

## WILAWELS A04LT06

# WILAWELS 150W Low Voltage Transformer A04LT06 User Manual

Model: A04LT06

## 1. INTRODUCTION

This manual provides essential information for the safe installation, operation, and maintenance of your WILAWELS 150W Low Voltage Transformer A04LT06. This device is designed to convert standard 120V AC household current to a safe 12V DC low voltage output, suitable for various outdoor landscape lighting applications.

## 2. SAFETY INFORMATION

**WARNING: To reduce the risk of fire or electric shock, read and follow all instructions carefully. Improper installation or use can lead to serious injury or property damage.**

- Always disconnect power at the circuit breaker before installing or servicing the transformer.
- This transformer is intended for outdoor use and must be installed in accordance with local electrical codes.
- Do not immerse the transformer in water. Ensure it is mounted in a location that prevents standing water from accumulating around it.
- Do not exceed the maximum output capacity of 150W. Overloading the transformer can cause damage and create a fire hazard.
- Use only low voltage landscape lighting fixtures and wiring compatible with 12V DC systems.
- Ensure all connections are secure and protected from moisture.
- Keep children away from electrical components.

## 3. PRODUCT FEATURES

- **Power Output:** 150W maximum, converting 120V AC input to 12V DC output.
- **Multiple Operating Modes:** Manual On/Off, Auto (Dusk to Dawn), Countdown Timer, and Test Mode.

- **Integrated Photocell Sensor:** For automatic dusk-to-dawn operation.
- **Durable Construction:** Weather-resistant design with built-in circuit breaker for protection against rain, snow, dust, overheat, overload/short circuit, and corrosion.
- **ETL Certified:** Ensures compliance with North American safety standards.
- **Easy Installation:** Designed for quick setup.

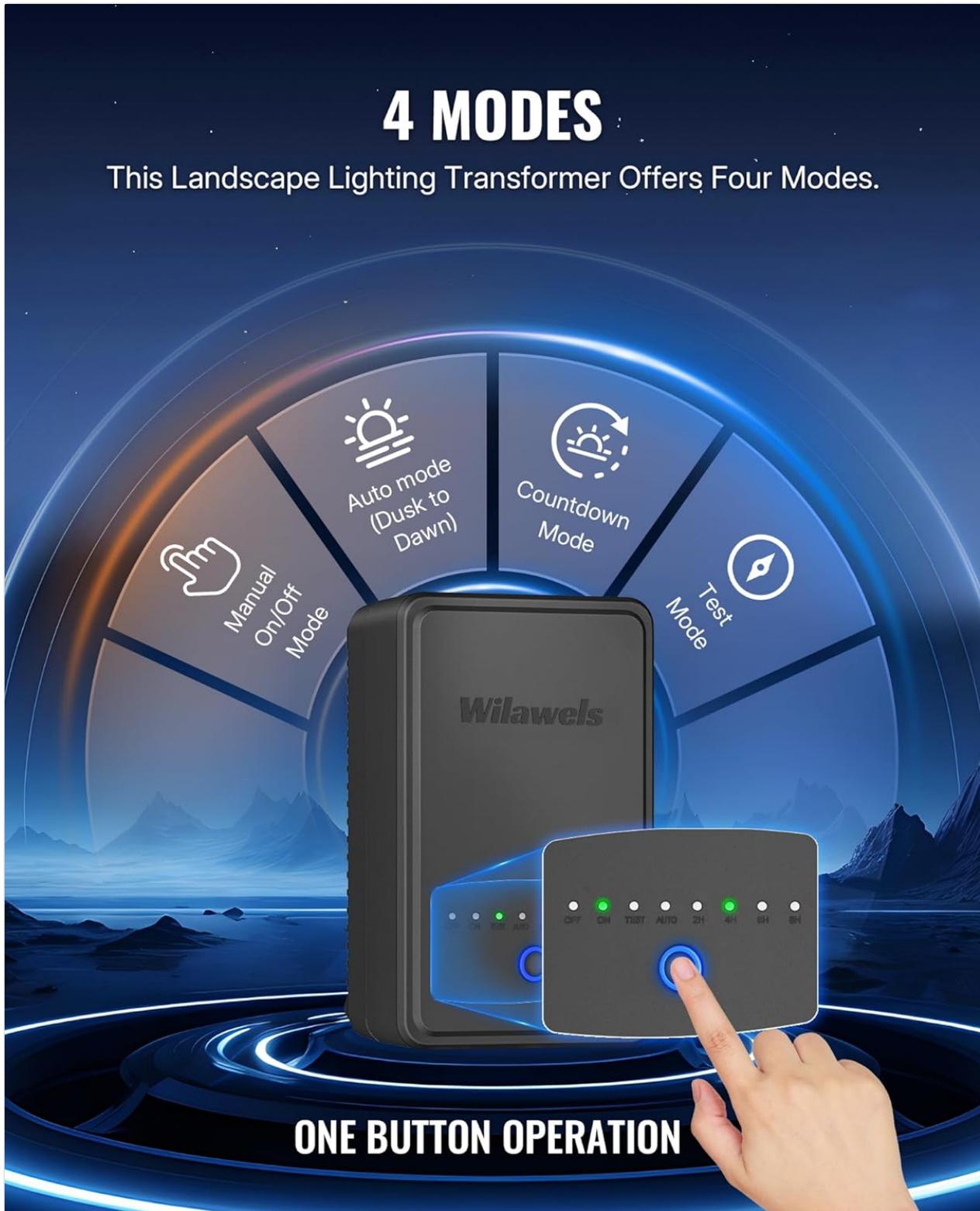


Figure 1: Transformer with its four operating modes and single button control.

