

# INTERMATIC® MALIBU®

## Model: ML121T OUTDOOR LOW VOLTAGE TRANSFORMER INSTALLATION AND OPERATING INSTRUCTIONS

FOR USE WITH OUTDOOR LOW VOLTAGE LANDSCAPE LIGHTING ONLY.  
THIS TRANSFORMER SHOULD NOT BE USED WITH SWIMMING POOLS AND/OR SPAS.

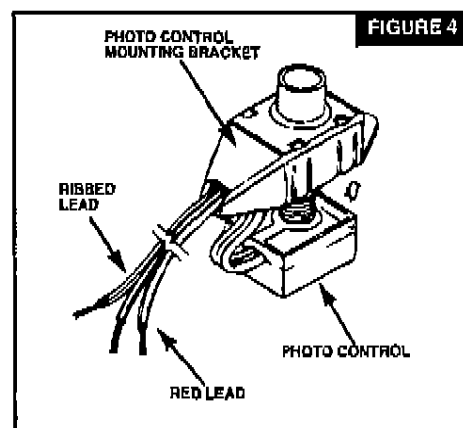
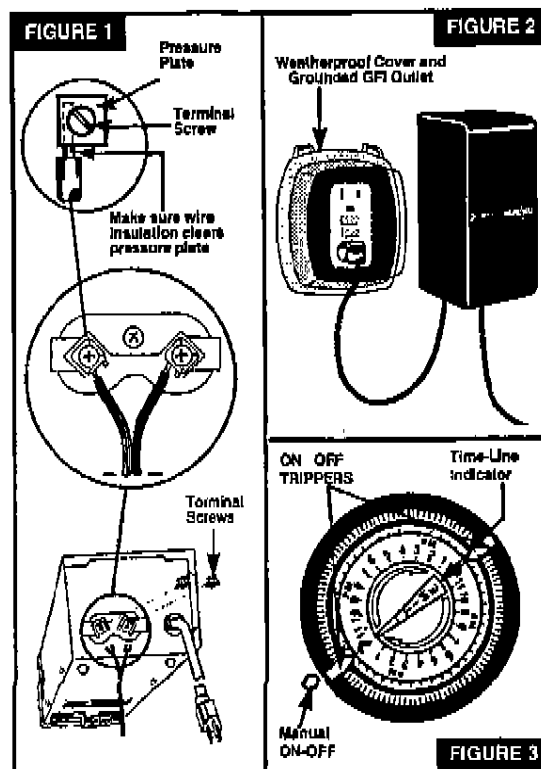
1. Attach power cable to bottom of transformer with two terminal screws provided. See Figure 1.(If using optional photo control, see wiring instructions below).
2. Mount raintight transformer within 1 foot (30 cm) of a standard grounded electrical outlet (120 volt only) with a weatherproof while in use, covered GFCI. (Test regularly.) See figure 2. This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not repair, or tamper with, this cord or plug. Install transformer not less than 1 foot (30 cm) above ground with cable terminals down and not within 10 ft. of inside walls of Pool or Spa.
3. Turn manual switch to "ON" or rotate dial so "ON" tripper passes time line indicator.(See timer control below.)
4. Stretch power cable to full length. Route power cable where lights are desired.
5. **DO NOT USE EXTENSION CORDS. DO NOT SUBMERGE TRANSFORMER. DO NOT CONNECT TWO OR MORE POWER SUPPLIES IN PARALLEL. DO NOT USE WITH A DIMMER.**

### Timer control on/off (on or off at preset times)

1. On and off times are determined by tripper placements. (see Figure 3 ). Insert ON (red) tripper next to the time you want lights to come on . Insert OFF (black) tripper next to the time you want the lights to go off. If you desire a second ON/OFF cycle, use two sets of trippers.
2. To set timer, turn dial clockwise one or more complete revolutions until the present time-of-day is adjacent to the time-of-day arrow. The lights will now operate on and off at the preselected times.

