



Integrity

**ADC-531
YUV/RGB to SDI Converter**

User Manual

Revised December 2004

OVERVIEW

The Integrity System **ADC-531 YUV/RGB to SDI Converter** is a modular card for Integrity system frames. It converts one component analog video source to serial digital video and then produces four identical SDI outputs conforming to SMPTE 259M Part C standards for 270 Mb 4:2:2 component serial digital video. The CAV input may be any one of several formats: RGB (with sync on green channel), RGSB (with separate sync), YUV Beta, YUV M-II, EBU-1 or EBU-2. This election is performed in a software user menu accessible via the RCI-300 Setup Tool for PC, or from any RCP series control panel during operation.

INSTALLATION

Install the card in any FRM-301, FRM-304, FRM-501 or FRM-504 system frame. The card may be hot-plugged.

CONNECTIONS

Connect video cables as described.

For RGB sources:

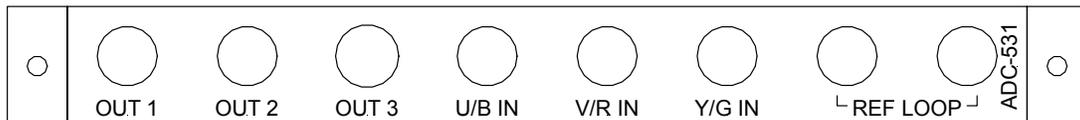
Y/G IN	GREEN channel, with sync on green
U/B IN	BLUE channel
V/R IN	RED channel

For RGSB sources:

Y/G IN	GREEN channel
U/B IN	BLUE channel
V/R IN	RED channel
SYNC	SYNC channel (Composite Sync or black Reference)

For YUV sources: (Y Cr Cb or Y R-Y B-Y)

Y/G IN	Y channel luminance
U/B IN	U, B-Y or Cb channel
V/R IN	V, R-Y or Cr channel



Rear Connector View

MENU FUNCTIONS

The ADC-531 controls described below are menu-driven. The menu layout and order may change on different model control panels. The functional descriptions below apply to all control panels.

Input Format

Set the INPUT FORMAT control to match the type of the analog video source signal.

Input Format

RGB

RGBS

YUV EBU 1

YUV EBU 2

YUV BETA

YUV M-II

Component Proc

Selecting Component Proc presents the video “Proc Amp” controls as YUV (or RGB) channel gains. This provides direct management of each input channel gain. In addition, a digital HUE control is presented, allowing the user to rotate the composite hue, even though you are still operating in 4:2:2 component color space. This function provides the means to correct a composite hue error present in the original VTR recording when played back on a component analog VTR output.

COMPONENT PROC

Y/G GAIN

U/B GAIN

V/R GAIN

HUE

Standard Proc

Selecting Standard Proc presents the video “Proc Amp” controls as Video Gain, Black Level, Chroma Level and Hue instead of YUV (or RGB) channel gains. This is easier for some users to operate, with more predictable results, when looking at a waveform monitor and vectorscope downstream of the outputs.

STANDARD PROC

GAIN

BLAC

CHROMA

HUE

Restore Presets

Select RESTORE PRESETS to snap all video proc amp controls back to their default (unity gain) settings.

RESTORE PRESETS**Configure**

Select CONFIGURE to access advanced user menus.

CONFIGURE**Timing**

Select TIMING submenu to adjust the Horizontal and Vertical video position controls. Note: the ADC-531 is NOT a synchronizer. The source must be genlocked to house reference and H and V timing adjusted at the source.

TIMING**H VIDEO POS****V VIDEO POS****A/V Button**

This setting configures the AUDIO button on RCP-503, RCP-502, and RCP-303 control panels to navigate to the selected audio board. This is used to create a “logical pair” when audio is associated with this video card.

A/V BUTTON**Audio Slot 1-18****Name Card**

Select NAME CARD to set an “alias name” for this card, such as “VTR 5”. Names may be up to eight characters in length, and characters may include A-Z, a-z, 0-9, space, and hyphen.

NAME CARD

Card Info

Select CARD INFO to view the model name and software version installed in the card. Please review this information when calling the factory for support or adding updates to control panels.

**CARD INFO
VERSION**

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