

Installation and User Instructions

Ratings

- Input: 102-132 VAC 60 Hz, 2.5W max.
- Output: 15 Amp output, 1800W resistive and inductive, 500W tungsten, 1/3 HP

WARNING

- **Electrical shock hazard. Risk of injury or death. Always plug three-prong plug into a properly grounded outlet. Never attempt to defeat this safety feature.**
- **Risk of fire. Do not use timer to control devices that could have dangerous consequences due to inaccurate timing, such as sun lamps, sauna, heaters, crock pots, etc.**

NOTICE

- Follow local electrical codes during use.
- Dispose of used batteries promptly per local regulations.

1 – Activate the Batteries

The timer comes with two LR44 batteries installed.

1. Remove the pull tab to connect the installed batteries.
2. The display will initialize itself, then flash “12:00 AM” in the **CLOCK** mode (Fig. 1).



Fig. 1

NOTE: If display doesn't light, the batteries are dead. Replace the batteries before using the digital timer.

2 – Get Familiar with the Timer's Features

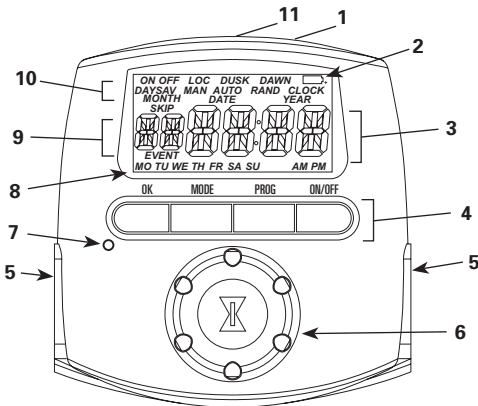


Fig. 2

1. Battery Holder (back of unit) — two LR44 batteries keep time up to three months without power
2. Low Battery Indicator — programmed data is stored in non-volatile memory, so it won't be lost when batteries are removed
NOTE: Replace the batteries as soon as possible after the low battery indicator appears.
3. Time Of Day (TOD) Display — the timer will automatically adjust for Daylight Saving Time (DST) and changing dawn and dusk times for your location (Astronomic feature)
4. Pushbuttons
5. Two Timed, Grounded Outlets
6. Selector Knob
7. Reset Button

8. Day Of Week (DOW) Display — events can be programmed for just one day of the week, all the days of the week, just weekdays or just weekends
9. Event Display — the timer can be programmed for up to 28 total ON/OFF events per week
10. Mode Display — the timer can display several modes during setup and programming and three modes during operation: **MANual**, **AUTO** and **RANdom**. **MANual** allows for manual operation of the plugged-in devices, **AUTO** uses the timer's exact settings and **RANdom** uses the timer's settings varied by random 5-minute increments of ± 30 minutes.
11. Output Status Indicator — this is the ON/OFF indicator. When the green light is on it means that the lamp or appliance should be on. If it is not on, the bulb may be burned out or the device may be turned off at the lamp or appliance.

NOTE: You may set up and program the timer before you plug it in. Be aware that while it is unplugged, the display will turn off to conserve battery power if there is no pushbutton activity for a few minutes. If this happens, simply push any button to turn the display back on.

3 – Clear Any Existing Programming

It's unlikely that your new digital timer has any existing programming, but to make sure, use this procedure *before setting the time*.

1. Locate the Reset button. It is the small, round hole adjacent to the keypad. You will need a pen or paper clip to press this button.
2. Press and hold the **ON/OFF** button.
3. Press the Reset button for 3 seconds and release. The display will light up and then go blank.
4. Release the **ON/OFF** button.

*NOTE: Pressing the Reset button without holding down the **ON/OFF** button will clear the time, but will not clear the non-volatile (programming) memory.*

4 – Set the Time, Date and Location

NOTE: The following procedure must be completed entirely, including adjustments, in order for the Astronomic and automatic Daylight Saving Time features to function properly.

