# P4472 Save A Watt<sup>™</sup> HD Operation Manual

Thank you for purchasing the P4472 Save A Watt<sup>™</sup> HD. This operating manual will provide an overview of the product, safety instructions, a quick guide to operation, and complete instructions for correct usage. Take the time to completely review these instructions as well as safety warnings to ensure your best use of the product.

Simply connect your appliance to the Save A Watt<sup>™</sup> HD. By programming the ON/OFF periods you can save money. The unit combines the advantage of traditional mechanical and electronic timers, it is easy to program the 15 minute interval ON/OFF periods for 7 days and 24 hours the same way you would program a traditional mechanical timer. The unit is not limited to one day of programming only – each day can have a unique program. The informative LCD display will inform you which time periods are set to ON or OFF.

#### Advanced features included:

- Holiday and Random mode.
- Over temperature protection to provide clean safe power to your expensive equipment.
- Zero power crossing switch provides a spike free ON/OFF relay control to prolong your appliance's useful life.
- LED LCD backlight, also provides a nightlight function.

With the innovative Save A Watt<sup>™</sup> HD you'll have peace of mind in more ways than one.

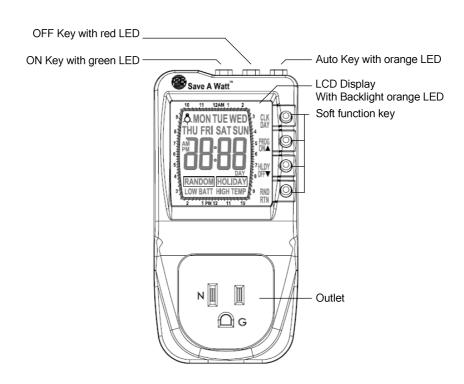
#### **Safety Instructions:**

- The operating voltage is limited to +/- 10% of Line voltage 120Vac. Do not use it with other voltage rating.
- The maximum output current is 15A.
- To reduce the risk of electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

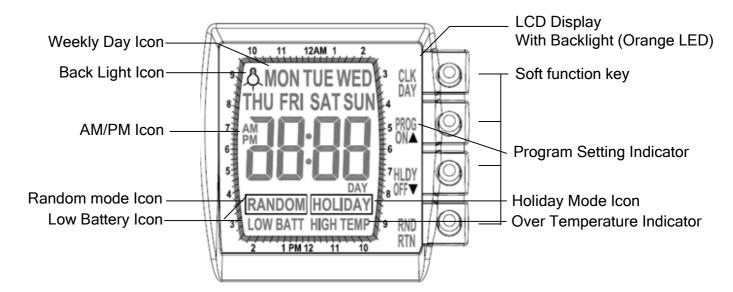
## Warning:

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

#### **Feature Locations:**



## **Display Panel:**



## Installation:

- 1. Using the appropriate flat screwdriver open the battery cover, and position the 3 (AAA) batteries according to the +/- terminal. When the batteries are in place, press the battery cover back into its original position. Now you can operate the unit by battery power, allowing full programming of the unit without needing to plug it into the wall.
- 2. Turn off the appliance before connection to the unit and remove the power cord from the outlet. Connect the Save A Watt<sup>TM</sup> HD unit to the outlet and appliance to the unit.
- 3. The main display of LCD will be flashing in **Clock** mode. This is normal when the unit is connected for the first time to power, please refer to **Clock** mode to set the clock time.
- 4. Press the **ON** key, and turn the appliance back on and confirm normal operation. If the appliance does not function, please recheck your installation.

