# **PS3010HB**

Multipurpose Switching Mode Power Supply

User Manual

Keep this manual in a safe place for quick reference at all times. This manual contains important safety and operation instructions for correct use of the power supply. Read through the manual and pay special attention to the markings and labels of this unit and equipment to be connected. Pay special attention to these two types of notices used in this manual.

#### WARNING:

Failure to observe this warning may cause injury to persons and damage to power supply or connected equipment.

## CAUTION:

Failure to observe this warning may result in damage to equipment and Improper functioning of the power supply.

## WARNING:

- 1. Do not use this power supply near water.
- 2. Do not operate or touch this power supply with wet hands.
- 3. Do not open the casing of the power supply when it is connected to ac mains.
- 4. Refer all servicing to qualified service personnel only.
- 5. The power supply is designed for in-door use.
- 6. This power supply is made to charge only properly sized lead acid batteries.
- 7. Don't recharging non-rechargeable batteries.
- 8. Charging other types of battery or under-sized lead acid batteries may cause fire or explosion.
- 9. Do not use the charger if it has been dropped or damaged.
- 10. Do not remove casing of the charger, there is no user-serviceable parts inside.
- 11. Do not charge the battery on boats. Remove the battery and charge on shore.
- 12. Never attempt to charge a frozen battery
- 13. Never attempt to charge a damaged battery.

14. Wear protective goggles and turn your face away when connecting disconnecting the battery.

15. Never place the charger on top of a battery.

#### setting area.

2.14. Push the UP button the change the settings (12V or 24v).

2.2. Battery Ah setting

2.21. Push the V/A button, The value position is flickering of Current setting area.

2.22. Push the SHIFT button to move the cursors.

2.23. Push the *UP* or *DOWN* button the change the settings (10Ah-120Ah).2.3. Output Switch

Under the Charge mode, by pushing **OUTPUT** button to in charging status. Once **OUTPUT** button lighted, Battery into the automatic charging status. 2.USB mode

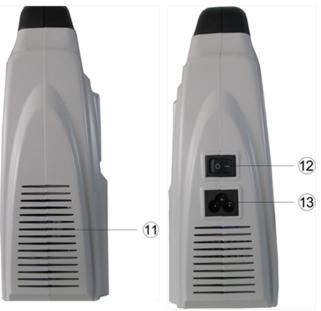
The USB ports are suitable for both android mobile phone and IOS phone, with automatic check function..Push and light the **USB** button.Push and light the **OUTPUT** button to activate output mode.

## **SPECIFICATIONS**

Input Voltage	110VAC 230VAC 50Hz~60Hz	
Input Current	1.6A	
Output Rating	Voltage range	1~30V
	Current range	0~10A
Line Regulation ±% of output + offset	Voltage	CV≦1%+3mV
Load Regulation ±% of output + offset	Voltage	CV≦1%+5mV
Measurement	Voltage	10mV
Accuracy	Current	10mA
Measured Value	Voltage	$\leq$ 0.5%+2 word
Accuracy @ 25℃ ±% of output + offset	Current	$\leq$ 0.5%+3 word
Setting Value	Voltage	$\leq$ 0.5%+2 word
Accuracy @ 25°C ±% of output + offset	Current	$\leq$ 0.5%+3 word
Ripple and Noise 20HZ-20MHZ	Voltage	≦100mVp-p
Dimensions	170x240x85mm	
Weight (Net )	1.1KG	
Recommended Battery Capacity Range		10AH-120AH

#### **CONTROL AND INDICATORS**





1.DC Output positive Terminal
2.DC Output negative Terminal
3.Keypad
4.USB Charging Ports
5.Voltage Value Display
6.Current Value Display
7.Voltage Setting Indicator
8.Current Setting Indicator
9.USB Output Display
10.Output Indicator
11.Fan
12.Power switch

13.Outlet

# **CONTROL MODE SELECTION**

There are 3 modes, Normal, Charge, and USB mode for the power supply.

1. Normal mode

This is the factory preset mode and the power supply output V, I, are controlled by the (3) Keypad.

1.1. Voltage Setting

1.11. Switch on the power supply

1.12. Push the *OUTPUT* button to stop the output setting and light off *OUTPUT* button

1.13. Push the V/A button, The value position is flickering of voltage setting area.

- 1.14. Push the SHIFT button to move the cursors
- 1.15. Push the  $\boldsymbol{UP}$  or  $\boldsymbol{DOWN}$  button the change the settings
- 1.2. Current Setting

1.21. Switch on the power supply

1.22. Push the **OUTPUT** button to stop the output setting and light off **OUTPUT** button

1.23. Push the V/A button, The value position is flickering of current setting area.

1.24. Push the SHIFT button to move the cursors

1.25. Push the UP or DOWN button the change the settings

1.3. Output Switch

Under the Normal mode, by pushing *OUTPUT* button to in output status. Once *OUTPUT* button lighted, the measured values displayed at LCD, push *OUTPUT* button again to exit output mode.

#### 2.Charge mode

Observe the warnings & safety precautions before rushing to install and operate the charger. Check battery condition, clean battery poles. Secure the battery charger in a well ventilated place, make sure the mounting surface is flat and without soft covering material or loose paper sheet. The air intake is at the left side and air outlet at the right side. Make sure both intake and outlet are not blocked. Never place charger on top of battery. Before connecting or disconnecting the charging cable, unplug AC cord from the mains. First connect the Red battery clamp to the battery Positive + Pole. Then connect the Black battery clamp to the Negative – Pole of the battery. Make sure all the connections are secured, double check on the correct polarity. When charging automotive batteries: The battery terminal not connected to the chassis has to be connected first. The other connection is to be made to the chassis, remote from the battery and fuel line. The battery charger is then to be connected to the supply mains; After charging, disconnect the battery charger from the supply mains. Then remove the chassis connection and then the battery connection. Please notice the tightness of the power cables battery clamps to the load. If the cables are not secured well enough, resulting in a huge voltage drop between the battery charger to the load.

#### 2.1. Battery Voltage Setting

- 2.11. Switch on the power supply.
- 2.12. Push the **CHARGE** button to open the charging setting and light on **CHARGE** button.
- 2.13. Push the V/A button, The value position is flickering of voltage

16. Never smoke, use an open flame, or create sparks near battery or charger during normal charging operation as batteries may give out explosive gas.

- 17. Do not charge batteries in an enclosure (box- in) due to possible explosion of entrapped explosive gas.
- 18. Use of accessory not recommended may cause risk of fire, electric shock.
- 19. Disconnect the mains supply before connecting or disconnecting the links to the battery.
- 20. If the charger does not work properly or if it has been damaged, unplug its AC and DC connection.
- 21. During charging, the battery must be placed in a well ventilated area.
- 22. If longer output charging cord is required, make sure the diameter is adequate for the current in given cable length.
- 23. Charging will stop when car's ignition is turned off.

## INTRODUCTION

Congratulations on purchasing our new Digital Multipurpose Switching Mode Power Supply, This device USES a very wide range, in addition to the general use of power, but also for the car lead-acid battery, for charging the mobile phone through USB port. Please read this user manual before the operation.