

Up/Down/Cross Converter with HD/SD-SDI Input, RGB Colour Corrector, Frame Sync

The FC064 is an RGB Colour Corrector with YCbCr proc features and a frame sync that processes HD/SD-SDI signals in all formats.

The RGB processing controls provide full offset, gain and gamma adjustments. The YCbCr proc controls provide lift, gain, saturation, phase, white clip (hard and soft), black clip, and colour saturation clip. Parameter updates are smooth and responsive, providing real-time adjustments.

Even though the card provides extensive control of the signal from the RGB perspective, it will continue to pass those signals that fall outside of the RGB gamut. Plug and YCbCr limit ramp signals pass without modification. When the YCbCr saturation clip is activated,

the saturation limiting operation will not affect the colour phase.

The FC064 also includes AFD functions that detect the incoming AFD code, allow independent custom ARC to be applied for each incoming AFD code, and set the desired AFD code to be inserted on the output, even if there is no code detected on the input.

Closed captions and timecode are preserved through up, down, and cross conversions. 708/608 CC data is extracted from the transport stream and converted to line 21 data on a downconversion. On an upconversion, it is decoded from line 21 and inserted into the transport stream on a user-selectable line.

Features

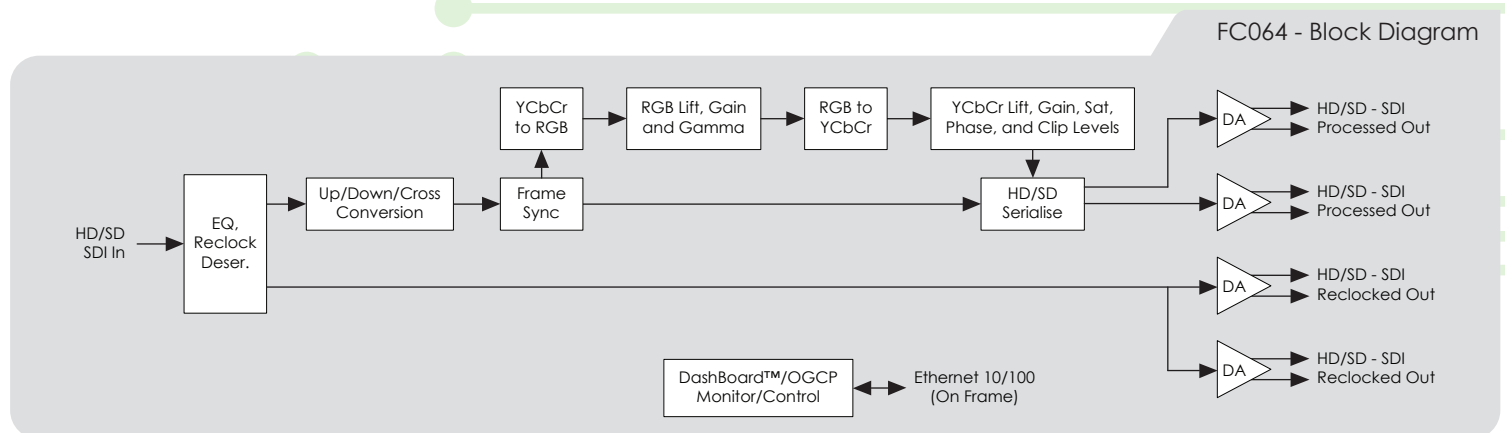
- HD/SD digital inputs
- Up, down, cross and aspect ratio conversion
- Full RGB colour corrector (offset, gain, gamma)
- Extended YCbCr proc controls with white hard clip, white soft clip, black hard clip, and saturation clip
- Phase preserved when applying saturation clip
- AFD code insertion and AFD ARC Control
- Passes entire YCbCr gamut in unity gain configuration
- One button bypass of colour correction for comparison purposes
- Parameter updates are smooth and responsive, excellent for on-air manipulation
- On-card storage of 16 presets
- Local control from full card edge menu with character display
- Remote control/monitoring via DashBoard™
- Detail enhancement and noise reduction
- Frame sync
- Five year warranty

Ordering Information

FC064 Up/Down/Cross Converter with HD/SD-SDI Input, RGB Colour Corrector, Frame Sync

RM-FC064-A Rear I/O Module (Single Slot) HD/SD-SDI Input, 4 SDI Reclocked Outputs, 4 SDI Processed Outputs

