Ki Pro ULTRA Plus

Multi-Channel HD Recorder
4K/UltraHD/2K/HD Recorder and Player

HDR  ProRes  Avid DNxHD® MXF  Avid DNxHR® MXF
Ki Pro Ultra Plus is a multi-channel Apple ProRes® recorder offering up to 4-Channels of simultaneous HD recording, or in Single-Channel mode a 4K/UltraHD/2K/HD Apple ProRes, Avid DNxHR® MXF for 4K/UltraHD or Avid DNxHD® MXF recorder and player. Ki Pro Ultra Plus supports the latest large raster high frame rate workflows, up to 4K 60p with HDR playout and recording.

3G-SDI, fiber and full HDMI 2.0 digital video connectivity plus a wealth of analog and digital audio connectivity answers any project’s demand for efficient, powerful and flexible workflows.

Supported video formats and frame rates include 4K/UltraHD/2K/HD recording and playback up to 4:4:4 60p, or up to 4-Channels of simultaneous HD recording with broad video format support and flexible input-output connectivity, including HDMI 2.0 with HDR output and fiber.

$3,995 US MSRP*

Ki Pro Ultra Plus offers 4K/UltraHD/2K/HD recording and playback up to 4:4:4 60p, or up to 4-Channels of simultaneous HD recording with broad video format support and flexible input-output connectivity, including HDMI 2.0 with HDR output and fiber.

Multi-Channel HD Recorder

4K/UltraHD/2K/HD Recorder and Player

Supports the latest technologies and workflows, including up to 4K 60p with HDMI 2.0 support and HDR.

Ki Pro Ultra Plus supports a broad range of video formats and frame rates, recorded directly to AJA’s proven and reliable SSD-based Pak Media, available in capacities up to 2TB.

Next generation pristine 4K/UltraHD 50/60p recording is easily supported, with full rollover capabilities from Pak Media drive to drive. This ensures long recording times for the most demanding projects.

Smooth slow motion playback can be obtained easily with full control via the RS-422 serial connection or through the simple and intuitive on unit menu system and through the Ki Pro Ultra Plus’ web interface.

Menus and images are beautifully rendered on a new high resolution LCD display enabling detailed playback and monitoring in all environments.

Ki Pro Ultra Plus, the ultimate next generation digital recorder and player.

* Pricing is for US only. International pricing will vary. Please contact a local AJA Reseller for pricing details.
**4K, 12-bit Full Raster Workflows**

Next generation 4K/UltraHD 50/60p recording and playback are attainable at up to ProRes HQ quality when using AJA Pak 2000 media. 4K/UltraHD is supported through 4x 3G-SDI, HDMI 2.0 or optional Fiber inputs and outputs.

Ki Pro Ultra Plus not only supports true 4K at 4096 x 2160p for digital cinema and 3840 x 2160 UltraHD for broadcast production, it also offers the color depth to match with ProRes 4444 (XQ) for recording/playback rates up to 30p.

Any shoot or project benefits from the rich colors and smooth gradations across the luminance and chroma range that 12-bit 4:4:4 makes possible.

VFX work benefits from Ki Pro Ultra Plus’ 12-bit support on Apple ProRes 4444 files, resulting in clean, green screen plates across 4K/UltraHD/2K/HD resolutions for manipulation in postproduction. With full HDMI 2.0, you can monitor it all from 4:2:2 YCbCr to full 4:4:4 RGB in 12-bit.

**HDR Playout and Recording**

Ki Pro Ultra Plus with HDMI 2.0 support enables playout of your HDR (High Dynamic Range) and WGC (Wide Color Gamut) materials to HDR capable HDMI displays. A simple menu setting allows the selection of the correct EOTF (Electric-Optical Transfer Function) for the video at hand, whether encoded as PQ based HDR10 or as HLG.