# WEATHERPROOF AND PROTECTED

Built-in circuit breaker offers protection against rain, snow and dust.



Figure 2: Weatherproof and protected design of the transformer.

## 4. PACKAGE CONTENTS

- WILAWELS 150W Low Voltage Transformer A04LT06
- Integrated Power Cord (SJTWA 18AWG/3C, 6.3 ft)
- Integrated Photocell Sensor Cord (SJTWA 20AWG/2C, 6.8 ft)

## 5. SETUP AND INSTALLATION

Follow these steps for proper installation of your low voltage transformer:

1. **Choose a Mounting Location:** Select a suitable outdoor location near a 120V AC GFCI (Ground Fault Circuit Interrupter) protected outlet. The location should be protected from direct water spray and allow for proper ventilation. Mount the transformer vertically using appropriate hardware (not included) to prevent water from entering the unit.
2. **Connect Landscape Lighting:** Route your low voltage landscape lighting cables (not included) to the transformer's output terminals. Ensure the total wattage of all connected lights does not exceed 150W. For example, you can connect approximately 25 x 6W lawn lights, 15 x 10W lawn lights, or 10 x 15W lawn lights. Strip the ends of the low voltage cables and securely connect them to the transformer's 12V output terminals.
3. **Position the Photocell Sensor:** The integrated photocell sensor detects ambient light to enable dusk-to-dawn operation. Position the sensor cord so that the sensor head is exposed to natural light and not obstructed by shadows from buildings, trees, or artificial light sources (like porch lights) that could interfere with its operation.
4. **Connect to Power:** Plug the transformer's 120V AC power cord into a GFCI-protected outdoor outlet.
5. **Test System:** Once all connections are made, turn on the power at the circuit breaker and use the Test Mode (see Section 6) to verify that all lights are functioning correctly.

# SET UP LESS THAN AN HOUR

Plug and play once installed.



Power Limit

**150W**



**x 25**

6W Lawn Light



**x 15**

10W Lawn Light



**x 10**

15W Lawn Light

Figure 3: Transformer setup with power limit examples.

# DUST TO DAWN

The photocell sensor automatically turns lights on at dusk and off at dawn.



Figure 4: Dusk to Dawn operation via photocell sensor.

## 6. OPERATING MODES

The transformer features a single button for cycling through its four operating modes. The current mode is indicated by LED lights on the unit.

- **Manual On/Off Mode:** Press the button to manually turn the lights on or off. The lights will remain in the selected state until manually changed again.
- **Auto Mode (Dusk to Dawn):** In this mode, the integrated photocell sensor automatically turns your landscape lights on at dusk and off at dawn. This provides continuous illumination during nighttime hours.

- **Countdown Mode:** This mode allows you to set a specific duration for your lights to remain on after dusk. Available countdown options typically include 2H (2 hours), 4H (4 hours), 6H (6 hours), and 8H (8 hours). The lights will turn on at dusk and automatically turn off after the selected duration.
- **Test Mode:** Use this mode to quickly check if your lights are connected and functioning correctly. The lights will turn on for a short period, regardless of ambient light conditions, allowing for easy troubleshooting during installation.

To change modes, simply press the control button repeatedly until the desired mode's indicator light illuminates.

## 7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your transformer:

- **Cleaning:** Periodically wipe the exterior of the transformer with a damp cloth to remove dirt and debris. Do not use harsh chemicals or abrasive cleaners.
- **Inspect Connections:** Annually check all electrical connections for tightness and signs of corrosion. Ensure low voltage cables are not damaged or frayed.
- **Photocell Sensor:** Keep the photocell sensor clean and free from obstructions (leaves, dirt, snow) to ensure accurate dusk-to-dawn operation.
- **Circuit Breaker:** The built-in circuit breaker protects against overloads. If the lights turn off unexpectedly, check for an overload condition (too many lights connected) or a short circuit in the wiring. Disconnect power, resolve the issue, and then restore power.

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Lights do not turn on.	No power to transformer, faulty connections, overloaded circuit, faulty lights, incorrect mode.	Check GFCI outlet, ensure power cord is plugged in. Verify all low voltage connections. Reduce total wattage if exceeding 150W. Test individual lights. Ensure correct operating mode is selected.
Lights stay on during the day or off at night.	Photocell sensor obstructed or faulty, incorrect mode.	Clean photocell sensor and ensure it is not blocked by objects or artificial light. Switch to Auto (Dusk to Dawn) mode.
Lights flicker or are dim.	Loose connections, insufficient wire gauge for distance, overloaded circuit.	Tighten all connections. Ensure appropriate wire gauge is used for the length of the cable run. Reduce load if exceeding 150W.
Transformer makes unusual noises.	Internal fault.	Immediately disconnect power. Do not attempt to repair. Contact customer support.

## 9. SPECIFICATIONS



Figure 5: Transformer dimensions and cord specifications.

Specification	Detail
Model Number	A04LT06
Manufacturer	WILAWELS
Input Voltage	120V AC, 60Hz
Output Voltage	12V DC
Max Output Power	150W

Specification	Detail
Product Dimensions	19.81 x 9.91 x 6.86 cm (7.8 x 3.9 x 2.7 inches)
Item Weight	771 g (1.7 lbs)
Colour	Black
Power Cord	ETL Certified SJTWA 18AWG/3C, 6.3 ft
Sensor Cord	ETL Certified SJTWA 20AWG/2C, 6.8 ft
Certifications	ETL Certified
Included Components	Low Voltage Transformer

## 10. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the product packaging or contact WILAWELS customer service directly. Keep your purchase receipt as proof of purchase.