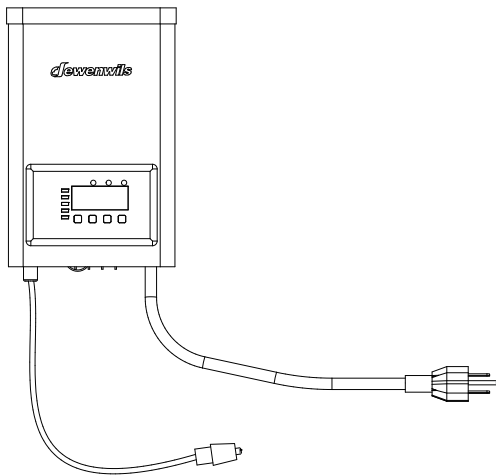




Low Voltage Transformer

SKU: HOSL03H

[Instruction Manual]



Please pay attention to the warning signs
Read the instructions with caution before operating
and keep it properly

SAFETY INSTRUCTIONS:

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 IT.**
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 connect two or more transformers in parallel.
7. Do not use the transformer with a dimmer switch.
8. Plug the power supply unit directly into a GFCI wet location outlet.
9. For use with low voltage outdoor landscape lighting system only.
10. The maximum output of this transformer is 120 watts. Do not overload the transformer. Be sure that the total cumulative wattage of all 12 volt fixtures connected to the transformer is equal to or less than 120 watts.

CAUTION: This landscape light system must be installed in accordance with all local codes and ordinances. If you encounter any problems during installation, please contact a qualified electrician.

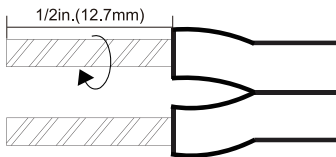
CALCULATION LIGHTING CAPACITY

The 120 watt transformer has 120 watt circuits which will power up to 120 watts of light. 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 120 watt transformer.

INSTALLATION

1. Preparing the Cable

Being careful when splitting it.
NOT to expose the copper cable.
Remove the landscape cable insulation 1/2 inch from both cables and twist ends.

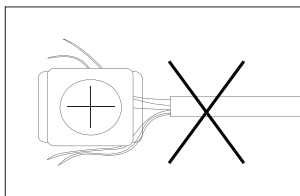
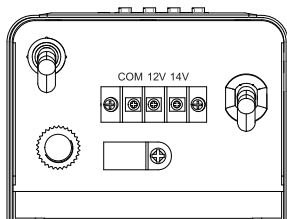


2. Connecting the cable to the Transformer

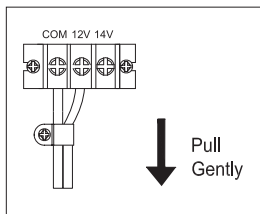
Lay the transformer on a flat, stable surface and use screwdriver to connect the stripped ends of the cable under the terminal clamping plate.

Tips: ① Thread your cable through the white plastic loop to reduce its gravity.

② As the following image shows, there are 3 group wiring ports (COM/12V/14V for each group), you can choose any group of them to connect your cable. For each group, there are 2 terminal output ends- 12V/14V, select the appropriate terminal according to your lamp voltage.

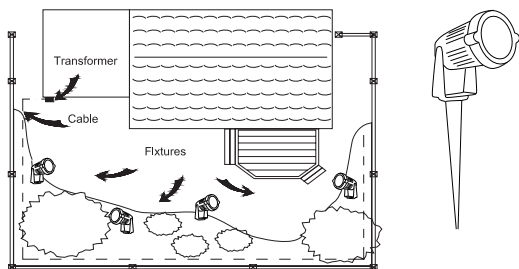


Note: Gently pull on the landscape cable to verify if the connection is strong.



3.Placing Your Fixtures and Routing the cable

Lay your fixtures (not included) to your desired location. Be sure they do not exceed the 120-watt rating of the transformer. Coil the rest of the cable after the last fixture. Transformer Cable Fixtures.

