Xintekvideo
INC.

RANDOM NOISE REDUCER/ COMPONENT TO SDI CONVERTER MODEL SDI 330

AN ADVANCED NOISE REDUCER/ SDI CONVERTER FEATURING:

*Xintekvideo's VIP Technology
A digital Video Improvement Processor engine utilizing advanced filtering techniques with motion compensation to provide over 9 dB of random noise reduction with no objectionable artifacts. 12-bit processing, 10-bit quantizing.

*Independent Noise Reduction of Luminance and Color Difference Signals
It permits video processing optimization for all types of random noise.

*Xintekvideo's Auto Noise Reduction Technology
Automatic setting of noise reduction level based on input video quality.

*Serial Digital Output
Two D1 serial digital outputs for D1 serial interfacing.

*Optional Analog Components Output
For easy monitoring of system performance.

DESCRIPTION:
The Model SDI 330 is a high quality random noise reduction processor utilizing Xintekvideo's exclusive **VIP** technology. **VIP** (**V**ideo **I**mprovement **P**rocessor) is a proprietary system that utilizes recursive filtering techniques in conjunction with sophisticated motion compensation to achieve outstanding noise reduction performance. The performance of the system is particularly startling when applied to very noisy video signals. (Try using other noise reducer with very noisy pictures and look at the artifacts generated by those processors!).

The Model SDI 330 delivers over 9 dB's of S/N improvement for both luminance and color difference signals. Independent control of luminance and color difference noise reduction permits optimum processing for many types of random noise, e.g. plain "snow", color streaking, extraneous interference and beats. Intelvideo's unique AUTO noise reduction permits optimum hands-off operation.

The SDI 330 is ideal for transmission links utilizing digital compression techniques (e.g. MPEG), where random noise can severely affect compression efficiency. It is highly effective in video production applications to improve picture quality from poor tapes or old films. The SDI 330 utilizes large gate array technology to deliver stable performance at an extremely competitive price.

Random Noise Reducer / SDI Converter

Model SDI 330

Specifications:

Input:

Y, R-Y and B-Y video signals	1 volt peak to peak for Y, 0.7v pp for color difference signals 75% Color Bars, into 75 Ohms. Return Loss >40dB
Reference input	Black burst or composite NTSC color video. Looped through, high impedance input.

Output:

Two D1 serial digital outputs	SDI interface level at 75 Ohms
Optional Y, R-Y, B-Y analog outputs	At the same levels as the inputs

Video Specifications:

Frequency Response	Flat response (+/- .5 dB) out to 4.5 MHz for Y -6dB at 1.7 MHz for Color Differences
Non-Linearity	<1% plus quantizing effect
K Factor with 2T Pulse	Better than 1%
Frame Tilt	Less than 2%
Y to Color Differences relative timing	+/- 25ns
Luminance Noise Reduction	0 dB to 9 dB of noise reduction (motion and initial picture quality dependent).
Color Difference Noise Reduction	Same as for Luminance
Input to Output delay	2usec, nominal
Quantizing accuracy	10-bit

Environmental:

Temperature	40^0F to 105^0F, Ambient
Humidity	10% to 90% non-condensing

Power:

120 volts AC, 60Hz, 15 Watts

Mechanical:

1.75"H, 19"W, 9"D, 7Lbs

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