Setting Time

1. Ensure that the timer is in the **CLOCK** mode (Fig. 1). If it is not, press the **MODE** button a few times (through **MANual**, **AUTO** and **RANdom**) until **CLOCK** shows in the mode display area, then press **OK**.
2. Turn the selector knob until the correct hour shows in the first two digits of the Time Of Day (TOD) display, along with the correct **AM** and **PM** display. Note that the **AM** and **PM** displays will alternate as the time passes through 12.
3. Press the **OK** button to set the hour. The last two digits of the TOD display (minute display) will begin to flash.
4. Turn the selector knob until the correct time in minutes shows.
5. Press the **OK** button to set the minutes. **MONTH**, **DATE** and **YEAR** will show in the mode display area, with the digits under **YEAR** flashing (Fig. 3).

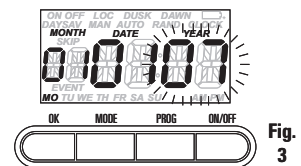


Fig. 3

Setting Date

6. Turn the selector knob until the current year is displayed and press the **OK** button. The digits under **MONTH** will begin to flash.
7. Turn the selector knob until the current month is displayed and press the **OK** button. The digits under **DATE** will begin to flash.

4 – Set the Time, Date and Location (Continued)

- Turn the selector knob until the current date is displayed and press the **OK** button. The timer will automatically determine and display the day of the week.
NOTE: "00" indicates 2000.

Adjusting Daylight Saving Time

- DAYS** and **AUTO** will show in the mode display area (Fig. 4). The timer will automatically adjust the clock for Daylight Saving Time (DST) when set to **AUTO** here. If you do not want the timer to do this, turn the selector knob until **MAN** shows.

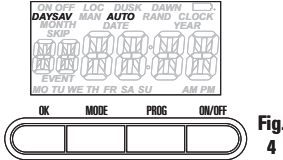


Fig. 4

- After choosing **AUTO** or **MAN**, press the **OK** button. The timer's starting date for DST will show in the display in the form of **MONTH** and week (Fig. 5).

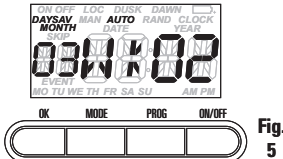


Fig. 5

- The start and end dates for DST can change. The next four steps allow you to change them for your location. If the timer's settings for DST are already correct, press the **OK** button right away, otherwise:
 - First, turn the selector knob to choose the correct month (01 through 12) for your DST starting date and press the **OK** button.

- Turn the selector knob again to change the week (01 = first, 02 = second, 03 = third, 04 = fourth, 0L = Last) for your DST starting date and press the **OK** button.
- Then, turn the selector knob to choose the correct month for your DST ending date and press the **OK** button.
- Turn the selector knob again to change the week for your DST ending date and press the **OK** button.

Setting Location

- The timer will now display **LOC**, the default state and country (Alabama, United States) (Fig. 6). The location must be set in order for the Astronomic feature to function.

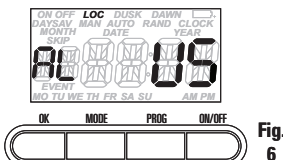


Fig. 6

- First, turn the selector knob to choose your state and press the **OK** button.
- Turn the selector knob again to change from the country to the section, if necessary. Your state may have from one to nine sections to choose from (NE, NW, CTR, etc.).
- Press the **OK** button to accept the location.

- The timer will now display **LOC**, "TZ" and the selected time zone for your location (Fig. 7). If the timer's selection is correct, press the **OK** button right away, otherwise turn the selector knob until the correct time zone shows in the display and then press the **OK** button.

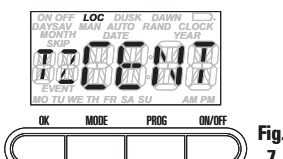


Fig. 7

Adjusting Dawn and Dusk

- The timer will now display **DAWN** and the calculated sunrise time for your location (Fig. 8).

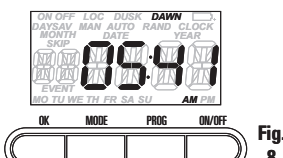


Fig. 8

Accept the calculated sunrise time or turn the selector knob until the correct time shows in the display, and then press the **OK** button.

- The timer will now display **DUSK** and the calculated sunset time for your location (Fig. 9).

