

300W Transformer with Integrated Photocell and Timer

Installation Instructions

WARNING:

- DO NOT Use with submersible fixtures
- DO NOT Use with extension cords
- DO NOT Submerge in water
- DO NOT Connect multiple transformers in parallel
- DO NOT Use with a dimmer
- DO NOT Exceed total fixture wattage of 300W

IMPORTANT SAFETY WARNINGS:

All wiring and installation must be in accordance with local building and electrical codes. Only plug transformer in to 120V GFCI receptacle marked for “wet location.” Always disconnect transformer from power source before performing work on lighting system. Calculate lighting capacity correctly – total wattage of fixtures may not exceed 300W.

TRANSFORMER MOUNTING INSTRUCTIONS

- 1) Select a suitable location near a 120V covered GFCI marked for “wet location.” Avoid mounting transformer near night light sources or in areas that are not exposed to sunlight. Photocell will not work properly in these locations.
- 2) Mount transformer at least one foot above ground.
- 3) Drill two 3/16” holes on appropriate mounting surface.
- 4) Install anchors and screws, leaving enough room to mount transformer using the hole on the back of the transformer.



- 5) Do not plug in transformer until after low voltage wiring is complete.

CIRCUIT BREAKER

If a circuit break occurs, immediately disconnect the transformer from the power source. Common causes for a circuit break are:

- Low voltage wires incorrectly connected to transformer output terminals.
- Overload or short circuit (bare wires touching) somewhere along cable.
- Fixtures incorrectly installed along the cable.
- Fixtures along cable exceed 300W total.

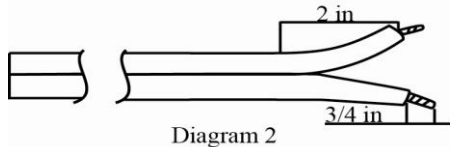
Make all repairs to the lighting system before reconnecting the transformer to the power source. After the problem has been determined and solved, reset the breaker by pushing the button.

LOW VOLTAGE WIRING INSTRUCTIONS

NOTES:

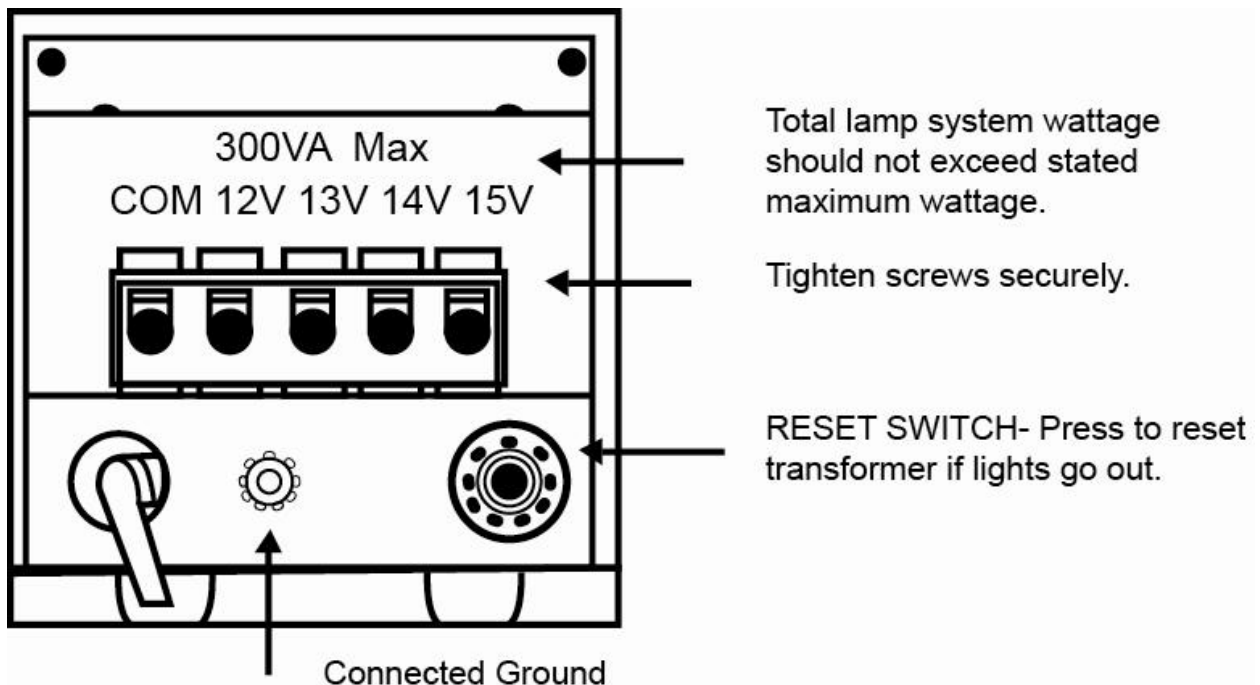
Verify correct wire is being used – 12 gauge wire rated for direct burial is recommended. Distribute fixtures evenly along the cable with higher wattage fixtures closer to the transformer, if possible. Verify total wattage of all fixtures does not exceed 300W.

