Troubleshooting Guide

**Observed Problem** | **Possible Cause** | **What to Do**
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Timer is blank until any button is pushed, and display changes between ON and OFF when pressing door, but light stays OFF | Bulb is missing, loose, disconnected or burned out. | Make sure bulb is good and that there are no other switches, photo controls, etc., in the circuit controlling the bulb.

**Air Gap** switch at upper edge of timer is white. | Make sure "Air Gap" switch is in its ON position solid to the box, or sliding in center of slot.

Timer does not switch when displayed, or blinks with LED. | No power (fuse or circuit breaker blown). | Make sure fuse is good or circuit breaker is on.

Timer does not switch but display is normal. | Timer is not in AUTO, AUTO RAND, or MAN (manual) mode. | Press MODE to select the desired operating mode.

Timer works manually but does not follow scheduled program. | Timer is not in AUTO or AUTO RAND mode. | Press MODE to select AUTO or AUTO RAND.

Timer won’t enter the AUTO or AUTO RAND modes when MODE button is pushed. | Time of day and/or switching times are not programmed. | Make sure time of day and at least one scheduled activity is programmed.

Programmed schedule(s) are incorrect. | Review ALL 7 ON/OFF switching time pairs by re-played pushing NEXT/ON or while in PGM mode and revise as necessary.

Timer switches at incorrect times or skips some switching times. | Timer is IN AUTO RAND (manual) mode (varies switching times up to 15 minutes). | Press MODE to select AUTO mode.

Timer load state does not match programmed state immediately after programing the time or schedule. | The timer does not “catch up” to the programmed load state. Instead, the load will remain in the current state prior to entering the PGM mode. The timer will then begin following the scheduled program at the next occurring OFF time. | After entering your schedules or the time, then returning to the AUTO modes, push NEXT/ON/OFF to change the load state if necessary.

Timer only operates when the remote (3-way) switch is in one position or timer ignores the remote switch. | Remote switch is wired incorrectly. | Recheck wiring, especially for the jumper, per "2. Install the Switch Timer." If so, proceed to Section 3.

Timer ignores remote (3-way) switch even though it is wired correctly. | Excessive length of wire (greater than 100 feet) or buried wiring to the remote switch. | Eliminate condition by replacing the buried cable or doing without the remote switch. Consult factory for other options.

Timer turns off immediately after being turned on. | Remote switch is defective or worn out. | Replace the remote switch.

Battery holder is difficult to snap in place. | Batteries not seated in holder, holder misaligned or contact tab of holder are bent. | Seat the batteries, then install the holder with the notch facing down.

LIMITED ONE-YEAR WARRANTY

If within one (1) year from the date of purchase, this product fails due to defects in material or workmanship, Intermatic Incorporated will repair or replace it, at its sole option, free of charge. This warranty is made by: Intermatic Incorporated/After Sales Service/7777 Winn Rd., Spring Grove, Illinois 60081-9698/815-675-7000 http://www.intermatic.com Please be sure to provide all information and follow the instructions carefully.

The warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) mailing the product, along with proof of purchase, postage prepaid to the authorized service center listed below. This warranty is made by: Intermatic Incorporated/After Sales Service/7777 Winn Rd., Spring Grove, Illinois 60081-9698/815-675-7000 http://www.intermatic.com Please be sure to provide all information and follow the instructions carefully.

Informatic Incorporated, Spring Grove, Illinois 60081-6859

Self-Adjusting Door Wall Switch Timer

c. Tuck wires into wall box(s) leaving room for the device(s).

d. Using screws provided, mount the switch timer into the wall box, then install the wall plate.

e. Turn power back on at the service panel.

You are ready to set the DATE and TIME—Proceed to Section 3.

NOTES: When installing the EJ500 switch timer in circuits with two or more switches:

- The wiring is different when using the EJ500 switch timer than when using conventional toggle switches. Read the following installation instructions carefully.

- The distance between switch timer and remote switches must not exceed 100 feet, and wiring to the remote switch(es) must not be buried underground.

- Used remote switches from a previous conventional installation may not function reliably with an electronic timer. Try a brand new remote switch if function is intermittent.

For Existing 2-Switch (3-Way) Installations:

1. Locate the COMMON wire connected to first old switch. It might be attached to a different colored screw, or find markings on old switch.

2. Connect BLACK wire from switch timer to COMMON wire, using a twist connector.

3. Connect the other two wires from the old switch to either the BLUE and RED wires from the switch timer.

4. Connect the ground wire from the box to the BARE COPPER wire from switch timer. If there is no ground wire, ground the switch timer to the box. If the box is plastic, connect the bare copper wire to ground as supplied or contact an electrician.

5. Locate the COMMON on the second old switch of the 3-way pair.

6. Connect jumper wire (supplied) from the COMMON terminal to either of the other terminals on the remote 3-way switch.

7. Make sure all twist connectors are tight.

8. Tuck wires into wall box(s) leaving room for the devices.

9. Mount the devices into the wall boxes, then install the wall plates.

10. Turn power back on at the service panel.

11. Make sure the switch timer displays "MAN" mode. Do the following test with the remote switch in each of its 2 positions: Press the NEXT/ON button on the switch timer several times. Each time that you press the NEXT/ON button, the switch controlled light or device (the "load") should turn on or off, if so, proceed to Section 3.

