

8090

## HD/SD 12-bit Analog to Digital Converter

with Universal Inputs

BLUE  
BOX

The 8090 is a HD/SD universal input 12-bit analog-to-10-bit SDI converter. The 8090 accepts HD component and SD component, composite and Y/C. Differential analog inputs are used for common

mode noise rejection. A 5-line adaptive comb or notch filter is used for Y/C separation in composite SD mode. SD inputs are oversampled to 54 MHz and the output circuitry includes a VCXO filter to reduce jitter. The unit offers full user proc control with user memory that provides adjustment of white level, black level, color gain, and color phase.

### FEATURES

Dual rate universal analog inputs with 12-bit A/D

Four HD/SD-SDI outputs

Composite, component (YPbPr and RGB) and Y/C inputs

Supports component BetaCam™, MII™ and SMPTE/N10

Differential inputs for power hum rejection

5-line adaptive comb filter for SD-composite mode

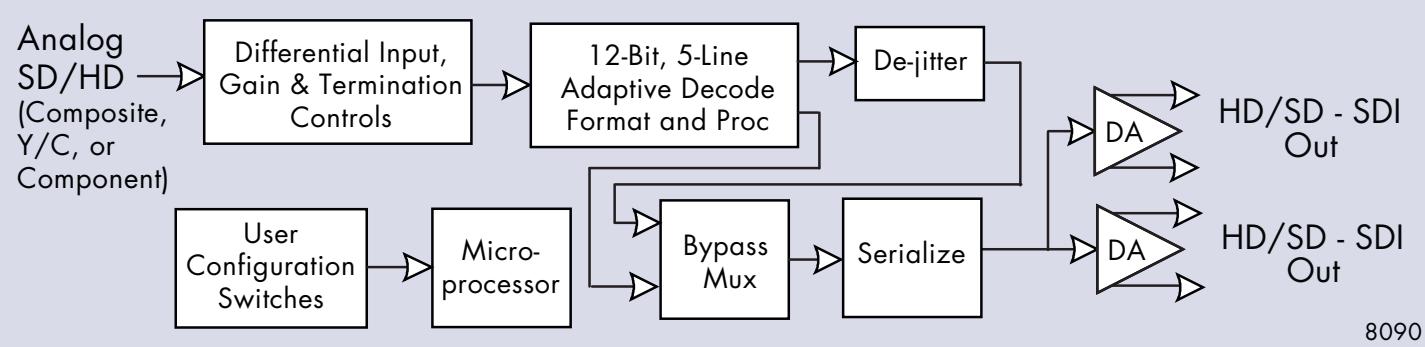
Internal color bar generator

External user configuration switches

Internal user proc configuration control

Manual or automatic input gain control

Five year warranty



### SPECIFICATIONS

**Input**HD component YPbPr/RGB  
SD component YPbPr/RGB, Y/C, composite**Frequency Response**HD: Y 0-25 MHz +/- 0.3 dB  
Pb/B, Pr/R 0-13.5 MHz +/- 0.3 dB  
SD 5.2 MHz +/- 0.25 dB**Power**5-18 VDC @ 4 watts  
Requires Power Supply  
PS11 or PS12**Analog Gain**

Auto or manual mode

**SNR**

&gt;52 dB

**Output**

4 HD/SD-SDI

**SD Comb Filter**

5-line adaptive

**Output Jitter**

&lt; 0.16 UI measured with color bar input

**Proc. Control**

Digital control of gain, DC, saturation and hue with user values saved and factory presets

**A/D Process**

HD: 4:4:4 SD: 8:8:8

**Size**

5.5" x 3" x 1" (139 x 77 x 26 mm)

### ORDERING INFORMATION

**8090** A to D Decoder HD/SD Dual-Rate 12-bit with Video Processing Controls and 5-line Comb for SD Inputs**PS11** Universal Power Supply, UL/CSA, Input: 100-240 60/50 Hz, Output: 5V 1.5A**PS12** Universal Power Supply, IEC Connector, CE/UL/CSA, Input: 100-240 60/50 Hz, Output: 5V 2A (PS12 International Power Supply. Specify country of destination.)