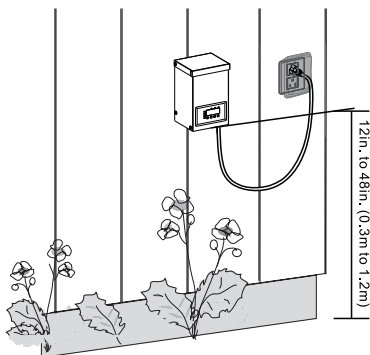


4.Attaching Your Fixtures

Use the cable connectors to attach your fixtures with the cable. Plug the transformer in the GFCI outlet and enter the ON mode. Then the lamps will light up.

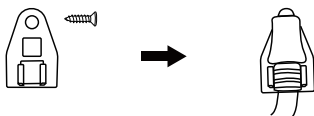
5.Mounting the Transformer

Use the screw to mount the transformer directly on a wall. 12 inch to 48 inch (0.3 m to 1.2 m) high from the ground would be suggested. 12in. to 48in. (0.3m to 1.2m)



6.Connecting & Mounting Photo Sensor

Push the bi-pin connector into the mating socket, then screw the connector cover. Mount the photo sensor bracket on a wall or other solid surface with the screw provided. Snap the sensor into the bracket. Route or coil the excess wire to protect it from lawn mowers, trimmers, etc. Avoid pointing the sensor at nighttime light sources such as windows, porch lights, and street lights.



The position of the photo sensor can influence at what light level the transformer will turn on in the AUTO ON/OFF and PHOTO ON TIMER OFF modes. Placing the sensor in areas receiving less sunlight at dusk (east side of house, behind trees and bushes, under a deck) will make the transformer come on earlier in the evening. Mounting the photo sensor in brighter locations will make the transformer come on when it has become darker out. The location, position and orientation of the photo sensor can be adjusted until the transformer turns on at the desired light level.

Operating Instructions

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

1. A remote photo sensor that senses the light level. There is a 30 second delay built into the photo sensor to avoid being triggered by lightning or other light sources.
2. A timer.
3. A clock.

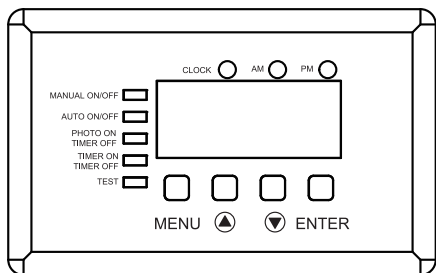
The transformer operation modes use these three methods in different combinations. To set the mode, plug in the transformer cord into the GFCI outlet. Then the LED clock display, the clock indicator, the AM/PM indicator and the MODE indicator will be lit.

The clock is only required for the TIMER ON TIMER OFF and PHOTO ON TIMER OFF modes. The clock is ignored for any of the other modes and does not need to set.

To set the clock:

Hold down the MENU button until the CLOCK indicator is lit. Press the ENTER button to set the AM/PM, press the ▲ button to select AM and the ▼ button to select PM. Then press the ENTER button to set the Hours, press the ▲ button to increase the time displayed and the ▼ button to decrease the time displayed. Then press the ENTER button to set the Minutes, press the ▲ button to increase the time displayed and the ▼ button to decrease the time displayed. Finally press the ENTER button, the clock is set successfully.

To change the operation modes of the transformer, press the MENU button to lit the indicator of the selected mode.



MANUAL ON/OFF - Press the ▲ button to select ON, the transformer will be on all the time. Press the ▼ button to select OFF, the transformer will be off and the lights will be off.

AUTO ON/OFF - Transformer turns on at dusk, turns off at dawn. The lights will be on all night. There is a 30 seconds delay from when the photo sensor determines darkness and the transformer turns on.

PHOTO ON TIMER OFF - The transformer turns on at dusk. The transformer will turn off when the clock reaches the TIMER OFF time. This mode will turn the transformer off at the same time every night regardless of how light or dark it is. The transformer and lights will be on from dusk to the TIMER OFF time.

