OPERATION MANUAL
Programmable Microcomputer TIMER

MODEL NO. ET160

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120 V AC 15 A

LCD Display — On/Off — Reset — Random — Down — Up — Set — Countdown

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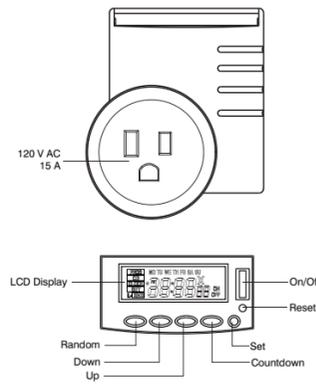
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Thank you for buying this Programmable Micro Computer Timer! By setting programs and random functions, you can turn on and off any plugged-in electrical applicances at your own selected time or at random intervals.

Operation of this Timer is simple. To obtain the fullest utilization, please read and follow the instructions carefully.

Features

- Real-time Clock with Weekday, Hour, Minute and Second display in selectable 12 or 24 hour display format
- 20 On/Off Program Pairs with Weekday, Hour and Minute setting which can operate individually either on a specific day, Monday to Friday, Monday to Saturday during Weekend or everyday
- Countdown Timer with Hour, Minute and Second setting
- Programmable Random Timer
- Summer/Winter Time Mode
- Manual On/Off
- Master/individual disable for pre-set program(s)

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LCD Display

Summer-Time Indicator — Hour — Minute — Second
Random Mode — Off Indicator
Set Mode — On Indicator
Clock Mode
Countdown Mode — Disable Indicator
Program Mode — Day
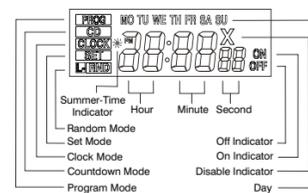
Battery Installation

Before operating, the two button cell batteries (included) should be installed into the Timer. To install the batteries, unplug the Timer, unscrew the 2 small screws at the back and remove the battery cover. Then place the batteries into the compartment while observing the correct polarity. Replace the cover and screws after battery installation.

Note: The batteries serve to back up the clock and programs while it is unplugged. The battery life is around 1 year when the Timer is not connected to

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the power outlet. If you plan to leave the Timer unplugged for a long period of time, you may want to remove the batteries from the Timer.

Reset Function / Abnormal Display

When an abnormal or blank display appears, or if you want to clear all programs, use a round object such as a ball-point pen to push the RESET key. After reset, clock and all programs will be cleared.

If the display is dim or abnormal, you should replace the button cell batteries.

Operation

The various modes of the Timer are arranged in a circular pattern as shown below:

Clock → Pgm.1 On → Pgm.1 Off → Pgm.2 On → Pgm.2 Off → ... Pgm.20 On → Pgm.20 Off → Countdown → Clock...

The PROG symbol will light up to denote Program is being displayed. The CD PROG symbol will light up to denote that the Countdown Program is being displayed.
Press either the ← or → key to scroll through clock and programs.If the key is pressed for more than 1 second,the key will repeat itself.

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To return to the Clock display from other modes, simply press both ← and → keys together.

Setting the Clock

- To set the clock, press the SET key while clock is displayed. SET will appear on the display and weekday will be flashing.
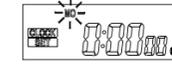
- Press ← or → (DOWN or UP) key to select the correct day.Holding the key and it will repeat by itself.
- Press SET key and Hour will be flashing.
- Repeat Step (2) and (3) until all data have been set.
- For the setting of Second, either ← or → key will set the second to '00'.
- After all data have been set, SET will disappear and the Timer will return to the normal clock display.

To change between 12 and 24 hour display, press the RND key during clock setting.

Setting the Program

With this Timer you can set up to 20 On/ Off Programs. To set each program, please see the example shown below:

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Example of setting program 1:

MO 8:15 ON / MO 15:45 OFF

In this example, the Timer will be turned on at Monday 8:15 and off at 15:45.