Static HDR infolframe data is transmitted to the HDR HDMI capable display by selecting the appropriate HDR format, letting the display know that it is receiving HDR encoded material. This allows the display to correctly map HDR color and luminance information appropriately.

Your footage comes to life with the extended color gamut of BT.2020 as compared to SDR video, with brighter specular highlights and a wider range of blacks to bring water, night scenes and shadows to life.

Ki Pro Ultra Plus also supports the capture of HDR footage with support for HLG over SDI and HLG and HDR10 over HDMI.

**Multi-Channel HD Recording**

Simultaneously record 1, 2, 3 or 4-Channels of up to 1080p 50/60 HD as beautiful Apple ProRes.

Multi-channel recording with Ki Pro Ultra Plus provides individual, discrete recordings for each input that are timecode accurate and ready to be imported directly into a multi-channel editing sequence. No additional conversion or software is required, just drag and drop the files directly from the Pak media into your edit.

Ki Pro Ultra Plus even allows independent profile support per channel in Multi-Channel mode; for example, select high resolution Apple ProRes HQ for high quality finishing and use a second input to record Apple ProRes (Proxy) for an efficient editing pipeline.

Starting with Input 1, add channels as needed in order when utilizing like raster size and frame rate, and record your HD Apple ProRes files on the same AJA Pak media. Ki Pro Ultra Plus even allows rollover to a second Pak drive for hours of uninterrupted multi-channel recording.

**Reliable Storage Media**

Ki Pro Ultra Plus records to robust and field proven SSD-based AJA Pak media, with capacities up to 2TB. Pak media supports 4K recording up to 60p in ProRes HQ and offers very long record times for multi-channel HD capture.

Losing one or several feeds during a multi-channel shoot can cause major sync issues during the editing process that can be lengthy to resolve. But Ki Pro Ultra Plus is designed so that as soon as a loss in signal is detected on any of the inputs, a color bars frame with the legend “Loss Of Signal” is recorded until the input is restored or the shoot ends. This way, all multi-channel clips have the same timecode duration and will align perfectly within any NLE. This function works with each input to Ki Pro Ultra Plus and will even function in Rollover mode.

New Forced Rollover support allows users to force a rollover recording to the second Pak Media port at any point, allowing quick extraction of the first Pak media drive for fast transfer to editing environments, playout servers and more, while recording continues.
Professional Connections

The video and audio connections on the rear panel of the Ki Pro Ultra Plus offer next generation connectivity with 3G-SDI, HDMI 2.0 and fully integrated fiber* inputs and outputs. Fiber allows direct incorporation into dedicated fiber networks for transmission and reception as far as 10km. AES and analog XLR balanced audio, LTC, RS-422 and LAN, plus headphone jack and unbalanced RCA analog audio out all included. New analog audio mapping settings allows mapping of incoming channel pairs to desired recording tracks for ease of use in the field.

* SFP modules not included

Record to External Storage

Pak-Adapt-eSATA (sold separately) is a Pak Media sized adapter with an eSATA connector that allows the user to attach a qualified RAID or single volume storage via an eSATA cable so that it may be used as a recordable drive. eSATA connectivity provides the bandwidth needed for 4K 422 HQ at up to 30fps. You can even connect two Pak-Adapt-eSATA to the Ki Pro Ultra Plus for even longer recording times.

4K and HD Monitoring

Ki Pro Ultra Plus provides full resolution inputs and outputs for 4K, UltraHD and HD over 3G-SDI, fiber and HDMI 2.0, including the latest affordable UltraHD monitors for on-set quality checks and single cable simplicity with HDMI 2.0 for both capture and playback. Using AJA’s proven conversion technology, an additional dedicated 2K and HD-SDI monitor output can be fed to any HD-SDI display, even if you’re recording in 4K mode.

