

TX™ SERIES

Model TX-VCR

Video Controlled Relay

ANYWHERE YOU NEED...

- To Detect Video Presence
- To Detect Loss of Video
- Bridging or Terminated Operation
- Detection of NTSC or PAL Signals
- Operation from AC or DC Power

You Need The TX-VCR!



The TX-VCR is part of the group of versatile TX series from Radio Design Labs. TX series feature the advanced circuitry and high quality connectors for which RDL products are known. The ultra-compact TX series can be mounted in limited space using the adhesive methods popularized by RDL's STICK-ON® Series. The TX-VCR may be mounted directly to a backboard using optional mounting brackets available from RDL.

APPLICATION: The TX-VCR is the ideal choice in installations where a control signal is needed based on the absence or presence of valid video signals. The unique power supply input allows the TX-VCR to be powered from a wide variety of existing ac or dc power sources.

The TX-VCR has one video input and a loop-through video output. The detection circuit bridges a 1 volt video line. The TX-VCR may be inserted in a video line with the **LOOPTHRU** video output feeding a terminated load. It may alternatively be installed at the end of a video line by installing a 75 Ω terminator to the **LOOPTHRU** video output jack. The terminator is supplied with the TX-VCR.

Video detection is based on valid sync signals. The TX-VCR responds to valid NTSC or PAL sync while ignoring 50 Hz and 60 Hz hum and related induction artifacts. The TX-VCR is able to detect signals as weak as ½ Volt. When a valid signal is detected, the relay contacts close. Both a normally-open and normally-closed contact is provided, permitting the module to be connected as a video presence detector or as a video loss detector. The front-panel **SYNC** LED lights when valid video is being detected.

The TX-VCR power supply input accepts an ac or dc voltage from 12 to 24 volts. 12 Vdc batteries may power the TX-VCR in broadcast applications; a common low-voltage ac supply may power the module together with the camera in security installations provided the camera is internally ground-referenced. The TX-VCR is a negative ground- referenced product. In the unlikely event it is connected on a common ac supply together with a camera which is positive ground-referenced *and* not transformer isolated, a ground fault may occur. The TX-VCR automatically detects such a fault, disconnects itself from the power input, and illuminates the **FAULT** LED. This alerts the installer to transformer isolate the TX-VCR power source from the camera power source. This unique circuit protects both the camera and TX-VCR from damage. RDL's available PS-24 power supply may be used to power the module when isolation is required, or in any other installation.

For installations where signaling based on valid video signals is needed, the TX-VCR is the ideal choice. Use the TX-VCR individually in NTSC or PAL systems, or combine it with other RDL RACK-UP®, STICK-ON®, TX, or FLAT-PAK™ series products as part of a complete audio/video system.

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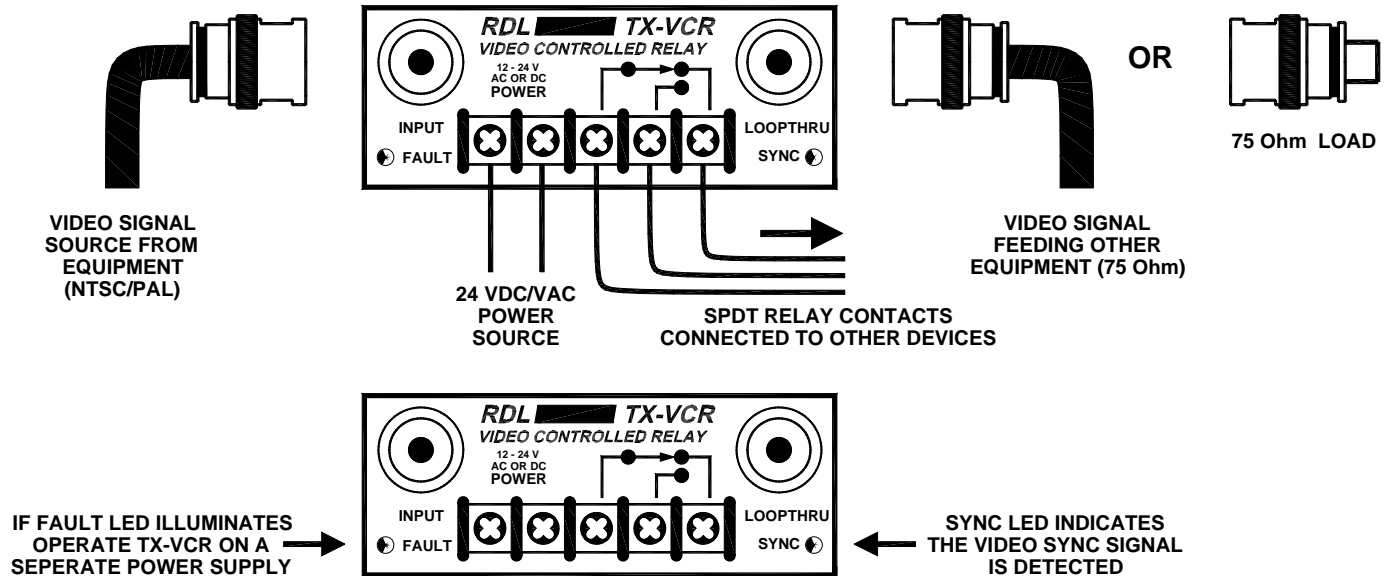
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Video Controlled Relay

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

| | |
|--------------------------|---|
| Input: | BNC, Ground-referenced |
| Input Level: | 0.5 V p-p video to 1 V p-p video |
| Output: | Loop-through, BNC, Ground-referenced (Output must be terminated with connected load or with 75 Ω terminator supplied) |
| Control Output: | N/O or N/C relay contacts |
| Power Requirement: | 12 to 33 Vdc Ground-referenced, OR 12 to 24 Vac, @ 75mA |
| Relay Contacts: | Single-Pole, Double-Throw |
| Maximum Switching Power: | 60 W (220 Vdc, 125 Vac, 2 A) |
| Mounting: | Bottom mount using adhesive strips provided; mounts directly to a flat surface using optional mounting brackets |
| Dimensions: | Height: 1.4 in 3.6 cm |
| | Length: 3.0 in 7.6 cm |
| | Width: 1.2 in 3.0 cm |