



**RDL**<sup>®</sup>  
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## RACK-UP<sup>®</sup> SERIES Model RU-VSX4 4-Input Video Switcher

- Loop-Through Output from each Input
- Vertical Interval Switching
- Local or Remote Control
- 10 MHz Bandwidth, NTSC or PAL
- Open-Collector Outputs
- All Solid-State Switching



The RU-VSX4 is part of the group of RDL RACK-UP products. The compact design permits high-density installations, with three products mounted in a single rack unit. The RU-VSX4 may be used alone, or mounted using a wide variety of RACK-UP series options.

**APPLICATION:** The RU-VSX4 is the ideal choice in most applications where four video signals need to be switched to a single output. The RU-VSX4 has two rear-panel jacks for each of the four video bridging input stages. One jack is for the input signal; the other is a loop-through output of the source signal. If 75- $\Omega$  termination of the input signal is required, the terminator (provided) is plugged onto the **LOOP OUT** jack. The output video signal is 75  $\Omega$  back-terminated to provide unity gain into a 75  $\Omega$  terminated input.

The front panel features 4 high-reliability, keyboard-style pushbuttons with LED indicators corresponding to each video input. The LED indicators show which video source is active. If the button for an active source is pushed, all video 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 video source, and one to shut off all video inputs. Installing a jumper from the **CTRL OFF** terminal to ground permits the RU-VSX4 to be controlled by equipment providing a continuous closure only when a source is to be switched on. In this mode, the RU-VSX4 may be controlled by an RDL D SERIES-RC4RU wall-mount 4-button remote control, or OEM equipment. When a video source is selected, the RU-VSX4 provides an open-collector 50 mA output to control other equipment or modules.

When a video source is requested, either from the front panel or by remote, the RU-VSX4 waits until the next vertical interval to switch to the requested video source. If no video is present then the switch occurs instantly. This feature avoids the screen roll typically associated with unsynced video switchers.

Wherever a video switcher is needed to provide wide-band video source selection, local or remote control, reliability, compactness and unsurpassed versatility, the RU-VSX4 is the ideal choice.



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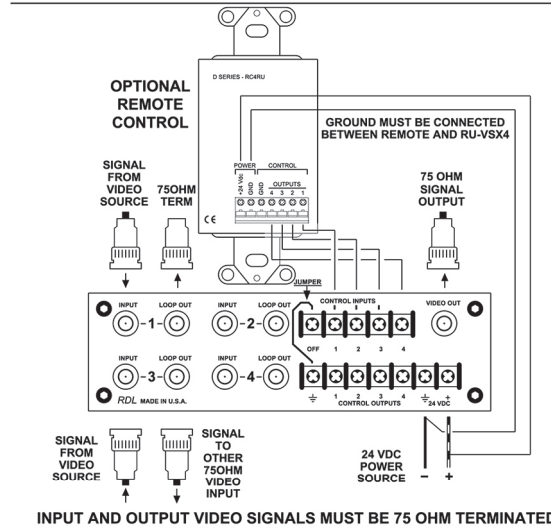


**RACK-UP® SERIES**  
**Model RU-VSX4**  
**4-Input Video Switcher**

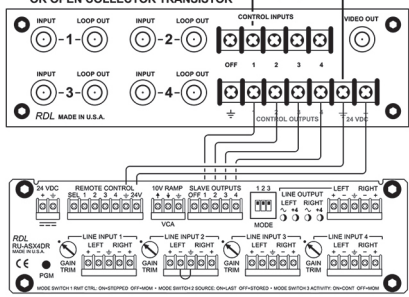
**Installation/Operation**



Declaration of Conformity available from rdlnet.com.  
Sole EMC specifications provided on product package.  
Specifications are subject to change without notice.



**OPTIONAL MOMENTARY REMOTE CONTROL CONNECTIONS**  
SHOWN CONNECTED TO CHANNEL 1  
CONTROL MAY USE SWITCH  
OR OPEN COLLECTOR TRANSISTOR



**AUDIO FOLLOW VIDEO WIRING USING RDL RU-ASX4DR AUDIO SWITCHER**

**TYPICAL PERFORMANCE**

- Input Impedance: 5 kΩ Bridging 75 Ω Line
- Gain: Unity, 75 Ω terminated Input; 75 Ω terminated Output
- Load Impedance: 75 Ω
- Outputs (5): 4 Loop Out from Input Signals; 1 Amplified OUTPUT
- Operating Signal Level: 0.5 to 1 V p-p
- Frequency Response: 10 Hz to 10 MHz (+/- 0.35 dB)
- Noise: < -70 dB below 1 V p-p
- Crosstalk: < -55 dB
- Off Attenuation: > 65 dB
- Differential Gain: 0.1%
- Differential Phase: 0.3 degree
- Connector Type: BNC, gold plated
- External Control Inputs: Electronic or mechanical closure to ground, 1 mA
- External Control Outputs (4): 50 mA, Open-collector to Ground
- Power Requirement: 24 Vdc @ 110 mA, Ground-referenced

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rule. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.