



Electronic Lawn Sprinkler Timer MODEL EL62156R

OPERATING INSTRUCTIONS

ATTENTION: READ CAREFULLY BEFORE ATTEMPTING TO ASSEMBLE YOUR INTERMATIC TIMER! FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE! RETAIN FOR FUTURE REFERENCE.

Specifications

POWER CONSUMPTION: 5 Watt

CASE: Steel hammer tone case with hasp for locking

OUTSIDE DIM: 9-3/8" (23.8 cm) high,

5-1/2" (14.0 cm) wide, 3-5/8" (9.2 cm) deep

KNOCKOUT: 2 bottom 1/2 & 3/4" combo

SWITCH RATING: Rate 1 amp inductive per circuit

SWITCH: Electronic (triac)

NET WEIGHT: 3-1/2 lbs.

6 or 7 day programming; 4 zone control up to 2 watering periods daily; adjustable from 1 minute to 99 minutes each zone; manual switch for temporary override; 24 hour battery back up (9 volts); operates on 24V 60 HZ. (Battery Required)

General Safety Information

WARNING: ALWAYS DISCONNECT POWER SOURCE BEFORE WIRING OR SERVICING THIS TIMER OR ITS CONNECTED LOADS.

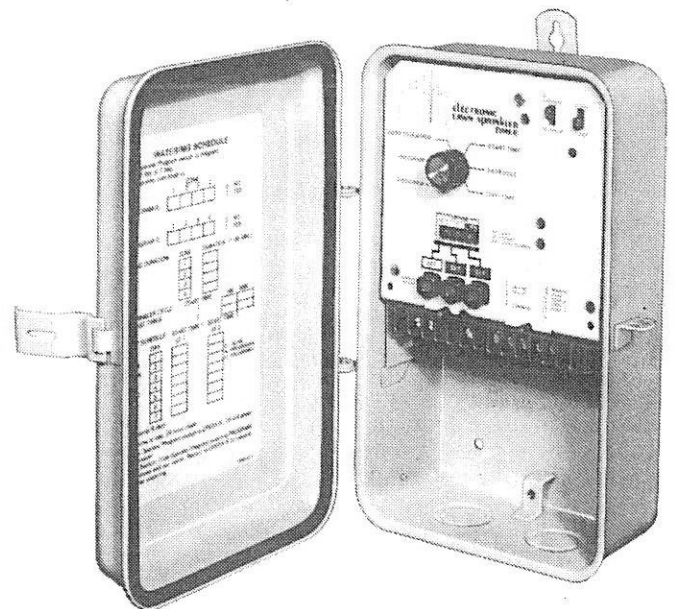
1. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act. (OSHA)
2. If the power disconnect point is out-of-sight, lock it in the off position and tag it to prevent unexpected application of power.
3. Do not exceed maximum current carrying capacity of timer. (See specifications.)
4. Be sure supply voltage and frequency match that of the timer (24 V 60 HZ)
5. Always replace front insulator panel BEFORE turning electricity ON.
6. Use padlock if there is a possibility of unauthorized person tampering with timer.

Installation

WARNING: DISCONNECT POWER BEFORE INSTALLING OR SERVICING.

