KONA

Professional performance.
Unparalleled reliability.

Because it matters.

AJA®
VIDEO SYSTEMS

KONA

Professional performance. Unparalleled reliability.

Built for video professionals by video professionals, KONA cards offer the highest quality with a range of feature sets tuned for your workflow.

Whatever your post production process, KONA capture, display and mastering solutions for SD, HD, 3G, Dual Link HD, 2K and 4K on a Mac or PC, provide the best engine for your creative process.

In a world of myriad HD standards, SD, 2K and 4K, and growing 3D stereoscopic workflows, KONA cards offer maximum connectivity like 3G/HD/SD SDI, Component, and HDMI-along with the flexibility of AJA's superior conversion capability.

No more rendering for raster resizing, KONA's superior 10-bit hardware-based up/cross/down conversion offers you the ability to ingest to the resolution of your project while displaying and mastering live simultaneously to HD and SD as your needs require.

At AJA we understand that creative professionals have a range of software applications and platforms they prefer and need to work with. Using AJA's industry-leading Mac and PC drivers and custom application plug-ins, KONA cards support the broadest range of creative software. No other manufacturer can match the breadth of application support and better meet the needs of the working professional. Pick your application of choice and KONA connects it to your world.

Built to the exacting standards of all AJA hardware, KONA cards are backed by our world-class support network, 3-year international warranty and advanced exchange service.

