

## AC031: HD/SD 12-bit Analogue to Digital Converter with Universal Inputs

## AC032: HD/SD 12-bit Analogue to Digital Converter with Universal Inputs and Frame Synchroniser

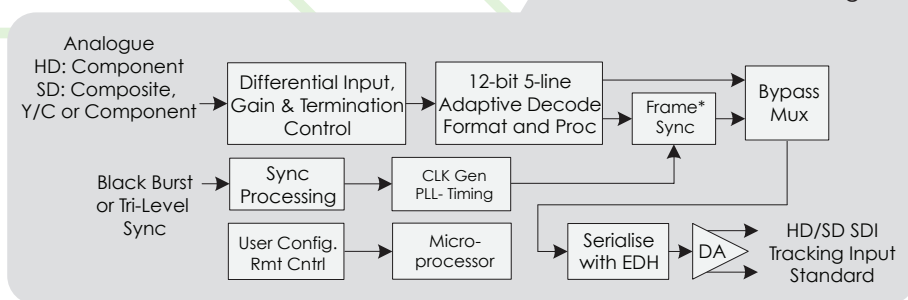
The AC031 is a multi-rate HD/SD universal input full featured high quality 12-bit analogue to 10-bit serial digital converter with EDH. The AC032\* adds a frame sync with infinite pixel phasing. Both units accept HD component and SD: component, composite and Y/C. The analogue inputs are differential 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 over-sampled to 54-MHz and the output circuitry includes a VCXO filter to reduce jitter. Full user digital proc. control, with user memory allows digital adjustment of gain, DC offset, saturation and hue in both remote and local modes. Factory presets enable a return to factory settings.

## Analogue to Digital Converters Features

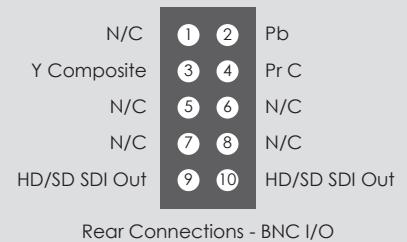
- HD/SD universal analogue inputs with 12-bit A/D
- Two HD/SD-SDI outputs with EDH
- SD: Composite, Y/C, component (YPbPr/RGB)  
HD: Component (YPbPr/RGB)
- Supports component BetaCam™, MIITM and SMPTE/N10
- Differential inputs for power hum rejection
- 5-Line adaptive comb filter for SD-Composite mode
- Frame Sync option (AC032\*) Infinite pixel phasing
- Internal colour bar generator
- Local or remote user configuration & Proc. controls
- Manual or automatic input gain control
- Five year warranty

AC031/AC032 Block Diagram



Features and specifications subject to change without notice

RM-AC031-A & RM-AC032-A Rear Con.



## Specifications

### HD Analogue Input

YPbPr or GBR SMPTE

### SD Analogue Input

Composite, Y/C or component RGB (RGB and YpPr in BetaCam™, MIITM or SMPTE/N10 levels)

### HD Frame Rates

1080i 23.98/24/25/29.97/30/50/59.94/60  
1080p 23.98/24/25/29.97/30  
1080sF 23.98/24  
720p 25/29.97/30/50/59.94/60

### SD Standards

525 / 625 NTSC (M, Japan, 4.43), PAL (B, D, G, H, I, M, N, Nc) and SECAM (B, D, G, K, K1, L)

### Digital Output

Two HD/SD-SDI with EDH

### A/D Process

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

### Resolution

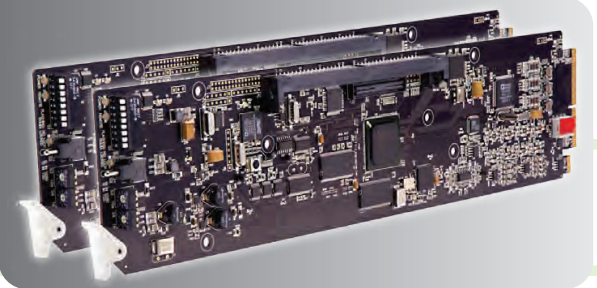
12-bit A to D and 10-bit video data path

### SD Comb Filter

5-line Adaptive

### Proc. Control

Digital control of gain, DC, saturation & hue with User values saved and Factory presets



### Power

7 watts

### Size

12.9" x 3" (33mm x 7.5mm)  
For use with openGear™ frames



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