

Video Distribution Amplifiers RVD-164 / RVD-164A

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Description

The RVD-164 and RVD-164A are video signal distribution amplifiers for 16 video channels. 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 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 RVD-164A also features a 5 VDC / 80 mA general purpose power output.

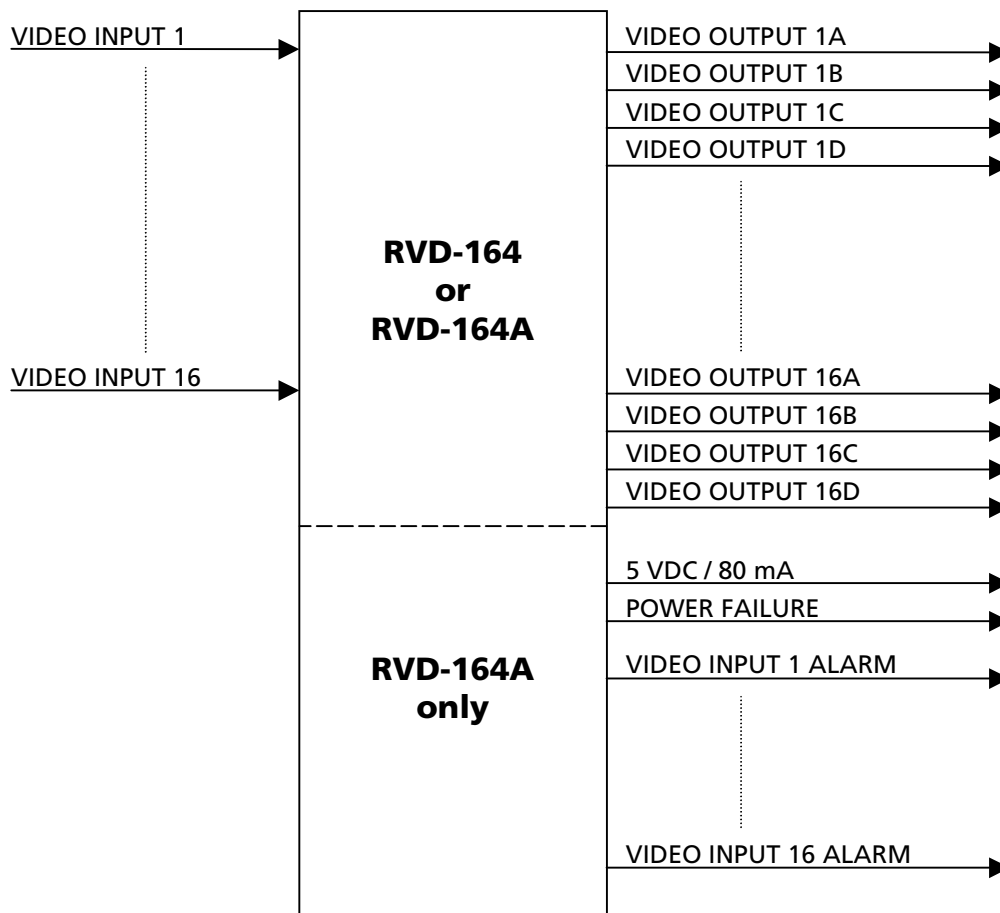


Features

- High video performance
- 16 input channels, each duplicated to four outputs
- Cable compensation circuit on input

RVD-164A only:

- Missing video indication for each channel
- Missing sync pulse indication for each channel
- Open video circuit indication for each channel
- Power failure indication
- General purpose low voltage output