Simple Control

Ki Pro Ultra Plus is simple to manage and control with a built in Websvserver presenting its elegant GUI to any browser on any platform. Simply plug in to Ki Pro Plus’ ethernet port and connect it to a router for access from anywhere. Upload firmware, quickly access and control multiple parameters and save and recall presets as needed. For more sophisticated workflows, access REST commands through the built in API for total control.

Two Sample Interleave I/O

Ki Pro Ultra Plus supports both Square Division Quad Split format and Two Sample Interleave giving a wide number of options to both record and playback 4K and UltraHD. Set up is easy, with Ki Pro Ultra Plus sensing the format being delivered in its “Follow Input” mode. Ki Pro Ultra Plus also allows you to select separate quad modes for both in and out, giving an additional conversion feature for when you need it.

exFAT and HFS+ Support

Ki Pro Ultra Plus allows you to use the file system that suits your needs. Full flexibility is provided to format your recording media as either exFAT or HFS+ within Ki Pro Ultra Plus itself or from your desktop computer. Work seamlessly with Avid ProRes files, Avid DNxHD, or DNxHR files on the OS that suits your workflow.

Closed Captioning Support

If you need to record or playout video with embedded Closed Captioning, Ki Pro Ultra Plus is fully compatible with your needs. Ki Pro Ultra Plus recognizes CEA-708 within incoming SDI Inputs and encodes the Closed Captioning to your Apple ProRes recorded file. Upon playback, you can utilize the Closed Captioning within a recorded file over Ki Pro Ultra Plus’ 4x 3G-SDI outputs.

RS-422 Control

RS-422 control allows Ki Pro Ultra Plus to integrate easily with supported editing systems and external controllers enabling it to fulfill several of the functions of a traditional VTR. Supported NLEs can even perform assemble edits directly to the Ki Pro Ultra Plus. Multiple Ki Pro Ultra Plus units can synchronously playback or record using RS-422 as well.
Ki Pro® ULTRA Plus

Interface

Pak Media Slots x2
High Resolution HD Display
Video Sources and Menu Overlay
Display, Configuration and
Menu Access Buttons
Rotary Selection Knob
Media Slot Selector
VTR Style Transport Buttons
Power On/Off
Headphone Volume
Headphone Output

For full product specifications visit www.aja.com/en/products/ki-pro-ultra-plus/#techspecs
Interface with Ki Pro Ultra Plus

Ki Pro Ultra Plus features a beautiful high resolution HD display for pristine monitoring of your material and serves as your interface to Ki Pro’s familiar and intuitive menu system. The detailed overlay UI includes on-screen keyboard functionality and a clear view of the powerful yet simple to operate UI, all pristinely presented on the 4.8” 720p LCD display.

When remote from Ki Pro Ultra Plus, utilize the fast LAN connectivity and access the internal web server UI from any web browser on any OS. Ki Pro Ultra Plus’ web interface allows firmware uploading, configuration of all settings, the ability to save presets and controls for configuring/triggering gang recording when utilizing multiple units.

Choice, At Your Fingertips

A rotary selection knob allows for quick and accurate adjustment of all configuration and settings options via the on-screen menu. The robust selection knob imparts confidence during selection through clear mechanical feedback. Then, once you found the setting you desire from a list within any menu item, simply click the rotary dial to set your preferred option.

To preserve your choices, Ki Pro Ultra Plus offers the ability to save and reload presets, even across multiple Ki Pro Ultra Plus units, ensuring consistency throughout a project.
Connections

- REF with Loop Out
- 4x Fiber In/Out
- 4x 3G-SDI In/Out
- RCA Analog Audio Out
- LTC In/Out
- Ethernet 10/100/1000 RJ-45
- HDMI 2.0 In/Out
- RS-422 (Machine Control)
- AES/EBU 8-Channel Audio In/Out
- Analog 8-Channel In
- Analog 8-Channel Out
- 2x Redundant Power Supplies
- 4-Pin XLR Power
- Dedicated 2K/HD-SDI Monitor Output
- 2x Power Supplies
- An 8-Channel Audio In Analog 8-Channel Out
Ki Pro® ULTRA Plus

