

INSTALLATION INSTRUCTIONS

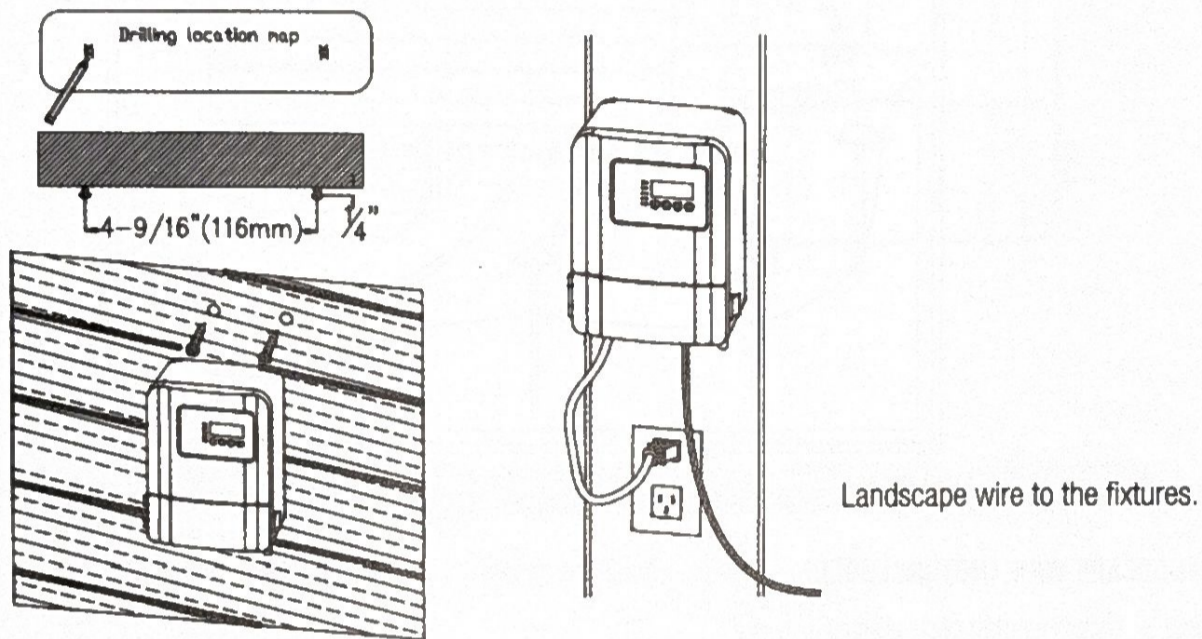
MOUNT THE TRANSFORMER

3.1 Option 1: Standard wall mounting

Insert the two included support screws 4-9/16" (11.6cm) apart in a wall near an electrical outlet and mount the transformers.

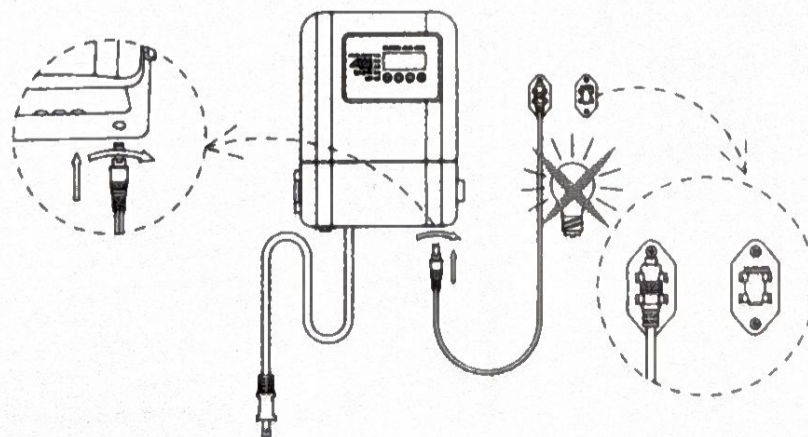
3.2 Option 2: Brick or cement wall mounting

Drill two holes of 5/16" (8mm), 4-9/16" (11.6cm) apart from each other, in a wall near an electrical outlet and place the two plastic anchors included. Insert the two support screws in the anchors until they have about 1/4" (6mm) of space left to mount the transformer.



