

# CVG-KR10D

## Composite-Y/C Comb Filter/Transcoder

The **CVG-KR10D** *Composite-YC Comb Filter / Transcoder* was designed to interface between the two popular video formats - Composite Video and YC (Super-Video).

The decoding from composite to Y/C is done digitally using an adaptive comb filter and DSP techniques to minimize dot-crawl and cross-color.

A built-in vertical enhancer circuit reduces noise and dot-crawl on the Y signal. In addition, the **CVG-KR10D** provides an independent Y/C to Composite route, for simultaneous bi-directional operation.

The **CVG-KR10D** is very small in size, and is fed from an external 12V DC supply - ideal for fieldwork. Be sure to use appropriate, high quality, video and Super-Video cables.

## Operation

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- ❑ Connect your Composite video source into the CV IN socket for Composite to Y/C conversion.
- ❑ Connect you Y/C acceptor to the YC OUT socket.
- ❑ Connect your Y/C video source into the YC IN socket for Y/C to Composite conversion.
- ❑ Connect you Composite video acceptor to the Y/C OUT socket.
- ❑ Use high quality cables as cables effect quality.
- ❑ Connect the **CVG-KR10D** to an appropriate 12 VDC power-supply - monitoring socket polarity.

- ❑ Operate the **CVG-KR10D**, Source and Acceptor. Press one of the front switches to select for either *PAL* or *NTSC* operation.
- ❑ Please note the machine cannot convert Composite *PAL* to Y/C in *NTSC*. Encoding and Decoding is performed within the same standard.
- ❑ The machine may operate in both modes simultaneously. The Coder section - Y/C to Composite is Multistandard and is not effected by front switch selection.

## Features and Applications

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The **CVG-KR10D** unit can be used in the following applications:

- ▶ Simultaneous bi-directional operation - from Composite to YC and from YC to Composite for studio use.
- ▶ Viewing YC signals on a Composite video monitor.
- ▶ Operates in PAL and NTSC.

## Application Hints

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- ▶ Save money by using a Composite Video monitor for viewing and monitoring a YC program.
- ▶ Use your Composite VCR for "pre-edit" purposes of YC material.
- ▶ Convert your pilot Composite shots to YC for proofing.

## Technical Specifications:

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**INPUTS:** 1 Composite Video, 1Vpp/75  $\Omega$  on a BNC connector.

1 Super-Video: Luma: 1Vpp/75  $\Omega$ .  
                  Chroma: 0.3 Vpp/75  $\Omega$ .

**OUTPUTS:** 1 Super-Video: Luma: 1Vpp/75  $\Omega$ ;  
                  Chroma: 0.3Vpp/75  $\Omega$ .

1 Composite Video, 1Vpp/75  $\Omega$  on a BNC connector.

**CONTROLS:** Two electronic touch switches to select PAL or NTSC operation.

**VIDEO BANDWIDTH:** 100 MHz -3dB (Y/C to CV), >5.8 MHz (CV to Y/C, PAL).

**DIFF. PHASE:** 0.15 Deg (Y/C to CV, NTSC).

**DIFF. GAIN:** 0.7% (Y/C to CV, NTSC).

**LUMA S/N RATIO:** >72 dB in both directions, (PAL).

**K-FACTOR:** <0.1% (Y/C to CV), <0.5% (CV to Y/C, NTSC).

**DIMENSIONS:** 16.5cmX12cmX4.5cm (W, D, H.)

**POWER SOURCE:** 12V DC, 200mA.

*Please note that if the output signal is disturbed or interrupted by very strong external electromagnetic interference, it should return and stabilize when such interference ends. If not, turn the power switch off and on again to reset the machine.*

*The socket-outlet shall be installed near the equipment and shall be easily accessible. To fully disconnect equipment, remove power cord from its socket.*

# CVG-KR10D INSTRUCTION MANUAL