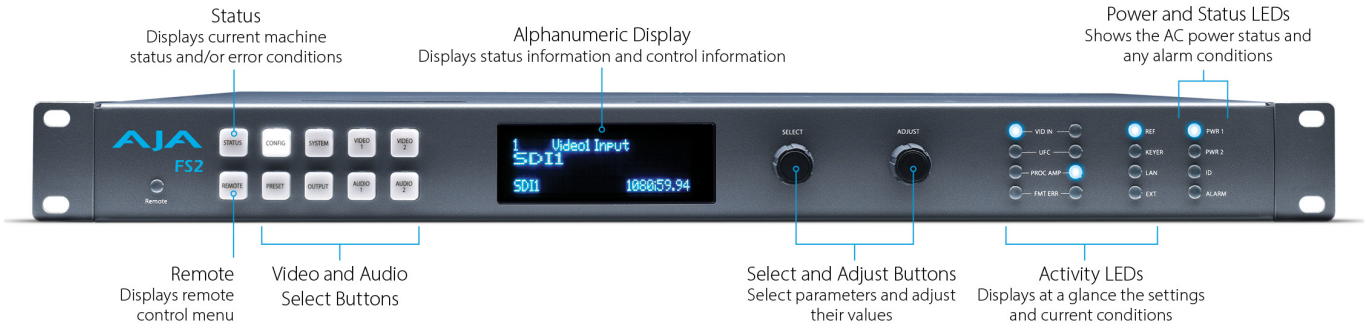
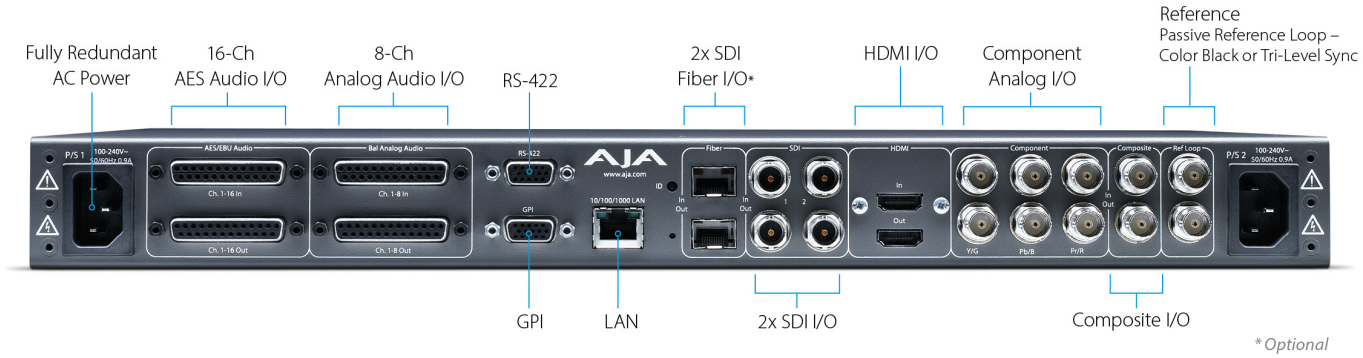
FS2

With dual-channel conversion and frame synchronizing in a slim 1RU space, FS2 can do the work of two separate devices or combine both processors together for maximum flexibility.

$4499 US MSRP

https://www.aja.com/products/fs2





Video Formats

- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1920 x 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1920 x 1080i 25, 29.97, 30
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Input	Possible Output Formats		
525i59.94	525i59.94	720p59.94	1080i59.94
720p59.94	525i59.94	720p59.94	1080i59.94
1080i59.94	525i59.94	720p59.94	1080i59.94
1080pSF23.98	1080pSF23.98	1080i59.94	525i59.94
625i50	625i50	1080i50	720p50
720p50	625i50	1080i50	720p50
1080i50	625i50	1080i50	720p50
1080pSF24	1080pSF24	1080i60	
1080i60	1080i60	720p60	
720p60	720p60	1080i60	

Notes:

- In the case of 1080PsF 23.98 input - and when 1080i 59.94 (or 525i) is selected as an output format, the FS2 automatically does 3:2 pulldown to get the correct frame rate. Similarly, in the case of 1080pSF/24 input, FS2 automatically does 3:2 pulldown to get the correct frame rate.
- When passing 24 or 60 frame rate video, output is high definition.