MOUNTING THE PHOTOCELL

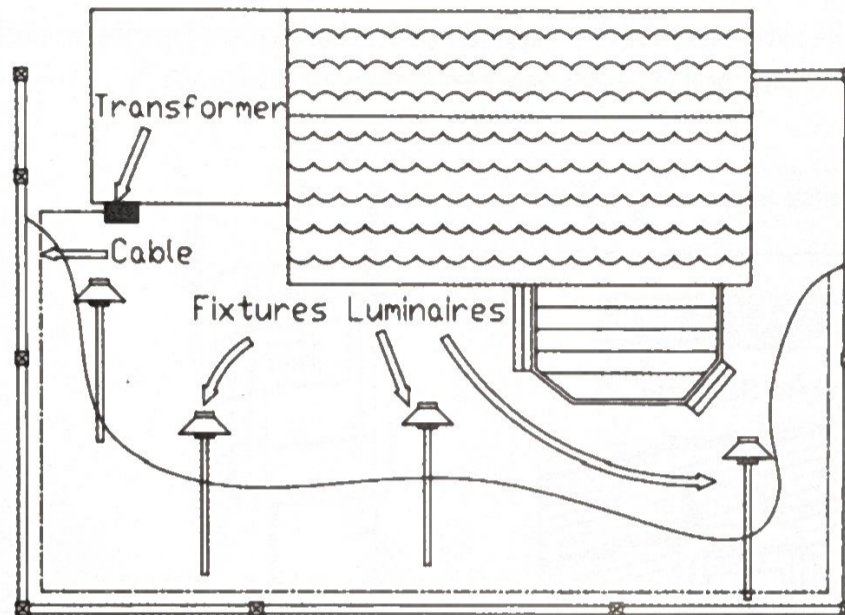
Mount the photocell (B) bracket on a wall or other solid surface with the screws (B2,B3,B4) provided. Snap the sensor into the bracket. Route or coil the excess wire to protect it from lawn mowers, trimmers, etc. Avoid pointing the sensor at nighttime light sources such as windows, porch lights, and street lights. Connect the photocell to the transformer, insert the wire plug from the photocell to the transformer socket and rotate anticlockwise until it secures. Placing the sensor in areas receiving less sunlight at dusk (east side of house, behind trees and bushes, under a deck) will have the transformer come on earlier in the evening. Mounting the photocell in brighter locations will have the transformer come on when it has become darker out. The location, position and orientation of the photocell can be adjusted until the transformer turns on at the desired light level. If the wires to the photocell are cut or broken, the photocell can be replaced. Unscrew the photocell connector cover from the transformer and pull the bi-pin connector out of the mating socket. The replacement part is inserted into the socket and the cap is screwed back onto the socket to provide a water tight connection. Note that the bi-pin connector is polarized and can be inserted into the socket only one way. The photo eye operation can be tested by turning the transformer mode to TEST. Replacement photocell is available in the store.



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RUN THE LANDSCAPE WIRE (NOT INCLUDED)

The landscape wire should run from the transformer to each light without being cut. Do not run the landscape wire within 10 feet(3M) of a pool, spa or fountain. If the landscape wire is too long, cut it with a cable cutter.



RUN THE LANDSCAPE WIRE (NOT INCLUDED)

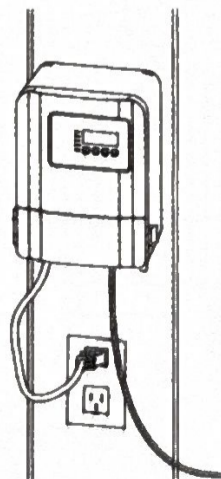
See chart below for recommended cable gauges

*Suitable cable should be sized in accordance to the table, should be spt-2w. If you cannot find this cable at your local hardware or home improvement store then please call customer to order the cable needed.