## ON, OFF and Auto key function:

- 1. Pressing the **OFF** key will turn off power to the outlet at once. The **OFF** key will illuminate in red, and the function keys and LCD display will continue to operate.
- 2. Pressing the **ON** key will turn power on to the outlet at once. The **ON** key will illuminate in green. The unit features a spike-free switch function which activates at zero-crossing and will present clean power to your connected appliance, and the function keys and LCD display will operate.
- 3. Pressing the Auto key activates Auto mode. The Auto key will illuminate in orange. The unit will automatically turn ON or OFF according to the Program. If the Program is ON, the unit will switch ON at once no matter what the previous state was. If the Program is OFF, the unit will switch OFF at once no matter what the previous state was
- 4. When pressing the ON or OFF key, the output will be switched to on or off accordingly, but the Auto key stays lit and the **Program** continues to control the output, the next **Program** event (on or off) is the next time that the on/off state is changed.
- 5. Pressing the **Auto** key again to **Manual** mode can disable auto on or off function and **Auto** key LED will be dark. You can switch the outlet on or off manually using the ON and OFF keys.
- 6. Pressing and holding the **OFF** or **ON** key for 2 seconds, will switch the output off or on accordingly, This activates the **Manual** mode as well and will disable the auto on or off function and the **Auto** key LED will be dark. You can switch the outlet on or off manually using the ON and OFF keys.

#### Remark:

A flashing display segment indicates this item can be edited or changed.

#### Menu mode:

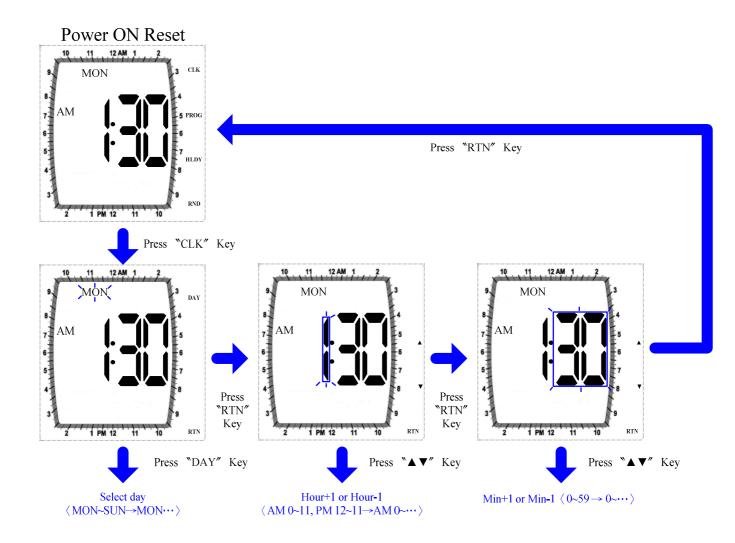
- Includes Clock, Program (PROG), Holiday (HLDY) and Random (RND) 4 modes.
- LCD display default will show Clock.

#### Clock mode:

- Includes **Day** selection and **Hour**, **Minute** adjustment.
- Day: MON, TUS, WED, THU, FRI, SAT and SUN.

**▲**:+1. **▼**:-1.

RTN: Save and return to MENU mode.



#### Program mode: Pressing PROG

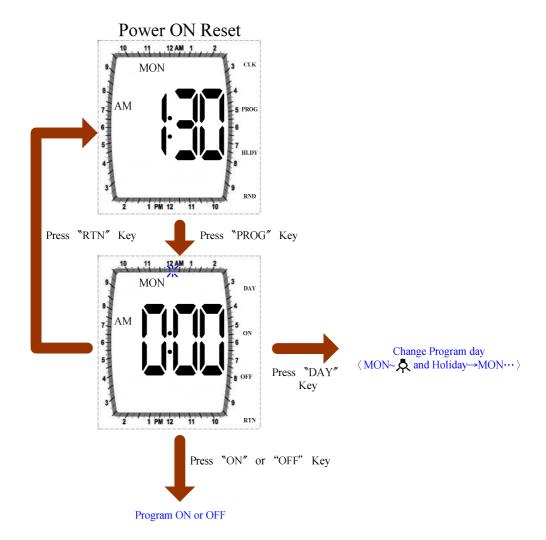
- Includes Day selection, output ON/OFF edit, and Reset.
- Day: MON, TUS, WED, THU, FRI, SAT, SUN, Holiday and nightlight.

**ON**: The current flashing cursor of the outer LCD will be set to on and the flashing cursor will be moved to the next segment for setting.

**OFF**: The current flashing cursor of the outer LCD will be set to off and the flashing cursor will be moved to the next segment for setting.

