

# POWERTECH

## OPERATING INSTRUCTIONS

READ THESE INSTRUCTIONS CAREFULLY BEFORE CONNECTING THIS TIMER TO MAINS POWER & YOUR ELECTRICAL APPLIANCES.

### IMPORTANT

Don't plug in any appliance where the load exceeds 10A. Always ensure the plug of the appliance is fully inserted into the timer output. To clean the timer, remove from the mains power and wipe it with a dry cloth. DO NOT IMMERSE THE TIMER IN WATER OR ANY OTHER LIQUID. The manufacturer recommends heaters & similar appliances should not be connected to timers as they cannot be left unattended during operation.

### FUNCTIONS

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

### FEATURES

- 10 On/Off programs with 1 minute step
- Manual On/Auto/Manual Off
- 12/24 hour mode, summertime & random (turns on 10-31 minutes between 6:00PM and 6:00AM) functions selectable
- Maximum of 99 hours 59 minutes 59 seconds CD (COUNTDOWN) function
- 16 combinations of single days or blocks of days available as follows:

FUNCTION	DAY COMBINATIONS
MO	Monday
TU	Tuesday
WE	Wednesday
TH	Thursday
FR	Friday
SA	Saturday
SU	Sunday
MO, TU, WE, TH, FR, SA, SU	Full week
MO, TU, WE, TH, FRI	Monday - Friday
SA, SU	Saturday & Sunday
MO, TU, WE, TH, FRI, SA	Monday - Saturday
MO, WE, FRI	Monday, Wednesday, Friday
TU, TH, SA	Tuesday, Thursday, Saturday
MO, TU, WE	Monday, Tuesday, Wednesday
TH, FRI, SA	Thursday, Friday, Saturday
MO, WE, FR, SU	Monday, Wednesday, Friday, Sunday

### INITIAL OPERATION

1. Plug the timer into a regular 240V power outlet and turn the power on. Leave for approximately 14 hours to charge the back-up battery.
2. Clear all current information by pressing the 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 the UP button or the DOWN button until the CLOCK icon displays on-screen.
2. Press the SET button for 2 seconds until "SET" displays on-screen and flashes. The "WEEK DAY" icon will flash at the same time. The timer has changed to SET mode, so you can set the current time now.
3. Press the UP button or the DOWN button to set the "WEEK DAY".
4. Press the SET button once and release. The "HOUR" will flash, the "WEEK DAY" will stop flashing and remain on-screen.
5. Press the UP button or the DOWN button to set the "HOUR".
6. Press the SET button once time and release. The "MINUTE" will flash, the "HOUR" will stop flashing and remain on-screen.
7. Press the UP button or the DOWN button to set the "MINUTE".
8. Press the SET button once time and release, the time change to CLOCK mode.
9. To reset the incorrect time, repeat above steps.

## SETTING PROGRAMS

When verifying your programs ensure that 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 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 & CD functions must be canceled.

1. Press the UP button or the DOWN button until "ON\_1" shows on-screen. The first ON setting can be made now.
2. Press the SET button once and release, the "SET" icon will display on-screen and flash. The "WEEK DAY" icon will flash at the same time.
3. Press the UP button or the DOWN button to set the "WEEK DAY".
4. Press the SET button once and release. The "HOUR" will flash the "WEEK DAY" will stop flashing and keep displaying.
5. Press the UP button or the DOWN button to set the "HOUR".
6. Press the SET button once and release. The "MINUTE" icon will flash. The "HOUR" icon will stop flashing and keep displaying.
7. Press the UP button or the DOWN button to set the "MINUTE" (e.g. Timer ON at 7:15 and OFF at 22:30 everyday).
  - a. Press the UP button or DOWN button until LCD shows ON\_1.
  - b. Press the SET button once and release, the SET will display in LCD and flash. The "WEEK DAY" will flash at same time.
  - c. Press the UP button or DOWN button til the LCD displays "MO, TU, WE, TH, FR, SA, SU".
  - d. Press the SET button once and release. The "HOUR" will flash the "WEEK DAY" will stop flashing and keep display.
  - e. Press the UP button or DOWN button til LCD displays 5:00PM or 17:00.
  - f. Press the SET button once and release. CD displays "OFF\_1".
  - i. Repeat the above steps b, c, and d til LCD displays : "MO, TU, WE, TH, FR, SA, SU", 10:30PM or 22:30.
  - j. Press the MANUAL button until the screen displays "AUTO".

### MANUAL ON/AUTO/MANUAL OFF Setting

Note: Operating modes can't be changed during program settings.

1. Press the 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 the RANDOM button, and the screen will display R(RANDOM). The RANDOM function is activated.
2. When RANDOM is activated, the timer will be in the on position randomly for 10-31 minutes during the time period - from 6:00PM to 6:00AM.
3. Press the RANDOM button once again to cancel this function.

Note: The RANDOM function can't be set at the same time as the PROGRAM and CD settings. The RANDOM function can only be executed in AUTO mode between 6:00PM and 6:00AM.

## CD (COUNT DOWN) FUNCTION

1. Press the UP button or the DOWN button until LCD shows CD, you can set the CD time now.
2. Press the SET button once and release, the SET will display in LCD and flash. The "ON" or "OFF" will flash at same time.
3. Press the UP button or the DOWN button set "ON" or "OFF" mode which you want.
4. Press the SET button once and release. The "HOUR" icon will flash the "ON" or "OFF" will stop flashing and keep display.
5. Press the UP button or the DOWN button to set the "HOUR".
6. Press the SET button once and release. The "MINUTE" icon will flash, the "HOUR" icon will stop flashing and keep display.
7. Press the UP button or the DOWN button to set the "MINUTE".
8. Press the SET button once and release. The "SECOND" icon will flash, the "MINUTE" icon will stop flashing and keep display.
9. Press the UP button or the DOWN button to set the "SECOND". Press SET button, the "SECOND" will stop flashing and keep display.
10. Press the CD button, the COUNT DOWN time will educe with one second if the current operation mode is in AUTO mode.
11. Press the 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 can be cancelled.
14. The CD icon will flash in LCD when press CD button in clock mode it means the CD function is executed.

## 12/24 HOUR MODE

Press the CD button and the SET button simultaneously to turn the time display to 12 and 24 hour mode.

## SUMMERTIME FUNCTION

1. Press the MANUAL and SET (or RANDOM) buttons simultaneously. The screen will show "S" (Summertime). The clock will advance 1 hour.
2. To revert to the winter setting, press the MANUAL and SET (or RANDOM) buttons simultaneously again. The clock will move backward 1 hour. The "S" icon will disappear from the screen.

## OPERATION GRADATION

Please notice the operation gradation when you set the timer. It will operate as follows:

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 the PROGRAM setting last. Make sure to 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 (Note: When removing the plug from mains power, the backup battery will remain working).