



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

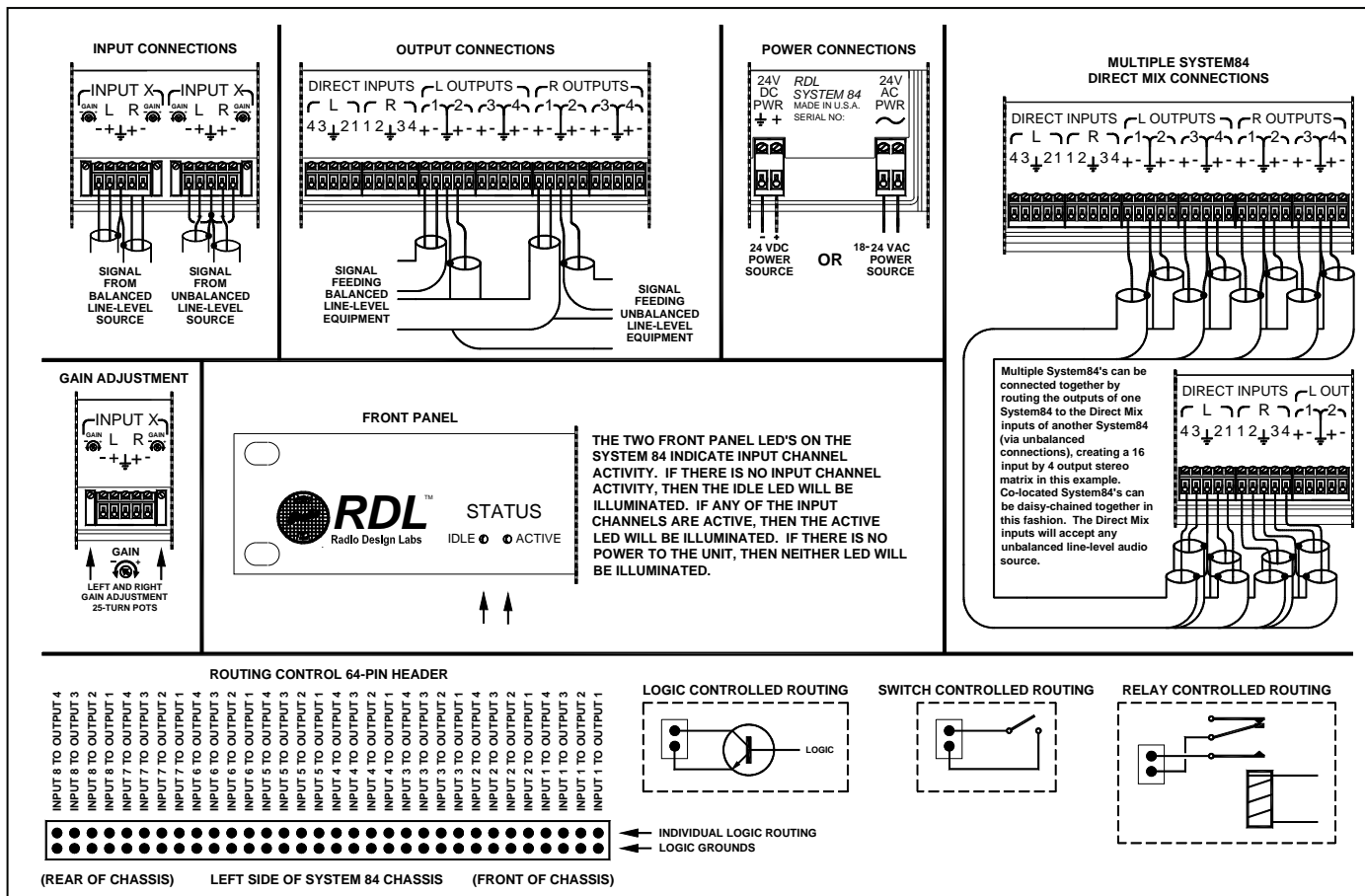
Audio Routing/Mixing Matrix

(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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