ELECTRONIC 7-DAY
WATER HEATER TIME SWITCHES
MODELS EH10, 120V AND EH40, 240V
WITH BATTERY CARRYOVER

Switch Rating (Per Pole) -
- 30 amp inductive/resistive - 120-240V. A.C., 60 Hz
- 1 H.P. 120V. A.C., 60 Hz.
- 1-1/2 H.P. 240V. A.C., 60 Hz.
- 5 amp tungsten, 120-240V. A.C., 60 Hz.

Set Points (Events) - 12 total (6 ON/6 OFF) - Can be assigned in any combination to weekdays, weekend days, daily or weekly operation providing up to a maximum of 84 weekly operations (42 ON/42 OFF).

Battery Powered Clock Operation - 3 years minimum, AA industrial grade alkaline supplied with time switch.

Minimum ON/OFF Time - 1 Minute
Maximum ON/OFF Time - 8 days 23 hours 59 minutes
Shipping Weight - 2.37 Lbs. (1.05 Kg)

Case - Drawn steel, 7-3/4" (19.7 cm) high, 5" (12.7 cm) wide, 3" (7.6 cm) deep; gray finish with lockable spring hasp, clear see-through viewing window and external override.

Knockouts - Combination of 1/2 - 3/4" (one on back and each side, two on bottom)

Wire Size - AWG #10.

GENERAL SAFETY INFORMATION:
1. Mount the time switch in the desired location using the three mounting holes which are provided. Mount the time switch at eye level, if possible, providing sufficient room to the left of the enclosure for the cover to swing open fully. (See Fig. #2). The time switch mechanism does not need to be removed from the enclosure to mount the time switch since the top mounting hole is a slotted type mounting hole. Secure a screw or other fastener at eye level. The head of the screw of fastener should be slightly larger than the narrow portion of the slotted hole to ensure that the time switch is securely held in place. The remaining two mounting holes provide a means to secure the time switch.
2. If you do remove the mechanism, refer to Figure #3 and remove the mechanism from the case by depressing the catch at the top of the case and pulling out.

3. Replace the mechanism in the case if it has been removed, making sure to engage ribs at sides of mechanism between ears at sides of case before snapping in place.
4. Lift the left side of the insulator off of the retaining post and pivot it up and away to expose the terminal screws.
5. Strip the supply and load wires by removing 1/2 inch of insulation. **DO NOT USE ALUMINUM WIRE.** Insert the wire ends under the proper terminal plates and tighten the screws firmly. Use any size wire AWG #10. Connect ground wire to grounding terminal at bottom of case.
6. Replace the plastic insulator.
7. Follow instructions for battery installation. Be sure that the battery is functioning properly. This can be checked by seeing that the display is visible. If the display has scrambled information, check to be sure that the polarity orientation of the battery is as shown on the cover label, then press the RESET switch and hold for at least two seconds. Note that the battery can easily be replaced without removing the time switch mechanism or field wiring. Simply press in and downward (in the direction of the arrow) on the battery cover which is identified with the word "Battery". It is recommended that the battery be replaced with a "AA" industrial grade alkaline cell at two to three...
year intervals as part of the normal time switch maintenance
observing battery polarity markings when installing. No other
maintenance is required.
8. Place the slide switches in the AUTO and RUN position.
9. Reapply power to the time switch.
10. Press the recessed reset switch for at least two
    seconds. The display will show 12:00 A.M. and MO. Note that the
days of the week are identified with the first two letters of the
day (MO for Monday). The timer is now ready for
programming. Refer to the examples which follow and enter the scheduled events (set points) required. Assign
each of the 12 set points (EVENTS) entered to whichever
day or groups of days of the week you wish an ON or OFF
operation to occur.

Set Point = Event = ON = OFF

PROGRAMMING STEPS:

SET CURRENT DAY AND TIME
Slide switch to TIME SET. Push DAY until current day
shows, then push HOUR until current hour AM or PM
shows. Now push MINUTE until current minute shows.
Clock is now set. Follow same procedure after replacing
battery or changing time (such as for daylight saving time).

SET YOUR PROGRAM
Slide switch to PROG. Display will look like this: (-:--) --

- Press DAY until desired program period shows (see choices in "PROGRAM PERIOD OPTIONS" section above).
- Press HOUR until desired "ON" 1" hour shows

(a) the first time each day of the program
period that you want the load to turn ON).
- Press MINUTE until desired minute shows.
- Press EVENT to program time for ON 1

(a) and to advance to programming for OFF 1.
- Press DAY again until all seven days of the
week show (or until another desired program period option shows; see "PROGRAM PERIOD OPTIONS")
- Press HOUR again until desired "OFF 1" hour shows

(a) that is, the first time each day of the program period
that you want the devices to turn OFF.
- Press MINUTE until desired minute shows.
- Press EVENT to set time for OFF 1. You may now begin
setting ON2, a second ON time, for the same program period,
OR press DAY to change to a different program period.
- Repeat above procedure until all desired ON/OFF
programs are set.

PLEASE NOTE: Before you program your timer, or when you
remove the battery, or when you use the RESET, pressing
EVENT will display the bar symbol --:-- ON 1. Repeated
pressing of EVENT will display all the way through the final bar
symbol --:-- OFF 6. Once you program your timer, however,
each actual time setting you make will replace the bar symbol.
While programming, each time you press EVENT you will
advance to the next EVENT.

PROGRAM PERIOD OPTIONS:
Your timer gives you up to 6 different ON and 6 different OFF
settings per program period. You can use all 6 settings per
period, or as few as you like. A program period covers one of
these:

- ALL 7 DAYS OF THE WEEK combined into one - display shows: MO TU WE TH FR SA SU.
- MONDAY THRU FRIDAY combined into one - display shows: MO TU WE TH FR.
- SATURDAY AND SUNDAY combined into one - display shows: SA SU.
- EACH INDIVIDUAL DAY OF THE WEEK - display shows only that day.
- BLANKDAY EXPLANATION - "BLANKDAY"

If it follows Sunday after last push of DAY button (when the slide switch is set at PROG). The purpose of the
- --:-- is to cancel a program setting on that day.

NOTE: "-:--" follows Sunday after last push of DAY button

Review your program
Slide switch to PROG. Press EVENT button to advance
display to each ON or OFF setting. Check days and times
displayed. To make any changes follow the instructions under
"SET YOUR PROGRAM". To delete a displayed set point,
press DAY button until "-:--" is displayed.

GENERAL FEATURES AND HINTS FOR TROUBLE FREE USE
- BUTTON: When you press a button, there is an advance of

one time unit; holding a button down advances continuously until released.
- MAINTENANCE: With the exception of battery replacement at 2-3 year intervals, your Intermatic
timer is maintenance-free.
- AFTER THE INSTALLATION IS COMPLETED, THE
LOCKABLE HASP SHOULD BE MOVED TO THE UP
POSITION TO ENGAGE THE COVER WHEN IT IS
CLOSED.

LIMITED ONE-YEAR WARRANTY
If within the warranty period specified, this product fails due to a defect in material or workmanship, Intermatic Incorporated will repair or replace it, at its sole option, free of charge. This warranty is extended to the original household purchaser only and is not transferable. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subjected to unauthorized repair, opened, taken apart or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) sealed lamps and/or lamp bulbs, LED's and batteries; (f) the finish on any portion of the product; (g) normal wear and tear; (h) installation costs, removal costs, or reinstallation costs.

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