To set the **TIMER OFF** clock, press the **ENTER** button to set the AM/PM, press the ▲ button to select AM and the ▼ button to select PM. Then press the **ENTER** button to set the Hours, press the ▲ button to increase the time displayed and the ▼ button to decrease the time displayed. Then press the **ENTER** button to set the Minutes, press the ▲ button to increase the time displayed and the ▼ button to decrease the time displayed. Finally press the **ENTER** button.

TIMER ON TIMER OFF - The transformer turns on when the clock reaches the **TIMER ON** time. The transformer will turn off when the clock reaches the **TIMER OFF** time. This mode will turn the transformer on and off at the same time everyday regardless of how light or dark it is. The transformer and lights will be on from the **TIME ON** time to the **TIMER OFF** time.

To set the **TIMER ON** clock, press the **ENTER** button to set the AM/PM, press the ▲ button to select AM and the ▼ button to select PM. Then press the **ENTER** button to set the Hours, press the ▲ button to increase the time displayed and the ▼ button to decrease the time displayed. Then press the **ENTER** button to set the Minutes, press the ▲ button to increase the time displayed and the ▼ button to decrease the time displayed. Finally press the **ENTER** button.

To set the **TIMER OFF** clock, press the **ENTER** button to set the AM/PM, press the ▲ button to select AM and the ▼ button to select PM. Then press the **ENTER** button to set the Hours, press the ▲ button to increase the time displayed and the ▼ button to decrease the time displayed. Then press the **ENTER** button to set the Minutes, press the ▲ button to increase the time displayed and the ▼ button to decrease the time displayed. Finally press the **ENTER** button.

TEST - Use this mode to test the photo sensor and transformer operation. Covering the photo eye turns on the transformer. Uncovering the photo sensor during the daytime or shining a bright light onto the photo sensor will turn off the transformer. Note that there is no 30 seconds delay in this mode.

TIPS:

1. The transformer has a power-off memory function. When the transformer powers on again, the transformer will enter the working mode before the power failure.
2. Circuit breaker may need to be reset if the transformer is not working.

CABLE SELECTION CHART

12 VOLT TAP	Cable Length		
Total Fixture Wattage	0-50 feet	51-100 feet	100-150 feet
0-60 Watts	16 AWG	16 AWG	14 AWG
61-120 Watts	16 AWG	14 AWG	12 AWG
121-180 Watts	14 AWG	12 AWG	Not Recommended
181-240 Watts	14 AWG	12 AWG	Not Recommended
241-300 Watts	12 AWG	Not Recommended	Not Recommended

14 VOLT TAP	Cable Length		
Total Fixture Wattage	0-50 feet	51-100 feet	100-150 feet
0-60 Watts	16 AWG ¹	16 AWG	16 AWG
61-120 Watts	16 AWG ¹	16 AWG	12 AWG
121-180 Watts	14 AWG ¹	14 AWG	12 AWG
181-240 Watts	14 AWG ¹	14 AWG	12 AWG
241-300 Watts	12 AWG ¹	12 AWG	Not Recommended

AWG¹ Not recommended for Halogen Landscape.



NOTE: This data is provided as a general guideline. Actual performance will depend on the installation layout, the fixtures, and the condition of the cable. If the wire diameter you use is thinner than the wire diameter recommended in the table, it may cause the flickering of the end lamps.

SPECIFICATIONS

- Model: HD-120-12W-1
- Input Voltage: 120VAC, 60Hz
- Output: 12VAC/14 VAC
- Max Power Rating: 120W
- Photo Sensor Cable Length: 6 ft

PACKING LIST

- 1 x Low-Voltage Transformer
- 3 x Screws
- 3 x Wall Anchors
- 1 x Photo Sensor Bracket
- 1 x Photo Sensor
- 1 x Instruction Manual

One Year Limited Warranty

Supported by our professional R&D team and QC team, we provide One Year Warranty for materials and workmanship from the purchase date. Please note that the warranty does not cover damage caused by personal misuse or improper installation.

Please attach your Order ID and Name so that our dedicated customer service team can help you better.