

# ASunDar



## Users Manual

ASD907 MINI Electronic Load

VR: 0.91

Shenzhen Asundar Electronics Co., Ltd

[www.asundar.com](http://www.asundar.com)

## Foreword

Thank you for purchasing the product of Shenzhen Asundar Electronics Co.,Ltd !

This manual describes how to use ASD907 MINI electronic load (referred to as the product in this manual). Before use, please read this user manual carefully.

### Attentions

- ◆ When open the package, make carefully inspection and confirm that ① product model is consistent with your order ② product certificate, user manual and warranty card and other accessories are complete. ③ If there is any damage or missing during transport, please contact the company or your supplier to solve.
- ◆ Before power on, please check the input voltage is within the scope of the rated parameters, If the voltage is beyond the scope, the product can't work, or cause burning out, or even serious consequences
- ◆ Please make sure that the ground lead of power input end is safe, or otherwise it may cause electric shock!
- ◆ Due to the product upgrade or specification updates, and in order to improve the accuracy of manual description, this manual will be updated in a timely manner, and if there lies the difference between manual and actual use of, please refer to the latest version or contact our customer service.
- ◆ If you still have any queries in reading the manual, please contact company customer service.
- ◆ Customer service phone: 0755-28531900 400-0755-308

## Contents

一、 Product Introduction-----	3
二、 Technical specifications-----	3
三、 Quick Start -----	3
四、 Environmental Requirements -----	9
五、 Warranty -----	10

## 一、 Product introduction

ASD907 MINI electronic load is mainly used for the performance evaluation and testing for power bank. It is a multifunctional MINI electronic load. Can be used for R & D, production line testing, debugging (quality) performance evaluation etc

### Main Function

2.4 inch color LCD screen display;

High precision and high resolution ratio 1mV/1mA;

High stability, low ripple, low drift;

Easy operation;

Can test output parameter of power bank;

Can test charging time and charging energy of power bank;

Can test discharging time and discharging energy of power bank;

## 二、 Technical specifications

item	Parameter	Specification index
Input	Voltage	0-10V
	current	0-4A
Programming resolution	Voltage	1mV
	current	1mA
Readback resolution	Voltage	0-5V 1mV 5-10V 2mV
	current	1mA
Readback accuracy (@25°C)	Voltage	0.05% +2mV
	current	0.15% +4mA
power input	Voltage scope	5.0V ±0.25V
	Current consumption	150mA-500mA
Equipment size	HxWxD	99.5mm*150mm*36.5mm
Packaging size	HxWxD	180mm*330mm*350mm
Weight	Net weight	405g
	Gross weight	525g

## 三、 Quick Start

This chapter will introduce the appearance and basic function of ASD907 MINI electronic load, and let you quickly understand and use the ASD907 MINI electronic load.

### 3.1 ASD907 MINI electronic load panel introduction



Figure 1: ASD907 display panel

- ① LCD display area
- ④ ▼ down key

- ② ▲ up key
- ⑤ “MENU/ESC”key
- ③ “ON/OFF/ENT”key



Figure 2 : ASD907 rear panel

- ① Heat radiating window



Figure 3: ASD905 left and right panels

- ① load input
- ② power input

## 3.2 Basic operation

### 3.2.1 quick start:

Connect ASD907 MINI electronic load to the power, LCD will appear start LOGO, as Figure 4 shows. After waiting a few seconds of system initialization, electronic load shows the standby interface, as shown in figure 5, which means a smooth start.



Figure 4: start LOGO



Figure 5: standby interface

You can start test function by pressing "ON/OFF" key in the standby interface. In constant current mode, the operation display interface is as shown in Figure 6. The left side of the interface shows the actual tested parameters, the "on" mark at the bottom of left corner means the product is in operation. The red display on top right corner shows the value of the set constant current,

Can adjust or modify the parameter by a short press on "▲" or "▼" key in both running mode or standby mode. (the long press will switch the control gear).

