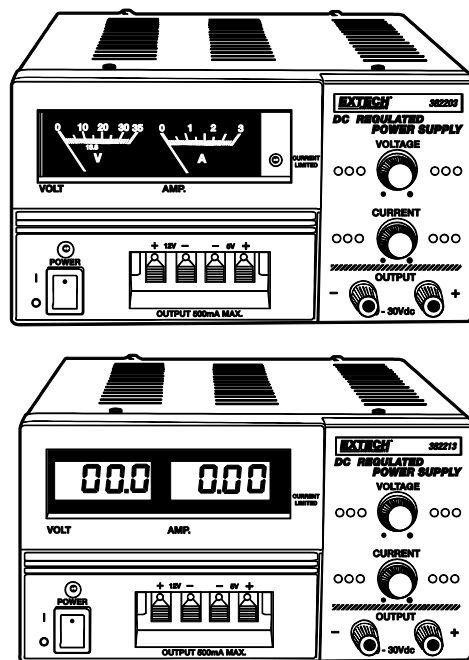


# EXTECH<sup>®</sup>

## User Manual

### Three Output DC Regulated Power Supply

Models 382203 (Analog) and 382213 (Digital)

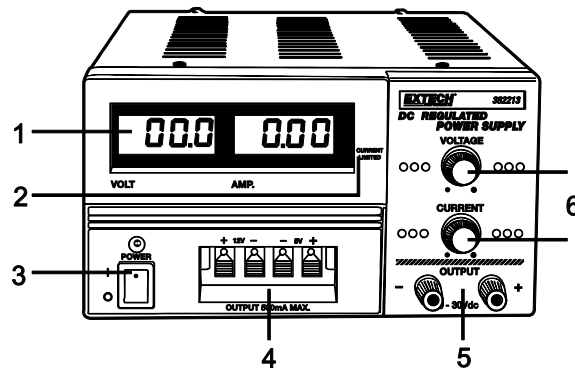


## Introduction

Congratulations on selecting Extech's Model 382203 (analog) or 382213 (digital) Regulated DC Power Supply. The 382203 and 382213 are solid state, compact, well regulated supplies suitable for many applications including bench testing, field service, hobby and telecommunication equipment use.

## Meter Description

1. Voltage and Current LCD displays for Main output
2. Current limit status LED
3. Power switch with status LED
4. 5V & 12V fixed output terminals
5. Main Output terminals for variable supply
6. Variable voltage and current adjustment knobs



Model 382213 (Digital LCD display) is shown above.

## Operation

---

1. The Power Supply must be powered using the rated line voltage (120V or 220V) within  $\pm 5\%$ .
2. Before turning the power supply ON, remove all connected loads and set the Voltage Adjustment Knob to the full counterclockwise position (0V DC output).
3. To operate the power supply as a constant current supply, the current output should be set between 10% and 100% of the rated value (3A).
4. The Current Limiting Indicator will light when the current limiting circuit is activated.
5. Constant Current setup (**Main output only**)
  - Set the current knob to the minimum position
  - Set the voltage knob to the maximum position
  - Short the output leads
  - Turn on the power supply
  - Turn the current knob to the desired current value (0.3 ~ 3.0 amps)
  - Turn off the power supply
  - Open the test leads (remove the short)
  - Connect the load and turn on the power supply
6. Use the Current and Voltage Adjustment knobs for setting variable Current and Voltage output signals respectively. Use Variable Output terminals for connections.
7. For 5VDC and 12VDC outputs, use the Fixed Output terminals.
8. The analog or digital displays will indicate actual current and voltage outputs for the main output.
9. Keep the meter's cooling vents (top and sides) clear of obstacles to prevent overheating.

## Specifications

	382203	382213
Display	Dual Analog Metering	Dual 3-digit LCD Displays
Voltage Output, DC	0-30V	
Current Output, DC	0 - 3 Amps	
Current Limiting Indicator	Status LED	
Accuracy	± 7% Full Scale	± 1% Full Scale + 2 digits
Ripple and Noise	< 5mV	
Line Regulation	< 0.05% + 10mV	
Fixed Output Voltage	5V / 0.5A (continuous); 1A (max.) 12V / 0.5A (continuous); 1A (max.)	
Operating temperature	0 ~ 40°C (32 ~ 104°F)	
Power	120/220VAC 50/60Hz (Auto switching)	
Fuse	3A/ 250V	
Dimensions	6 x 5.6 x 9.5" (152 x 142 x 242mm) (WxHxD)	
Weight	10 lbs. (4.5 kgs)	

### Current regulation when power supply is in constant current mode

- Line Regulation (± 5% variation): 5mA
- Load Regulation (10%-90% rated voltage): 5mA
- Ripple Current (RMS): 10mA
- Output Current Range: 0-3A (Max. 3.1-3.5A)