Combined wattage of all fixtures on line(in watts)	Wire Gauge(0~75')	Wire Gage(75'~150')	Wire Gage(150'~250')
0-60	16	16	12
60-1201	41	41	0
120-1801	21	01	0
180-2501	21	0N	ot recommended

5.1 Plug the transformer into a GFCI electrical receptacle.

5.2 To test fixtures, change the mode to "ON".



Landscape wire to the fixtures.

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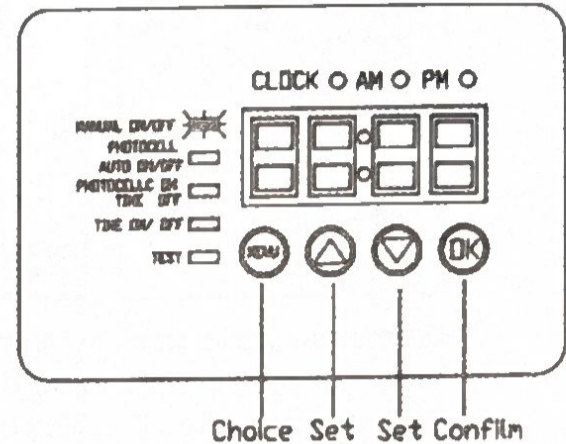
TRANSFORMER OPERATION

1. Setting the Clock

This setting allows you to set the clock to local time.

- Press MENU until CLOCK LED indicator is lit and the digit indicator is flashing. Then press OK.
- When AM and PM begins to flash, press the UP or DOWN arrow button to select AM or PM and press OK.
- When the Hour begins to flash, press the UP or DOWN arrow to desired hour and press OK.
- When the Minute begins to flash, press the UP or DOWN arrow to desired Minute and press OK.
- The Clock setting is now complete.

NOTE: To scroll through the clock settings more quickly, press and hold down the UP and DOWN arrows.



OPERATING IN MANUAL MODE

2. Operating in Manual Mode

This setting allows you to immediately turn the lights on and turn them off when you no longer need them.

- Press MENU until MANUAL ON/OFF indicator is lit and then press OK.
- The MANUAL ON/OFF mode is now set to ON. Press the UP arrow button to turn on the lights. Press the DOWN arrow button to turn off the lights.

3. Setting PHOTOCELL AUTO ON/OFF

This setting allows the photocell to turn the lights on at dusk and off at dawn.

- Press MENU until the PHOTOCELL AUTO ON/OFF LED indicator is lit and then press OK. The PHOTOCELL AUTO ON/OFF mode is now activated. The digit display shows the current time and the AM/PM LED indicator stays lit.
- The start delay time is 0.1 sec. ± 1 sec. The off delay time is 60 sec. ± 10 sec.

4. Setting PHOTOCELL ON/TIME OFF

This setting allows the photocell to turn the lights on and you set the time they go off.

- Press MENU until the PHOTOCELL ON / TIME OFF LED indicator is lit and press OK. The display shows "OFF" and press OK.
- When AM and PM begins to flash, press the UP or DOWN arrow button to select AM or PM and press OK.
- When the Hour begins to flash, press the UP or DOWN arrow to desired hour and press OK.
- When the Minute begins to flash, press the UP or DOWN arrow to desired hour and press OK.
- The setting is now complete. The PHOTOCELL ON/ TIMER OFF LED indicator stays lit and display shows the current time. The lights will automatically turn on at night and will turn off after a set time interval.

5. Setting the TIME ON/OFF

This setting allows you to control the time the lights turn on and when they will go off.