- Press ← or → key until PROG 1 ON appears on the display.
- Press SET key and SET will appear on the display and Weekday will be flashing.
- Press ← or → key to select the day(s) for Program 1 to be active. The day displayed will sequence through MO-SU (everyday), MO to SU, then MO - FR, MO - SA and SA - SU, and repeat again. In this example, the day would be Monday. Press the SET key when MO appears on the display.
- Hour should be flashing. Use ← or → key to change the hour to 8, then press the SET key.
- Minute should be flashing. Change it to 15.
- Press SET key to finish the setting of Program 1-On.
- Press → key and PROG 1 OFF appears at the display. Use the same method to set the off time.

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To set more programs, press the → key and PROG 2 ON appears. Repeat the above procedures to set all programs.

If no key is pressed for 1 minute, the Timer will return to Clock display automatically.

Setting the Countdown Timer

The countdown timer can be used to turn the timer on or off for a period from 1 second up to 23 hours 59 minutes 59 seconds.
Example: Set the Countdown Timer to stay On for 1 hour 10 minutes 0 seconds.
- Display CD PROG by using ← or → key.
- Press SET key. SET will light up and the word ON will be flashing
- Select on/off using ← or → key. Press SET key when ON is displayed.
- Hour should be flashing.Adjust the hour to 1 and SET.
- Minute should be flashing. Set minute to 10 and second to 0 using the same method.

To activate the Countdown Timer, press the CD key. To stop the countdown, press the CD key again and the display will return to its pre-set countdown value.
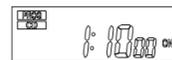
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When the Countdown function is operated in clock mode and timer program mode, CD willbe flashingon thedisplay.

Note: Countdown will not start when Random function is activated. All pre-set programs are also disabled during the countdown period. Activating the Manual on/off function will cancel the countdown operation.

Activating the Random Functions

This timer has a built-in random function to automatically turn the timer on and off at random intervals. This feature is especially useful for security purpose whenever a home is left unattended.

3 different Random functions are available:
(1) Short random Timer
(2) Long Random Timer
(3) Program Random Timer

To activate Short Random, press the RND key when Clock or Program 1-19 is displayed. RND will flash. To cancel Random function, press RND key again. Short random cycle is about 1~2 hour.

To activate Long Random, press the RND key when Countdown Timer is displayed. L-RND will be flashing. Long random cycle is about 2~4 hour.

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The Random functon can be programmed so that it will activate only during certain period of time (e.g., only at night time for the house light). To use Program Random, set Program 20 to the period that you want the Random function to be activated.

For example, you can set Program 20-On to Mo-Fr 19:30 and Program 20-Off to Mo-Fr 23:00. Then random function will only active on weekday evening.

To activate the Program Random, make sure Program 20 is displayed, then press the RND key (Pressing the RND key while Program 20 is not displayed will only activate the regular Random function).

Once Program Random is started,the RND symbol will stay on during the inactive period and flash during the active period. Cycle timer is same as in Short Random.

While random function is actived, all pre-set programs including Countdown Program will be disabled. Activating Manual On/Off function will cancel the Random function.

Summer/ Winter Time

Holding both ← and → keys at the same time in the Clock display will change the current time to Summer time mode. The hour will advance by one and the symbol " ☼ " will light up to denote that the Summer time is activated.

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Press the 2 keys again in Clock display will return to normal time.

Manual On/ Off

The Timer can be turned on or off anytime by using the ON/OFF key without affecting the program. The flashing ON or OFF will indicate that Manual On/Off function is activated.

Activating the Disable / Master Disable Function

This function allows you to disable any or all of the pre-set ON/OFF programs. To disable a particular program, display the program you wish to disable, then press the SET key. The display will be flashing and the word SET will light up.
Press the ON/OFF key to disable the program and the X symbol will appear to indicate that particular program is disabled.

Note: The display is still flashing and if there is no changes to be made on the pre-set program time, press the SET key until the display is not flashing. Use this function to disable as many available pre-set programs as you choose.

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To disable all 20 programs, press the SET key while in Clock display, then press the ON/OFF key. The X symbol appears on the Clock Display Mode indicates that all pre-set programs are disabled.

To cancel this Disable function, just use the same method to turn off the X symbol.

Technical Specifications

Program: 20 programs per day or per week
Minimum switching time: 1 minute
Ratings: 120V AC 15A
Maximum load: 1,800W resistive

Manual number : UMTMA2006

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Dim : (58W x 76 H)mm/page
Model : ET-160 -SE-50S
Scale : 1:1
Version : English
Date : July.04.2001.