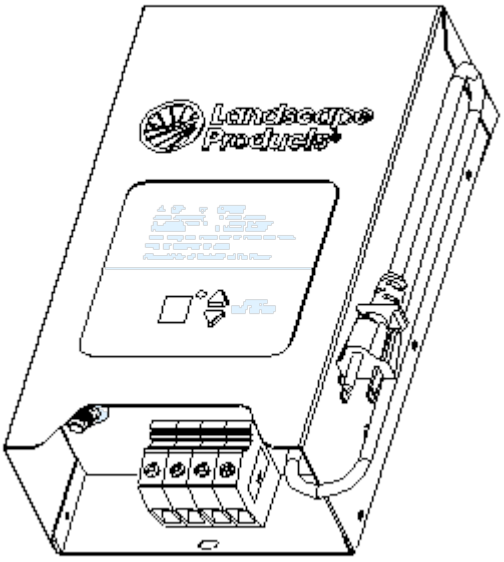
Landscape Products®

Instructions



SPECIFICATIONS

150 WATT DIGITAL TRANSFORMER

INPUT: 120VAC 60Hz 1.3A

MAX RATING: 150VA max

Output:12VAC/15VAC 150VA max

MODEL: LP-TR150-MT-SS

SAFETY INFORMATION

1. Do not install within 10 feet (3m) of a pool, spa, or fountain.
2. This transformer is suitable for mounting within 12 in. to 48 in. (0.3m to 1.2m) of the ground.
3. For use with a low voltage outdoor landscape lighting system.
4. There are no serviceable parts inside the power supply unit. DO NOT DISASSEMBLE.
5. Do not submerge transformer.
6. Do not connect two or more transformers in parallel.
7. Do not use with a dimmer.
8. Plug the power supply unit directly into a GFCI wet location outlet.
9. Do not use an extension cord.
10. The maximum output of this transformer is equal to or less than 150 watts. Do not overload the transformer. Be sure that the total cumulative wattage of all 12-15volt fixtures connected to the transformer is equal to or less than 150 watts. Total lamp wattage must not exceed a maximum of 150 watts.
11. For best performance, and to limit operation of the automatic thermal protector, do not install where air flow around the unit is overly restricted.
12. For supply connections, use wire rated for at least 60°C.
13. Keep enclosure cover closed.
14. Suitable for Use with Submersible Luminaires or Submersible Pumps or equivalent.

WARNING: Risk of Electric Shock. Install power unit 5 feet (1.5m) or more from a pool, spa, or fountain. Where the power unit is installed (a) indoors within 10 feet (3.0m) of a pool, spa, or fountain or (b) outdoors, connect power unit to a receptacle protected by a GFCI.

WARNING: For outdoor installations use UL Listed Underground low energy circuit cable or SPT-3 or SPT-2W. Failure to use at least 16-gauge minimum cable or install it as directed in these instructions may result in Risk of Fire or Electric Shock. Using large cable will ensure maximum light output.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

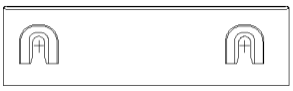
PRE-INSTALLATION

Hardware Included

NOTE: Hardware not shown to actual size.

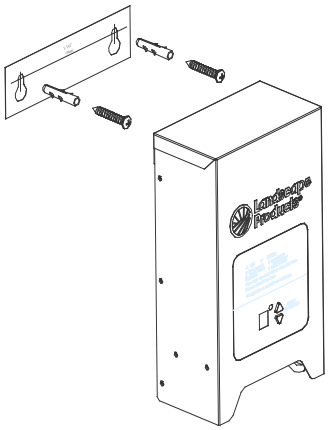

AA


BB


CC

Part	Description	Quantity
AA	5.0X50 Screw	3
BB	Wall Anchor	3
CC	Mounting Template	1

MOUNT THE TRANSFORMER



INSTALLATION

1. Mounting the Transformer

◇ Make sure the transformer is disconnected from the power source before beginning the installation process.

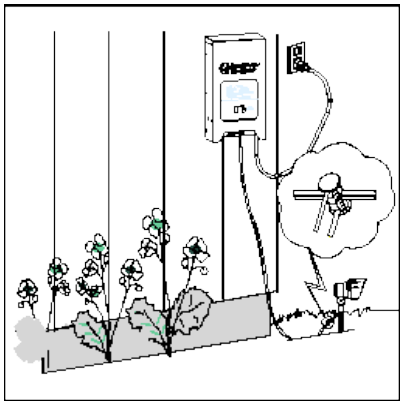
◇ Calculate your total wattage/Va and make sure the total does not exceed 150 watts.

◇ Layout your landscape lighting fixtures in the desired locations.

◇ Select a suitable flat location to mount the transformer that is near a 120V GFCI receptacle marked for “wet location.” Avoid mounting the transformer near bright light sources or areas that are not exposed to sunlight.

