

RVD-164 / RVD-164A

Video Distribution Amplifiers



The Ernitec RVD-164 and RVD-164A are video signal distribution amplifiers for 16 video channels respectively. The equipment can be used for PAL/CCIR and NTSC/RS-170 video signals.

Each input channel is duplicated to four outputs. This is particularly useful for larger installations where the camera signals must be distributed to multiple units, such as matrixes, multiplexers, etc. or for high security sites where redundant feeds must be available.

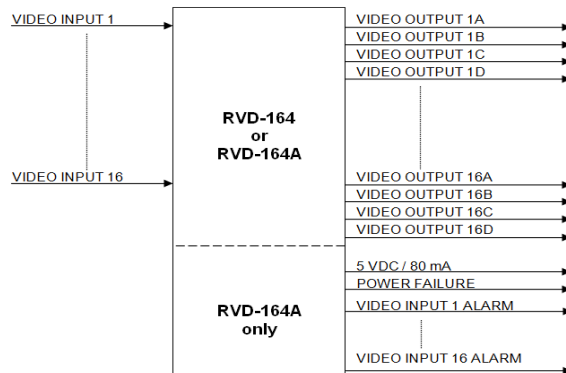
The input channels are equipped with an adjustable cable compensation circuit which can compensate for the loss in long coaxial cables.

The Ernitec RVD-164A is furthermore equipped with independent video alarm circuits for each input channel. The level of the video signal is monitored and an alarm is raised if the level is too low, for example due to a black-out of the camera. The sync pulse is also monitored to be within a specified limit. Finally, an alarm is raised if the video signal is completely disconnected, for example if the video cable is disconnected.

The Ernitec RVD-164 and RVD-164A can be used practically wherever multiple video signals must be distributed to different locations. By making a simple loop, it can also be used in situations where just a few video signals must be distributed to many different locations.

Specification

Video input specifications	RVD-164	RVD-164A
Number of inputs	16	16
Connector type	BNC	
Input impedance	75 W	
Nominal input voltage	1 Vpp	
Maximum input voltage	2 Vpp	
Cable compensation	0 dB, +2 dB, +4 dB, +6 dB @ 5MHz, selectable by switch	
Input return loss	> 32 dB @ 10 Mhz	
Number of outputs	4 per input	
Connector type	BNC	
Output impedance	75 W	
Output voltage	1 Vpp @ 1Vpp input	
Output return loss	> 32 dB @ 10 MHz, terminated	
Output isolation	> 32 dB @ 10 MHz	
Bandwidth, 10 Hz to 10 MHz	< 0.5 dB	< 1.5 dB
Signal to noise ratio	> 80 dB, 5 MHz unweighted	
Crosstalk	> 56 dB @ 5 MHz	
K-factor	< 0.4 %KF	
2T Pulse/bar ratio	> 93.5 %	
Zag 50 Hz	< 4.5 %	
Differential gain	< 1.5 % @ 4.43 MHz	
Differential phase	< 0.5° @ 4.43 MHz	
Luminance non-linearity	< 1.5 %	
Alarm Connector type	-	25 pole female Sub-D
Alarm Low video level	-	180 mV ±30 mV
Low video level , delay alarm	-	< 1.5 sec., typ. 1 sec.
Low sync pulse level	-	200 mV ±25 mV
Low sync pulse level, delay alarm	-	< 0.5 sec., typ. 0.2 sec.
Open video circuit, delay alarm	-	< 0.5 sec., typ. 0.2 sec.
Video alarm output level	-	0 VDC (no alarm), 5 VDC (alarm)
Power alarm	-	Potential free, NO/CC
General purpose power output	-	5 VDC, 80 mA
Supply voltage	230 VAC +15% -10%, 45 to 55 Hz	
Power consumption	< 25 VA	
Temperature range	0°C to +55°C	
Humidity	< 90 %RH @ 1 Bar, non-condensing	
Size (W x H x D)	132 x 426 x 165 mm (19", 3 U)	
Weight	4 kg	
Part number	0052-00103	0052-00104



Block Diagram of the RVD-164 / RVD-164A