OPERATING INSTRUCTIONS

Please read the following instructions carefully before connecting this timer to electrical appliances.

IMPORTANT

Don't plug in an appliance where the load exceeds 10 Amp. Always ensure the plug of any appliance is fully inserted into the timer outlet. If cleaning of the timer is required, remove from mains power and wipe timer with a dry cloth.

DO NOT IMMERSE TIMER IN WATER OR ANY OTHER LIQUID.

Heaters and similar appliances should never be left unattended during operation. The manufacturer recommends such appliances not be connected to timers.

KEYBOARD DEFINITION

1. **MASTER CLEAR**: Clear all data in memory including current time and all programs.
2. **UP**: Set current time combined with buttons **SET, DOWN**; Set programs combined with buttons **SET, DOWN** ; Set **CD** combined with buttons **SET, DOWN** ; Press **UP** and **DOWN** buttons simultaneously to enter **CLOCK** mode under **PROGRAM** setting mode or **CD** setting mode.
3. **SET**: Set current time combined with buttons **UP, DOWN**; Set programs combined with buttons **UP, DOWN** ; Set **CD** combined with buttons **UP, DOWN** ;
4. **DOWN**: Set current time combined with buttons **SET, UP**; Set programs combined with buttons **SET, UP**; Set **CD** combined with buttons **SET, UP** ;
5. **RANDOM**: Set or cancel **RANDOM** function.
6. **CD(COUNT DOWN)**: Set or cancel **CD** function.
7. **MANUAL**: Select operating modes (**ON,AUTO,OFF**)of timer; Override programs or recall the overridden programs in setting programs.

GENERAL FEATURES

1. 10 ON/OFF programs with 1 minute step.
2. MANUAL ON/AUTO/MANUAL OFF selectable.
3. 12/24 hour mode selectable.
4. LCD display with second.
5. Summer time function available.
6. Random function with a randomly on 10-31minutes between 6:00 PM and 6:00 AM.
7. 16 combinations of day or blocks of days available as follows:
   MO
   TU
   WE
   TH
   FR
   SA
   SU
   MO, TU, WE, TH, FR, SA, SU
   MO, TU, WE, TH, FR
   SA, SU
   MO, TU, WE, TH, FR, SA
   MO, WE, FR
   TU, TH, SA
   MO, TU, WE
   TH, FR, SA
   MO, WE, FR, SU
8. Maximum of 99 hours 59 minutes 59 seconds **CD(COUNT DOWN)** function.

INITIAL OPERATION

1. Plug the timer into a regular **240** Volts power outlet and turn the power on. Leave for approximately 14 hours to charge the Memory Back-up battery.
2. Clear all current information by pressing **MASTER CLEAR** button with a sharp object such as a pen or pencil after charging.
3. The timer is now ready to be set up for use.

SETTING CURRENT TIME

1. Press **UP** button or **DOWN** button until the **CLOCK** displays in LCD.
2. Press **SET** button 2 seconds at least,the **SET** will display in LCD.and flash.The "**WEEK DAY**"will flash at same time. the time change to **SET** mode.you can set the current time now.
3. Press **UP** button or **DOWN** button to set the "**WEEK DAY**".
4. Press **SET** button once time and release, The "**HOUR**"will flash.the "**WEEK DAY**"will stop flashing and keep display.
5. Press **UP** button or **DOWN** button to set the "**HOUR**".
6. Press **SET** button once time and release,The "**MINUTE**"will flash. the "**HOUR**"will stop flashing and keep display.
7. Press **UP** button or **DOWN** button to set the "**MINUTE**".
8. Press **SET** button once time and release,the time change to **CLOCK** mode.
9. To reset incorrect time, repeat above steps.

SETTING PROGRAMS

TIP: When verifying your programs ensure that the settings do not overlap, especially when using the block option. If there are program settings overlapping, the timer **ON** or **OFF** will be executed according to program time, not by program number. Program **OFF** has the priority over program **ON**.Please verify the timer's operation mode,if you want to arm the programs,the timer must be in **AUTO** mode,and the **RANDOM** and **CD** function must be canceled.