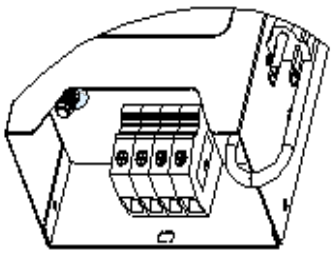
◇ Mount the transformer a minimum of 12”-15” above grade, use the included mounting template to drill your holes, use supplied hardware and hang the transformer, making sure the transformer is secure to the wall.

◇ Keep the transformer unplugged and continue with the installation and wiring of fixtures.



3. Connecting the Wire(s)

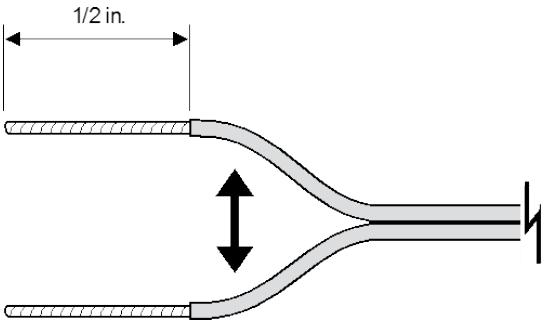
◇ Loosen the desired terminal blocks and insert the wires, making sure there is no exposed copper and firmly tighten down the terminal blocks. Give the wires a gentle tug to make sure the wires are secured. Be sure one side of the wire is inserted to one of the COM terminals and the remaining wire to the voltage (12v,15v) terminal.



2. Preparing the Wire

◇ Once all the fixtures have been wired, it is time to prepare your wire(s) for the transformer installation.

◇ Split the cable about 2”-4” and strip off ½” – ¾” of insulation, twist the copper strands tightly together.

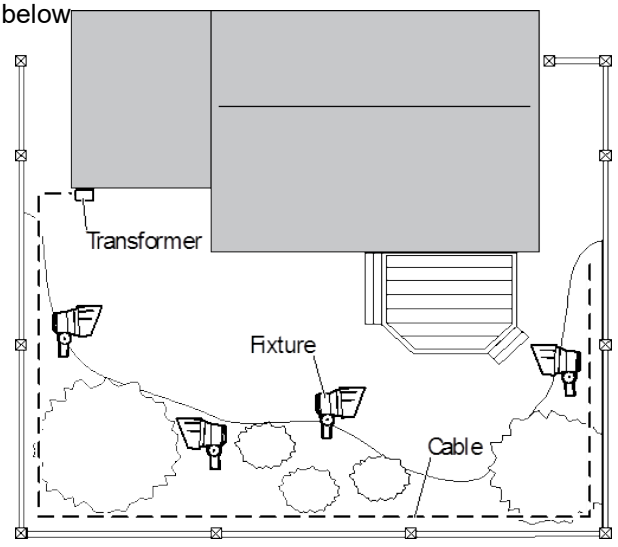


4. Power Up the Transformer

◇ Once you have connected and secured your wires to the transformer, plug in the transformer into a 120v GFCI outlet.

◇ Turn the transformer on by selecting manual mode and check to make sure all fixtures are working properly.

◇ Program your transformer to the desired setting by following the programming instructions below



Programming

1. Setting PHOTOCELL AUTO ON/OFF

◇ Press ↑ or ↓ for 3 secs, and select the "A".

◇ Enter the AUTO Photocell mode after "A" flashes for 5 secs

◇ The start delay time is 0.1 sec. ± 1 sec. ;
The off delay time is 60 sec. ± 10 sec.

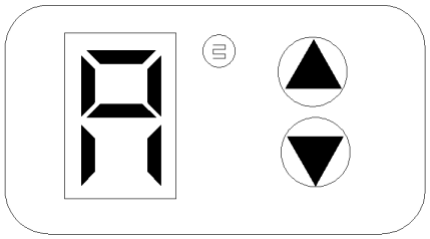


FIG.1

2. Operating in Manual Mode

a. Press ↑ or ↓ for 3 secs, and the select "□".

b. Enter the Manual mode after "□" flashes for 5 secs. Press ↑ to open and press ↓ to close.

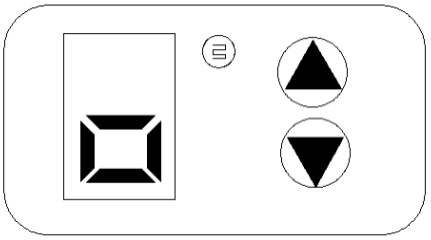


FIG.2

3. Setting the TIME ON/OFF

◇ Press ↑ or ↓ for 3 secs, and the select "1-9" timer mode. Press ↑ to add the timing time ↓ to reduce the timing time. Enter the timer mode after "1-9" flashes for 5 secs.

◇ The time tolerance is ±3 seconds per hour.

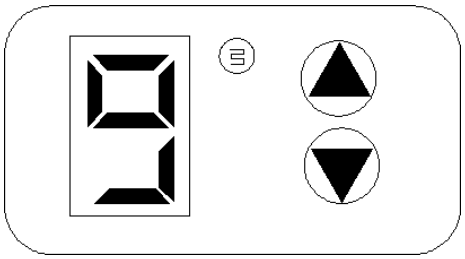


FIG.3

4. Using the TEST function

c. Press ↑ or ↓ for 3 secs, and select the "[".

d. Enter the TEST mode after "[" flashes for 5 secs.

e. The time of photocell feeling the external light signal: the lights will turn on at dusk and off at dawn within 0.5 seconds .

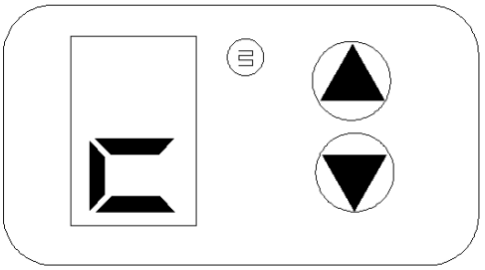


FIG.4

Transformer Sizing

Transformers vary in size or capacity. The total lamp wattage (load) of all fixtures connected to one transformer must not exceed the wattage capacity of the transformer. Therefore, to determine the transformer size needed, simply add up the wattage of all lamps you plan to use +10% for cable & connection factor. (Low voltage cable and fixture connections add hidden watts to your system.)

TRANSFORMER SIZE = TOTAL FIXTURE WATTS x 1.1

Select a transformer that matches as closely as possible your total lamp wattage. For example: if you have 12 fixtures all rated at 10 watts, you will need a 150-watt transformer (12 x 10 = 120 watts plus 10% = 132). If your total wattage is too great, either divide the total load between two transformers or use a more powerful model. Selecting a transformer with about 20% higher capacity than your total lamp wattage will allow for adding a fixture or two later.

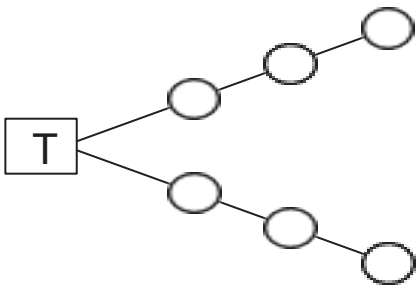
Low Voltage Cable & Wiring Methods

Low voltage wire size and length along with total fixture wattage impacts the voltage drop due to the wires inherent resistance. This voltage loss can be minimized in different ways:

- Use multiple wire runs
- Use a heavier gauge cable (10ga. Or 8 ga.), we recommend starting with 12 ga. Wire
- Shorten the wire runs
- Reduce the wattage of the fixtures
- Reduce the total number of fixtures per wire run
- Use multiple transformers in different locations (ex. Transformer dedicated to front yard and another for the backyard, etc.) The closer the transformer is to the fixtures the easier it is to ensure sufficient voltage to each fixture. Most LED low voltage lamps operate in a range of 10v-15v. Check the specs on the LED lamps you are using to ensure you are within the operating voltage range of the lamp.

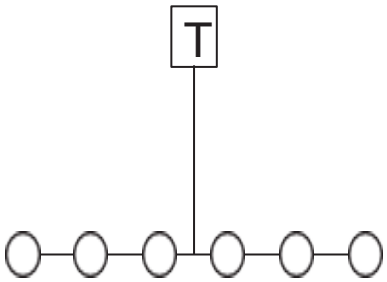
Wiring Installation Methods:

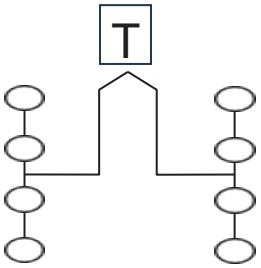
Split load installation or multiple cable run: Fixtures run in two or more directions from the transformer. Locating the transformer in the center of the run reduces the effects of voltage drop.



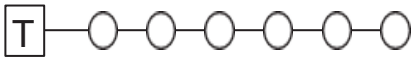
Wiring Installation Methods (Cont.):

"T" installation (RECOMMENDED): Allows more equal distribution of power to the center of the run, or to a run some distance away.





Straight run installation: Fixtures run in sequence directly from the transformer.



** You can use a volt-meter to check the voltage at the fixture closest to the transformer (highest reading) and also check the voltage at the fixture furthest from the transformer (lowest reading). Make sure your lamps/fixtures are operating within the specified voltage of the LED lamps you are using. The Landscape Products transformer is equipped with multiple voltage taps, so you can move the wire to a higher voltage if you need to increase your voltage range.