- Press MENU until the TIME ON / TIME OFF LED indicator is lit and press OK. The display shows "ON" and press OK.
- When AM and PM LED begins to flash, press the UP or DOWN arrow button to select AM or PM and press OK.
- When the Hour begins to flash, press the UP or DOWN arrow to desired hour and press OK.
- When the Minute begins to flash, press the UP or DOWN arrow to desired hour and press OK.
- The display shows "OFF" indicating that you can now set the OFF time and press OK.
- When AM and PM begins to flash, press the UP or DOWN arrow button to select AM or PM and press OK.
- When the Hour begins to flash, press the UP or DOWN arrow to desired hour and press OK.
- When the Minute begins to flash, press the UP or DOWN arrow to desired Minute and press OK.

INSTALLATION INSTRUCTIONS

OPERATING IN MANUAL MODE

6. Using the TEST function

This setting allows you to test your landscape lighting after installation.

Press MENU until the TEST LED indicator is lit and press OK.

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

NOTE: When using the TEST function during daylight hours with the photocell installed on the transformer, be sure to completely cover the photocell for the lights to turn on. The photocell needs to sense darkness in order to function, even in TEST mode. If no photocell is installed on the transformer, the lights will turn on regardless of daylight then using the TEST function.

If you do not press "OK", the transformer defaults enter into the presently-set function within 10 seconds. In other modes outside of TEST, the transformer defaults enter into the presently-set function within 30 seconds.

7. Power outage and reset

- a. Power cut or power failure.
- b. Short circuit caused by incorrect operation.
- c. Power overload

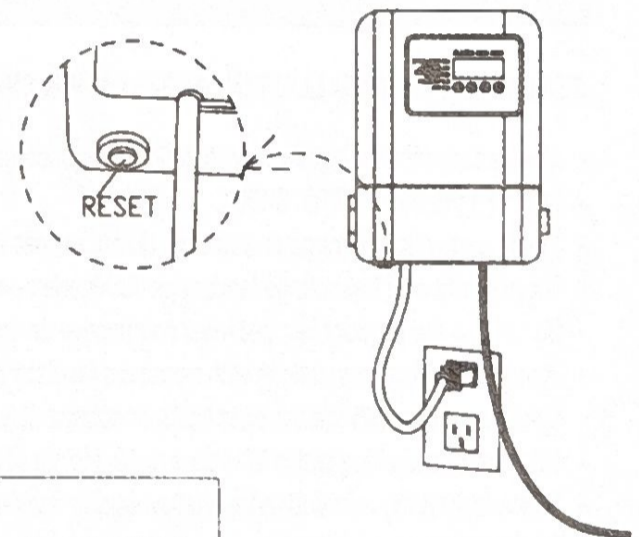
The display might show "ERR" under the above circumstances. Please unplug the power cord first. After resolving the issue with power, press RESET button. Then plug the power cord back. the transformer functions may need to be reset.

8. Display Auto Shut-down

The display and LED indicator lights on the transformer will turn off after approximately 2 minutes of idle time. Press MENU button to turn on the transformer display.

9. Restoring the Factory Settings

To restore the transformer to its original factory setting, press and hold the OK button for 3 seconds. The display shows 88:88 and resets to 12:00 after 1 second to indicate that the transformer is now restored to factory settings.



