

## VCP-ISL-01R Single Channel CAT5 or RG59 Automatic Composite Video Equalizer, Fully-Adaptive to 1600metres CAT5 Or 1800metres RG59

### Product Features

- Equalizers Up To 1600m CAT5 or 1800m of RG59
- Fully Automatic Operation
- Compatible with Colour or Monochrome
- Compatible with PAL or NTSC
- 5MHz bandwidth
- Compensates for high frequency cable losses of up to 60dB at 5MHz
- Automatic cable type compensation
- Modular card design
- Uses BFR Digital VC-01 to launch on CAT5



\* card for VCP-RACK

VCP-ISL-01R		
<b>Product Description</b>	Single Channel CAT5 or RG59 Automatic Composite Video Equalizer	
<b>Technical Specifications:</b>		
<b>Video Input:</b>		
Minimum Differential Input:	0.7Vp-p; Minimum correctable Peak-to-Peak signal swing	
Maximum Differential Input:	1.4Vp-p; Maximum correctable Peak-to-Peak signal swing	
Minimum Common Mode Input:	1V	
Maximum Common Mode Input:	4V	
Signal-to-Noise Ration (SNR): (NTC-7 weighted filter)	EQ = 0m	- 67 dB rms
	EQ = 305m	- 67 dB rms
	EQ = 610m	- 65 dB rms
	EQ = 915m	- 64 dB rms
	EQ = 1220m	- 61 dB rms
	EQ = 1615m	- 54 dB rms
Differential Gain:	1%	
Differential Phase:	1 °	
Input Clamp Current:	25 µA	
Differential Input Connector:	RJ45 socket	
Single-Ended Input Connector:	Female BNC	
Input Selector:	Micro-Switch	
Input Protection:	ESP Protected	
<b>Video Output:</b>		
Video Output:	1Vp-p; 75Ohm	
Output Connector:	Female BNC	
Output Protection:	ESP Protected	
<b>Indicators:</b>		
Pwr:	Rack Power; Card Power	
EQ:	Equalisation Lock	
<b>General</b>		
Power supply:	5Volt DC; supplied by VCP-RACK	
Operating temperature:	-40°C to 85°C	
Operating humidity:	0% to 95%; non-condensing	
Dimensions (mm):	cage card for VCP-RACK	

\*Specifications subject to change without notice.



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The VCP-ISL-01R, also known as BFR Digital's 1-mile box is a fully automated, equalizer for composite video transmission over CAT5 or RG59 coaxial cable.

Differential video signals sent over long distances of twisted pair wire exhibit large high frequency attenuation, resulting in loss of high frequency detail/blurring. The exact loss characteristic is a complex function of wire gauge, length, composition, and coupling to adjacent conductors.

