

INSTALLATION INSTRUCTION

Magnetic Transformer

LC-2531100/LC-2531200



IMPORTANT:

Read all instructions before installing.

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- This power supply complies with the requirements of UL1838. This power supply should be installed in compliance with the National Electrical Code and local electrical codes. This unit is for use with landscape lighting systems only.
- **WARNING –Risk of Electric Shock.** Install power unit 5 feet (1.5 m) or more from a pool.
- Do not modify or change the product in any way. This product is to be installed by a qualified electrician only. Failure to do so will void the warranty and may result in serious injury and/or damage to the transformer.
- Connect directly to an outlet; do not use an extension cord with this product. For 120 Volt AC operation only. Be sure that the supply circuit is energized. If this occurs, the circuit breaker can be replaced with a breaker rated for high in-rush currents and should only be done by a qualified electrician.
- To avoid risk of fire do not use a fixture or a combinations of fixtures where the total watts exceed the rating of the power supply.

IMPORTANTE:

Lea todas las instrucciones antes de instalar.

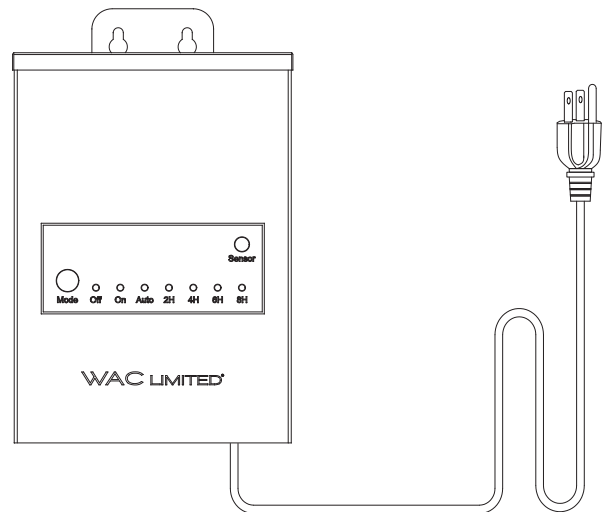
- No conecte este temporizador en un cable de extensión u otro adaptador de corriente. Conecte directamente a una toma eléctrica.
- No conecte el contador a los aparatos que contienen elementos de calefacción (de aparatos de cocina, calentadores, planchas, etc.)
- El fallo del temporizador para apagar dicho dispositivo puede provocar un sobrecalentamiento y un posible incendio.
- No conecte este temporizador si está húmedo.
- No limpie este temporizador cuando está enchufado int.
- No exceder los valores máximos del temporizador.
- Posible riesgo de descarga: Mantener fuera del alcance de los niños.

IMPORTANT:

Lisez toutes les instructions avant de l'installer.

- Ne branchez pas ce temporisateur dans une rallonge ou un autre adaptateur électrique. Brancher directement dans une prise électrique.
- Ne pas relier cette minuterie pour les appareils qui contiennent éléments de chauffage (appareils de cuisson, chauffe, un fer à repasser, etc.)
- L'échec de l'horloge pour éteindre tel dispositif peut entraîner une surchauffe et un incendie.
- Ne branchez pas cette minuterie si elle est mouillée.
- Ne nettoyez pas ce temporisateur quand il est branché int.
- Ne pas dépasser les évaluations maximales de la minuterie.
- Risque d'électrocution: Conserver hors de la portée des enfants.

MODEL NO.	LC-2531100-SS	LC-2531200-SS
INPUT	120 VAC 50/60 Hz	120 VAC 50/60 Hz
OUTPUT	12VAC	12VAC
OUTPUT RATED POWER	100 W	200 W



Important safety information to reduce risk of fire injury!

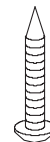
1. Do not install within 10 feet (3 m) of a pool, spa or fountain.
2. There are no serviceable parts inside the power supply unit. DO NOT DISASSEMBLE.
3. Do not repair or tamper with cord or plug.
4. Do not submerge transformer in water.
5. Do not mount the transformer onto combustible material.
6. Do not use the transformer with a dimmer switch.
7. Do not plug the power supply unit directly into a GFCI wet location outlet
8. Applicable for low voltage outdoor landscape lighting system only.
9. Do not overload the transformer. Total power of fixtures should not exceed the output rated power of the transformer.

CAUTION: This landscape light system must be installed in accordance with all local codes and ordinances. If you are experiencing problems, contact a qualified electrician.

CALCULATING LIGHTING CAPACITY

To make sure the maximum number of fixtures can be safely connected to this transformer, add up the individual wattage of all the fixtures. The total wattage of your fixtures must not exceed output capacity of the transformer.

Mounting Accessories



Wood Screw
Qty: 3pcs



Plastic Anchor
Qty: 3pcs

Waclighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters, East Manufacturing Facility
44 Harbor Park Drive
Port Washington, NY 11050

South East Manufacturing Facility
1600 Distribution Ct
Lithia Springs, GA 30122

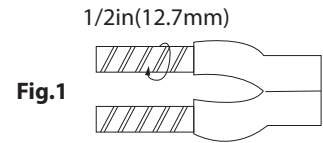
Central Manufacturing Facility
1700 South J Elmer Freeway, Ste 100
Cedar Hill, TX 75104

West Manufacturing Facility
1750 S Archibald Ave
Ontario, CA 91761

Installation

1.Preparing the Cable

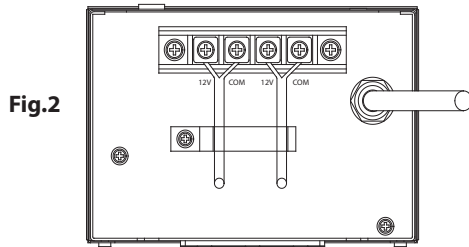
Split the cable without exposing the copper cable underneath.
 Remove the landscape cable insulation 1/2 inch from both cables and twist ends.(Fig.1)



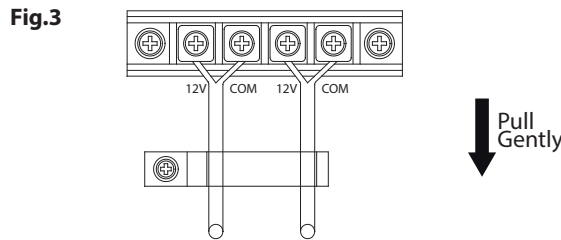
2.Connecting the cable to the Transformer

Lay the transformer on a flat, stable surface and insert one stripped end of the wire under the terminal clamping plate"COM".
 Then, tighten the screw. Repeat this procedure for clamping plate"12V".(Refer to the last page to calculate max run length for different wire gauges.)

Tips: Thread your cable through we white plastic loop to reduce strain on the wire.(Fig.2)



NOTE: Gently pull on the landscape cable to verify the connection is strong.(Fig.3)



3.Placing Your Fixtures and Routing the cable:

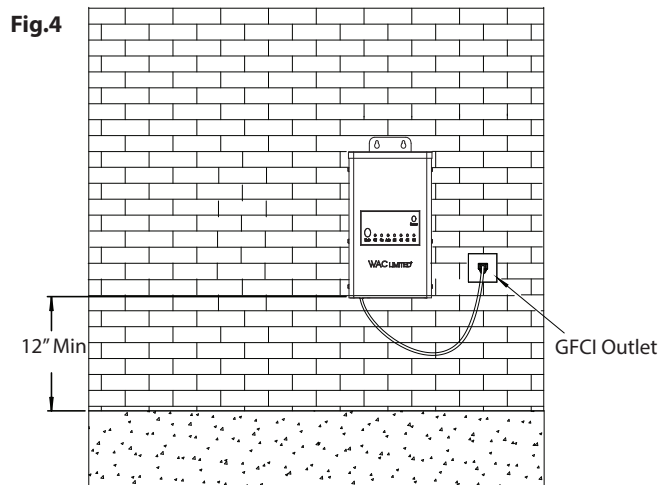
Lay your fixtures (not included) to your desired location. Be sure they do not exceed the rating of the transformer.
 Coil the rest of the cable after the last fixture.

4.Attaching Your Fixtures

Use the cable connectors to attach, your fixtures with the cable. Plug the transformer in the GFCI outlet and enter the ON mode.

5. Mounting the Transformer

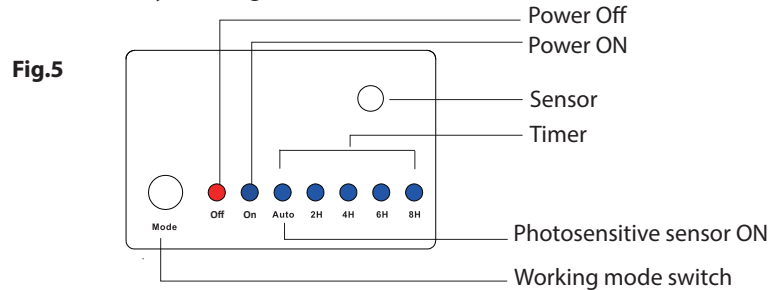
Use the screw to mount the transformer directly on a wall.
 Mount at least 12in above ground.(Fig.4)



Operating instruction

1. Panel description

After the product is switched on at 120V 50/60Hz working voltage, the software self-tests during startup (all indicator lights will be briefly lit together), and the indicator light stays in the Off normally off state after self-testing, at this time the product is in standby state.(Fig.5)

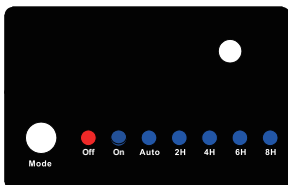


2. Product Operation

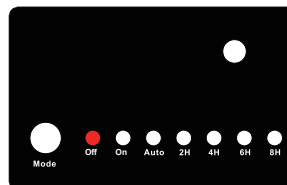
This transformer has three automatic methods to turn on and off:

- ①. On or off by the mode switch button.
- ②. Photosensitive sensor mode: it will start working automatically at dusk and stop working automatically at dawn
- ③. Photosensitive sensor+ timing: it will automatically start working at dusk and automatically shut down at the set time

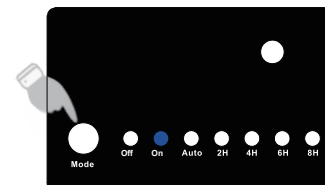
3. Operating instruction



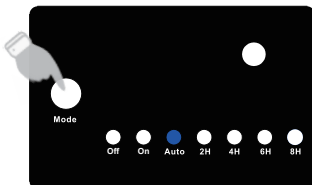
1. Software self-check indicator status during startup.



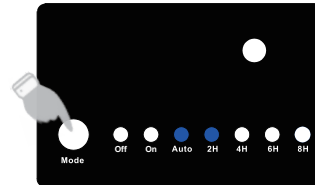
2. After the self-test is completed, the standby state will be on.



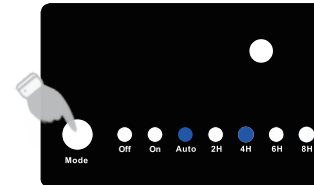
3. In the standby state, press the Mode key once to turn On the normal mode.



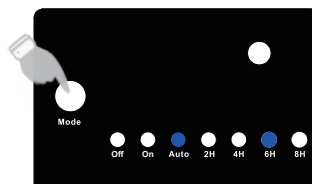
4. Press the mode key a second time to enable the photosensitive sensor mode.



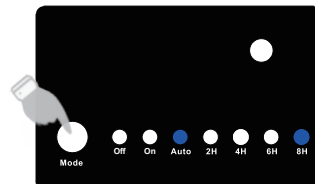
5. Press the mode key a third time to enable the photosensitive sensor mode for a 2-hour duration.



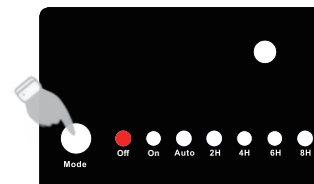
6. Press the mode key a fourth time to enable the photosensitive sensor mode for a 4-hour duration.



7. Press the mode key a fifth time to enable the photosensitive sensor mode for a 6-hour duration.



8. Press the mode key a sixth time to enable the photosensitive sensor mode for an 8-hour duration.



9. Press the mode key a seventh time to return to off, also known as standby mode.

4.Memory function

The transformer has a power-off memory function. When the transformer powers on again, the transformer will remain the same mode as before the power failure.

Note

The position of the photo sensor will affect the light level at which the transformer is turned on for automatic on/off and photo sensor on/off timer modes. Installing the transformer in an area that receives less sunlight at dusk (east side of the house, behind trees and shrubs, under patios) will cause the transformer to turn on earlier in the evening. Install the transformer in a brightly lit place, and the transformer will start when it gets dark. The position and direction of the installed transformer can be adjusted until the transformer turns on under the required illumination. Avoid pointing the sensor at night-time sources such as windows, porch lights and street lights.

WARNING:

The transformer has built-in over current protection and over temperature protection functions. Circuit breakers will trip if there is a short, or if total lamp wattage exceed the rated power of the transformer. If breaker trips check total wattage of lamps or for a short in the circuit. Restart after trouble shooting.

LOW VOLTAGE CABLE LENGTH:

In planning a low voltage system, it is necessary to consider the impact of voltage drop. Because of cable's inherent resistance, voltage drops along its length: the end-of-run lamps will be dimmer than those at the beginning. Since voltage drop is a function of cable length and cable size and total fixture wattage, voltage drop can be minimized in several different ways:

- Use multiple cable runs
- Use heavier gauge cable(8 or 10 gauge)
- Shorten cable lengths or runs
- Reduce VA of individual fixtures
- Reduce the total number of fixtures on a run
- Use multiple transformers in different locations

Cable is measured by gauge. The lower the number, the thicker the cable and the more current it carries. Common cable size for low voltage lighting is available in three gauges: #12-2, #10-2, and #8-2. To calculate maximum cable length, use the formula below:

$$V_d = \frac{L \times VA \times 2}{K_c}$$

V_d = Voltage drop in the section of cable, in volts
 L = Length of the section of the cable (one way distance), in feet
 VA = Total VA values carried by the section of cable for the fixtures it supplies
 K_c = Cable Constant as follow:

Cable Size	K _c
12	7500
10	11920
8	18960

Please refer to WAC Lighting website for voltage drop calculator.