1. Press **UP** button or **DOWN** button untill LCD shows ON_1. The first ON setting can be made now.
2. Press **SET** button once and release,the **SET** will display in LCD.and flash.The "**WEEK DAY**"will flash at same time.
3. Press **UP** button or **DOWN** button to set the "**WEEK DAY**".
4. Press **SET** button once time and release, The "**HOUR**"will flash.the "**WEEK DAY**"will stop flashing and keep display.
5. Press **UP** button or **DOWN** button to set the "**HOUR**".
6. Press **SET** button once time and release. The "**MINUTE**"will flash. the "**HOUR**"will stop flashing and keep display.
7. Press **UP** button or **DOWN** button to set the "**MINUTE**".
EXAMPLE: Timer ON at 17:15 and OFF at 22:30 everyday.
a. Press **UP** button or **DOWN** button untill LCD shows ON_1.
b. Press **SET** button once and release,the **SET** will display in LCD.and flash.The "**WEEK DAY**"will flash at same time.
c. Press **UP** button or **DOWN** button till the LCD displays "**MO, TU, WE, TH, FR, SA, SU**".
d. Press **SET** button once time and release, The "**HOUR**"will flash.the "**WEEK DAY**"will stop flashing and keep display.
e. Press **UP** button or **DOWN** button till LCD displays 5:00PM or 17:00.
f. Press **SET** button once time and release. The "**MINUTE**"will flash. the "**HOUR**"will stop flashing and keep display.
g. Press **UP** button or **DOWN** button till LCD displays 5:15PM or 17:15. press the **SET** button to confirm.
h. Press **UP** button once and release. LCD displays OFF_1.
i. Repeat the above b,c and d till LCD displays "MO,TU,WE,TH,FR,SA,SU",10:30PM or 22:30.
j. Press **MANUAL** button till LCD displays **AUTO.**

MANUAL ON/AUTO/MANUAL OFF SETTING
Operating modes can't be changed during program settings.
1. Press **MANUAL** button to revert the three modes in turn.
2. The programs can only be executed in AUTO mode. When AUTO is selected, the timer operates as the programs. In **MANUAL ON** or **MANUAL OFF** mode all programs are ignored and the timer doesn't operate. When **MANUAL ON** mode is selected, power output is always **ON**. When **MANUAL OFF** mode is selected, power output is permanently off.
3. When the mode is turned from **MANUAL ON** to **AUTO**, the timer will keep the setting of **MANUAL ON** until to the next timer setting.

RANDOM FUNCTION
1. Press **RANDOM** button. LCD displays **R**(RANDOM). **RANDOM** function is activated.
2. When RANDOM is activated,the timer will be in On position randomly for 10-31 minutes during the time gap----from 6:00PM to 6:00AM.
3. Press the **RANDOM** button once again to cancel this function. **RANDOM** function can't be set during **PROGRAM** and **CD** setting.
4. The **RANDOM** function can only be executed in **AUTO** mode between **6:00PM**and **6:00AM**.

CD(COUNT DOWN) FUNCTION
1. Press **UP** button or **DOWN** button untill LCD shows **CD,** you can set the **CD** time now.
2. Press **SET** button once and release,the **SET** will display in LCD.and flash.The "**ON**" or "**OFF**"will flash at same time.
3. Press **UP** button or **DOWN** button set "**ON**" or "**OFF**"   mode which you want.
4. Press **SET** button once and release, The "**HOUR**"will flash.the "**ON**" or "**OFF**" will stop flashing and keep display.
5. Press **UP** button or **DOWN** button to set the "**HOUR**".
6. Press **SET** button once and release, The "**MINUTE**"will flash.the "**HOUR**"will stop flashing and keep display.
7. Press **UP** button or **DOWN** button to set the "**MINUTE**".
8. Press **SET** button once and release, The "**SECOND**"will flash.the "**MINUTE**"will stop flashing and keep display.
9. Press **UP** button or **DOWN** button to set the "**SECOND**". Press **SET** button, the "**SECOND**" will stop flashing and keep display.
10. Press **CD** button,the **COUNT DOWN** time will reduce with one second if the current operation mode is in **AUTO** mode.
11. Press **CD** button once again,the **COUNT DOWN** time will stop and comeback the primary **COUNT DOWN** time.
12. Maximum **COUNT DOWN** time is 99 hours 59 minutes 59 seconds .
13. The **CD** function can only be executed in **AUTO** mode.and the **RANDOM** function must be canceled.
14. The **CD** will flash in **LCD** when press **CD** button in clock mode.it means the **CD** function is executed.

12/24 HOUR MODE
Press **CD** button and **SET** button simultaneously to turn the time display between 12 and 24 hour mode.

SUMMERTIME FUNCTION
1. Press **MANUAL** button and **SET** (or **RANDOM**)button simultaneously. LCD shows **S**(Summer time). Clock advances 1 hour.
2. To revert to winter setting, press the two buttons again. Clock moves backward 1 hour. **S** disappears in LCD.

OPERATION GRADATION
Please notice the operation gradation when you set the timer,it will operate as follows gradation:
1.MANUAL ON OR MANUAL OFF ------▶2.RANDOM------▶3.CD------▶4.PROGRAM.
It executes the **MANUAL ON OR MANUAL OFF** setting first, **RANDOM** setting second, **CD** setting third,and **PROGRAM** setting last when the timer runs. Please set the right operation mode,

SPECIFICATIONS
Voltage:	240VAC,50Hz
Total Loading:	10A, 2400W M.40
Min Setting Time:	1 Minute
Operating temperature:	-10 °C to +40 °C
Accuracy:	+/- 1 minute per month
Battery backup:	NiMH 1.2V >100hours (when removing the plug of timer from main power,the backup battery will remain the calculagraph working)

MDT02