PRICE $2.00

Assembling and Using Your...

Heathkit

REGULATED POWER SUPPLY

MODEL PS-4

HEATH COMPANY

A Subsidiary of Daystrom Inc.

BENTON HARBOR, MICHIGAN

595-231

ASSEMBLY AND OPERATION OF THE HEATHKIT REGULATED POWER SUPPLY

MODEL PS-4

SPECIFICATIONS

Power Requirements:	105 to 125 volts AC, 50/60 cycle, 150 watts maximum
Output:	
B+ Voltage:	0 to 400 volts DC regulated; 0 to 100 ma continuous (125 ma intermittent)
Bias Voltage:	0 to -100 volts DC at 1 ma
Filament Voltage:	6.3 volts AC at 4 amps (Insulated to withstand 1500 volts DC)
B+ Regulation:	Output variation less than 1% from no load to full load, for outputs of 100 to 400 volts. Output variation less than ±0.5 volt for a ±10 volt variation in the 117 volt AC input
B+ Ripple:	Less than 10 mv RMS ripple, jitter and noise
B+ Output Impedance:	Less than 10 Ω from DC to 1 mc (See output impedance curve.)

Meters:

Voltmeter:..... 0 to 400 volts or 0 to 150 volts
Milliammeter:..... 0 to 150 ma

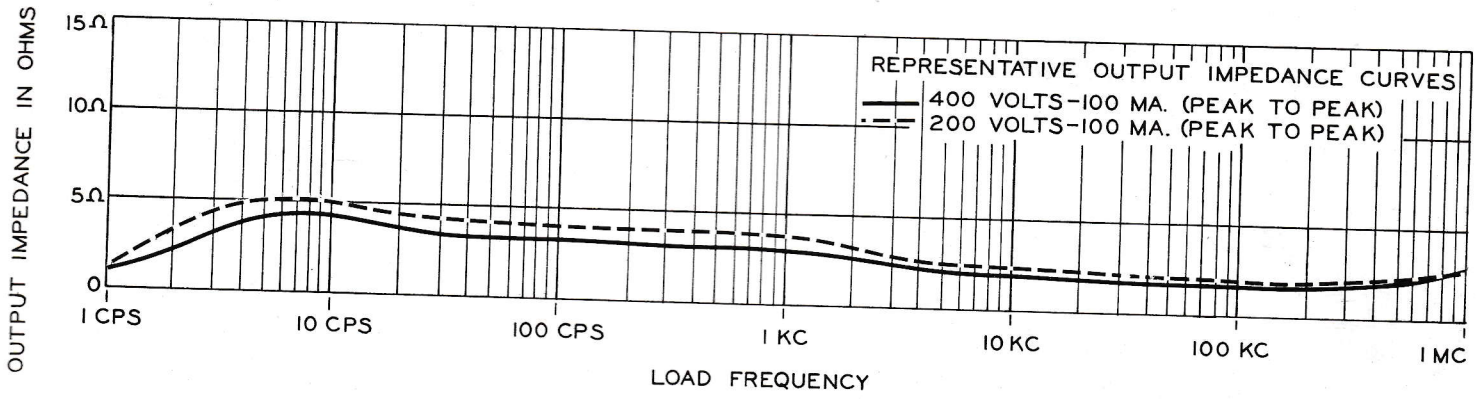
Tube and Diode Complement:..... 2 - 6L6 Series Regulators
1 - 6BH6 Control Amplifier
1 - 6X4 Bias Rectifier
2 - OA2 Bias Voltage Regulators
2 - 50 ma Selenium Screen Voltage Rectifiers
4 - 150 ma Silicon High Voltage Rectifiers

Output Terminals provided:..... B+ and common
C- and common
6.3 VAC filament
Chassis ground

Dimensions:..... 13" wide x 8 1/2" high x 7" deep

Net Weight:..... 12 pounds

Shipping Weight:..... 16 pounds



INTRODUCTION

The Heathkit Regulated Power Supply, Model PS-4, has been designed as a convenient source of variable regulated B+ voltage, variable bias voltage, and filament voltage for laboratories and workshops. This supply allows the designer, or experimenter, to develop and test his circuitry without having to construct a power supply each time. The output voltage and current are both continuously monitored by separate panel meters, allowing easy determination of power supply requirements for a particular piece of equipment.

The outputs are isolated from the chassis to allow the B+ to be used as either a positive or negative supply. Separate filament and high voltage transformers are employed so that all high voltage can be switched off, leaving only filament voltage available while changes in circuitry are made. This eliminates filament warmup time.

The bias voltage output control has a special taper for fine adjustment at low voltages and a meter switch is provided to read either the bias or B+ voltage. Built-in circuit protection prevents damage to the unit if the bias voltage output should accidentally be shorted. The supply is also fused for protection against overloads and short circuits.