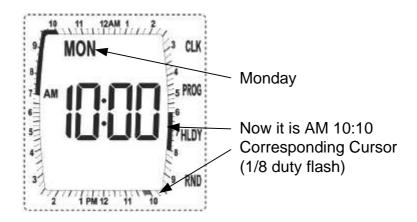
RTN: Save and return to MENU mode.

**Reset**: Holding the **Clock (Day)** and **Random (Return)** key for over 3 seconds will reset the clock to zero and all segments to off.



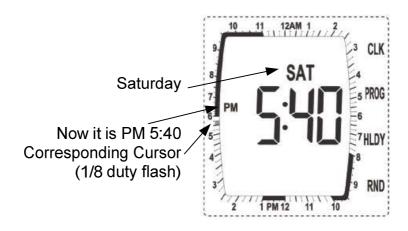
Example: Monday AM 06:00 to AM 08:00 is ON, PM 07:00 to PM 10:00 is ON, Other time is OFF.

Program  $\rightarrow$  Day to Mon  $\rightarrow$  OFF until main display to AM 06:00  $\rightarrow$  ON until main display to AM 08:00  $\rightarrow$  OFF until main display to PM 07:00  $\rightarrow$  ON until main display to PM 10:00  $\rightarrow$  RTN.



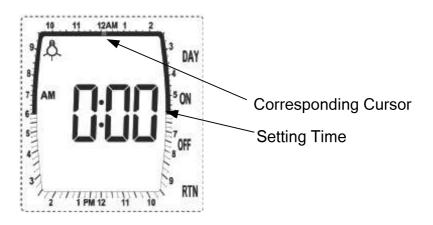
Example: Saturday AM 08:00 to AM 10:00 is ON,
PM12:00 to PM 01:00 is ON,
PM 06:00 to PM 11:00 IS ON,
Other time is OFF.

Program  $\rightarrow$  Day to Sat  $\rightarrow$  OFF until main display to AM 08:00  $\rightarrow$  ON until main display to AM 10:00  $\rightarrow$  OFF until main display to PM 12:00  $\rightarrow$  ON until main display to PM 01:00  $\rightarrow$  OFF until main display to PM 06:00  $\rightarrow$  ON until main display to PM 11:00  $\rightarrow$  RTN.



#### Example: Backlight every day PM 06:00 to AM 06:00.

Program  $\rightarrow$  Day key until backlight icon displays  $\rightarrow$  ON until AM 06:00  $\rightarrow$  OFF until PM 06:00  $\rightarrow$  ON until AM 00:00  $\rightarrow$  Return key.



# Holiday mode: Pressing HLDY.

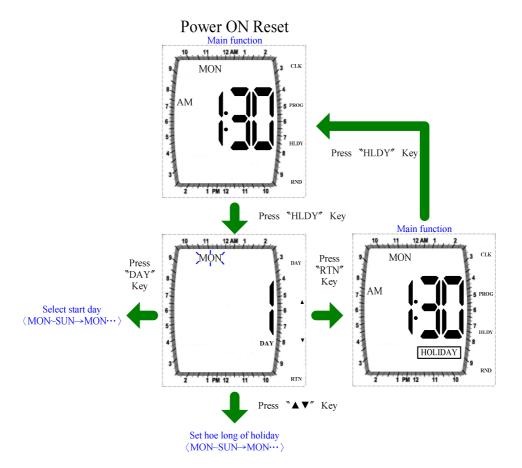
- The user can edit the holiday timer ON/OFF in advance and recover to normal timer mode automatically when the holiday ends.
- Holiday mode on or off: toggle HLDY.
- Holiday mode edit: press and hold Holiday for 2 seconds, select which day and duration.

Day: From which day, MON, TUS, WED, THU, FRI, SAT and SUN.

▲ : +1. ▼ : -1.

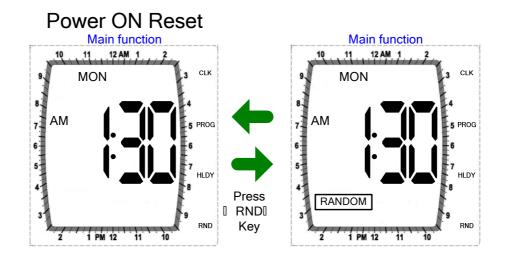
RTN: Save and return to Menu mode.

