

Professional Landscape Lighting by INTERMATIC®

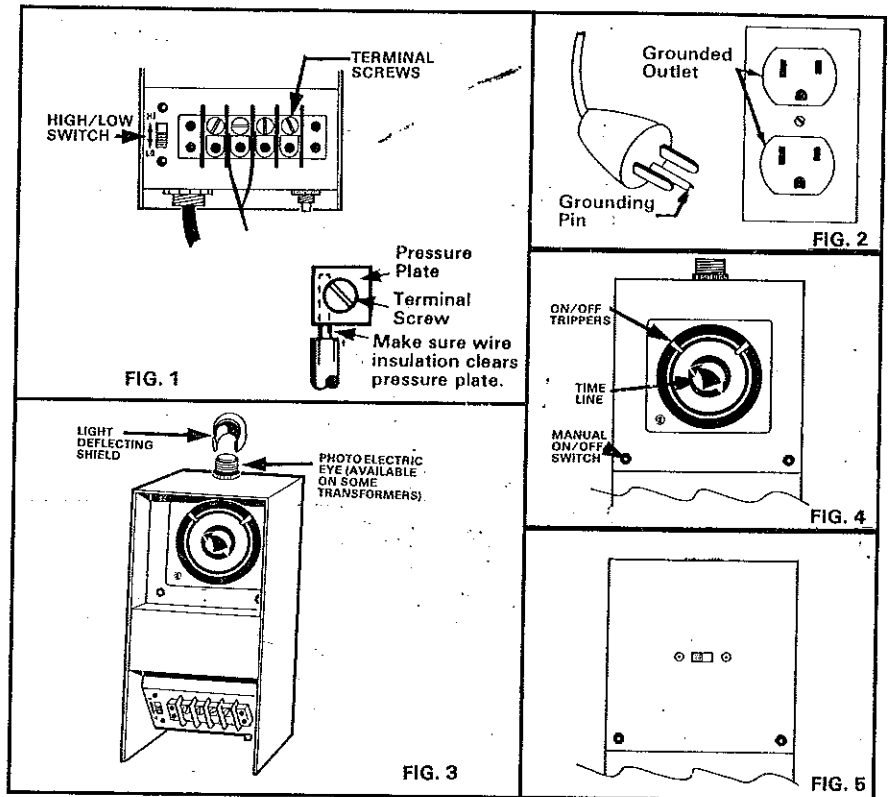
LIGHTING SYSTEMS

TRANSFORMER INSTALLATION AND OPERATING INSTRUCTIONS

LOCATING AND INSTALLING YOUR TRANSFORMER

Once you have surveyed your property and determined where to place your accent lighting... such as along the walk, outlining the patio, etc., then...

1. Attach power cable to bottom of transformer with two terminal screw provided. See Fig. 1.
2. Hang raintight transformer within 1 foot of a standard grounded electrical outlet (115/125 volt only). 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 without the assistance of an electrician or qualified serviceman. When mounted out-of-doors install transformer not less than one foot above ground with cable terminals down.
3. Plug transformer power cord into the grounded outlet described in step 2 and turn it on. It will be necessary to cover the photoelectric eye at this time so it does not see light. See Figure 3. A piece of electrical tape will work for this purpose. Turn the timer dial so that the ON orange tripper passes the time line indicator. See Figure 4.
4. Stretch power cable to full length and route it where lights are going to be installed.
5. Refer to and follow the instructions included which specifically relate to the assembly and installation of your low voltage lighting fixtures.

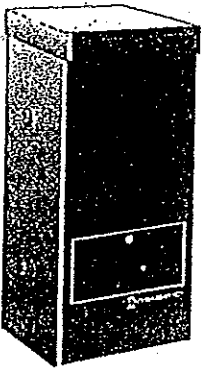


Once fixtures are installed, they can be controlled in a variety of ways with your model power pack. Follow specific instructions for the method that best suits your needs.

COMBINATION PHOTO CONTROL AND TIMER ON/OFF - 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. For best results, mount transformer on an unshaded surface protected from artificial lights. With low voltage cable attached as shown in Figure 1, plug power cord into a live grounded outlet and make certain unit is turned on, see switch in Figure 4. During daylight hours, it will be necessary to cover the photo eye with something like dark tape to simulate darkness or the unit will remain off. This unit is supplied with a light deflecting shield, see Figure 3, which may be rotated to compensate for unusual light conditions. Shield is used by snapping on to the threaded part of the photo eye. To override the photo control and turn the lights off at a specific time during hours of darkness, insert one of the blue OFF trippers next to the time you want the lights to go off, see Figure 4. If you should want the lights to come back on again before daylight, place one of the ON orange trippers next to the time you want the lights to turn back on. The lights will remain on until the photo control turns them off at dawn. 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.

