



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

## RACK-UP<sup>®</sup> SERIES

### Model RU-VSX4

### 4-Input Video Switcher

#### ANYWHERE YOU NEED...

- 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



#### *You Need The RU-VSX4!*

**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 RU-SX4A Audio Switcher, an RDL RC4-RU 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. Use the RU-RA3 rack-mount adapter to mount multiple RU-VSX4s, or to combine related products (such as audio mixing, audio distribution, or audio metering) into a single rack unit!



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

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING<sup>™</sup>



# RACK-UP<sup>®</sup> SERIES

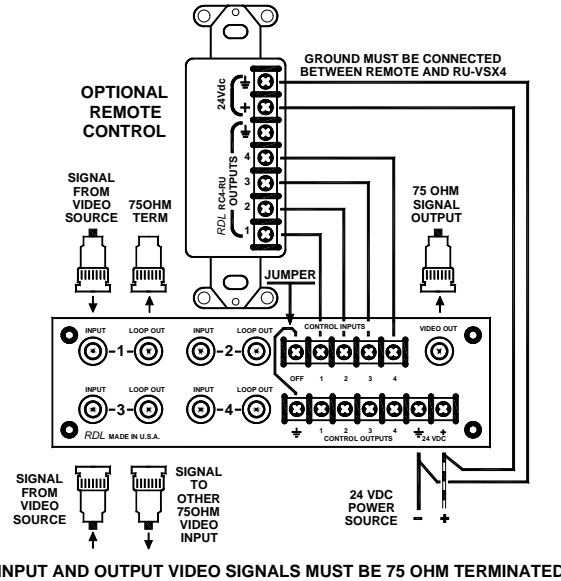
## Model RU-VSX4

### 4-Input Video Switcher

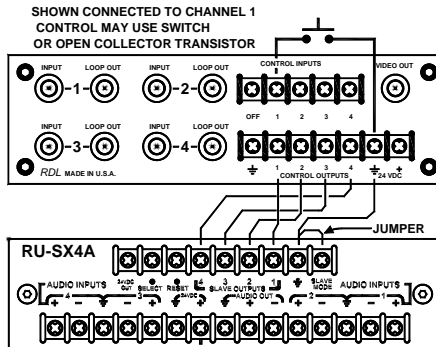
## Installation/Operation



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.



### OPTIONAL MOMENTARY REMOTE CONTROL CONNECTIONS



AUDIO FOLLOW VIDEO WIRING USING RDL RU-SX4A AUDIO SWITCHER

### TYPICAL PERFORMANCE

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Input Impedance:              | 5 k $\Omega$ Bridging 75 $\Omega$ Line                             |
| Gain:                         | Unity, 75 $\Omega$ terminated Input; 75 $\Omega$ terminated Output |
| Load Impedance:               | 75 $\Omega$                                                        |
| Outputs (5):                  | 4 <b>Loop Out</b> from Input Signals; 1 Amplified <b>OUTPUT</b>    |
| 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 to 33 Vdc @ 110 mA, Ground-referenced                           |

### Radio Design Labs Technical Support Centers

U.S.A. (800) 933-1780, (928) 778-3554; Fax: (928) 778-3506

Europe [NH Amsterdam] (+31) 20-6238 983; Fax: (+31) 20-6225-287