Holiday timer ON/OFF edit, please refer to Program mode.



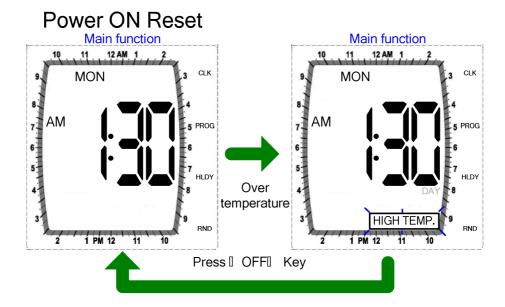
## Random mode: Pressing RND.

• It provides a random time offset to the **Program** output on/off +/- (0 to 15 min).



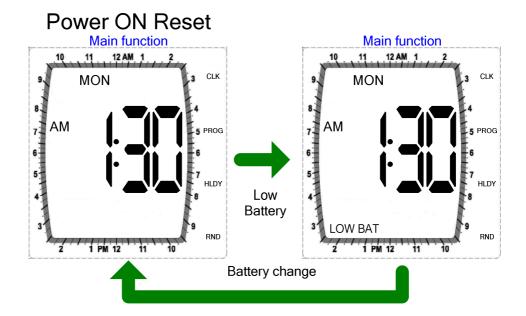
## Over temperature protection function:

It is possible if the unit is overloaded or the connected power plug is in poor condition that the temperature will raise. If the temperature is too high, the power will be switched off to the outlet. The **OFF** key will illuminate in red. The main display **HIGH TEMP** icon will flash, and the audible alarm will sound. Remove the appliance, press the **OFF** key to turn off the audible alarm and erase the main display **HIGH TEMP** icon. Then press the **ON** key to turn the power back on.



## Low battery indication:

When the battery voltage is under 3.3V, the "LOW BAT." Icon will appear on the display. After you change the battery, the clock will need re-setting.

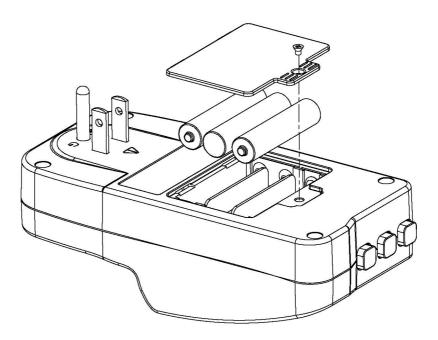


## **Retained Programming:**

Your ON/OFF settings and other programming is retained in non-volatile memory. Your settings and programming will be saved even when there is no power or the battery is exhausted.

## **Battery backup function:**

- 1. When power to the unit is interrupted, the internal power supply will be switched to battery backup mode immediately. The LED backlight is also disabled.
- 2. The battery backup feature also allows the user to program the unit without having it plugged into an outlet. You can change the settings while holding the unit in your hands which is more convenient than crouching down to reach a wall outlet.
- 3. Do not leave the unit unplugged with batteries installed for an extended period. Otherwise the batteries will be exhausted prematurely. When the unit is plugged back in or AC power is restored, the internal power supply will be switched back to AC line power.
- 4. To replace the battery: Using the small Philips style screwdriver open the battery holder, and position the 3 (AAA) batteries, ensuring polarity is correct. When the batteries are in place, press the battery holder back into its original position and use the screwdriver to secure.



# Specification:

Item	Range	Resolution		Remark	
Clock	7 Day, 12 Hour (AM/PM)	1 min	Typ.   Max. 30 ppm		
Timer(Program)  Count down	7 Day, 12 Hour (AM/PM)	12 Hour (AM/PM) 15 min 30 ppm			
(Delay OFF)	23 Hour 59 Min.	1 min	30 ppm		
Back-Light	12 Hour (AM/PM), 3 LED (Orange)	15 min	30 ppm	To be a night light in night. Lit 5 seconds if any key press.	
	Manual or Auto				
Output Control	Condition Indicator : LED,				
	ON : Green, OFF : Red, AUTO : Orange				
Output Outlet	3-prong grounded plug and receptacle.				
Spike free switch	ON/OFF on zero power			Increasing connected appliance	
Spike free Switch				and switch usage life.	
Buzzer	Key:1 short sound Delay OFF 3 sec:3 short and 1 long sound			No function if AC line power is interrupted.	