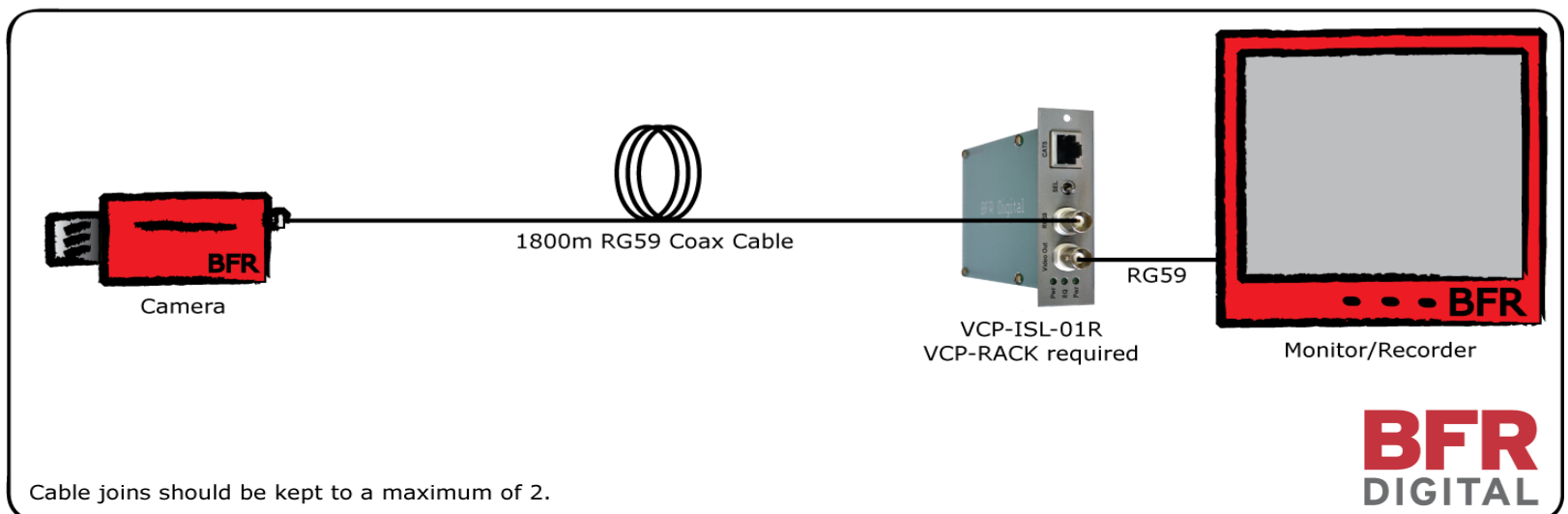
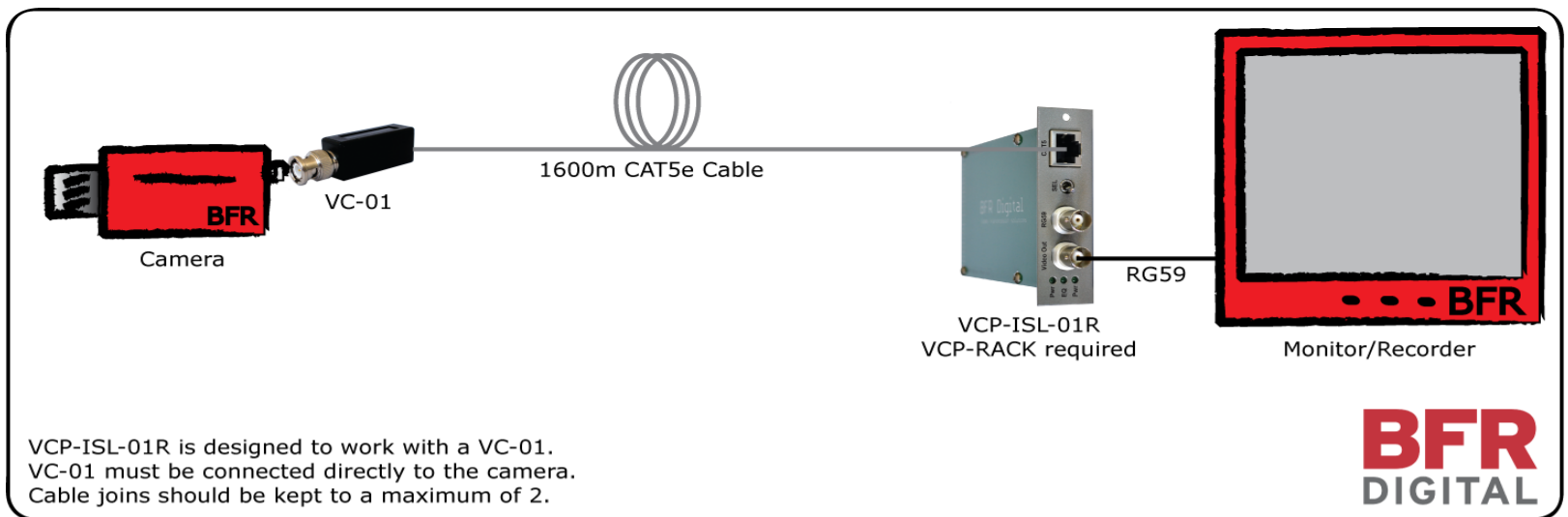
The video signal can be restored by applying a filter with the exact inverse transfer function to the far end signal. VCP-ISL-01R is designed to compensate for the losses due to long cables, and incorporates the functionality and flexibility to match a wide variety of cable types and loss characteristics.

The VCP-ISL-01R offers 99% video reproduction at 1000m (same as a camera connected to a monitor on a 1m lead) and 75% video reproduction at 1800m (same as a camera connected to a monitor on 250m of RG59).

Cable Type	Maximum Cable Length Supported
<b>Copper-Core</b>	
CAT5/CAT5e	1600m
CAT6	1700m
RG59 Coax	1800m
CAT3	900m
<b>Non-Copper-Core</b>	
CAT5/CAT5e	550m
Copper-Coated Aluminium Core	
RG59 Coax	400m
Copper-Coated Steel Core	

\* Belden or 3M cable is recommended to achieve maximum distance.

**\*When using CAT5 or CAT6 the VCP-ISL-01R is designed to operate with a VC-01 only. The VC-01 must be connected directly to the camera as in the application diagram below.**



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