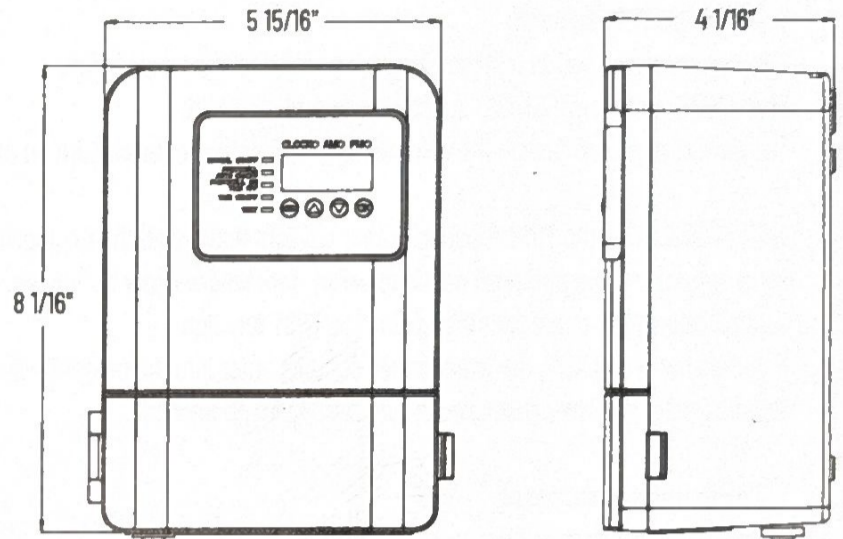
OPERATING IN MANUAL MODE

Problem	Probable Cause
All of the lights fail to work	Check that the transformer power is on. Check if there is a loose connection at the transformer Screw Terminal with the cable. Check that the power switch is not in an OFF setting.
Only some lights work	Check the connector to make sure the wire barbs have pierced the landscape cable. Halogen or Incandescent bulbs(if applicable) can be burned out. Use caution as the bulb can be hot.
The lights are on during the day	The photocell is mounted in a dark area which causes the lights to turn on unnecessarily.
The lights do not switch on at dusk	The photocell is mounted in an area that has too much constant light at night, preventing the system from turning on.

120 WATT DIGITAL TRANSFORMER

For use with low voltage landscape luminaires and fittings.

Wattage	120W
Input Voltage	120V-60Hz 136VA
Output Voltage	0-12V-15V 120VA Max
Finishes	Black
Supply Connections	Use wire rated for at least 60°C
Wet Rated	Yes

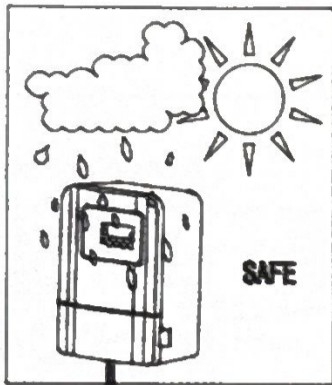


WARNING

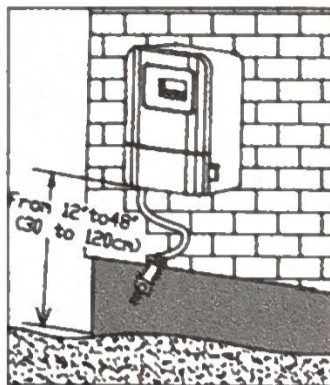
READ PRIOR TO INSTALLATION. INSTALLATION SHOULD BE CARRIED OUT BY A CERTIFIED ELECTRICIAN.

- Always turn off power prior to installation or replacement.
- RISK OF FIRE OR ELECTRIC SHOCK.
- To prevent wiring damage or abrasion, do not expose wiring edges to sheet metal or other sharp objects.
- For use only with low voltage landscape luminaires and fittings
- Do not use the product in a potential combustive environments.
- Protect all wiring connections with approved insulators (not supplied).
- Suitable for use with submersible lights or submersible pumps.
- Suitable for mounting within 12 inches to 48 inches of the ground.
- Secondary wiring is intended for shallow burial - less than 6 inches (152mm) - unless the manufacturer has provided wiring intended for direct burial.
- Do not submerge transformer.
- Do not connect two or more transformers in parallel.
- Do not use with a dimmer.
- Do not use any extension cord when connecting the transformer to power outlet.
- Plug the power supply unit directly into GFCI outlet that is marked "wet location".
- The instructions for a conduit-connected power unit shall include the statements "WARNING - Risk of Electric Shock. Install power unit 5 feet (1.5m) or more from a pool or spa and 10 feet (3.05 m) or more from a fountain. Where the power unit is installed within 10 feet (3.05m) of a pool or spa connect power unit to a GFCI protected branch circuit.
- The total wattage of the installed light fixtures must not exceed the 95% of the transformer wattage rating.
- Install in accordance with all local codes and ordinances.