Please note that an ON orange 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 that the photo control is working properly. They will then turn off and come back on at dusk.

TIMER CONTROL ON/OFF - (On or off at preset times). Mount power pack and attach cable as explained in steps 1 and 2. On and off times are determined by tripper placements, see Figure 4. Insert ON orange tripper next to the time you want lights to come on and blue OFF 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. To set timer, make certain unit is plugged into a live grounded outlet, then turn dial clockwise one or more complete revolutions until the present time-of-day is adjacent to the time-of-day arrow. If you want the lights on during daylight hours for any reason, it will be necessary for the photo eye to be covered with electrical tape or something similar so that it does



ML200TW*

(with ground shield)
(con pantalla protectora)
(avec écran protecteur)

ML300TW*

(with ground shield)
(con pantalla protectora)
(avec écran protecteur)

- (A) Lay the transformer down on a flat, stable surface and raise the front access door (**diagram 3**).
- (B) Thread the pre-stripped cable(s) (**diagram 1**) up through the tension retaining loop (**diagram 4**) and follow exact wiring instructions described in gray shaded box under diagrams 1 & 2. Attach 1 wire to load 1A terminal, attach other wire to COM (common) terminal (**diagram 4**).
- (C) Follow steps 2, 3, 4 and 5 below.

(A) Coloque el transformador sobre una superficie plana y levante la puerta frontal de acceso (**diagrama 3**).

(B) Pase el/los cable(s) pelado(s) de antemano (**diagrama 1**) a través del bucle de retención (**diagrama 4**) y siga las instrucciones de cableado tal y como se describen en el recuadro de fondo gris ubicado debajo de los diagramas 1 y 2. Conecte uno de los cables al terminal de carga 1A, conecte otro al terminal COM (común) (**diagrama 4**).

(C) Siga los pasos 2, 3, 4 y 5 listados a continuación.

(A) Placer le transformateur sur une surface plane et stable, puis soulever la porte d'accès avant (**schéma 3**).

(B) Acheminer le(s) câble(s) pré-dénude(s) (**schéma 1**) dans la boucle de retenue de tension (**schéma 4**) et suivre exactement les instructions de câblage de la boîte ombragée apparaissant sous les schémas 1 et 2. Fixer un fil à la borne de charge 1A et l'autre à la borne COM (commune) (**schéma 4**).

(C) Poursuivre avec les étapes 2, 3, 4 et 5 ci-dessous.

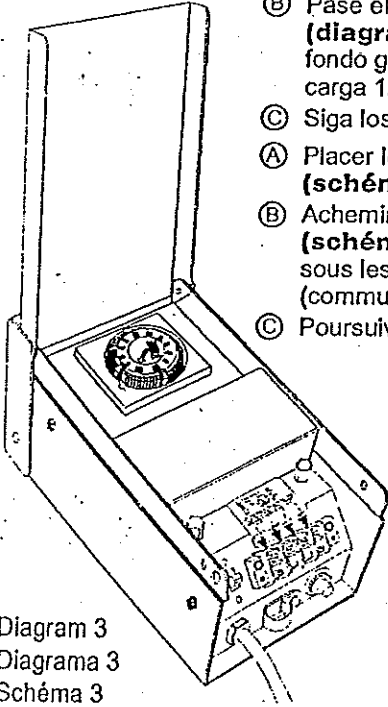


Diagram 3
Diagrama 3
Schéma 3

Additional cable runs can be attached to load 1B terminal and the remaining COM terminal. (Optional) Up to 4 cables (8 wires) total can be connected to the transformer by fastening 2 cable ends under each of the 4 terminal screws. Make sure total wattage of all runs does not exceed power pack wattage output capacity. For best lighting performance, it is recommended that long runs (over 50') are split into shorter lengths and attached directly to the transformer.

Se pueden conectar cables adicionales al terminal de alimentación 1B y al otro terminal COM. (Opcional) Se puede conectar al transformador un total de hasta 4 cables (8 alambres); para ello sujete los extremos de 2 cables a cada uno de los 4 tornillos de terminal. Para obtener la mejor iluminación posible, se recomienda dividir los cables largos (de más de 15 metros [50 pies] en tramos más cortos y conectarlos directamente al transformador.