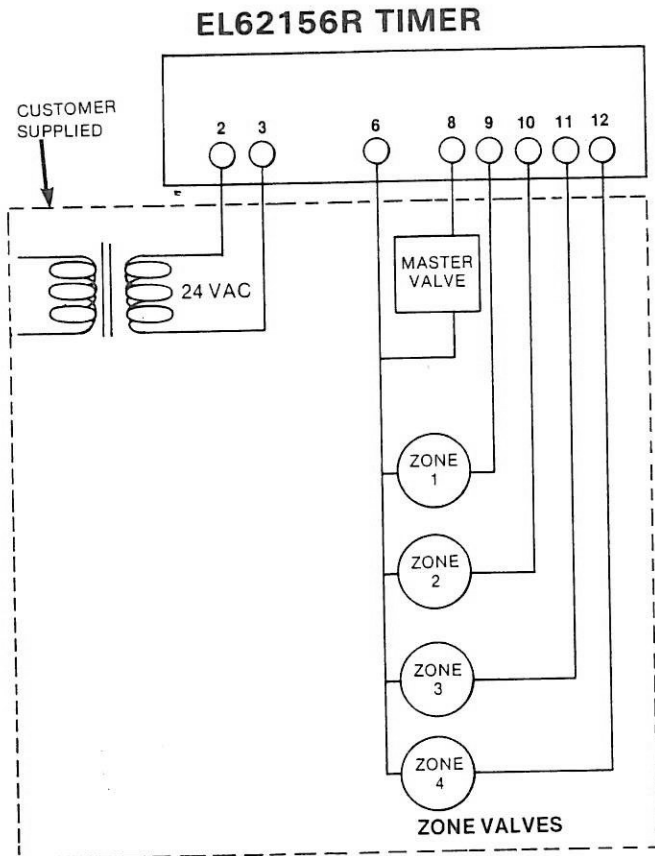
This electrical time switch is designed to control the on/off operation of a sprinkler system. For details see wiring diagram.

1. Lift left side of insulator off of retaining post and pivot it up and away to expose the terminal strip.
2. Install 24 V transformer.
3. Screw or bolt timer case in desired position.
4. Carefully strip supply and load wires. Remove 1/2" of wire insulation, insert wire ends under terminal plates and tighten screws firmly.
5. Replace insulator panel.
6. Apply power to circuit.
7. Set program per instructions.
8. Close timer case and lock.



Description

The Intermatic 7-day electronic Water Sprinkler Timer is designed for automatic control of four zone sprinkling systems to allow programmed watering of lawns, shrubs, and or gardens. This easy to operate timer has two separate watering programs to determine which zones are to be watered during two daily watering times. Times are adjustable from 1 to 99 minutes. Battery backup will hold memory for 24 hours. replace battery annually to maintain adequate capacity. Should power outage exceed battery capacity the timer has preset automatic program which will provide for watering each zone for 8 minutes each day. This timer is housed in a raintight enclosure. A 24V. 60 Hz. transformer (not supplied) is required for operation. For most applications a 20 VA transformer will be sufficient to control most common solenoid valves.



Operation

Before beginning to program the timer press RESET button with pen or pencil and hold for 1 second, place operate/program switch in program then fill in the watering schedule on the inside door of the timer cover. (If the schedule is already filled in and you do not want any changes to the schedule, proceed to the programming section.) The following example will illustrate how to do this. Note that the sample watering schedule is filled in according to the following example. (See Fig. 1)

1. PROGRAM A.

2. PROGRAM C. These two programs will determine which zones are watered during a given start time. For example, if you desire to water (4 zones) once each day and zone 2 twice daily, you would enter "1's" for all zones in PROGRAM A indicating all zones are to be watered during start times which are programmed for PROGRAM A. Next you would enter in PROGRAM C "O's" for zones 1, 3 and 4 and a "1" for zone 2. Any start times programmed for PROGRAM C will water only zone 2. This enables you to water zone 2 twice each day and water all other zones once each day.

3. ZONE DURATION. This is simply the length of time that each zone will water. All 4 zones have an individual duration selection to compensate for the different watering needs of each zone. Once selected the watering duration of any zone will remain the same throughout the program. For instance, if zone 2 from our example is set for 60 minutes, it will water for 60 minutes if called for in PROGRAM A or PROGRAM C. The 60 minutes selected for zone 2 would provide for 120 minutes of watering for zone 2 on each day that both PROGRAMS A and C

WATERING SCHEDULE

Slide Operate/Program switch to Program
 Select 6 day or 7 day.
 Set programs, turn knob to

	ZONE				
	1	2	3	4	
1. PROGRAM A	1	1	1	1	0 = NO 1 = YES
2. PROGRAM C	0	1	0	0	0 = NO 1 = YES

3. ZONE DURATION	ZONE	DURATION (1-99 Min.)
	1	45
	2	60
	3	90
	4	90

4. SPRINKLER CYCLE START TIMES	START TIME	HR	MIN
	1	07	00
	2	18	00

5. DAY SCHEDULE	DAY	START TIME 1	START TIME 2	
	1	0	0	0 = NONE A = PROGRAM A C = PROGRAM C
SUN	2	A	C	
MON	3	A	C	
TUE	4	A	C	
WED	5	A	C	
THU	6	A	C	
FRI	7	0	A	
SAT				(Optional 6 day)

