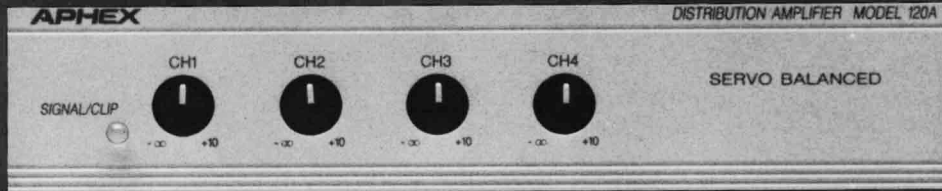


# *Servo-Balanced Distribution Amp Model 120A*



The Model 120 is a high performance audio distribution amplifier with a single high impedance input and four low impedance outputs, all electronically servo-balanced. The 120's transformerless circuits are designed for wide, flat frequency response free from ringing or overshoot, making it ideal for distribution of SMPTE time code as well as audio. Each output has its own amplifier and level control for maximum versatility and isolation. The sturdy steel chassis may be used stand-alone or rackmounted, singly or in pairs.

## **FEATURES:**

- Servo-Balanced input and outputs
- Individual output level controls
- Wide bandwidth and dynamic range
- Compact 1/2 rack steel package
- Cost Effective
- Sonically transparent
- +25dBm output level into 600 Ohms
- Short-circuit proof
- Fully RF protected
- Recessed output level controls

## **APPLICATIONS:**

- Sound Reinforcement
- Radio and TV broadcasting
- Dubbing facilities
- Recording studios
- Telephone line driver
- Tape duplication facilities
- Mobile Radio and TV units
- Press feeds
- Post production facilities

# Servo-Balanced

## Distribution Amp

### Model 120A

**Performance**—The 120 was designed to be as transparent as possible. This means wide, flat frequency response, excellent transient reproduction and a dynamic range surpassing digital. This allows the 120 to be used in the most critical applications, as well as distributing SMPTE time code if necessary. The compact, rugged package provides maximum shielding and is equally at home on the ground in a location shoot or mounted in a studio's rack.

**Input**—The input circuit is a true instrumentation type, adjusted for good common-mode rejection. Servo-balancing compensates for high common-mode voltages, so headroom isn't sacrificed. The high input impedance allows bridging of the input signal with minimum loading. This way several amplifiers can be easily driven from the source. The input circuit is fully RF protected.

**Outputs**—The individual output amplifiers are very low impedance so long lines and capacitive loads are easily driven with no loss of stability or high frequency response. Servo-balancing permits the outputs to be used single-ended at any time without a change in gain by simply grounding the unused pin. Individual output level controls are recessed for bump-proof operation, yet can be easily adjusted without tools. Each output is RF protected and fully short-circuit proof with a front panel clip indicator.

**Applications**—The 120 will find use in a wide variety of applications, including TV and radio broadcast, production and post production, recording studios, tape duplication and dubbing stages—anywhere a high quality, reliable signal distribution system is required.

#### Specifications

FREQUENCY RESPONSE	5 Hz to 100 kHz, +0, -0.5 dB
THD	0.002% @ +4 dBm, 0.005% @ +20 dBm
IMD	0.002% @ +10 dBm
HUM and NOISE	Better than -90 dBm at unity gain
INPUT IMPEDANCE	100 kOhms, balanced
MAX INPUT LEVEL	+25 dBm
INPUT CMRR	>45 dB
OUTPUT IMPEDANCE	65 Ohms
MAX OUTPUT LEVEL	+25 dBm into 600 Ohms Balanced, +21 dBm Unbalanced
OUTPUT GAIN RANGE	± 15 dB
CHANNEL ISOLATION	>70 dB
CONNECTORS	XLR Inputs and Outputs
SLEW RATE	13 V/μSec
AC POWER	100, 120, 220 or 240 VAC, 50-60 Hz (Specify)
SIZE	1¾" high × 8¼" wide × 7¼" deep
WEIGHT	3½ lbs.

Aphex Systems is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or shown.

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## APHEX

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