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

Specifications

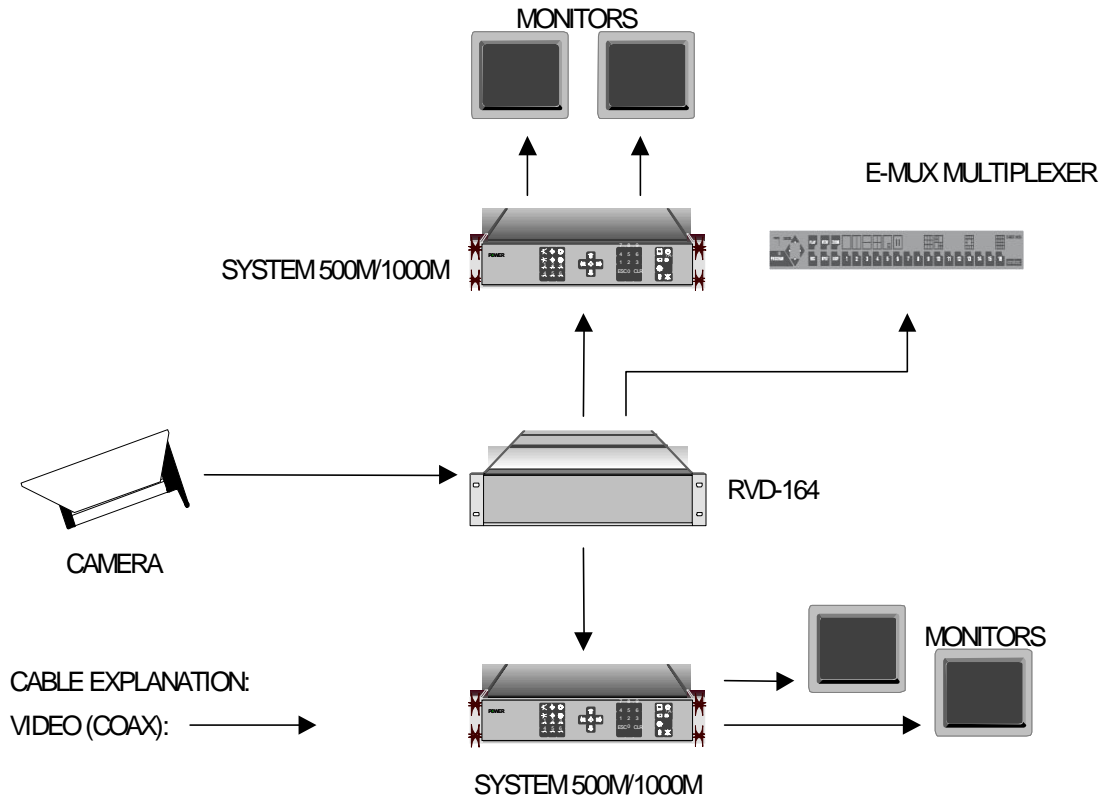
Video input specifications	
Number of inputs	16
Connector type	BNC
Input impedance	75 Ω
Nominal input voltage	1 Vpp
Maximum input voltage	2 Vpp
Cable compensation	0 dB, +2 dB, +4 dB, +6 dB @ 5MHz, selectable by switch
Input return loss	> 32 dB @ 10 Mhz
Video output specifications	
Number of outputs	4 per input
Connector type	BNC
Output impedance	75 Ω
Output voltage	1 Vpp @ 1Vpp input
Output return loss	> 32 dB @ 10 MHz, terminated
Output isolation	> 32 dB @ 10 MHz
Video specifications	
Bandwidth, 10 Hz to 10 MHz	
RVD-164	< 0.5 dB
RVD-164A	< 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 and auxiliary power specifications (RVD-164A only)	
Connector type	25 pole female Sub-D
Low video level	180 mV \pm 30 mV
Low video level , delay alarm	< 1.5 sec., typ. 1 sec.
Low sync pulse level	200 mV \pm 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
General specifications	
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
EMI / EMC	EN 50081-2, EN 50082-2
Safety	EN 60065

Applications

The RVD-164 / 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.

A number of possible applications are shown below.



Application example for RVD-164

3142-00110 / 011299

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THE ONE TO WATCH

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