- 6 Set time of day 24 hour clock.
- 7 Slide Operate/Program switch to OPERATE OP will show in window
- 8 Rain Switch: Slide Operate/Program switch to PROGRAM and areas will not water Return to OPERATE to resume normal watering

Figure 1

Assume zone 1 requires about half as much water as zones 3 and 4. Based on your estimate of watering duration required you enter 45 minutes for zone 1 and 90 minutes for zones 3 and 4.

4. WATERING CYCLE START TIMES. The watering cycle start times are the times of day you would like a watering cycle time to begin. For example you desire to water early in the morning and late in the afternoon so you select START TIME 1 to be "0700" or 7 AM, and start time 2 to be "1800" or 6 PM.
 Note that at a selected start time only one zone will be watering. Each zone will be individually watered for the time duration you have selected then the next zone in sequence will begin watering. In our example if you select PROGRAM A, programmed to water all 4 zones, to water at START TIME 1 (7 AM), the following watering sequence takes place. At 7 AM zone 1 begins watering, at 7:45 AM zone 1 stops watering and zone 2 begins; at 8:45 zone 2 stops watering and zone 3 begins; at 10:15 zone 3 stops watering and zone 4 begins; at 11:45 zone

4 stops watering and the cycle is complete. If you select PROGRAM C to water at START TIME 2 (7PM), then at 7 PM zone 2 begins watering and at 8:00 PM zone 2 stops watering. The cycle is complete since PROGRAM C only calls for zone 2 to be watered.

5. **SCHEDULE.** The watering schedule allows you to select PROGRAM A or C, or to skip watering for each of the two start times. This must be completed for all days. Note that day 7 will not appear in the readout if the selector switch is in the "6 day" mode. The two start times for each day will be determined by the watering cycle start times programmed in step 4. For our example assume we wish to water all four zones each morning, and water zone 2 each evening for Monday through Friday. For Monday through Friday you would enter "A" for start time 1 and "C" for start time 2. Saturday morning you normally mow the lawn so you need to skip start time 1 on Saturday, although you do want to provide watering for all of the zones on Saturday. For Saturday you would enter "O" for start time 1 and "A" for start time 2. On Sunday you don't want to water at all. For Sunday you would enter "O" for start times 1 and 2.

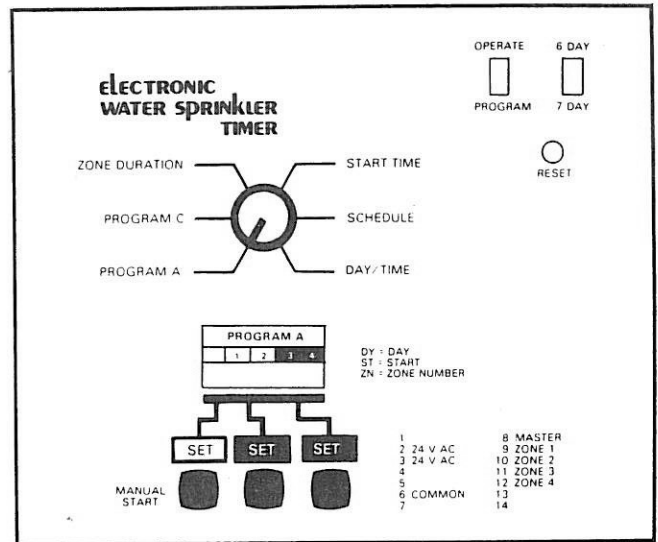


Figure 2

Programming

Make sure your watering schedule is complete before starting to enter the program. Programming your electronic water sprinkler timer is very simple. Look at the illustration. (Fig. 2) and you will note there are only (3) selector switches and (3) pushbuttons. To begin programming slide the OPERATE/PROGRAM switch to "program" and slide the day selector switch to select "6" or "7 day" operation. You are now ready to enter the program from the watering schedule. Begin by setting the rotary selector switch to PROGRAM A. Enter the watering schedule information for PROGRAM A by momentarily depressing the center and the right pushbutton. The center pushbutton sets zones 1 and 2; the right pushbutton sets zones 3 and 4. Note that if the pushbutton is held depressed, the display sequences from "0" to "01" to "10" to "11" and then back to "00". This method of "rolling" the characters is the same for all entries. Be sure to check that each entry is the same as your watering schedule, before continuing.

