

# *USER'S MANUAL*



**DC REGULATED POWER SUPPLY**



# DC POWER SUPPLY

## BRIEF INTRODUCTION:

The HY1500 and HY1800 series variable DC power supply are very stable, regulated DC power supplies allowing continuous adjustment of both the output voltage and output current levels.

The HY1500 and HY1800 series have LCD displays, the HY1500C and HY1800C have analogue displays.

## MODELS:

MODEL	HY1502C	HY1503C	HY1802C	HY1803C	HY1505C	HY1502	HY1503
	HY1502D	HY1503D	HY1802D	HY1803D	HY1505D		
REGULAR OUTPUT VOLTAGE	0~15V	0~15V	0~18V	0~18V	0~15V	0~15V	0~15V
REGULAR OUTPUT CURRENT	0~2A	0~3A	0~2A	0~3A	0~5A	2A	3A

## 1. TECHNICAL PARAMETERS

- 1.1 Input voltage : 104~127V AC (60Hz), 207~253V AC (50Hz)
- 1.2 Line regulation: CV 0.01%+1mV CC 0.2%+1mA
- 1.3 Load regulation: CV 0.01%+3mV(I ≤ 3A) CC 0.2%+3mA(I ≤ 3A)  
CV 0.01%+5mV(I > 3A) CC 0.2%+5mA(I > 3A)
- 1.4 Ripple and noise: CV 0.5mVr.m.s (I ≤ 3A) CC 3mAr.m.s (I ≤ 3A)  
CV 1.0mVr.m.s (I > 3A) CC 6mAr.m.s (I > 3A)
- 1.5 Protection: constant current and short-circuit protection
- 1.6 Voltage indication accuracy: LED/LCD ± 1%+2digits, analogue display 2.5%
- 1.7 Current indication accuracy: LED/LCD ± 2%+2digits, analogue display 2.5%
- 1.8 Environment: 0 ~ +40 °C relative humidity:<90%

## 2. OPERATION

1. Front panel controls.

(1) Current indication.

(2) Voltage indication

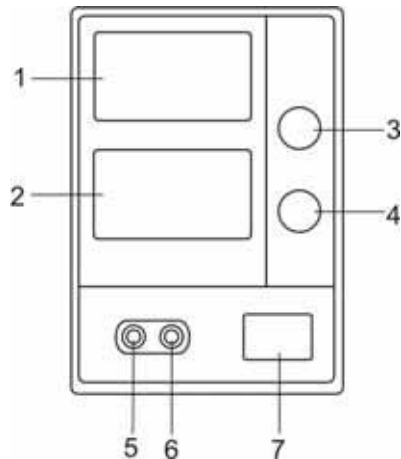
(3) Coarse adjustment of current.

(4) Coarse adjustment of output voltage.

(5) Positive output terminal.

(6) Negative output terminal.

(7) Power ON/OFF switch



### 2.2 OPERATING PROCEDURE

2.2.1 For constant voltage mode adjust controls 3 clockwise to the maximum position. Switch on the power ON/OFF switch 7 and adjust controls 4 to set the desired output voltage. Connect the load to the output terminals 5 & 6.

2.2.2 For constant current mode adjust controls 4 clockwise to the maximum position. Adjust controls 3 anti-clockwise to the minimum position. Switch on the power ON/OFF switch 7 and connect the load to the output terminals 5 & 6. Adjust controls 3 to set the desired output current.

2.2.3 For restricted current protection mode switch on the power ON/OFF switch 7, adjust controls 3 anti-clockwise to the minimum position, adjust controls 4 clockwise to set the desired output voltage level and then connect the load to the output terminals 5 & 6 Adjust controls 3 clockwise to set the output current at the desired level for restricted current protection.



### **3. ATTENTION:**

3.1 In the event of a short circuit at the output the current will limit at the value set by the current controls, however the unit should be turned off and the short circuit removed before continuing use.

3.2 The mains power must be switched off before servicing and servicing should be referred to a qualified person.

3.3 The unit should be stored in a dry and well ventilated place and the power cord removed if storing for long periods.

#### **4. ACCESSORIES**

4.1 Power cord-----one piece

4.2 Instruction manual-----one piece