Video Input Digital

- Dual 3G-SDI, SMPTE-259/292/424, 8 or 10-bits
- Dual Fiber 3G-SDI, SMPTE-297, 8 or 10-bits (optional)
- Dual Channel LC connector module
- Single Channel LC connector module
- Single Channel SC connector module
- Single Link 4:2:2 (1x BNC each)
- HDMI v1.3 30-bits/pixel, RGB or YUV, 2.25 Gbps, SD, HD, 1080p 50/6060

Video Input Analog

- HD component YPbPr, SMPTE-274 (3x BNC)
- 12-bit A/D, 2x oversampling
- SD Component (3x BNC)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J
- 12-bit A/D, 4 x oversampling
- +/- .25 dB to 5.5 MHz Y frequency response
- +/- .25 dB to 2.5 MHz C frequency response
- .5% 2T pulse response
- <2 ns Y/C delay inequity
- SD Composite
- 12-bit A/D, 4x oversampling

Video Output Digital

- Dual SD/HD/3G SDI, SMPTE-259/292/424, 8 or 10-bits
- Dual Fiber 3G-SDI, SMPTE-297, 8 or 10-bits (optional)
- Dual Channel LC connector modules
- Single Channel LC connector module
- Single Channel SC connector module
- Single Link 4:2:2 (1x BNC each)
- HDMI v1.3 30-bits/pixel, RGB or YUV, 2.25 Gbps, SD, HD, 1080p 50/60

Video Output Analog

- HD component YPbPr, SMPTE-274 (3x BNC)
- 12-bit D/A, 2x oversampling
- SD Component (3x BNC)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J
- 12-bit D/A, 4x oversampling
- +/- .25 dB to 5.5 mHz Y frequency response
- +/- .25 dB to 2.5 mHz C frequency response
- .5% 2T pulse response
- <2 ns Y/C delay inequity
- SD Composite
- 12-bit D/A, 4x oversampling

Audio Input Digital

- 16-Channel, 24-bit SMPTE-272/299 SDI embedded audio, 48 kHz sample rate, synchronous
- 16-Channel, 24-bit AES/EBU audio, 48 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (8x XLR via 25-pin breakout cable)

Audio Input Analog

- 8-Channel, 24-bit A/D analog audio, 48 kHz sample rate, balanced (8x XLR via 25-pin breakout cable)
- +12 dBu, +15 dBu, +18 dBu, +24 dBu (Full Scale Digital)
- +/- 0.2 dB 20 to 20 kHz frequency response

Audio Output Digital

- 16-Channel, 24-bit SMPTE-272/299 SDI embedded audio, 48 kHz sample rate, synchronous
- 16-Channel, 24-bit AES/EBU audio, 48 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (8x XLR via 25-pin breakout cable)

Audio Output Analog

- 8-Channel, 24-bit A/D analog audio, 48 kHz sample rate, balanced (8x XLR via 25-pin breakout cable)
- +12 dBu, +15 dBu, +18 dBu, +24 dBu (Full Scale Digital)
- +/- 0.2 dB 20 to 20 kHz frequency response

Up-Conversion

- Hardware: 10-bit
- Anamorphic: fullscreen
- Pillarbox 4:3: results in a 4:3 image in center of screen with black sidebars
- Zoom 14:9: results in a 4:3 image zoomed slightly to fill a 14:9 image with black side bars
- Zoom Letterbox: results in image zoomed to fill fullscreen
- Zoom Wide: results in a combination of zoom and horizontal stretch to fill a 16:9 screen; this setting can introduce a small aspect ratio change

Down-Conversion

- Hardware: 10-bit
- Anamorphic: fullscreen
- Letterbox: image is reduced with black top and bottom added to image area with the aspect ratio preserved
- Crop: image is cropped to fit new screen size

Cross-Conversion

- Hardware 10-bit
- 1080i to 720p
- 720p to 1080i
- 720p to 1080PsF

SD to SD Aspect Ratio Conversion

- Letterbox: This transforms SD anamorphic material to a letterboxed image
- H Crop: Will produce a horizontally stretched effect on the image; transforms anamorphic SD to full frame
- SD Pillarbox: Will produce an image in the center of the screen with black borders on the left and right sides and an anamorphized image in the center
- V Crop: Will transform SD letterbox material to an anamorphic image

Timecode

- SDI RP188 via SDI BNC

Reference Input

- External, 2x BNC
- Looping, nonterminating
- Blackburst or tri-level sync

Network Interface

- 10/100 Ethernet (RJ-45)
- Embedded web server for remote control
- VTECS™ protocol for Remote Control Panel

User Interface

- Alphanumeric display, with dedicated buttons/knobs

Machine Control

- GPI in/out, 15-pin D-connector
  - Pinout is as follows:

1	GND	9	GPI OUT 2
2	GPI IN 1	10	GPI I/O GND 3
3	GPI IN 2	11	GPI I/O GND 4
4	GPI IN 3	12	GPI OUT 3
5	GPI I/O GND 1	13	GPI OUT 4
6	GPI I/O GND 2	14	NC
7	GPI IN 4	15	GND
8	GPI OUT 1		

Size (w x d x h)

- 17.25" x 14.5" x 1.75" 1RU (438.15 x 368.3 x 44.45 mm)

Weight

- 7.9 lb (3.6 kg)

Power

- 100-240 VAC 50/60 Hz, (Dual, redundant power supplies), 55W typical; 80W max.

Environment

- Safe Operating Temperature: 0 to 40 C (32 to 104 F)
- Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)