Workflow

Fiber Input up to 4K 60p
- 2x Duplex Fiber (LC) Connections for 4K or 4x HD 60p

SDI Input up to 4K 60p
- 4x 3G-SDI Connections for 4K or 4x HD 60p

HDMI Input up to 4K 60p
- 1x HDMI 2.0

Analog Audio

AES/EBU Audio

Fiber Output up to 4K 60p

SDI Output up to 4K 60p

HDMI Output up to 4K 60p

Down-Converted HD from 4K

Jog Shuttle Control

Ethernet

Web UI

1x HD-SDI

2x Duplex Fiber (LC) Connections

4x 3G-SDI Connections

1x HDMI 2.0 Compatible
Ki Pro Ultra Plus

Accessories

**Pak Media**

Pak Media is a high capacity solid state drive encased in a protective housing with rugged connection engineered to handle the rigors of repeated use in the field. Available in 2TB, 1TB, 512GB and 256GB capacities.

**Pak Dock**

External Pak Dock with Thunderbolt and USB 3.0 connections for fast transfer of media to a host computer.

**Pak-Adapt-eSATA**

Pak-Adapt-eSATA is a Pak Media sized adapter with an eSATA connector that allows the user to attach a qualified RAID or single volume storage via an eSATA cable so that it may be used as a recordable drive.

**Pak-Adapt-CFast**

Pak-Adapt-CFast enables the use of qualified CFast cards in Ki Pro Ultra Plus for recording and playback.

**KPU-Shelf**

Ki Pro Ultra Plus features a small footprint for desktop use or can be mounted side by side using the additional KPU-Shelf for rackmount applications.
Ki Pro Ultra Plus

Tech Specs

Video Formats
- Single Channel Mode:
  - (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 59.94, 60
  - (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97*
  - (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 59.94, 60
  - (HD) 1080p 23.98, 24, 25, 29.97, 30, 59.94, 60
- Multi-Channel Mode:
  - (HD) 720p 23.98, 24, 25, 29.97, 30
  - (HD) 1080p 23.98, 24, 25, 29.97, 30, 59.94, 60
  - Multi-Channel Mode:
  - (HD) 1080p 23.98, 24, 25, 29.97, 30, 59.94, 60

Codec Support
- Single Channel Mode:
  - Apple ProRes .MOV
  - AVID DNx MXF or .MOV
- Removable Storage
  - 2x slots, AJA SSD media Pak 256, Pak 512, Pak 1000, Pak 2000
  - Pak-Adapt-eSATA*, Pak-Adapt-Cfast*

Audio Input Analog
- 8-Channel, mappable, 24-bit A/D analog audio, 48 kHz sample rate (1x DB-25 TASCAM Pinout)
- +24 dBu full scale digital
- +/- 0.2 dB Hz to 20 kHz frequency response

Audio Output Digital
- 16-Channel, 24-bit SDI/Fiber embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, 24-bit HDMI embedded audio, 48 kHz sample rate, synchronous
- 8-Channel, AES/EBU via (1/2x DB-25 TASCAM pinout)

Avid DNxHD 36 only supported for 1080p 25 and 29.97 requires Record Type>PsF selection

For full product specifications visit www.aja.com/en/products/ki-pro-ultra-plus/#techspecs
Three Year Warranty
AJA Video warrants that Ki Pro Ultra Plus will be free from defects in materials and workmanship for a period of three years from the date of purchase.

About AJA Video Systems, Inc.
Since 1993, AJA Video has been a leading manufacturer of video interface and conversion solutions, bringing high quality, cost effective digital video products to the professional, broadcast and postproduction markets. AJA products are designed and manufactured at our facilities in Grass Valley, California, and sold through an extensive sales channel of resellers and systems integrators around the world. For further information, please see our website at www.aja.com