



RDL[®]
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

System 84 Models A and B

Audio Routing/Mixing Matrix



- Audio Routing / Mixing Switcher
- Eight Stereo Inputs (Model A) / Eight Mono Inputs (Model B)
- Four Stereo Outputs (Model A) / Four Mono Outputs (Model B)
- Logic Controlled Soft Switching
- All Solid-State Audio Switches – No Relays In Audio Path
- Balanced/Unbalanced Inputs and Outputs On Plug-in Connectors
- Gain-Trim On Each Source
- Any Input May Be Assigned To Any (Or Every) Output
- Multiple Inputs May Be Combined To an Output
- Constructed With True Summing Capabilities
- Direct Mix Inputs For Expansion
- Low-Noise Performance
- Uses Only a Single Rack-Unit Space

The System 84 Model A and B are both digitally controlled matrix routers and low-noise audio mixers with eight inputs which can be mixed to four outputs in any combination. Functions are controlled by 32 logic lines on a single input connector (provided). Dry contacts may be used to select each function, or the System 84 may be software controlled using a computer equipped with a logic-control In/Out card.

Audio inputs and outputs feature plug-in connectors. Precise-level adjustment is provided on the rear-panel using multi-turn trimming potentiometers. Instrumentation input amplifiers, noise-free solid state soft audio switching, studio-quality audio mixing, excellent headroom and low-noise performance combine to make the System 84 the ultimate in flexible audio system design at a fraction of the cost you would expect.

System 84

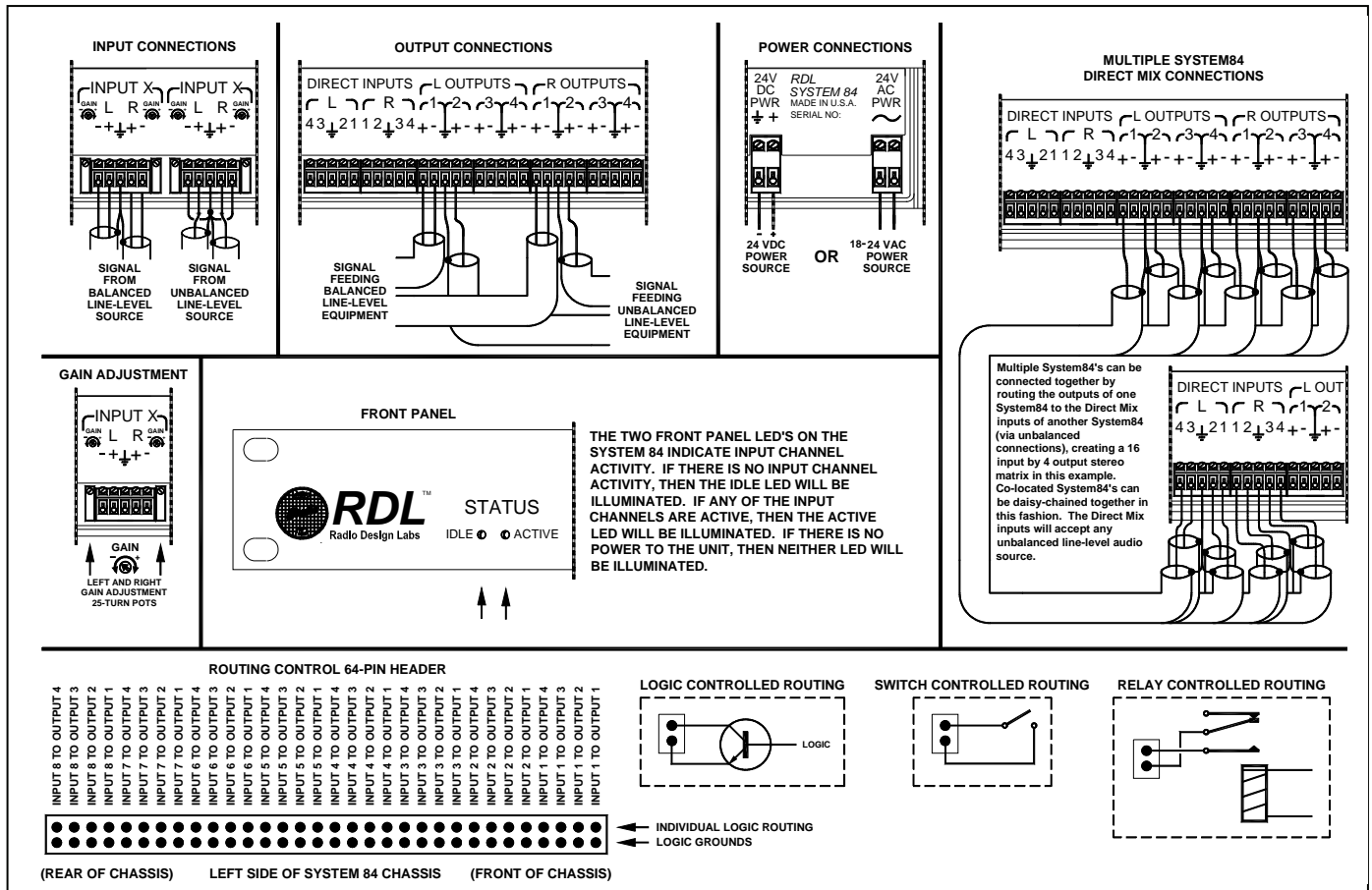
Audio Routing/Mixing Matrix

(Stereo Model Shown)

Installation/Operation



EN55103-1 E1-E5; EN55103-2 E1-E4
Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.



TYPICAL PERFORMANCE (Common to System 84 Models)

Inputs (switched): 8 10 kΩ balanced or unbalanced via plug-in terminal block, line-level
 Inputs (direct): 8 Unbalanced via plug-in terminal block, -2 dBu
 Input Level: -10 dBu to +8 dBu (for +4 dBu output) Max input +24 dBu
 Headroom: > 18 dB above +4 dBu
 Gain: Adjustable for each input, 25-turn trimmer, -6 dB to 12 dB
 Frequency Response: 10 Hz - 30 kHz +/-0.25 dB(Bridging load)
 THD+N: < 0.010% (20 Hz - 20 kHz)
 Intermodulation Distortion: < 0.025% (20 Hz - 20 kHz)
 Input Channel Crosstalk:
 Left into Right: Better than 80 dB (10 Hz - 15 kHz)
 Left into Right: Better than 75 dB (15 kHz - 20 kHz)
 Right into Left: Better than 70 dB (10 Hz - 15 kHz)
 Right into Left: Better than 65 dB (15 kHz - 20 kHz)
 Residual Noise: < -80 dB (Channel ON; referred to +4 dBu)
 Off Attenuation: > 80 dB (10 Hz - 20 kHz) with adjacent input channels OFF
 > 80 dB (10 Hz - 10 kHz) ; > 75 dB (10 kHz - 20 kHz) with adjacent input channel ON
 Indicators: Front panel LEDs indicating activity: **IDLE** if no channel active; **ACTIVE** if any channel active
 CMRR: > 50 dB (50 to 120 Hz)
 Outputs: 4 Balanced, 150 Ω balanced or unbalanced via plug-in terminal block
 Power Requirement: 24 Vdc @ 575 mA, Ground-referenced; OR 18-24Vac @ 575mA (separate jacks)
 Mounting: Standard 19" Rack-mount ; 1RU
 Dimensions:
 Height: 1.75 in. 4.4 cm
 Length: 19.0 in. 48.3 cm

Radio Design Labs Technical Support Centers

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