Below the display of the tested parameter, it is electronic energy accumulation value. The unit is W·h. Please reset the parameter to zero before use. Otherwise the previously tested value may be added to the current value. The reset method is to press "ENT" button over 2 seconds and can clear the parameter to zero. The bottom of the right corner of the parameter display shows the working temperature of the product. When the working temperature is below 30°C, the color of the displayed value will be green. When the working temperature is between 30°C to 40°C, the parameter color will be yellow. When the working is higher than 40°C, the parameter color will be red. It is not recommended to use the product for a long time when the working temperature is higher than 40°C, please reduce power consumption or increase the auxiliary cooling measures.

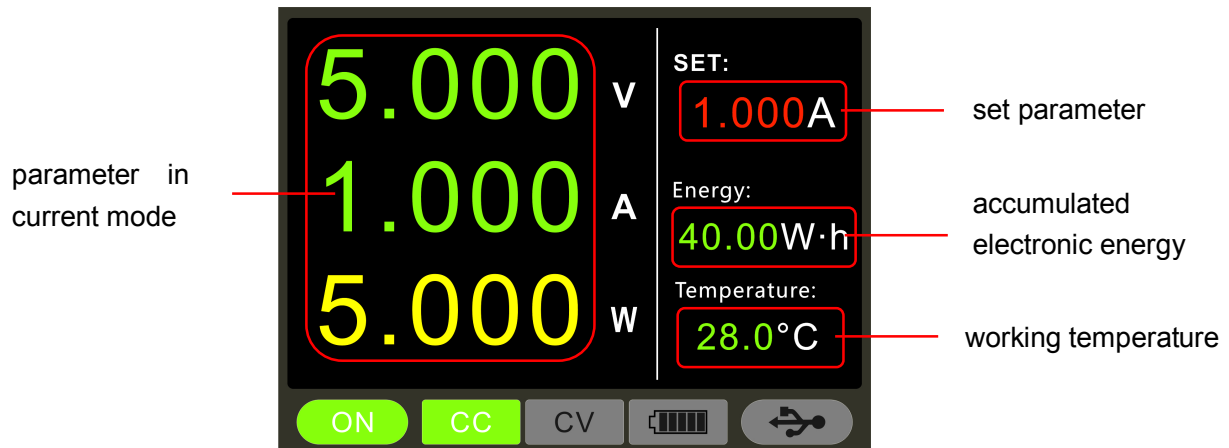


Figure 6: constant current mode display interface

Figure 7 shows the display interface of the constant voltage mode. The interface of constant voltage mode and the interface of constant current mode are very similar. Can adjust or modify the setting parameter by a short press on "▲" or "▼" key in both running mode or standby mode.(the long press will switch the control gear). Please refer to constant current mode operation method for more operation information.