Next rotate the selector switch clockwise to PROGRAM C. Enter the information for zones 1 and 2, 3 and 4 as you did for PROGRAM A. Again, rotate the selector switch clockwise to ZONE DURATION. The left and center pushbuttons are used for this entry. The left pushbutton is used to select the zone (1 thru 4) and the center pushbutton is used to set; the watering duration (1 thru 99 minutes). Continue to rotate the selector switch clockwise to START TIME. The left pushbutton selects start time 1 or start time 2, the center pushbutton selects the hour and the right pushbutton selects the minutes for both start times. Next rotate the selector clockwise to SCHEDULE. Again, all 3 pushbuttons are required to enter the information. The left pushbutton selects the day (1-Sunday, 2-Monday, etc) the center pushbutton sets the program for start time 1 and the right pushbutton sets the program for start time 2. Again rotate the selector clockwise to DAY/TIME. The DAY/TIME entry also requires all 3 pushbuttons for entry. The left pushbutton sets the present day and the center and right pushbuttons set the present time of day (hour and minute.) The programming is complete. Be sure to return the OPERATE/PROGRAM switch to operate.

Reviewing And Manual Operation

The program information you have entered may be reviewed at any time. To do this slide the OPERATE/PROGRAM switch to program, then rotate the selector switch to the program entry location you wish to review. The information you have entered will be displayed. To review all of the zone durations, start times or schedule information you must press the left pushbutton to "roll" the 4 zones, 2 start times or the days respectively.

If you wish to change any information, simply "roll" in the new information using the appropriate pushbutton. After reviewing be sure to return the OPERATE/PROGRAM selector switch to operate. Leaving this switch in the program position will prevent the program from automatic watering; control. This may be used during rainy weather to temporarily suspend watering.

Any of the zones may be watered manually in the operate mode by pressing the left pushbutton (MANUAL START). If the pushbutton is pressed once, the timer will initiate watering at zone 1 and will water sequentially through zone 4, each zone being watered for the time selected for ZONE DURATION. You may begin watering at zone 2, 3 or 4 thus skipping zone 1, 2 or 3 respectively. This is accomplished by pressing the MANUAL START pushbutton more than one time in sequence. After completing the manual watering cycle, the timer will automatically resume the programmed schedule.

Setting the "6 day" selector switch position allows every other day watering.

Maintenance

Periodic inspection of timer should be a part of the systems maintenance procedure. If for any reason the timer needs attention or service (also see WARRANTY right), disconnect electricity before touching the wires. The timer mechanism can be removed by removing the screw at the upper center of case and pulling mechanism up and out.

Trouble Shooting Chart

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Unit fails to operate	<ol style="list-style-type: none"> 1. Loose connection. 2. Blown fuse or tripped circuit breaker. 3. Programming error. 4. Wired to incorrect voltage. 	<ol style="list-style-type: none"> 1. Tighten all loose connections. 2. Check line, circuit breakers. 3. Check programming, reset if necessary. 4. Replace timer and wire to 24 V transformer.
Unit does not water as programmed.	<ol style="list-style-type: none"> 1. Programming error. 	<ol style="list-style-type: none"> 1. Check programming. In case of power failure reset per instructions and reprogram.

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**. 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.

This 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 nearest authorized service station listed. Please be sure to wrap the product securely when mailing to avoid damage. This warranty is made by: Intermatic Incorporated, Intermatic Plaza, Spring Grove, Illinois 60081.

AUTHORIZED SERVICE STATION: INTERMATIC INCORPORATED, 4700 West Montrose Avenue, Chicago, Illinois 60641.