

# Model 82 Stereo Analog Audio Distribution Amplifier

Designed for a wide variety of recording, production, broadcast, and duplication applications, the Model 82 has one stereo input and four stereo outputs.

The Model 82 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 four stereo outputs meet exacting professional standards. Capable of connecting to balanced or unbalanced loads, each output can drive  $+26~\mathrm{dBu}$  into 600 ohms. Using front-panel switches, each output can be individually configured for a nominal output level of  $-10~\mathrm{dBV}$  or  $+4~\mathrm{dBu}$ . The ExactCal input calibration section allows for optimal audio performance over a  $-12~\mathrm{dBV}$  to  $+10~\mathrm{dBu}$  input level range.

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  $\pm 17$  V for use by the analog circuitry. Components and construction standards make the Model 82 suitable for continuous operation, even for on-air broadcast applications.

### **One Stereo Input**

The differential input circuitry is compatible with balanced or unbalanced signals having a nominal level range of  $-12~\mathrm{dBV}$  to  $+10~\mathrm{dBu}$ . Laser trimmed, the inputs offer superior common-mode signal rejection. To achieve optimal audio performance the Exact-Cal calibration section matches the specific input levels with the Model 82's internal gain structure. Two 15-turn trim potentiometers and four LEDs allow fast, precise calibration.

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.

## **Four Stereo Outputs**

The Model 82 contains four independent stereo output sections. For compatibility with a wide range of facilities, each output section can be independently configured for a  $-10~\mathrm{dBV}$  or  $+4~\mathrm{dBu}$  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.

The Model 82's architecture precludes the need for individual output-level trim potentiometers. With the input signal calibrated using the ExactCal section, the four outputs use 1%-tolerance components to provide precise –10 dBV or +4 dBu outputs. Eight XLR-type connectors are used to interface the four stereo outputs.

#### **Audio Performance**

The Model 82 is the result of exacting circuit design combined with the latest state-of-the-art components. Like all Studio Technologies products, the Model 82 has survived tough listening 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
- Four independent stereo outputs

- Configurable –10 dBV or +4 dBu nominal output levels
- Inputs and outputs support balanced or unbalanced operation
- Internal ±17 V power supply with toroidal mains transformer
- Single rack-space mounting





## **Model 82 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: 4, 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: 3-pin XLR-type, manufactured by Neutrik

AC Mains: standard 3-blade IEC-type

AC Mains Requirement: 100, 120, or 220/240 V, ±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 82 please contact:

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