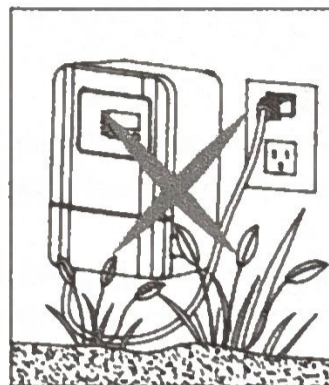
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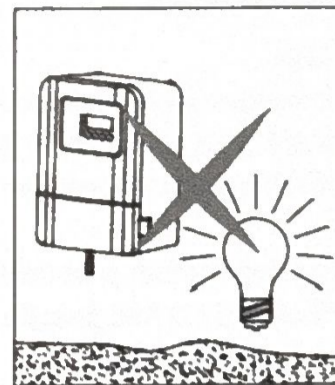
1.1. Outdoor use, weather proof MODE.
 1.1a Carefully remove the plastic film covering to the LCD display panel.



1.2 Mount the transformer within 12 inches to 48 inches (30cm to 120cm) of the ground.



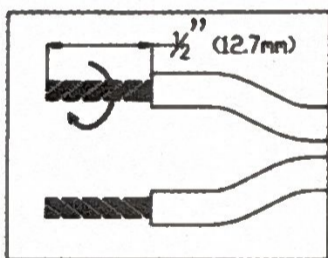
1.3 Only applies in AUTO MODE. Do not install behind shrubs. It will affect photocell for Auto dusk-to-dawn mode.



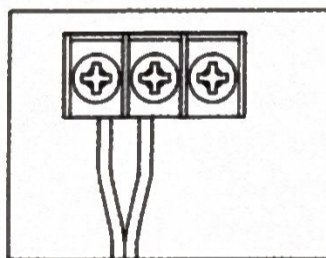
1.4 Only applies in AUTO MODE. Photocell will not operate properly if installed too close to the LCD nighttime light source.

1. Do not use with a dimmer.
2. Do not use any extension cord when connecting the transformer to power outlet.
3. Plug the power supply unit directly into GFCI outlet that is marked "wet location".
4. The instructions for a conduit-connected power unit shall include the statements "WARNING - Risk of Electric Shock. Install power unit 5 feet (1.5m) or more from a pool or spa and 10 feet (3.05 m) or more from a fountain. Where the power unit is installed within 10 feet (3.05m) of a pool or spa connect power unit to a GFCI protected branch circuit.
5. The total wattage of the installed light fixtures must not exceed the 95% of the transformer wattage rating.

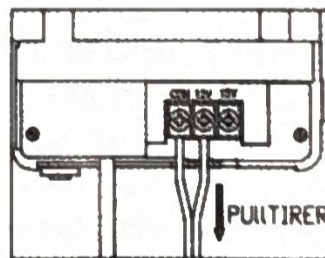
CONNECT CABLE TO TRANSFORMER



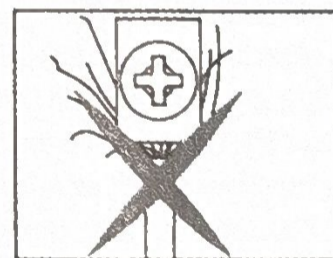
2.1 Remove the landscape wire insulation 1/2" (12.7mm) from both wires and twist ends.
 2.1a Open the front panel by pulling the right side below the screen.



2.2 Remove the bottom plate by pulling on it for more space during installation. Insert wires under each terminal plate and tighten screws. Minimum tightening torque of 10.6 lb-in



2.3 Gently pull on the landscape wire to verify if the connection is strong.



2.4 Verify that there are no loose cable strands.
 2.5 Replace the bottom plate and close the front panel.

