, but allow photocell to be exposed to sky. When near saltwater, protect unit by enclosing in weatherproof structure

#### CAUTION

PLEASE READ INSTRUCTION BEFORE COMMENCING INSTALLATION AND RETAIN FOR FUTURE REFERENCES. Electrical products can cause death or injury, or damage to property.

If in any doubt about the installation or use of this product, consult a competent electrician.

## **INSTALLATION GUIDE**

#### **Circuit Breaker**

OT-75W has a built-in circuit breaker to help protect against electrical short circuits. This does not prevent the need to use GFCI outlets marked for "wet location".

It also does not prevent the requirement to follow all local and electrical building codes for the main circuit breaker protection.

If a circuit break occurs, immediately disconnect the transformer from the power source. Make all repairs to the lighting system that cause the circuit breaker to trip. Once the problem has been resolved, reset the breaker by switching to the ON position

#### **Features and Controls**









- 2. Operating Record
- 3. Locking Hole
- Mechanical Timer
   Testing Loop
- 6. Photocell Plug
- 7. Overload Circuit Breaker
- 8. Terminal Block
- 9. Knockout
- 10. Conduit Cover
- 11. Mounting Tab 12. Power Cord
- 13. Photocell Knockout

13376 Comber Way Surrey BC V3W 5V9 375 Admiral Blvd Mississauga, ON L5T 2N1



## LED Landscape Lighting — Transformers

## **MODEL OT-75W**

### **INSTALLATION GUIDE**

#### **Mounting Transformer**

- 1. Mount transformer to solid surface or stand using stainless steel screws and anchors if needed (hardware not included)
- 2. Screws will pass through key holes. Use bubble level to ensure vertical mounting
- 3. Bottom of transformer MUST be at least 1 feet above the ground

#### **Transformer Sizing**

- 1. The total lamp VA (load) of all fixture connected to one transformer MUST NOT exceed 70% of the VA capacity of the transformer
- 2. Therefore, the transformer selections are primarily based on Total Fixture Load:

#### TOTAL FIXTURE LOAD (Watts or VA) ÷ 0.7 = Minimum Transformer Capacity

Example) The total fixture load is 200W, divide by 0.7 to equal 286W, a 300W transformer would be idel.

#### **Select Your Wire**

- 1. We recommend using 12AWG low voltage direct landscape wire.
- 2. It is important to distribute fixtures evenly along the cable with higher wattage fixtures closer to the transformer if possible
- 3. Only use the bottom terminals for wiring to lighting
- 4. DO NOT loosen the top terminals. They are for internal wiring of the transformer
- 5. The higher voltage terminals are for long wire runs to lights. These will help account for voltage loss along the long run of wire

#### **Voltage Loss Calculation**

(Distance (Ft.) X Load (W) X 2) ÷ Cable Constant = Voltage Loss

Wire Gauge	Cable Constant	Wire Gauge	Cable Constant
#18/2	1380	#12/2	7500
#16/2	2200	#10/2	11920
#14/2	3500		

#### Select Voltage Taps

Transformer are Multi-Tap — giving you a selection of voltages for your wire run connections. Selecting a higher voltage at the transformer compensates for voltage that may be lost along wire runs.

#### **Installing a Photocell**

- 1. Disconnect the power supply from the transformer before installing the photocell.
- 2. Remove the inner knockout located on the side of the transformer
- 3. DO NOT remove the outer portion of the knockout or the photocell will not fit properly
- 4. To remove the inner portion, use a screwdriver to bend the tabs forward
- 5. Use a set of pillars to twist and bend the tabs until the inner knockout breaks loose
- 6. Insert the wire and connector of the photocell through the hole in the side of the transformer
- 7. Place the nut around the wire and screw onto the photocell, holding the unit in position



Unplug the jumper connection from the transformer



Remove the nut from the photocell.



13376 Comber Way Surrey BC V3W 5V9 375 Admiral Blvd Mississauga, ON L5T 2N1 1-888-543-6473
1-888-541-6474



## LED Landscape Lighting — Transformers

## **MODEL OT-75W**

### **INSTALLATION GUIDE**

#### **Installing a Photocell**





8. Plug the photocell into the now empty socket connection



#### Timer

Operating the Timer:

- 1. Rotate the outer portion of the timer until the arrow on the right side points to the current time (24 hours time)
- 2. Slide the dark gray tabs towards the centre for the allotted time you want the lights to be on
- 3. Follow the instructions for the timer to set the clock and on and off times or manually turn ON/OFF your system

#### **Check the System**

- 1. After installing the entire low voltage system, operate the system for five minutes. On the low voltage side, all electrical connections spots should be cool to touch.
- 2. If connection is hot to the touch, re-tighten the connection and check to ensure that the temperature decreases
- 3. Place the transformer cover back and tighten all four provided screws on both sides