- If the timer display changes between ON and OFF but the load does not operate, re-check your wiring and make sure that the loop is functioning properly.

- If the timer display changes between ON and OFF but the load operates when the remote switch is in one of its 2 positions, you need to turn power off on the service panel, change the jumper wire to the other terminal. Then turn power back on at the service panel and repeat Step 11.

You are ready to set the DATE and TIME—Proceed to Section 3.

For Single-Switch Installations:

a. Connect one of the two wires from the wall to the BLUE wire from the switch timer, using the twist connectors provided.

b. Connect the other wire from the wall to the BLUE wire from the switch timer, using the twist connectors provided.

c. Connect the ground wire from the box to the BARE COPPER wire from the switch timer (if there is no ground wire, ground the switch timer to the box. If the box is plastic, connect the bare copper wire to ground as supplied or contact an electrician.

- Make sure all twist connectors are tight.
3. Press NEXT ON/OFF to display the data. The word DATE and a number will be flashing (Fig. 2).
4. Press M+ to stop the flashing. Press again as necessary to display the correct month (Fig. 3).
5. Press DAY/DST as necessary to display the correct date (Fig. 3). The correct day of the week is shown as well.
6. Press NEXT ON/OFF to set Daylight Saving Time (DST). The display flashes between DST and AUTO (Fig. 4).
7. Press DAY/DST to stop the flashing. Press again to toggle between AUTO and MAN for whether you want to adjust automatically for DST.
   - If your area uses DST, select AUTO (Fig. 5).
   - If your area does not use DST, select MAN.
8. Press NEXT ON/OFF to to set your ZONE. The display flashes between ZONE and CNTY. Use the map (Fig. 6) to determine your zone.
9. Press ZONES to stop the flashing. Press again to toggle between SOUTH, NORTH, and CNTY. Use the map (Fig. 7) to determine your zone.
10. Press NEXT ON/OFF to set exact sunset and sunset times. The display flashes between SUNUP and an AM time (Fig. 8). Find the exact times in your area in your newspaper or online.
   - If you DO NOT want to set exact Sunup and Sunset times: a. Press NEXT ON/OFF to advance to SNSEt.
   - If you DO want to set exact Sunup and Sunset times: a. Press HOUR+ as necessary to set the correct SNSEt hour.
b. Press NEXT ON/OFF to advance to setting exact SNSEt minute (Fig. 10).
c. Press HOUR+ as necessary to set the correct SNSEt minute.
d. Press M+ as necessary to set the correct SNSEt minute.

Setting the Calendar is complete. Now set Time of Day.
1. Press MODE until the display shows PGM with blanks for time (Fig. 16).
2. Press HOUR+ to set the hour you want the program to turn ON. Press M+ to set the minutes you want the program to turn ON (Fig. 14).
3. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
4. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
5. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
6. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
7. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
8. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
9. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
10. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
11. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
12. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
13. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
14. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
15. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
16. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
17. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
18. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
19. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
20. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
21. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
22. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
23. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
24. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
25. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
26. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
27. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
28. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).
29. Press NEXT ON/OFF to set the OFF time for the program. The screen again displays blanks (Fig. 15).
30. Press DAY/DST as many times as necessary to display 12:00 a.m. and the day(s) you want the program to activate (Fig. 16).

To make a selection, open the front cover and press the MODE button until you see your choice of the following options:
   - **AUTO** — uses the timer settings you have programmed.
   - **MANUAL** — gives your home a “lived in” look by varying your settings by a random amount of ± 20 minutes or so.
   - **MANUAL** — maintains your settings but operates the switch timer like a standard ON/OFF. Press on the door of the switch timer for ON, press off for OFF.

**Manual Override**
To override a program (ON/OFF time) till its next schedules time:
- Press on the control cover (over the programming buttons)
- Open the control cover and press the NEXT ON/OFF button.

**The ‘Air Gap’ Switch**
The manual “air gap” switch at the top edge of the switch timer is designed to turn power off for routine maintenance (e.g., repairs, removing broken bulbs, etc.). Using this switch for normal ON/OFF operation will shorten battery life.

**About the Battery**
- Batteries are usually alkaline batteries maintain calendar and time settings during power interruptions for up to 3 months of accumulated interruptions. All other settings remain in memory indefinitely without batteries or AC power.
- Remove batteries if the switch timer will be without AC power for an extended time.
- Replace the batteries if the display is dim or displays “LOBAT”.
- Batteries may be changed without removing AC power.
- If AC power is interrupted, memory will be lost within 15 seconds to avoid losing time-of-day and calendar settings.
- Remove the battery holder by prying left and right of the holder with a flat screwdriver, then pry the battery holder up.
- Install new batteries in the battery holder as marked, then place it back into the switch timer with notch down.
- If the display flashes “12:00,” reset time and check the date.