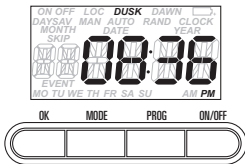


Fig. 9

Accept the calculated sunset time or turn the selector knob until the correct time shows in the display, and then press the **OK** button.

- The timer will now jump to **MAN** mode.

5 – Set Initial Pair of ON and OFF Events

You may program the digital timer for up to 28 events. A time setting to turn on (at a specific time, **DAWN** or **DUSK**) is considered an **ON** event. A time setting to turn off (at a specific time, **DAWN** or **DUSK**) is considered an **OFF** event.

NOTE: You must view an event screen before programming.

Viewing an Event

- Ensure that the timer is in a normal operating mode by pressing the **MODE** button, if necessary, until **MAN**, **AUTO** or **RAND** appears in the mode display area.

- Press the **PROG** button to view the first event screen (Fig. 10). If all programming has been cleared, the timer will display **SKIP** above the event display ("01"), indicating that the first event is not programmed, and "--:--" will replace the time display.

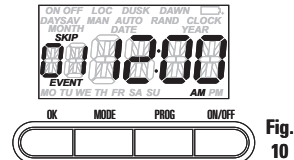


Fig. 10

NOTE: From any event viewing screen (with no displays flashing), you may:

- Press **OK** to return to the normal operating mode without making any change.
- Turn the selector knob to view the next event screen.
- Press **PROG** to set or change the event you are viewing. Event number will flash.

Programming an ON Event

- Press **PROG** again. The **SKIP** display (or **ON** or **OFF**, if the timer has been programmed) will begin flashing (Fig. 11).

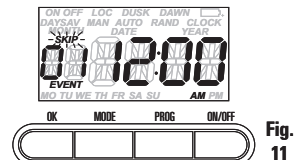


Fig. 11

- Turn the selector knob until the screen displays the event setting you desire:
 - ON** only — for turning on at a preset time
 - ON** and **DUSK** — for turning on at sunset
 - ON** and **DAWN** — for turning on at sunrise

- NOTE: The settings with **SKIP** or **OFF** are used for disabling an event or programming an **OFF** event.*

- Press **PROG** to accept the event setting. The Days Of Week (DOW) display will begin to flash (Fig. 12).

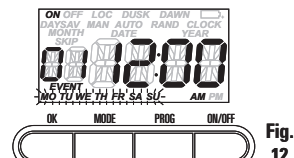


Fig. 12

- Turn the selector knob until the screen displays the DOW setting you desire:
 - MO TU WE TH FR SA SU** — for an event that occurs every day
 - MO TU WE TH FR** — for a weekday event
 - SA SU** — for a weekend event
 - MO** (or **TU**, or **WE**, etc.) — for a single day event

- Press **PROG** to accept the DOW setting. If you have chosen **DAWN** or **DUSK**, skip to step 10. If you have chosen a preset time, the first two digits of the Time Of Day (TOD) will begin to flash.

- Turn the selector knob until the desired hour is reached and press **PROG**. The last two digits of the Time Of Day (TOD) will begin to flash.

9. Turn the selector knob until the desired minutes are reached.

10. Press **PROG** to accept the entire ON event setting.

*NOTE: Do not press **OK** before pressing **PROG** this final time or the timer will return to normal operating without accepting the new setting.*

11. The timer will move on to view the next event screen and you may continue programming or press **OK** to return to normal operating.

Programming an OFF Event

12. While viewing an event screen, press **PROG**. The **SKIP** display (or **ON** or **OFF**, if the timer has been programmed) will begin flashing (Fig.13).

13. Turn the selector knob until the screen displays the event setting you desire:

- **OFF** only — for turning off at a preset time
- **OFF** and **DUSK** — for turning off at sunset
- **OFF** and **DAWN** — for turning off at sunrise

*NOTE: The settings with **SKIP** or **ON** are used for disabling an event or programming an ON event.*

14. Press **PROG** to accept the event setting. The Days Of Week (DOW) display will begin to flash (Fig. 14).

15. Turn the selector knob until the screen displays the DOW setting you desire:

- **MO TU WE TH FR SA SU** — for an event that occurs every day
- **MO TU WE TH FR** — for a weekday event
- **SA SU** — for a weekend event
- **MO** (or **TU**, or **WE**, etc.) — for a single day event

16. Press **PROG** to accept the DOW setting. If you have chosen **DAWN** or **DUSK**, skip to step 19. If you have chosen a preset time, the first two digits of the Time Of Day (TOD) will begin to flash.

