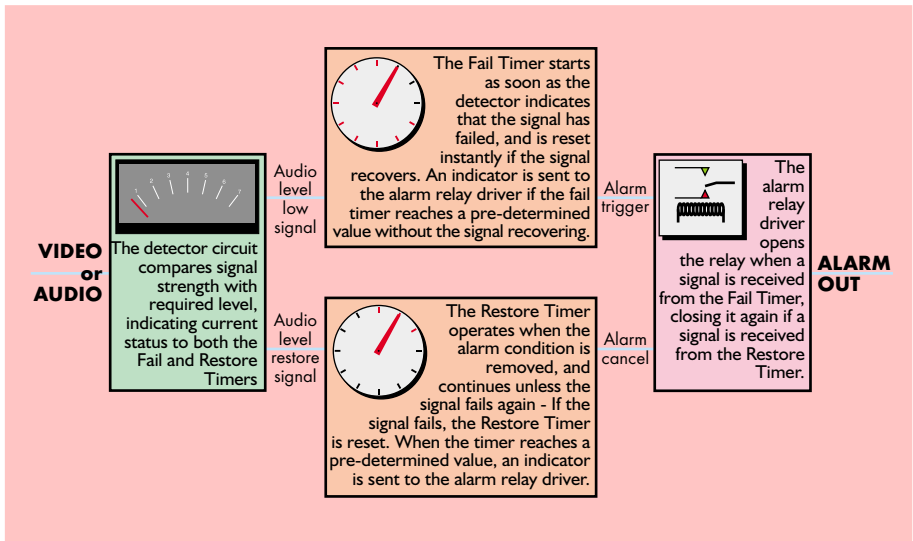


VX-2004 & VX-2005 VIDEO & AUDIO PROGRAMME FAIL DETECTORS

VX-2004/5



DESCRIPTION

The VX-2004 and VX-2005 programme fail detectors are Eurocard modules designed to monitor audio and video signal continuity and provide alarm outputs in the event of signal loss. When used in conjunction with VX-4026 configurable relay cards or the BCU-300 Broadcast Changeover Unit, programme feeds can be re-routed and backup procedures initiated. VX-2004 is a dual channel audio monitor card with independent fail detectors and alarm outputs for each channel. VX-2005 also monitors two channels which can be factory configured for video, audio or one channel of each.

The VX-2005 video module measures the level of video either during the sync period - even with sound-in-syncs present - or during active line, and determines whether the signal is within an acceptable presettable range, normally around $\pm 6\text{dB}$. If the signal level is too high or too low for a sufficient length of time (typically around 40ms for video), an alarm is signalled. This status remains until the signal level is once again within range for a (different) presettable time, typically around 5 seconds.

The VX-2004 audio module is transformer isolated and operates in a similar manner. The audio level must remain above the presettable threshold, generally set to about -50dBu, with the adjustable timer set to around 20-30 seconds to allow for periods of genuine silence. A separate timer monitors the return of the signal, resetting the alarm state only when the signal has remained for (typically) 5 seconds or more, to allow for noise in the circuit when re-establishing connections.

VX-2004 & VX-2005 PROGRAMME FAIL DETECTORS

There are three user-adjustable parameters controlling operation of each channel of a VX-2004 or VX-2005 module. The Fail Time determines how long a signal must be out of range before it has failed. The Threshold (or Window) determines the minimum (and possibly the maximum) acceptable level for the signal. The Restore Time determines how long a previously-failed signal must remain within spec before the alarm is cancelled.

The VX-2004 has potentiometer adjustment of these three parameters, with separate controls for each audio channel. Status LEDs on the front of the card indicate when the signal is out-of-spec and when it has failed (after the preset Fail Time).

The VX-2005 uses DIP switches to select the preset Fail and Restore Times. An adjustable time is also available. LEDs on the front of the card provide confirmation of signal and alarm status for each channel.

Sophisticated programme control options may be added by combining VX-2004 & VX-2005 signal fail cards with VX-4026 programmable relay switchers and VX-4028 logic control modules.

Options include status monitoring of external equipment such as an ISDN backup line, where switching to the backup can only take place once the circuit is established.

Control of remote equipment ensures that the signal reverts to the main channel and the ISDN dial-up line is cleared as soon as possible, to avoid call charges.

VX-2004 & VX-2005 programme fail cards are used in the BCU-300 Broadcast Changeover Unit, which offers automatic video & audio signal monitoring, switching and remote control of all functions.

In addition to the BCU-300, Vortex can produce many other special combinations for single or multi-channel audio and video backup, alarm and routing systems.

SPECIFICATIONS

▼	VX-2004 Inputs Detector range Fail timer range Reset timer range Relay output Aux logic inputs	Audio Programme Fail Detector 2x line level 0dBu (nom), xformer isolated & balanced -10dBu to -60dBu approx, adjustable Adjustable between 0 & 60 seconds Adjustable between 0 & 60 seconds DPDT signal-quality changeover relay (1 per channel) TTL level for immediate fail override (eg. codec fail)
▼	VX-2005 Video inputs Video detector range Video Fail Timer range Video Reset timer range Audio inputs Audio detector range Audio fail timer range Audio reset timer range Relay outputs Aux logic inputs	Video/Audio Programme Fail Detector 1 or 2 composite 700mV, 75Ω ±6dBv 5ms to 5 seconds (set in steps) 5ms to 5 seconds (set in steps) 1 or 2 line level 0dB nominal, balanced -10dBu to -60dBu approx, adjustable (per channel) 0 to 60 seconds adjustable (per channel) 0 to 60 seconds in steps (per channel) <i>Other nominal signal levels & timer ranges are available</i> DPDT signal-quality changeover relay (1 per channel) TTL level for immediate fail override (eg. codec fail)

Vortex Communications Ltd
75 The Grove, Ealing, London W5 5L, UK
Tel: (+44) 020 - 8579 2743 ▼ Fax: (+44) 020 - 8840 0018
E-mail: info@vtx.co.uk ▼ Web: www.vtx.co.uk

IN THE INTEREST OF PRODUCT IMPROVEMENT
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE
ALL TRADEMARKS ARE RECOGNISED

