



USER'S MANUAL

Single output DC Bench Power Supplies
with Large LCD

APS-1503/1602/1721



www.tmatlantic.com

General Description:

Your new DC Regulated Power Source provides accurate & stable DC power. It is ideal for test benches, laboratories, schools & repair facilities. The multi-turn voltage control knob helps the user accurately dial in a precise voltage. It is easy to read digital outputs (voltage & current) through a large LCD displays. It incorporates SMT PC boards & a cooling fan for reliable performance.

Features:

- *SMD adhesive sheet element technology for internal PCB construction
- *Attractive yellow large liquid crystal display shows voltage & current
- *A cooling fan
- *Multiloop high precision voltage regulation
- *Progressive current regulation
- *Dual terminal system. Safety test style or expandable screw terminals
- *Overload protection circuit
- *Low ripple voltage: <1mVp-p
- *Output polarity: positive or negative
- *Rugged reinforced metal frame construction

Specifications:

	Voltage	Current	Display	
APS-1503	0-50VDC	0-3A	100mV	10mA
APS-1602	0-60VDC	0-2A	100mV	10mA
APS-1721	0-120VDC	0-1A	100mV	1mA

Source effect: $5 \times 10^{-4} = 2\text{mV}$

Load effect: $5 \times 10^{-4} = 2\text{mV}$

Ripple coefficient: <250uV

Stepped current: 30mA±1mA

1. General Description:

Utilizes SMD technology

Single/Dual Output Light and Compact

Output Polarity: Positive and Negative

LCD Display shows Voltage and Current value

Low Ripple Voltage Less Than 1mVp-p

Overload Protection Circuit

Applicable for School, Production Line, Laboratory and Maintenance

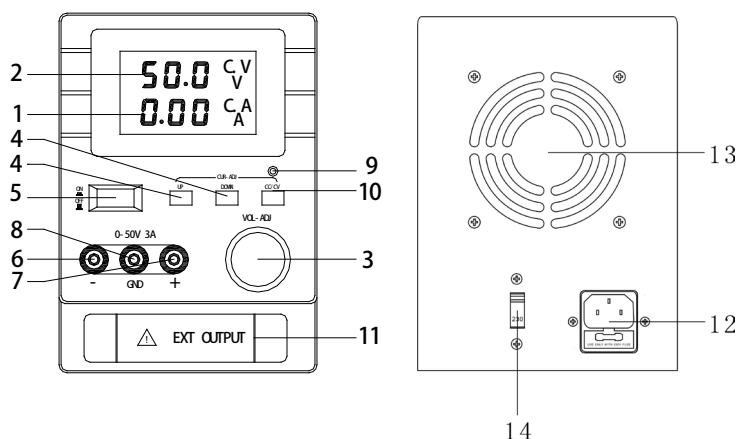
Specifications:

Input Voltage	110V/220V AC	50Hz/60Hz
Voltage Regulation	$CV \leq 5 \times 10^{-5} mV$	
Load Regulation	$CV \leq 5 \times 10^{-5} mV$	
Ripple & Noise	$CV < 0.5 mV r.m.s$	CC $< 2 mA r.m.s$
Protection	current Limiting	
Voltage Indication Accuracy		LCD $\pm 1\% + 2 \text{Digits}$
Current Indication Accuracy		LCD $\pm 2\% + 2 \text{Digits}$
Ambient Temperature		0 ~ +40°C
Humidity	<90%	
Dimensions(Single)	180(w)×130(H)×300(D)	
Weight	6.8kg	
Accessory	Instruction Manual, Power cord , Test Lead	

2. Operation

2.1 Front Panel Controls.

- (1) Current Indication
- (2) Voltage Indication
- (3) Fine (10 Turns) adjustment of Voltage
- (4) Up/Down Adjustment of Current
- (5) Power On/Off
- (6) Negative Output Terminal
- (7) Positive Output Terminal
- (8) Ground Connection
- (9) Constant Current Indicator
- (10) Constant Current Switch
- (11) External Power Output Connection
- (12) Grounding Power cable
- (13) Cooling fan
- (14) Transfer switch



The unit has one output display. The display has two figures. One is Voltage and the other is current. The Voltage is 0-50 Volts with 0-3Amps. The fan of unit turns on when the temperature reaches 140°F or 60°C. It has a standard 110V/220VAC input only with fuse protecting.

2.2 Operating Procedure

For constant Voltage mode make sure #10 is depressed and the LCD # 9 is off.

By rotating the knob of #3 to the right increases the voltage output and rotating it to the left decreases the voltage output.

3. Attention:

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

3.2 The unit should be stored in a dry and well ventilated place and the power cord should be removed for long periods of inactivity.

4. Accessories:

4.1 Power cord----- one piece

4.2 Instruction Manual-----one piece

4.3 One set of Banana plug to Alligator Clips

4.4 One set of hook up wires for external hook up.