

RDL® Radio Design Labs™

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™



RACK-UP® SERIES

Model MAX RU-SPX4

Digital Audio Selector

ANYWHERE YOU NEED...

- Selection of SPDIF Signals (4 x 1)
- Operation Up to 24 bits, 48 kHz
- Exclusive **Sure-Lok**™ Auto-Recovery Sentinel
- Transformer Isolated Input / Outputs
- Digital Signal *Reclocking*
- Signal Locked or Error Indication



You Need The RU-SPX4!

The RU-SPX4 is part of the group of versatile *Max Series* RACK-UP products from Radio Design Labs. *Max Series* RACK-UPs feature all metal chassis and the advanced circuitry for which RDL products are known, combined with accessible, user-friendly controls and displays. The compact design permits high-density installations, with *three* products mounted in a single rack unit! Optional brackets permit mounting a *Max Series* RACK-UP module above, below, or in front of any flat surface. Optional rack-mount adapters (RU-RA3) are available for *Max Series* RACK-UP series installation. *Max Series* RACK-UP modules may be used freestanding as well.

APPLICATION: The RU-SPX4 is the ideal choice in installations requiring high quality source selection between digital SPDIF signals. Solid-state switching is used to select one of four transformer isolated electrical or optical SPDIF inputs. The selected input is decoded, reclocked and retransmitted to the transformer isolated electrical SPDIF output and optical output. Each input channel in the RU-SPX4 features two electrical inputs (phono and BNC) and one optical input. The electrical inputs are 75 Ω terminated. Any one of the three input jacks may be used. The output is available on a phono jack, BNC jack or optical connector. The RU-SPX4 is powered from 24 Vdc which may be connected through the barrier block or through the dc power jack. A front-panel power switch is provided. All inputs and outputs are available on the rear panel. The RU-SPX4 front-panel selected channel LED flashes whenever the module is not locked to a valid SPDIF digital source.

The front panel features 4 high-reliability, keyboard-style pushbuttons with corresponding LED indicators to show which digital audio source is active. If the button for an active source is pushed, all digital audio sources are turned off until the next source selection. A front-panel LOCAL/REMOTE toggle switch activates either the front-panel buttons or a rear-panel connected remote control. In the *remote* mode, the inputs are selected by an external momentary switch or open-collector closure to ground. Five remote input terminals are provided; one for each digital audio source, and one to shut off all inputs. Installing a jumper from the CTRL OFF terminal to ground permits the RU-SPX4 to be controlled by equipment providing a continuous closure only when a source is to be switched on, such as an RDL RC4-RU wall-mount, 4-button Remote Control or OEM equipment. When a digital audio source is selected, the RU-SPX4 provides a 50 mA open-collector output to control other equipment or modules.

A frequent problem encountered with consumer and professional quality digital audio equipment is unpredictable latch-up when digital signals are switched or connected to the input. **Sure-Lok**™ auto-Recovery circuitry unique to the RU-SPX4 monitors the most frequent causes of latch-up and reinitiates digital signal lock, bringing a new higher level of stability to digital audio signal distribution under the variety of conditions encountered in professional environments.

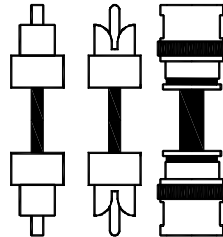
Wherever broadcast quality SPDIF signal selection is required, the RU-SPX4 is the ideal choice. Use the RU-SPX4 individually, or combine it with other RDL products as part of a complete audio/video system.

RU-SPX4

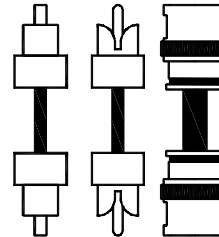
Typical Connections

Consumer SPDIF Source

Use only one of the available input formats on a channel at a time

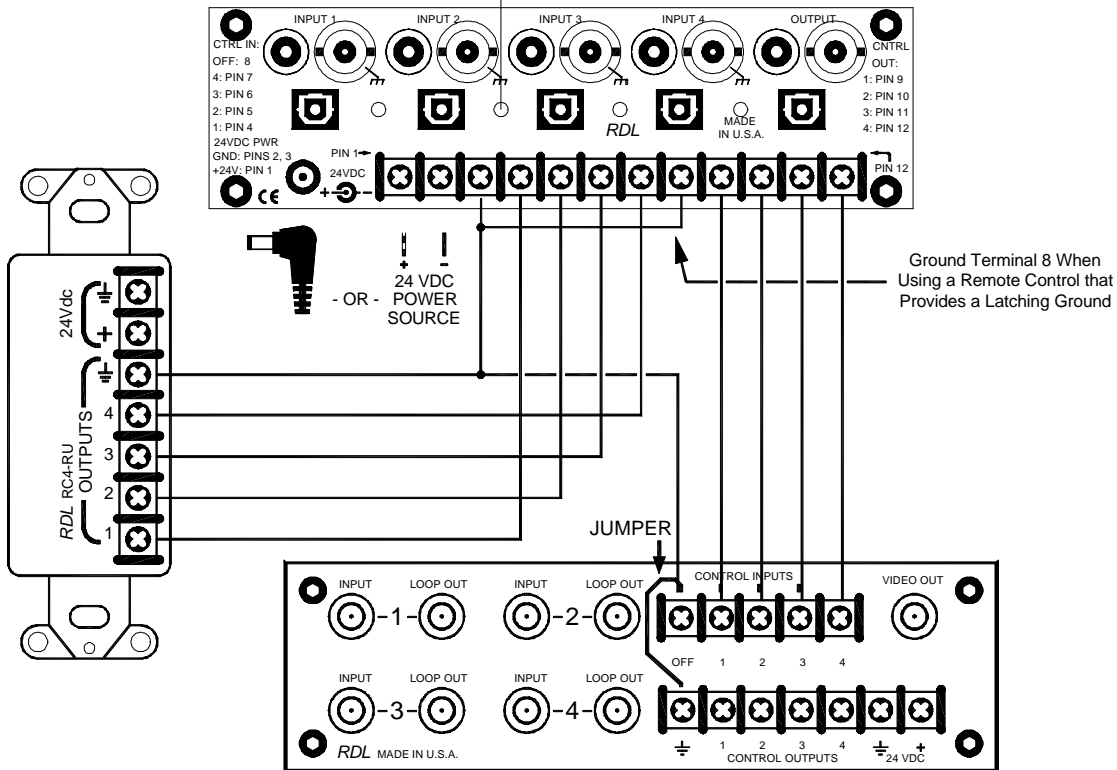


Install Screw (provided) to Ground Input Shields (recommended for RF suppression)



SPDIF Output to Other SPDIF Equipment

Use only one of the available outputs at a time



TYPICAL PERFORMANCE

Inputs (4):	75 Ω SPDIF phono, BNC (transformer isolated), or optical
Output:	75 Ω SPDIF phono, BNC (transformer isolated), or optical
Sample Rate:	32 kHz – 96 kHz
Resolution:	16 to 24 bits
Indicators (6):	4 Source LEDs (flashing when source selected and not locked; continuous when source selected and locked) 1 Remote/Local LED 1 Power LED
Standards:	IEC958, S/PDIF and EIAJCP340/1201
Power Requirement:	24 to 33 Vdc @ 140 mA, Ground-referenced
Mounting:	Rack-mount using optional rack adapters such as RU-RA3; or operate freestanding
Dimensions:	Height: 1.7 in 4.3 cm Length: 5.8 in 15.0 cm Depth: 4.3 in 10.9 cm

EMC:

