MDT01 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 random advance of 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 **250** 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.
- h. Press UP button once and release. LCD displays OFF_1.
- i. Repeat the above b,c,d,e,f,and g till LCD displays 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 this function is ON, the settings will be executed with a random advance of 10-31 minutes between 6:00PM and 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 250VAC,50Hz

Max Load 10A, 2500W

Min Setting Time 1 Minute

Operating temperature -10 °C to +40 °C

Accuracy +/- 1 minute per month

Battery backup NiMH 1.2V >100hours