



RDL[®]
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

TX™ SERIES

Model TX-AVX

Automatic Video Switchover

ANYWHERE YOU NEED...

- To Switch to a Secondary Video Source
- To Detect Loss of Video
- Automatic Switchover
- Detection of NTSC or PAL Signals
- Operation from AC or DC Power

You Need The TX-AVX!



The TX-AVX 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-AVX may be mounted directly to a backboard using optional mounting brackets available from RDL.

APPLICATION: The TX-AVX is the ideal choice in installations where automatic switchover to an alternate video source is needed when the primary signal is lost. The unique power supply input allows the TX-AVX to be powered from a wide variety of existing ac or dc power sources.

The TX-AVX has two video inputs and a single output. The detection circuit bridges the **INPUT** line. When a valid NTSC or PAL video signal is detected, the **INPUT** jack is connected to the **OUTPUT** jack. The output is designed to connect to a 75 Ω terminated load. In the absence of video input at the **INPUT** jack, the **AUX INPUT** jack is connected to the **OUTPUT** jack. The switching is accomplished by means of a high quality RF relay. If power to the TX-AVX is interrupted, then the **AUX INPUT** jack is connected to the **OUTPUT** jack. The **INPUT** jack is 75 Ω terminated. The **AUX INPUT** is terminated when it is connected to the **OUTPUT** and is unterminated when it is not in use.

Video detection is based on valid sync signals. The TX-AVX responds to valid NTSC or PAL sync while ignoring 50 Hz and 60 Hz hum and related induction artifacts. The TX-AVX is able to detect signals as weak as ½ Volt. When a valid signal is detected, the relay connects the **INPUT** to the **OUTPUT**, and provides a ground connection to the **SLAVE** terminal, permitting the module to be connected as a video presence detector.

The TX-AVX power supply input accepts an **ac** or **dc** voltage from 12 to 24 Volts. 12 Vdc batteries may power the TX-AVX 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-AVX 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-AVX 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-AVX power source from the camera power source. This unique circuit protects both the camera and TX-AVX 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.

Use the TX-AVX individually in NTSC or PAL systems, or combine it with other RDL RACK-UP®, STICK-ON, TX, FLAT-PAK™ series and various mounting accessories as part of a complete audio/video system.

TX™ SERIES

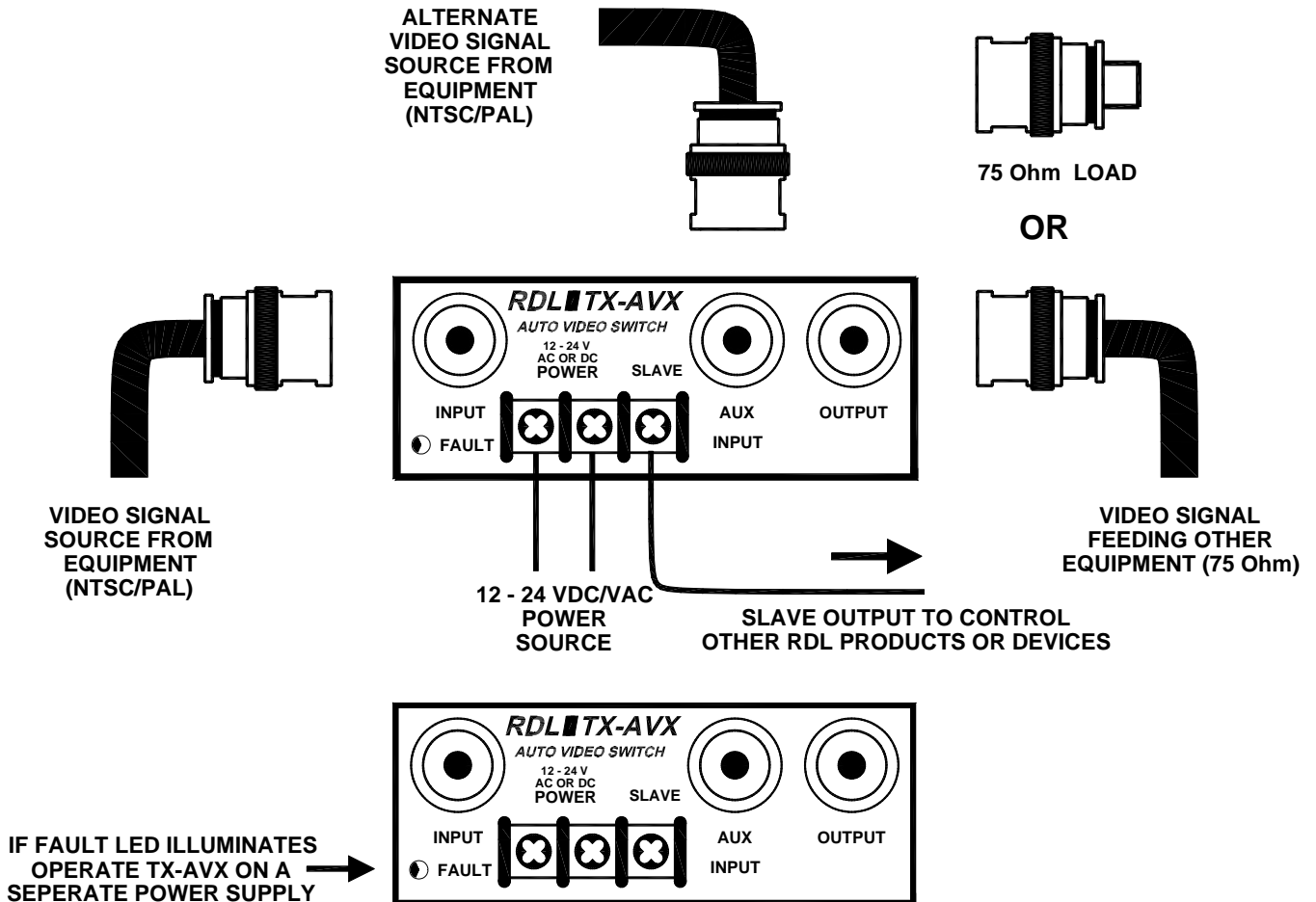
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Installation/Operation



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

Inputs:	BNC, Ground-referenced
Input Level:	0.5 V p-p video to 1 V p-p video
Output:	BNC, Ground-referenced (Output must be terminated with 75 Ω load)
Slave Output:	N/O contact, 100mA
Power Requirement:	12 to 33 Vdc Ground-referenced, OR 12 to 24 Vac, @ 30mA
Mounting:	Bottom mount using adhesive strips provided; mounts directly to a flat surface using optional mounting brackets
Dimensions:	Height: 1.40 in. 3.60 cm Length: 3.00 in. 7.60 cm Width: 1.20 in. 3.00 cm