OGCP-9000/CC 2RU Remote Control Panel for Colour Correctors and all 9000 Series COMPASS™ Cards (Specify country of destination for power cord)



Features and specifications subject to change without notice



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**Product Selection
Guide**

	FC061	FC062	FC064	FC066	FC067	FC068	FC821
HD/SD-SDI Inputs	1	1	1	1	1	1	1
HD/SD-SDI Processed Outputs	2	4	4	2	4	4	4
HD/SD-SDI Input Copies	0	4	4	0	4	4	4
Analogue Video Input	•			•			
Analogue Video Output							•
Analogue Audio Input	•			•			
HD Support	•	•	•	•	•	•	•
SD Support	•	•	•	•	•	•	•
Remote Control & Monitoring	•	•	•	•	•	•	•
SNMP	•	•	•	•	•	•	•
AES Embedding	•			•			
AES De-Embedding	•			•			
Frame Sync	•	•		•	•		
Up Conversion	•	•	•	•	•	•	
Down Conversion	•	•	•				•
Cross Conversion	•	•	•				
HD <-> SD Closed Captioning	•	•	•	•	•	•	•
HD <-> SD Timecode Conversion	•	•	•	•	•	•	•
HD <-> SD Emb Audio Conversion	•		•	•	•	•	•
Embedded Audio Delay	•	•		•	•		
Adjustable Video Delay	•	•		•	•		
AFD ARC Control	•	•	•	•	•	•	
AFD Code Insertion	•	•	•	•	•	•	
Audio Downmixing	•	•		•	•		
Colour Correction			•				

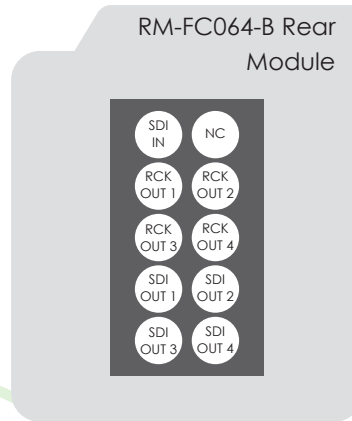


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Specifications

Electrical

17 watts

HD/SD-SDI Input

Number of Inputs: 1
Standard: SMPTE 292 and 259M
Return Loss: >15 dB at 5 MHz - 1.485 GHz

Reference Video Input

Number of Inputs: 2 looping (openGear™ frame)
Standard: Tri-level sync (SMPTE 274) and Black Burst (NTSC and PAL)

HD/SD-SDI Output

Number of outputs: 4 Reclocked 4 Processed
Standard: SMPTE 292 and 259M
Signal Level: 800 mV nominal
Return Loss: >15 dB at 5 MHz - 270 MHz >12 dB at 270 MHz - 1.485 GHz

Jitter: HD: < 0.15 UI
SD: < 0.10 UI
Embedded Audio: 16-Ch SD/HD
RGB Colour Correction:
RGB Black Adjust (one per primary): -100% to 100% in 0.1% steps

RGB White Adjust (one per primary): 0% to 200% in 0.1% steps
RGB Gamma Control (one per primary): 0.125 to 8.0 in 0.001 steps

YCbCr Proc Amp:
White Adjust (Gain): 0 to 200% in 0.1% steps
Black Adjust (Lift): -100% to 100% in 0.1% steps

C Gain (Saturation): 0% to 200% in 0.1% steps

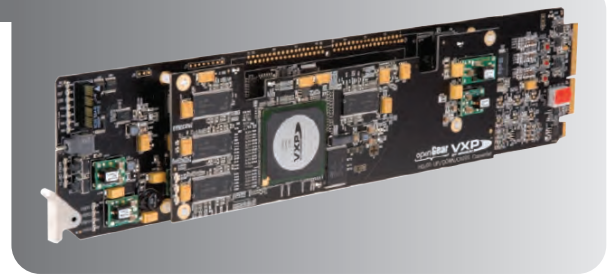
Colour Phase: -360° to + 360° in 0.1 degree steps

YCbCr
Clipper:
Y Black hard clip (values limited at or above): -6.8% to 50% in 0.1% steps
Y White hard clip (values limited at or below): 50% to 109.1% in 0.1% steps

Y White soft clip (values rolled off at): 50% to 109.1% in 0.1% steps

CbCr Saturation clip (values limited at or below):

50% to 160% in 0.1% steps



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