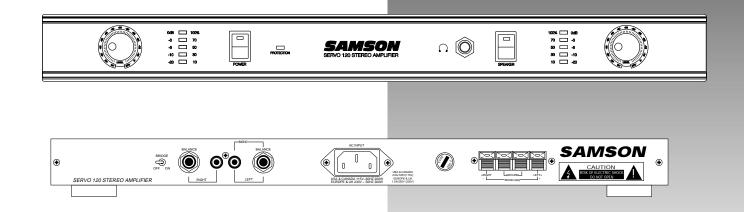
# SERVO 120 POWER

## SAMSON AUDIO



The Servo 120 power amplifier is intended for use in all types of recording applications, live performance and permanent installs. This easily-installed 1-space rackmount stereo power amplifier (which can also be used in mono bridge mode) delivers 60 watts per channel into a 4 ohm load (in mono bridge mode, 120 W into 8 ohms), over a bandwidth of 20 Hz to 50 kHz. It utilizes high-current output power transistors and features an efficient bipolar circuit design that continuously keeps DC output during idling at or near 0 volts. The Servo 120 also has balanced 1/4" and RCA inputs and push-spring terminal outputs, a front-panel protection light, headphone jack, speaker On/Off switch, 3 color LED meters and thermal and overcurrent protection circuitry. The Servo 120 is convection cooled for silent operation, eliminating fan noise and the need for filter maintenance.

Contact:			

- Rack-mount stereo power amplifier (1-space).
- 60 watts per channel into 4 ohms (stereo).
- 120 watts into 8 ohms (mono bridge).
- 10 Hz to 100 kHz frequency response.
- Electronically balanced 1/4" and unbalanced RCA inputs on gold-plated connectors.
- Push-spring terminal outputs.
- Smart Servo circuitry protection against overheating and overcurrent.
- High-current output power transistors.
- Unique bipolar circuit design continuously keeps DC output during idling at or near 0 V (thus keeping idle speakers at their 0 point).
- Front-panel protection LED, headphone jack, speaker on/off switch, 3 color LED meters.
- Independent left- and right-channel input controls with 41-position detent.
- Convection-cooled (No Fan).
- Solid steel chassis with lightweight anodized aluminum heat sink.
- Toroidal transformer power supply.
- Front-panel headphone jack with speaker disable switch.
- 3 Year warranty.

#### ARCHITECT'S & ENGINEER'S SPECIFICATION

The power amplifier shall be capable of stereo or mono bridged operation. In stereo mode, it shall deliver a minimum of 52 W into loads of 8 ohms each with both channels operating, or 60 W into loads of 4 ohms each with both channels operating. In mono bridge mode, it shall deliver a minimum of 120 W into an 8 ohm load. It shall be passively cooled, and shall have internal short-circuit and thermal protection circuitry. A protection LED indicator shall activate and the power amplifier shall shut down to protect against short circuits, overheating, severe overcurrent conditions or DC offset present at the outputs. The power amplifier shall have slow start-up and muted inputs on turn-on. Inputs shall be on balanced 1/4" tip-ring-sleeve connectors and outputs shall be on 1/4" phone connectors and on pushspring terminals. The front panel shall have independent level controls for left and right channels, a master power switch and LED indicators for clip, idle and amplifier protection.

The power amplifier shall have a frequency response of less than 10 Hz to 100 kHz, signal-to-noise equal to or greater than 103 dB and THD less than 0.5%. Total power consumed at full audio power shall be 240 W (120 Vac) and 975 W (220 Vac). The dimensions shall allow for standard 19" EIA rack mounting. It shall be 1.75" (44 mm; 1 rack space) high and 11.5" (292 mm) deep. Weight shall be 15.6 lb. (7 kg). The power amplifier shall carry a three-year warranty.

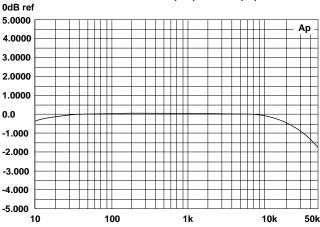
The power amplifier shall be a SAMSON SERVO 120.

### **SERVO 120 SPECIFICATIONS**

Output Power (typical all channels driven):

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	4 Ω, 1 kHz, 1% THD, 83 W			
	4 Ω, 1 kHz, .034% THD, 60 W			
	8 Ω, 1 kHz, 1% THD, 57.5 W			
	8 Ω, 1 kHz, <.019% THD, 52 W			
	8 $\Omega$ bridged, 1 kHz, 1% THD, 160 W			
	8 $\Omega$ bridged, 1 kHz, < .08% THD, 120W			
Frequency Response (-3 dB):	<10 Hz to 100 kHz			
Frequency Response (1 watt):	20 Hz to 20 kHz, -0.1/-0.2			
Crosstalk (adj. channels):	80 dB, 1 kHz @ rated output			
Distortion (THD+N, 20 Hz to 20 kHz) (80 kHz LPF):				
at rated power:	< .05%			
at 1 watt:	< .05%			
Sensitivity (level control at maxin	num): +4 dBu			
Damping Factor (8 $\Omega$ ):	> 150			
Dynamic Range:	98 dB below rated output			
	(20 Hz to 22 kHz B.P.F.)			
Headphone Output Level:	240 mW at 8 Ω (1 kHz)			
Input Impedance:	>10 k $\Omega$ balanced/> 10 k $\Omega$ unbalanced			
Power Consumption:	240 W @ 120 V/60 Hz			
	270 W @ 220 V/50 Hz			
Dimensions:	17.5" (w) x 1.75" (h) x 11.5" (d)			
	444 mm (w) x 44 mm (h) x 292 mm (d)			
Weight:	15.6 lb / 7 kg			

#### **FREQUENCY RESPONSE**



AUDIO PRECISION Servo 120 LEVEL (dBr) vs FREQ (Hz) 0dB ref

Specifications subject to change without notice. ©1998 Samson