Vous pouvez ajouter d'autres longueurs de câble à la borne de charge 1B et à l'autre borne COM. (facultatif) Vous pouvez connecter jusqu'à 4 câbles (8 fils) au transformateur en attachant 2 extrémités de câble sous chacune des 4 vis de bornes. Pour obtenir un meilleur éclairage, il est recommandé de séparer les longs parcours de câble (plus de 50 pieds) en segments plus courts et de les raccorder directement au transformateur.

HI-LO switch changes transformer from 12 volts to 13 volts. The HI position should only be used when the first light fixture is at least 50' from the transformer. (Improper use will shorten bulb life.)

Interruptor "HI-LO" cambia el transformador de 12 a 13 voltios. El transformador sólo deberá utilizarse en la posición "HI" si la primera lámpara se encuentra a 50 pies (15.24 m) de éste como mínimo. (El uso inadecuado del transformador puede acortar la duración de la bombilla.)

Interrupteur HI-LO fait passer le transformateur de 12 volts à 13 volts. N'utilisez la position HI que lorsque la première lampe est à au moins 50' du transformateur. (Un mauvais usage réduira le cycle de vie de l'ampoule.)

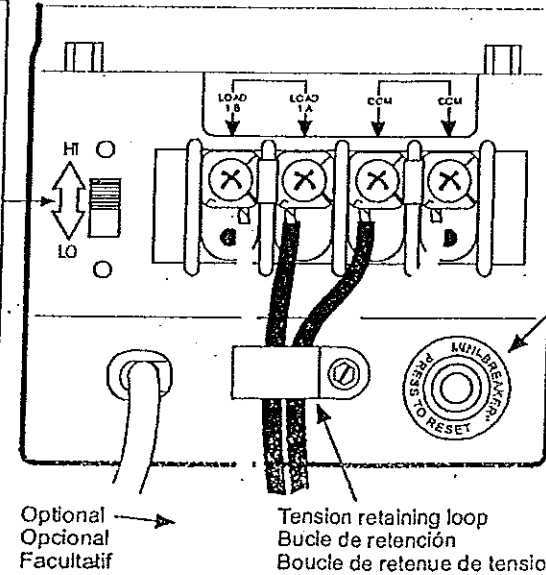


Diagram 4
Diagrama 4
Schéma 4

Tighten screws securely
Ajuste bien los tornillos
Bien resserrer les vis

RESET SWITCH—Press to reset transformer if lights go out (See troubleshooting)

Interruptor REINICIALIZAR—Presiónelo para reinicializar el transformador si las luces se apagan. (Véase la guía de resolución de problemas).

INTERRUPTEUR DE RÉENCLÈCHEMENT—Appuyez pour réenclencher le transformateur si les lumières s'éteignent. (Voir dépannage).

Optional
Opcional
Facultatif

Tension retaining loop
Bucle de retención
Boucle de retenue de tension

not activate or deactivate the lights. The lights will now operate on and off at the preselected times.

PHOTO CONTROL ON/OFF - (On at dark/off at light). Make certain that unit is mounted so that photo eye is exposed only to natural daylight. For best results, mount transformer on an unshaded surface protected from artificial lights. With low voltage cable attached as shown in Figure 1, plug power cord into a live grounded outlet and **make certain unit is turned on**, see switch in Figure 4. During daylight hours, it will be necessary to cover the photo eye with something like dark tape to simulate darkness or the unit will remain off. This unit is supplied with a light deflecting shield, see Figure 3, which may be rotated to compensate unusual light conditions. Shield is used by snapping on to the threaded part of the photo control. Remove all trippers from timer and unit will come on each night at dusk and off each morning at dawn; the exact times will vary depending on the amount of light that is "seen" by the photo eye.

MANUAL ON/OFF: Slide switch to the desired on or off position. See Figure 5.

HIGH LOW SWITCH - A high/low switch is provided. This switch will reduce current when the total wattage of lamps in the system is 30% or less of transformer rating to prolong bulb life. Place switch in high position if total lamp wattage is 70% or more of transformer rating. See Figure 1.

SUGGESTIONS TO SOLVE PROBLEMS QUICKLY

1. Make sure transformer is plugged in. Is outlet working?
2. Metal pierce terminals in the lamp housing and/or cable connector must be straight and must penetrate cable insulation in a way to make contact with copper wire. If terminals are bent, straighten with pliers.
3. Make certain switch on transformer is in the "ON" position. For timer models, 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, eventually burn out and losing one can shorten the life of the others. Conditions beyond control (high input voltage, poor 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 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
INTERMATIC INCORPORATED
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