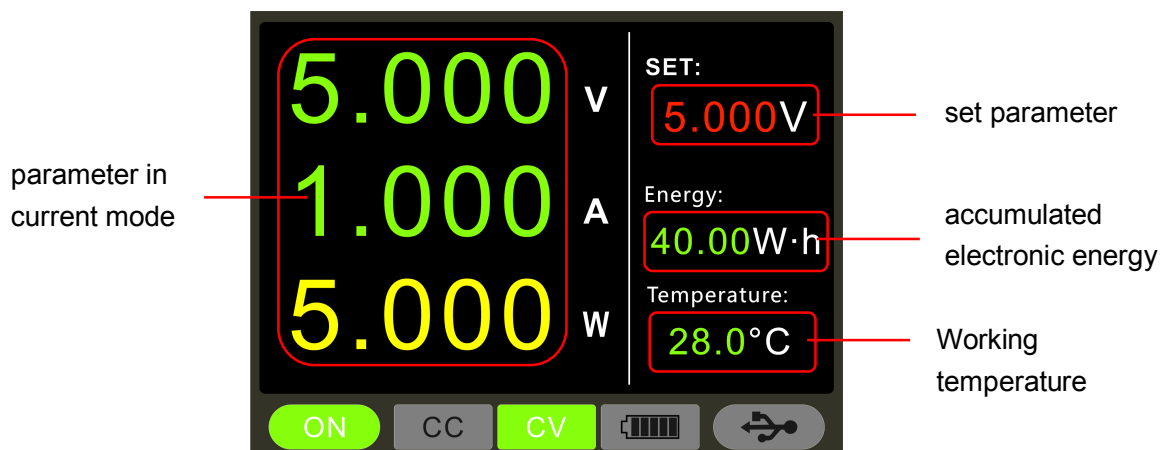


Figure 7: Constant voltage mode display interface

Figure 8 shows the display interface in the mode of battery capacity test. The left side of the interface shows the actual tested parameters, the "on"mark at the bottom of left corner means the product is in operation. The red display on top right corner shows the set constant current discharge value, press "▲" or "▼"key to adjust the parameter in the standby mode. Below the display of the tested parameter, they are respectively timer, volume, total electronic energy.

It is suggested to make these parameters clear before use. Otherwise the previously tested value may be added to the current value. Press "ENT"button over 2 seconds can clear the parameter to zero.

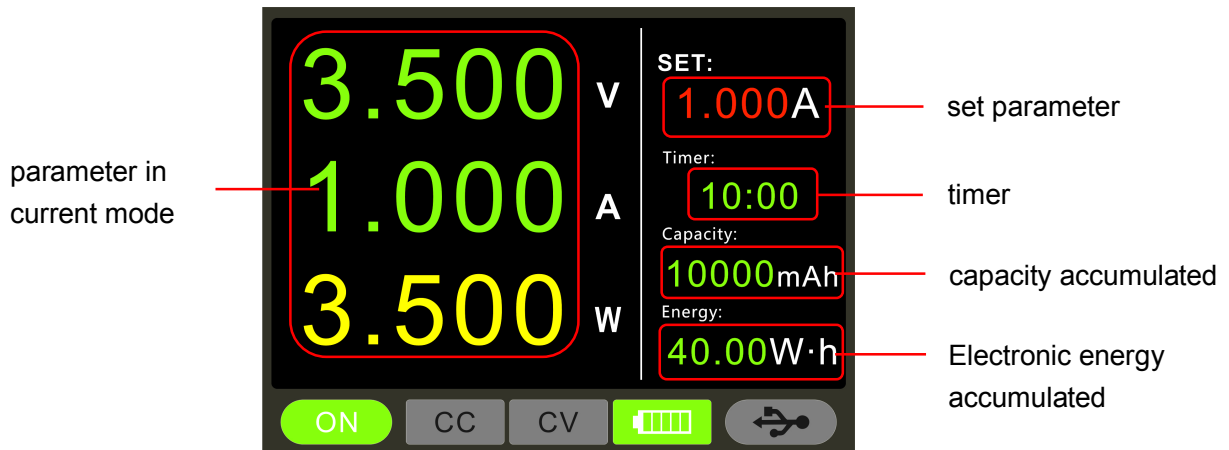


Figure 8: Capacity test mode display interface

### 3.2.2 working mode setting

Press “MENU”button after the boot of MINI electronic load and get “setting”interface, as shown in Figure 9. Press “▲”or“▼”key to select working mode, press “ENT”button to enter into working mode select interface, see Figure 10. In working mode interface, press ▲”or“▼” key to select one of the following working mode of “constant current mode”, “constant voltage mode”or “capacity test”.select the needed working mode according to your requirements and then press “ENT”to confirm(press “ESC”button to return to the MENU interface),the product will enter into standby interface of the corresponding working mode, click "ON/OFF" button to start the test function in the standby interface, and you can click "ON/OFF" button to stop the current test in operating interface.