- 1) Split cable about 2" and strip approximately $\frac{1}{2}$ " to $\frac{3}{4}$ " of insulation from wire ends and twist tightly (see diagram below).



- 2) Loosen screws on transformer output terminals.
- 3) Thread the stripped/twisted cables firmly into the terminals.
- 4) Firmly tighten the terminal screws. Gently pull on the wires to ensure that they are properly inserted.
- 5) Mount transformer on surface and plug into GFCI outlet.

DETERMINE WHICH OUTPUT TERMINAL TO USE



This transformer has multiple output terminals: 12V, 13V, 14V, 15V and common(C). A volt meter is required to perform the following tests to determine which output is appropriate for your system. Voltage of 10.5V-12V needs to be supplied to each fixture.

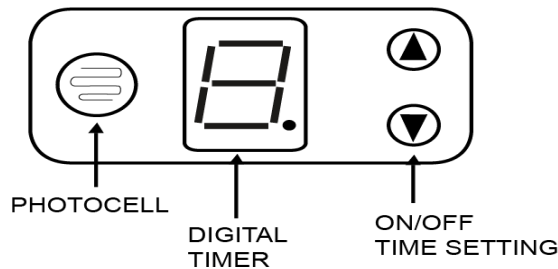
Straight Run Configuration

- 1) Install lamps in the fixtures and connect all fixtures in sequence.
- 2) Connect one wire to the common terminal and one wire to 12V terminal from the fixture closest to the transformer.
- 3) Turn on the transformer.
- 4) Using a volt meter, measure the voltage at the fixture closest to the transformer (highest reading) and the fixture furthest from the transformer (lowest reading).
- 5) If the low reading is below 10.5V, move that fixture's non-common wire to the 13V terminal and re-test.
- 6) Repeat steps 1-3 until low reading is above 10.5V.

Loop Configuration

- 1) Install lamps in the fixtures and connect all fixtures in sequence.
- 2) Connect one wire to the common terminal and one wire to the 12V terminal from both the first and last fixture in the sequence. Make sure to maintain polarity when using loop configuration.
- 3) Turn on the transformer.
- 4) Using a volt meter, measure the voltage at the fixture closest to the transformer (highest reading) and the fixture in the middle of the loop (lowest reading)
- 5) If the low reading is below 10.5V, move that fixture's non-common wire to the 13V terminal and re-test
- 6) Repeat steps 1-3 until low reading is above 10.5V

TRANSFORMER/PHOTOCELL OPERATION



DRAWING 4

This transformer includes a photocell feature that allows light fixtures to operate either manually, on a timer, or automatically. The photocell may take up to 30 seconds to activate upon change in light levels. Pressing the “UP” or “DOWN” arrow keys will cycle through the 11 functions.

Manual ON – Pressing “UP” or “DOWN” key until the display shows “O” will cause light fixtures to stay on continuously.

Manual OFF – Pressing “UP” or “DOWN” key until the display is blank will turn all light fixtures off.

Timed Operation (1-9 Hrs.) – Pressing “UP” or “DOWN” key will cycle through numbers “1-9” (hours). The fixtures will turn on when light levels are low (dusk), and turn off after the indicated amount of time.

Automatic Operation – Press “UP” or “DOWN” key until the display reads “A”. Light fixtures will turn on when light levels are low (dusk) and turn off when light levels are high (dawn).