OPERATION VOLTAGE IS LIMITED TO $\pm 10\%$ OF LINE VOLTAGE				
POLLUTION DEGREE : 2				
CAT II				

GENERAL SPECIFICATION				
POWER RATING	120 Vrms ± 10%, 50/60Hz			
POWER CONSUMPTION	Max. 2.1 Watt			
Ratings	15Amp (1800 Watts) Resistive and Inductive,			
	500 Watts Tungsten, 1/3 H.P. 120V.A.C.			
L/W/H	5½ x 3½ x 1½			
WEIGHT	Around 7.4 oz.			

## **Trouble Shooting:**

Item	Symptoms	Action	Description
	The main display is flashing when the unit first time connected to the wall outlet.		This normal operation, Clock is not setup yet.
2	LCD show low battery icon	Battery replacing	This is a low battery warming signal.
	No display in the LCD, no response from pressing keys.	an energized AC wall outlet or	When the unit is not connected to an energized AC power and no power of battery, it shall be no display in the LCD, no response from pressing keys. Or something defective internally.

#### **Maintenance**

- Protect the meter from adverse weather conditions. The Timer is not waterproof. Do not expose the LCD display to direct sunlight for long periods of time.
- CAUTION: To avoid damage to the meter, do not expose it to sprays, liquids, or solvents.
- Clean the exterior of the meter by removing dust with a lint-free cloth.
- Use care to avoid scratching the clear plastic display filter.
- For further cleaning, use a soft cloth or paper towel dampened with water. You can use a 75% isopropyl alcohol solution for more efficient cleaning.
- CAUTION: To avoid damage to the surface of the Timer, do not use abrasive or chemical cleaning agents.

<sup>\*</sup>Specifications subject to change without notice.

#### P3 INTERNATIONAL CORPORATION LIMITED WARRANTY

P3 INTERNATIONAL CORPORATION ("P3") warrants to the original retail purchaser only, that its product is free from defects in material or workmanship under the condition of normal use and service for a period of six (6) months from the date of purchase. In the event that a defect, malfunction or failure occurs or is discovered during the warranty period, P3 will repair or replace at its option the product or component part(s) which shall appear in the reasonable judgment of P3 to be defective or not to factory specifications. A product requiring service is to be returned to P3 along with the sales receipt or other proof of purchase acceptable to P3 and a statement describing the defect or malfunction. All transportation costs shall be borne by the owner and the risk of loss shall be upon the party initiating the transportation. All items repaired or replaced thereunder shall be subjected to the same limited warranty for a period of six (6) months from the day P3 ships the repaired or replaced product. The warranty does not apply to any product that has been subject to misuse, tampering, neglect, or accident or as a result of unauthorized alterations or repairs to the product. This warranty is void if the serial number (if any) has been removed, altered, or defaced. This warranty is in lieu of all warranties expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose which are expressly excluded or disclaimed. P3 shall not be responsible for consequential, incidental or other damages, and P3 expressly excludes and disclaims liability for any damages resulting from the use, operation, improper application, malfunction or defeat of any P3 product covered by this limited warranty. P3's obligation is strictly and exclusively limited to the replacement or repair of any defective product or component part(s). Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. P3 does not assume or authorize anyone to assume for it any other obligation whatsoever. Some states do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you. It is the owner/user's responsibility to comply with local, state, or federal regulations, if any, that may pertain to P3 products or their use. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you experience difficulty in the operation of your unit, or if your unit requires repair please contact:

P3 INTERNATIONAL CORPORATION TECHNICAL SUPPORT

**Tel: 212-741-7289** Fax: 212-741-2288

Email: <u>techsupport@p3international.com</u> Rev0913