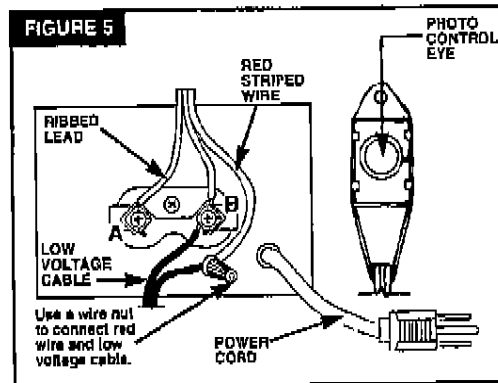
### If you use optional photo control (Model LV812PR)

1. Insert the three-wire cord of the photo control through the hole in the photo control mounting bracket (see Figure 4) and snap the photo control into place.
2. Attach the ribbed wire from the photo control to terminal A of the transformer.(see Figure 5). The middle wire and one of the low voltage cables attach to terminal B of the transformer. The red wire from the photo control must be connected to the remaining low voltage cable. Use a wire nut to secure the connection and cover the connection with electrical tape.
3. It is important that all of these connections are screwed down tightly. Locate the photo control eye (see Figure 5) in an unshaded area that will not be affected by extraneous lights such as house lights, street lights, vehicle head-lights, etc., and mount the photo control using the screw that is provided.



**Combination photo control and timer on/off:**

1. Your lights can be set to go on or off in a variety of ways by utilizing both the photo control and the timer. First make certain that the unit is mounted so that the photo eye is exposed only to natural daylight. During daylight hours, it will be necessary to cover the photo eye with something like electrical tape to simulate darkness or the unit will remain off. To override the photo control and turn the lights off at a specific time during the night, insert one of the black OFF trippers next to the time you want the lights to shut OFF (see Figure 3). If you want the lights to turn back on before daylight, place one of the ON red trippers next to the time you want the lights back on. The lights will remain ON until the photo control turns them OFF at dawn.
2. Once these steps have been completed, turn the timer dial clockwise one or more complete revolutions until the present time-of-day is adjacent to the time arrow on the dial.
3. Please note that an ON (red) tripper must be used to



activate the photo control prior to darkness. We suggest setting it at the noon position. The lights will then turn on momentarily each day at noon (which indicates the photo control is working properly).

They'll immediately shut off and come back ON at dusk.

4. Remove tape from the photo control eye once testing is complete.

**Photo control on and off. (on at dark, off at daylight)**

1. Make certain the unit is mounted so that the photo eye is exposed only to natural daylight. Make certain unit is turned on.
2. For testing during daylight hours, cover the photo eye with a piece of electrical tape to simulate darkness. Remove all trippers from the timer dial and the unit will come on each night at dusk and off each morning at dawn; the exact times will vary depending upon the amount of light that is 'seen' by the photo eye. Remove tape after testing.

**SUGGESTIONS TO SOLVE PROBLEMS QUICKLY**

1. Make sure transformer is plugged in. Is outlet working?
2. **CAUTION:** if lights cycle on and off remove power and correct fault. Cycling is caused by overload or short circuit. Restore power.
3. Turn manual switch to "ON" or rotate dial so "ON" tripper passes time line indicator.
4. Is lamp burned out? Use another lamp to test.

**NOTE:** This lighting system is designed to last for many years under normal conditions. However, like any other types, lamps eventually burn out and losing one can shorten the life of the others. Conditions beyond control (high input voltage, poor voltage regulation, etc.) will also affect lamp life. It is, therefore, important to replace a burned out lamp promptly.

**FULL ONE YEAR WARRANTY**

If within one (1) year from the date of purchase, this product fails due to a defect in material or workmanship, Intermatic Incorporated will repair or replace it free of charge. The warranty does not apply to (a) damage caused by accident, abuse, mishandling, dropping; (b) units which have been subject to unauthorized repair, opened, taken apart; (c) units not used in accordance with directions; (d) damages exceeding the cost of the product; (e) sealed lamps and/or light bulbs. Some states do not allow a limitation of damages so the foregoing limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. The warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) mailing postage prepaid to the authorized service station listed below. Please be sure to wrap the product securely when mailing to avoid shipping damage. The warranty is made by Intermatic Incorporated, Intermatic Plaza, Spring Grove, Illinois 60081-9698.

**AUTHORIZED SERVICE STATION**  
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