17. Turn the selector knob until the desired hour is reached and press **PROG**. The last two digits of the Time Of Day (TOD) will begin to flash.

18. Turn the selector knob until the desired minutes are reached.

19. Press **PROG** to accept the entire OFF event setting.

*NOTE: Do not press **OK** before pressing **PROG** this final time or the timer will return to normal operating without accepting the new setting.*

20. The timer will move on to view the next event screen and you may continue programming or press **OK** to return to normal operating.

6 – Select AUTO, RANDom or MANual Operation

Once set up, you have three choices for operating the digital timer. The screen will display **MANual**, **AUTO** or **RANDom** and you may choose between them by pressing the **MODE** button.

- **AUTO** — uses the timer settings you have programmed.
- **RANDom** — gives your home a “lived-in” look by varying your settings by random 5-minute increments of ± 30 minutes.
- **MANual** — makes the switch into a standard ON/OFF switch without timer settings. Press the **ON/OFF** button to operate plugged-in devices.

*NOTE: While in **AUTO** or **RANDom** and you may override the timer by pressing the **ON/OFF** button.*

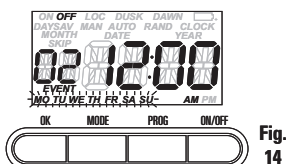
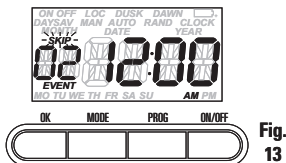
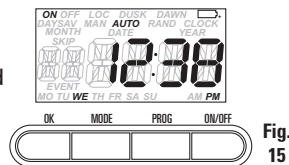
- If the timer has a device turned on, pressing the **ON/OFF** button will turn it off and leave it off until the next ON event.
- If the timer has a device turned off, pressing the **ON/OFF** button will turn it on and leave it on until the next OFF event.

7 – Plug In Timer

To conserve battery power, as soon as setup and programming are complete, plug the desired devices into the timer and plug the timer into a properly grounded outlet.

About the Batteries

- The battery voltage is continuously monitored. If a low voltage is detected, the low battery indicator will be displayed (Fig. 15).
- The timer requires two LR44 batteries to keep time up to three months without power.
- Replace the batteries as soon as possible after the low battery indicator appears.
- Change the batteries within one minute of unplugging in order to keep the time and date settings. Afterwards, if the display is wrong or flashes “12:00 AM”, reset the time and date. **All other settings (your ON and OFF programming) remain in memory indefinitely without battery or AC power.**
- While the batteries are removed, the timer will turn off the display to conserve power.
- Dispose of the used batteries promptly according to local regulations. Keep batteries away from children.

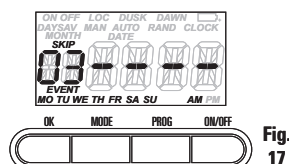
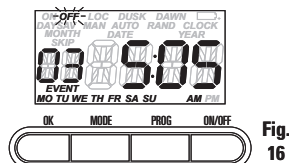


Changing Program Times

Skipping an ON or OFF Event

Use these steps to disable an existing ON or OFF event that you no longer want (for example, special settings from a vacation).

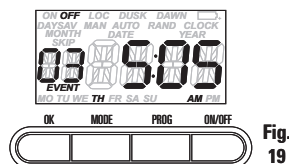
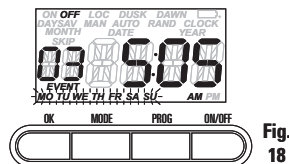
1. Ensure that the timer is in a normal operating mode by pressing the **MODE** button, if necessary, until **MANual**, **AUTO** or **RANDom** appears in the mode display area.
2. Press the **PROG** button to view the first event screen (“01”).
3. Turn the selector knob until the desired event screen is displayed.
4. Press **PROG** again. **ON** or **OFF** will be flashing (Fig.16).
5. Turn the selector knob until **SKIP** shows in the display and “--” replaces the time (Fig. 17), then press **PROG** to accept the new setting.
6. Continue to press **PROG** until the next event is viewed.
7. Continue programming or press **OK** to return to normal operating.



