



Model 81 Stereo Analog Audio Distribution Amplifier

Designed for a wide variety of recording, production, broadcast, and duplication applications, the Model 81 has one stereo input and eight stereo outputs.

The Model 81 is a high-performance analog audio distribution amplifier designed to meet the needs of the real world. The stereo input is compatible with virtually any line-level audio source. The eight stereo outputs meet exacting professional standards. Capable of connecting to balanced or unbalanced loads, each output can drive +26 dBu into 600 ohms. Using front-panel switches, each output can be individually configured for a nominal output level of -10 dBV or +4 dBu. The ExactCal input calibration section allows for optimal audio performance over a -12 dBV to +10 dBu input level range.

One Stereo Input

The differential input circuitry is compatible with balanced or unbalanced signals having a nominal level range of -12 dBV to +10 dBu. Laser trimmed, the inputs offer superior common-mode signal rejection. To achieve optimal audio performance the ExactCal calibration section matches the specific input levels with the Model 81's internal gain structure. Two 15-turn trim potentiometers and four LEDs allow fast, precise calibration.

Eight Stereo Outputs

The Model 81 contains eight independent stereo output sections. For compatibility with a wide range of facilities, each output section can be independently configured for a -10 dBV or +4 dBu nominal output level. Each output features an electronically balanced circuit capable of driving balanced or unbalanced loads. Short circuit resistant, the rugged output circuits can drive full signal levels into 600 ohm or greater loads.

Audio Performance

The Model 81 is the result of exacting circuit design combined with the latest state-of-the-art components. Like all Studio Technologies products, the Model 81 has survived tough listening

The front-panel controls and LEDs make installation and setup a simple job. The compact, one-rack space package is constructed using heavy-gauge steel components. The unit's mains power input is factory configured for 100, 120 or 220/240 V, 50/60 Hz operation. Featuring a toroidal mains power transformer, the internal power supply produces ± 17 V for use by the analog circuitry. Components and construction standards make the Model 81 suitable for continuous operation, even for on-air broadcast applications.

With ExactCal, excellent audio performance can be achieved with little or no hassle. During normal operation, the ExactCal LEDs also serve as convenient signal-present indicators. Standard 3-pin XLR-type connectors are used to interface the input sources with the input circuitry. Manufactured by Neutrik, the connectors feature metal housings for reliable operation.

The Model 81's architecture precludes the need for individual output-level trim potentiometers. With the input signal calibrated using the ExactCal section, the eight outputs use 1%-tolerance components to provide precise -10 dBV or +4 dBu outputs. Two 25-pin D-subminiature connectors are used to interface the eight stereo outputs. Following the industry-standard connection scheme, the D-sub connectors allow fast, reliable, low-cost interconnection.

evaluations by industry professionals. These veterans have the "ears" to guide us in achieving the right performance. The outcome is a product that achieves sonic excellence.

Features

- Stereo input with transformerless laser-trimmed circuitry
- ExactCal section allows precise input-level calibration
- 15-turn input trim potentiometers
- 3-pin Neutrik XLR-type connectors
- Eight independent stereo outputs
- Configurable -10 dBV or +4 dBu nominal output levels
- 25-pin D-subminiature output connectors
- Inputs and outputs support balanced or unbalanced operation
- Internal ± 17 V power supply with toroidal mains transformer
- Single rack-space mounting

**STUDIO
TECHNOLOGIES
INC.**

5520 West Touhy Avenue
Skokie, Illinois 60077 USA
+1 847-676-9177, Fax +1 847-982-0747
www.studio-tech.com



Model 81 Specifications

Audio Input: 1, stereo

Type: electronically balanced, compatible with balanced or unbalanced signals

Impedance: 24 k ohms

Nominal Input Level: -12 dBV to +10 dBu

Input Level Controls: 2, 15-turn trim potentiometers

Audio Outputs: 8, stereo

Type: electronically balanced, direct coupled

Compatibility: intended to drive balanced or unbalanced loads of 600 ohms or greater

Output Impedance: 50 ohms

Nominal Output Level: -10 dBV or +4 dBu, each output individually configurable

Maximum Output Level: +27 dBu into 10 k ohms, +26 dBu into 600 ohms

Frequency Response: 10 Hz-70 kHz +0/-0.5 dB (down 1 dB @ 110 kHz)

Distortion (THD+N): 0.004%

S/N Ratio: 91 dB (20 Hz-20 kHz, ref. +4 dBu)

Crosstalk: 75 dB (1 kHz, ref. +4 dBu)

Connectors:

Audio Inputs: 2, 3-pin XLR-type, manufactured by Neutrik

Audio Outputs: 2, 25-pin D-subminiature

AC Mains: standard 3-blade IEC-type

AC Mains Requirement: 100, 120, or 220/240 V, $\pm 10\%$, factory configured, 50/60 Hz

Dimensions (Overall):

19.00 inches wide (48.3 cm)

1.72 inches high (4.4 cm)

6.65 inches deep (16.9 cm)

Mounting: one space in a standard 19-inch rack

Weight: 7.0 pounds (3.2 kg)

Specifications subject to change without notice.

For further information on the Model 81 please contact:

Studio Technologies, Inc.

5520 West Touhy Avenue
Skokie, Illinois 60077 USA

+1 847-676-9177

Fax +1 847-982-0747

www.studio-tech.com