

# MarsLG® 150W/300W Landscape Transformer (3299-12V/3289-12V) Instruction Manual

#### **IMPORTANT SAFETY INSTRUCTIONS**

- Basic precaution should always be practiced when using electrical products.
- Read and follow all instructions on the product or provided with the product.
- For use only with 12V low voltage landscape lighting systems. Not for use with submersible fixtures.
- Do not install or use within 10-feet of a pool, fountain, or spa.
- Do not submerge transformer.
- Do not use an extension cord.
- Do not use with a dimmer.
- Do not connect multiple transformers in parallel.
- Do not overload the transformer (total cumulative wattage of all light fixtures should not exceed 70% of transformer rating).
- Only qualified person(s) should perform installation work and electrical wiring in accordance with all applicable codes and standards.

#### LOCATING AND MOUNTING TRANSFORMER

- Transformer should be mounted outdoors vertically such that it is at least 1 foot off the ground, using fastener suitable for the mounting surface.
- Transformer should be installed near a weather-protected, grounded GFCI electrical receptacle.
- If an optional photo sensor is used, do not mount transformer in areas with heavy shade or nighttime light source, which affects photocell performance.
- Installing transformer in weatherproof structure is recommended near salt water.
- In areas with hot climate, avoid installing transformer in direct sunlight (but still allow photo sensor, if used, to view the sky).
- It is normal for transformer to become hot during operation; avoid contact with plastic or PVC sidings.
- Once transformer location is determined, secure weather-resistant screw to mounting surface, leaving approximately %" to hang transformer. The size of the mounting screw should be at least SAE #4 to support the weight of the transformer.

## **CONNECTING LOW VOLTAGE CABLE**

This transformer is multi-tap, which offers a selection of different output voltages. Selecting a higher output voltage can compensate for possible voltage drop in long wire runs. For example, if after all wiring is done and voltage at the farthest light fixture from the transformer measures 9V, moving wire from "12V" tap to "15V" tap would result in 12V at the light fixture. Providing each light fixture with an acceptable voltage is the ultimate goal.

- Always unplug transformer from 120V power and set toggle switch to "OFF" position before making wire connections.
- Strip off ¾" of insulation from wire ends of low voltage cable.
- If low voltage cable has stranded wires, twist the stripped wire ends.
- Insert stripped wire ends under pressure plates of screw terminals (e.g. one to "12V" and the other to "Com1"); tighten screws.
- Gently pull on low voltage cable to confirm that it is secured.

#### **OPTIONAL ACCESSORIES**

• Timer (product code 3378TMR)

To install, remove existing power cord from TIMMER MODULE RECEPTACLE and replace with timer; plug in removed power cord into output of timer.

Tel: 510-264-1688

Refer to timer manual for operating instructions.

### • Photocell (product code 3380PC)

To install, remove jumper connector from PHOTOCELL PLUG and replace with photocell.

The photocell reacts to changing light conditions, making automatic dusk-to-dawn operation possible. There may be a delay in reacting to light conditions, which is normal. Avoid having the photocell facing an artificial light source.

A piece of black tape may be used to cover the photocell when testing during the daytime.

# **TROUBLESHOOT**

Symptom	Possible Causes
Nothing seems to work	<ul> <li>Transformer not receiving power Check that power receptacle is energized. Check that power cord is securely plugged into receptacle.</li> <li>Loose connection at transformer Check that low voltage cable is secured to screw terminals of transformer.</li> <li>Control Switch is in OFF position Check that Control Switch is not set to the OFF position.</li> <li>Optional timer is not set to turn ON at the current time Check that the timer is set correctly.</li> <li>Optional photocell used during daytime If performing tests during the day, cover photocell with a piece of black tape.</li> </ul>
All lights are ON during the day	<ul> <li>Optional timer not set to turn OFF during the day Check that the timer is set correctly.</li> <li>Optional photocell not sensing enough light Check that photocell is not covered, and that it is not located in a dark area.</li> </ul>
All lights do not switch ON at dusk	<ul> <li>Control Switch is in OFF position Check that Control Switch is not set to the OFF position.</li> <li>Optional timer is not set to turn ON at dusk Check that timer is set correctly.</li> <li>Artificial light shining on optional photocell Check that there are no lights shining on photocell.</li> </ul>
Only some lights switch ON	<ul> <li>Poor wire connection Check low voltage wiring between transformer and light fixture. With a voltmeter, check that the voltage at the light socket is close to 12VAC.</li> <li>Too much voltage drop With a voltmeter, check that the voltage at the light socket is close to 12VAC. If too low, try connecting to a higher voltage tap on transformer and using thicker low voltage wires.</li> <li>Light bulb is bad or not seated properly Remove and reinstall light bulb (CAUTION: bulb may be hot). If problem persists, try with a known good bulb. Replace light bulb if necessary.</li> </ul>