Revising an ON or OFF Event

Use these steps to revise an existing ON or OFF event.

1. Ensure that the timer is in a normal operating mode by pressing the **MODE** button, if necessary, until **MANual**, **AUTO** or **RANDom** appears in the mode display area.
2. Press the **PROG** button to view the first event screen (“01”).
3. Turn the selector knob until the desired event screen is displayed.
4. Press **PROG** as many times as necessary to display the setting you want to revise, for example, DOW (Fig. 18).
5. Turn the selector knob until you reach the DOW setting you want (Fig. 19) and press **PROG** to accept the new setting.
6. Continue to press **PROG** until the next event is viewed.
7. Continue programming or press **OK** to return to normal operating.



Troubleshooting Guide

Observed Problem	Possible Cause	What to Do
Digital timer does not switch on/off but display looks normal.	Digital timer is not set in AUTO , RANdOm , or MANuAl mode.	Press MODE to select the operational mode you want to use.
Digital timer won't enter AUTO or RANdOm mode when you press MODE .	The time of day or timer settings have not been set.	Make sure the time of day and at least one scheduled activity have been set.
Digital timer switches at incorrect times or skips some of the programmed times.	Programmed schedule(s) are incorrect.	Press PROG to review the settings and revise them as necessary. See instructions.
	Digital timer is in RANdOm mode, which varies switching times up to ± 30 minutes (to give your home a "lived-in" look).	If you don't want to keep the timer in RANdOm mode, press MODE to change to AUTO mode.
	The Astronomic and exact switching times are in conflict. For example, you've set on to DUSK and off at 8 pm, and due to seasonal changes, DUSK has advanced to 8:30 pm. <i>NOTE: Your timer automatically skips any conflicting ON event as summer approaches to prevent unwanted operation of lights or other controlled devices. See "What to Do" if you want to identify and remove conflicting settings.</i>	<ol style="list-style-type: none"> 1. Complete the steps for setting the Time and Date, then temporarily change the date to June 21st. 2. Review the DAWN and DUSK settings by pushing the PROG button. 3. Make sure the specific ON or OFF time settings won't interfere with these DAWN and DUSK times. Make changes as necessary. 4. When finished, change the Date setting back to today's date.
The lights or controlled devices don't match the programmed on/off status immediately after setting the time or programming a schedule.	Digital timer does not "catch up" automatically to the programmed load state. The status of the timer will remain as is until it comes to the next programmed on/off time.	After programming your events or the time, then returning to the AUTO mode, push the ON/OFF button to change the load state if necessary.
The load turns off immediately after being turned on.	The timer is not functioning properly.	If the problem persists, contact Intermatic Customer Service.
The digital timer operation is sluggish or not switching on/off at all.	Though the low battery indicator is not being displayed, the batteries are getting weak.	Replace the batteries.
Timer shows ON but the light or other controlled device is off.	The light or controlled device itself may be switched off or the light bulb may be burned out.	Make sure the light or controlled device is switched on and plugged in or replace the light bulb.

LIMITED LIFETIME 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 subject 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, such as surface and/or weathering, as this is considered normal wear and tear; (g) transit damage, initial installation costs, removal costs, or reinstallation costs.

INTERMATIC INCORPORATED WILL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY MODIFIED TO EXIST ONLY AS CONTAINED IN THIS LIMITED WARRANTY, AND SHALL BE OF THE SAME DURATION AS THE WARRANTY PERIOD STATED ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON THE DURATION OF AN IMPLIED WARRANTY, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

This 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 wrap the product securely to avoid shipping damage.

INTERMATIC INCORPORATED
SPRING GROVE, ILLINOIS 60081-9698

158--00563