![AJA VIDEO SYSTEMS logo]

Ki Pro Rack

The power of Ki Pro in a 1RU format, the perfect fit for your file based workflow.

With a wealth of professional connections including SDI and HDMI, Ki Pro Rack will fit right into your existing cabling and routing system. Ki Pro Rack also features AJA's industry leading conversion technology, enabling you to perform broadcast quality up, down, cross-conversion during recording or playback without the need for additional conversion hardware.

https://www.aja.com/products/ki-pro-rack
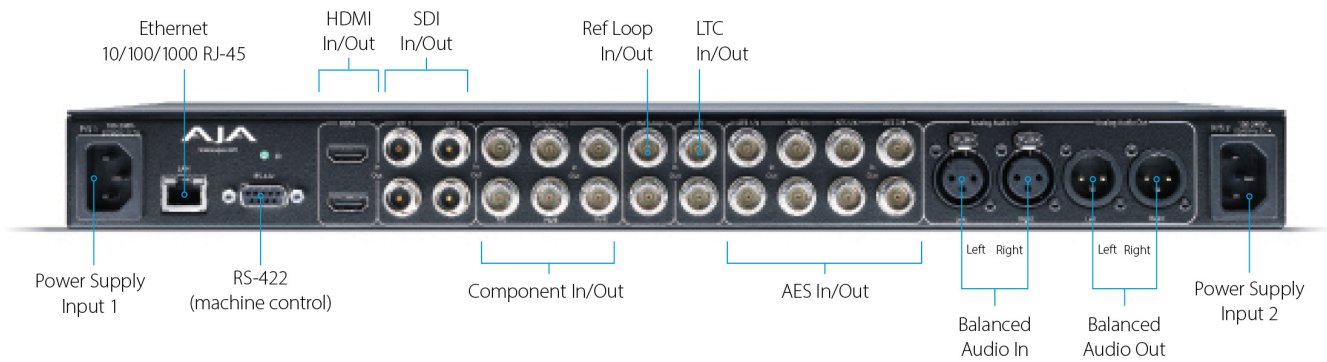
Video Formats

- 1080i 25, 29.97, 30
- 1080PsF 23.98, 24, 25*, 29.97*
- 1080p 23.98, 24, 25, 29.97
- 720p 23.98*, 25*, 29.97*, 50, 59.94, 60
- 625i 25
- 525i 29.97

*25 and 29.97 require a valid camera source and the use of the Record Type>PsF selection

Codec Support

- Apple ProRes 422
- Apple ProRes 422 (HQ)
- Apple ProRes 422 (LT)
- Apple ProRes 422 (Proxy)
- Avid DNxHD HQX (220x)
- Avid DNxHD SQ (145)
- Avid DNxHD LD (36), only provides support for the 1080p format

Removable Storage

- AJA KiStor modules - 2 slots with rollover recording

Video Input Digital

- SD/HD SDI, SMPTE-259/292, 10-bit
- Single Link 4:2:2 (2 x BNC, input selection in software)
- HDMI v1.3

Video Output Digital

- SD/HD SDI, SMPTE-259/292
- Single Link 4:2:2 10-bit (1 x BNC)
- HDMI v1.3

Note: HDMI requires 1080i, 720p or 1080p to be active; HDMI does not provide support for PsF

Video Input Analog

- SD/HD Component (3 x BNC)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J
- 12-bit A/D, 2 x oversampling
- +/- .25dB to 5.5 mHz Y frequency response
- +/- .25dB to 2.5 mHz C frequency response
- .5% 2T pulse response
- <2 ns Y/C delay inequity, or Composite (1 x BNC – CVBS on Y)

Video Output Analog

- Component (3 x BNC)
- NTSC, NTSCJ, PAL
- HD: YPbPr, RGB
- SD: YPbPr, RGB (component mode)
- SMPTE/EBU N10, Betacam 525 line, Betacam 525J, RGB
- 12-bit D/A, 8 x oversampling
- +/- .2dB to 5.5 mHz Y frequency response
- +/- .2dB to 2.5 mHz C frequency response
- .5% 2T pulse response
- <1 ns Y/C delay inequity, or Composite (1 x BNC – CVBS on Y)
- +/- .2dB to 5.0 mHz Y frequency response
- +/- .2dB to 1 mHz C frequency response
- <1% Diff Phase
- <1% Diff Gain

Audio Input Digital

- 8-channel, 24-bit SMPTE-272/299 SDI embedded audio, 48 kHz sample rate, synchronous
- 8-channel, 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous
- 8-channel, 24-bit AES/EBU audio, 48 kHz sample rate, synchronous or nonsynchronous, internal sample rate conversion (4 x BNC)

Audio Input Analog

- 2-channel, 24-bit A/D analog audio, 48 kHz sample rate, balanced (2 x XLR)
- +24 dBu full scale digital

- +/- 0.2 dB 20Hz to 20 kHz frequency response (Note: Line or Mic selection via CONFIG menu parameters)

Audio Output Digital

- 8-channel, 24-bit SMPTE-272/299 SDI embedded audio, 48 kHz sample rate, synchronous
- 8-channel, 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous
- 8-channel, 24-bit AES/EBU audio, synchronous or nonsynchronous, internal sample rate conversion (4 x BNC)

Audio Output Analog

- 2-channel, 24-bit D/A analog audio, 48 kHz sample rate, balanced (2 x XLR)
- +24 dBu full scale digital (0dbFS)
- +/- 0.2 dB 20 Hz to 20 kHz frequency response
- Stereo unbalanced headphone (1 x 3.5mm mini jack)

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

Timecode

- SDI RP188/SMPTE 12M via SDI BNC
- HDMI (when used with compatible cameras)
- LTC Input (1x BNC)
- LTC output (1x BNC) (Note: active during playback not during record or EE)

Reference Input

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

Network Interface

- 10/100/1000 Ethernet (RJ-45)
- Embedded web server for remote control

User Interface

- 2x 20 character display, with dedicated buttons

Closed Captioning Support

- CEA-708, CEA-608

Machine Control

- RS-422, 1x DE-9 female connector, Sony 9-pin protocol
- 9-pin D-connector pinout is as follows:

1	GND
2	TX-
3	RX+
4	GND
5	No Connection
6	GND
7	TX+
8	RX-
9	GND
Shell	GND

Size (w x d x h)

- 19.0" x 12.5" x 1.75" (482.6mm x 317.5mm x 44.5mm)

Weight

- 7.3 lb (3.4 kg)

Power

- 100-240 VAC 50/60 Hz, dual, redundant power supplies, 40W typical

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)