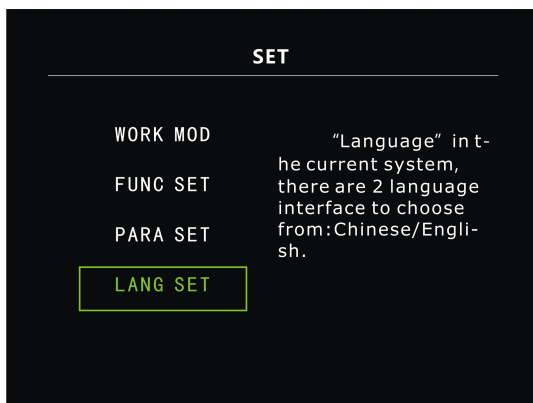


Figure 9: setting interface

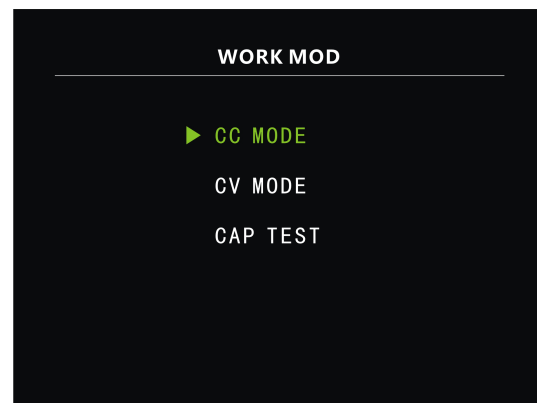


Figure 10: working mode setting interface

### 3.2.3 Extended function setting

Press “MENU”button after the boot of MINI electronic load and get “setting”interface, to select “function setting”by pressing “▲”or“▼”key, press “ENT”button to enter into function setting interface, as shown in Figure 11.In function setting interface, press “ ▲”or“▼” key to select one of the following functions of “discharge termination voltage judgment”, “timing shutdown”or “USB online”. Choose one kind of function according to the need and press “ENT”button, enter into the “start”or “cancel”interface for confirmation, to select “start”or “cancel”by pressing “ ▲”or“▼” key. Press "ENT" button to set the corresponding function on or off, and press “ESC” button to return to the previous menu. During the whole setting process, “ESC” button will bring you to previous menu.



**Discharge termination voltage judgment:** it needs to start discharge termination voltage function when test the battery capacity, and should set the corresponding discharge termination voltage value.

**Timing shutdown:** mainly used to set up a discharge delay time. When this feature is turned on and the shutdown time is set in parameter, the product will automatically switch to shutdown status from operating status.

**USB online:** mainly used for the online communication function between the MINI electronic load and the host computer. (Note: ASD907 does not support USB online function, ASD907 extended version can support this feature)

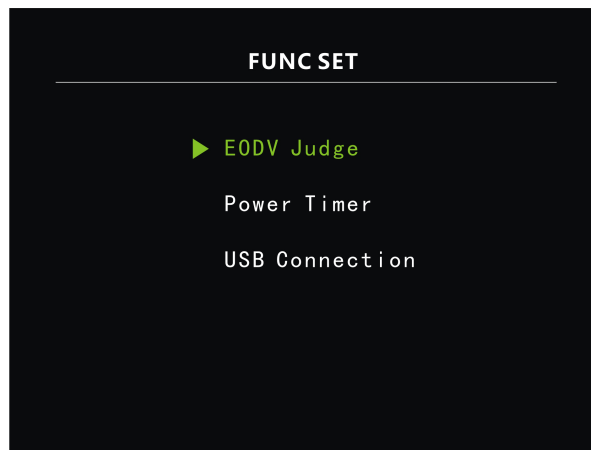


Figure 11: function setting interface

#### 3.2.4 parameter setting

Press "MENU" button after the boot of MINI electronic load and get "setting" interface, to select "parameter setting" by pressing "▲" or "▼" key, press "ENT" button to enter into parameter setting interface, as shown in Figure 12. In parameter setting interface, press "▲" or "▼" key to set following 4 parameters of "constant current value", "constant voltage value", "discharge termination voltage value" and "shutdown time". Choose one parameter according to the need and press "ENT" button to confirm and then enter into the parameter interface. By pressing "▲" key to increase the setting value, and "▼" key to reduce the set value. The short press can adjust the parameter slowly and long press can adjust quickly. And then save the set parameters by pressing "ENT" button. Press "ESC" button to be back to working interface. (During the whole setting process, "ESC" button will bring you to previous menu.)

