


## 24/7 automatic digital time switch

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### OPERATING INSTRUCTIONS

Please read the following instructions carefully before connecting this timer to your generating set.

#### Important

Do not connect an appliance where load exceeds 12 Amp. The 3 pin socket fitted into the timer works only as a replacement of the wall socket the timer plugged in. It does not switch the appliance on and off. This timer is designed to start and stop generating set via 2 externally fitted terminals  fitted on the side of case. The timer should be permanently connected to 12V battery to provide start and stop signals.

**DO NOT IMMERSE TIMER IN WATER OR ANY OTHER LIQUID.**

#### Keyboard definition

- a. MASTER CLEAR: Clear all data in memory including current time and all programs.
  - b. RANDOM: Set or cancel random function.
  - c. CLOCK: Set current time combined with buttons WEEK, HOUR, MIN. Select 12 or 24 hour mode combined with button TIMER. Activate summertime function combined with button ON/AUTO/OFF.
  - d. TIMER: Set programs combined with buttons WEEK, HOUR, MIN. Select 12 or 24 hour mode combined with button CLOCK.
  - e. ON/AUTO/OFF: Select operating modes of timer.
  - f. WEEK: Set week combined with button CLOCK or TIMER.
  - g. HOUR: Set hour combined with button CLOCK or TIMER.
  - h. MIN: Set minute combined with button CLOCK or TIMER.
  - i. RST/RCL: Override programs or recall the overridden programs.
- LED: Shows status of timer output. When the indicator is ON, there is a RUN signal from the timer. When indicator is OFF, there is a STOP signal from the timer.

#### GENERAL FEATURES

1. 10 ON/OFF programs with 1 minute step.
2. START/STOP generator indicator
3. Display with second.
4. MANUAL ON/AUTO/MANUAL OFF selectable.
5. Random function with a random advance of 10-31 minutes between 6:00 PM and 6:00 AM.
6. 12/24 hour mode selectable.
7. Summer time function available.
8. 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**

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## **INITIAL OPERATION**

1. Connect the timer to the generator's 12V battery. 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 as a pen or pencil after charging.
3. The timer is now ready to be set up for use.

## **SETTING CURRENT TIME**

1. Press CLOCK button and hold, simultaneously press WEEK button until the actual day is displayed. When setting, the buttons WEEK, HOUR, or MIN can be held down for rapid forward counting.
2. Release both buttons. The week and time will be set.
3. 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.

1. Press TIMER button and release. LCD shows ON\_1. The first ON setting can be made now.
2. Press WEEK button to set the day or block of days. Set the time by pressing HOUR and MIN button.
3. Press TIMER button again to finish the first ON setting and enter into the first OFF setting. LCD shows OFF\_1. By repeating 2 make the first OFF setting.
4. Press TIMER button again to finish the first OFF setting and enter into the 2<sup>nd</sup> ON setting. Repeat 2 and 3 to program remaining settings. Press TIMER button and hold for 2 seconds to enter fast advance.
5. After completing settings, press CLOCK button. The timer is ready to operate.

**EXAMPLE:** Timer ON at 17:15 and OFF at 22:30 everyday.

- a) Press TIMER once and release. LCD displays ON\_1.
- b) Press WEEK till LCD displays “MO, TU, WE, TH, FR, SA, SU”
- c) Press HOUR till LCD displays 5:00 PM or 17:00
- d) Press MIN till LCD displays 5:15PM or 17:15
- e) Press TIMER again and release. LCD displays OFF\_1
- f) Repeat the above b.,c. and d until LCD displays MO, TU, WE, TH, FR, SA, SU, 10:30PM or 22:30

## **MANUAL ON/AUTO//MANUAL OFF SETTING**

Operating modes cannot be changed during program settings.

1. Press ON/AUTO/OFF 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 the timer does not operate. When MANUAL ON mode is selected, RUN signal is always ON. When MANUAL OFF mode is selected, RUN signal 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.

## **RST/RCL FUNCTION**

The RST/RCL function allows one or more of the TIMER ON/OFF programs to be temporarily put on hold, so that they do not operate when the Timer is in AUTO mode but, without losing the times set in the program number.

### **To temporarily stop a program from operating**

1. Press TIMER button the required number of times to get to the ON setting of the program you wish to stop. Press RST/RCL and the time will clear.
2. Press TIMER button to the OFF setting of the program you wish to stop. Press RST/RCL and the time will clear.
3. Press CLOCK button and the Timer is ready to operate. The stopped programs will not operate when Timer is in AUTO Mode.

### **To restore the temporarily stopped program**

1. Press TIMER button the required number of times to get to the ON setting of the program you wish to restore. Press RST/RCL and the time originally programmed will be restored.
2. Press TIMER button to the OFF setting of the program you wish to restore. Press RST/RCL and the time originally programmed will be restored.
3. Press CLOCK button and the timer is ready to operate. The restored programs will operate, at their original times, when Timer is in AUTO mode.

## **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 again to cancel this function. Random function can't be set during program settings.
4. The RANDOM function can only be executed in AUTO mode between 6:00PM and 6:00AM.

## **12/24 HOUR MODE**

1. Press CLOCK and TIMER simultaneously to turn the time display between 12 and 24 hour mode.

## **SUMMERTIME FUNCTION**

1. Press CLOCK and ON/AUTO/OFF simultaneously. LCD shows **S** (Summer time). Clock advances 1 hour.
2. To revert to winter setting, press the two buttons again. Clock moves back 1 hour. **S** disappears in LCD.

## **SPECIFICATIONS**

Voltage:	12V DC (24V option available)
Max switching current (Start/stop relay) A:	12A @ 240V AC
Min Setting Time:	1 Minute
Operating Temperature:	-10°C to +40°C
Accuracy:	+/- 1 minute per month
Battery backup:	NiMH 1,2V>100Hours