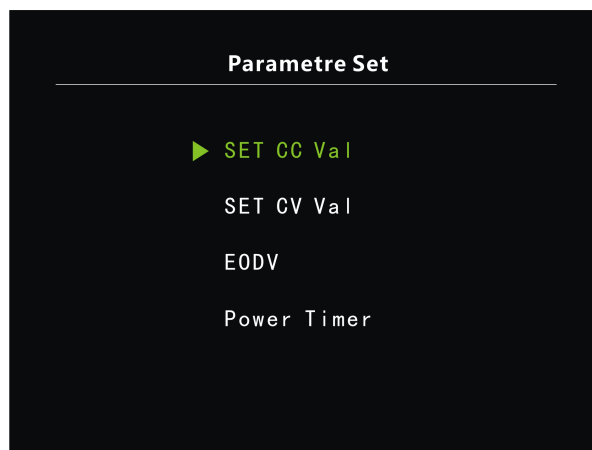


Figure 12: parameter setting interface

### 3.2.5 language select

Press “MENU”button after the boot of MINI electronic load and get “setting”interface, then press “▲”or“▼”key to select language, press “ENT”button to enter into language select interface, see the figure 13. In the interface of language selection, press ▲”or“▼”key to select “Chinese”or “English”,and then press “ENT”to confirm or press “ESC”to return.

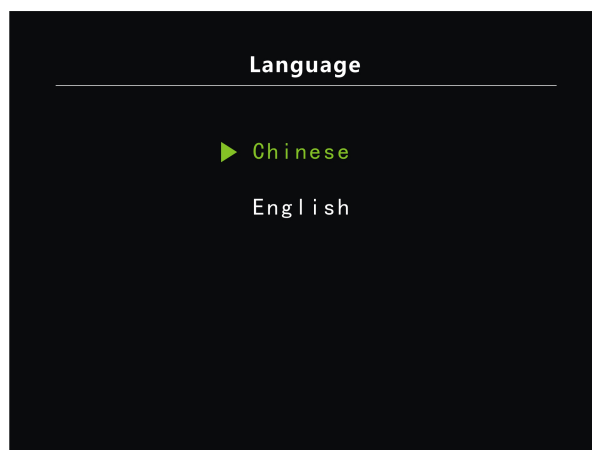


Figure 13: language select interface

## 四. Environmental Requirements

Item	Parameter	Specification index
Working environment	temperature	0°C - 55°C （if temperature exceeds 40°C, please reduce power dissipation）
	humidity	Max: 85%
	dust	degree of pollution: grade 2
	altitude	Below 2000 meter
Storage environment	temperature	-30°C ~ 70°C
	humidity	Max: 90%

## 五. Warranty

1. One year warranty is provided from the date of purchase(according to the issue date of the invoice)
2. The following is not within the scope of the warranty:
  - A. The damage caused due to transportation, improper use or keeping (such as liquid, damp,external pressure, falls, etc)
  - B. Repair or reconstruction is not approved by our company
  - C. the damages due to natural disasters (such as: lightning, earthquake, fire, flood, etc.) and secondary disasters;
  - D. Faults and damages are not caused by the machine itself.
  - E. Lack of complete procedures of warranty card and purchase receipt
  - F. Accessories are not within the scope of the warranty.
3. Product failure or damage, please correctly fill in the Warranty Card in detail.
4. Product warranty card generally has no replacement, please keep this card well.
5. After warranty period, we will provide paid service for more lasting perfect after sale service.
6. Repair fee will be charged in accordance with the latest price list.
7. If there has any queries, please do not hesitate to contact our agent or company.
8. The Agreement shall be explained by Shenzhen Asundar Electronics Co.,Ltd.

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