KONA 3G

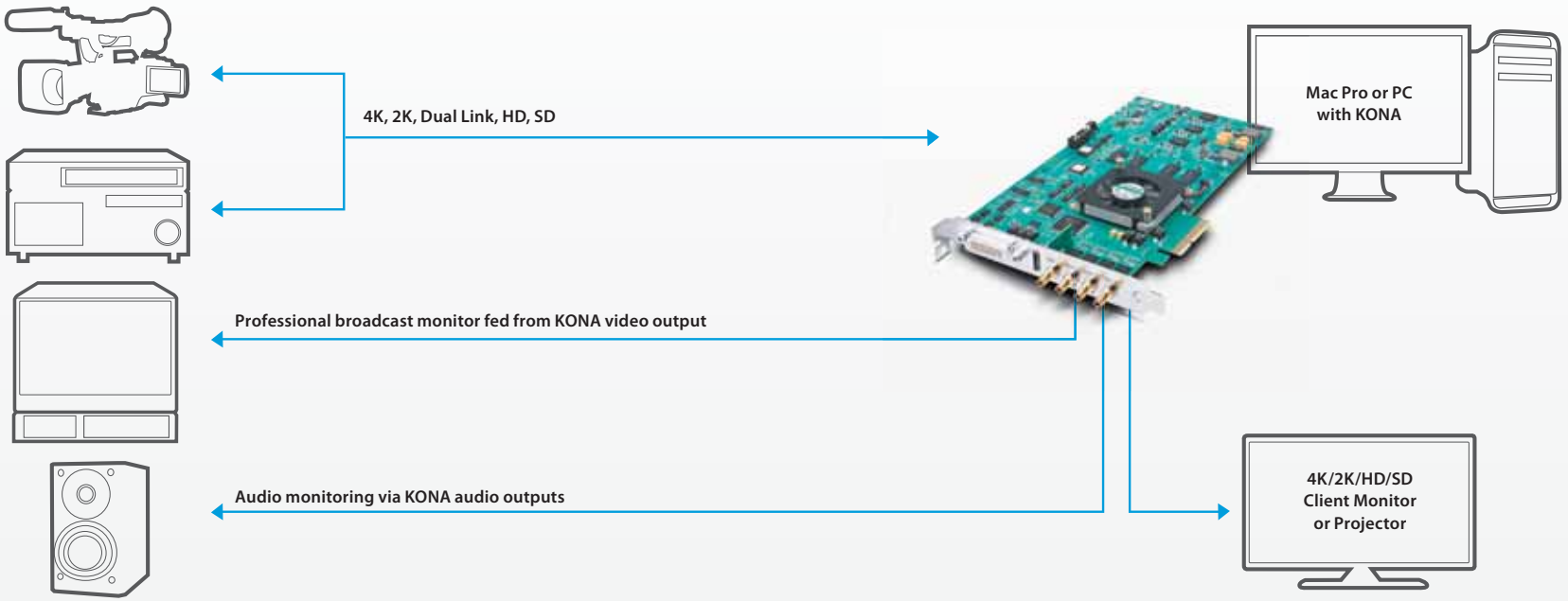
KONA LHi

KONA LHe Plus

The hub of your workflow - from ingest to master

Ingest, Edit, Monitor, Master

KONA-powered workflows



Connect your digital sources via SD/HD-SDI or HDMI to KONA for capture and editing via a wide variety of formats.
Master to any Digital or Analog device through high-quality professional SDI, HDMI or Component outputs.

Software compatibility

KONA cards are cross-platform and compatible with a wide range of professional Mac and PC software applications.

Mac software

AJA KONA for Mac drivers are optimized for use on OS X, with applications and advanced AJA hardware capabilities controlled easily at-a-glance in the application you're using. KONA for Mac software integrates within the native environment where used - whether Avid Media Composer, Apple Final Cut Pro, Adobe Creative Suite, Autodesk Smoke for Mac, or a wide array of other Mac applications.

Supported applications include:

- Adobe Creative Suite
- Avid® Media Composer® 6, Symphony® 6, and NewsCutter® 10
- Apple Final Cut Pro X
- Autodesk Smoke® for Mac

The KONA Desktop feature allows broadcast design elements to be viewed with the proper aspect ratio and color depth on a broadcast monitor via the KONA card.

KONA Desktop is available on the entire range of KONA cards, supporting Adobe After Effects, Photoshop, Apple Motion, Autodesk Smoke for Mac and more. Powerful AJA utilities, Easy Setups, and plug-ins round out the Mac environment providing support for all popular Mac application workflows.

PC software

KONA for PC software allows Windows to access the hardware power of your KONA within major editing and graphics applications. Other software vendors have also provided integrated support for KONA in their own PC applications through direct collaboration with AJA.
Choose the right KONA card for any format you need, including DPX, Cineon, TGA, TIFF, BMP, AVI and QuickTime. You can playback and master material, at a variety of frame rates, on a high-resolution widescreen monitor or digital projector. Custom AJA software allows full control over your playback, parameters are clearly laid out, including provisions for choosing a user-specified LUT. Supplied AJA plug-ins integrate your KONA card into a variety of graphics/visual-effects software applications to make operations even easier to use. Using AJA plug-ins, sophisticated features appear as if they were native to the software application user interfaces.

Directly supported applications include:
- Adobe Premiere® Pro
- Adobe After Effects®
- Adobe Photoshop®
- Avid® Media Composer® 6, Symphony® 6, and NewsCutter® 10
- Sony® Vegas®
- Eyeon Fusion®

Software compatibility

KONA software compatibility

	KONA 3G	KONA LHi	KONA LHe Plus
Apple FCP X	Mac	Mac	Mac
Apple Final Cut Pro 7	Mac	Mac	Mac
Apple Color	Mac	Mac	Mac
Apple Motion	Mac	Mac	Mac
Apple Soundtrack	Mac	Mac	Mac
Apple Logic	Mac	Mac	Mac
Adobe Premiere Pro	Mac/PC	Mac/PC	Mac/PC
Adobe After Effects	Mac/PC	Mac/PC	Mac/PC
Adobe Photoshop	Mac/PC	Mac/PC	Mac/PC
Avid Media Composer 6	Mac/PC	Mac/PC	Mac/PC
Avid Symphony 6	Mac/PC	Mac/PC	Mac/PC
Avid NewsCutter 10	Mac/PC	Mac/PC	Mac/PC
MacCaption/Caption Maker	Mac/PC	Mac/PC	Mac/PC
Autodesk Smoke On Mac	Mac	—	—
Drastic Media NXS	PC	PC	PC
Sony Vegas	PC	PC	PC
Eyeon Fusion 64 bit	PC	PC	PC
CineForm Neo HD	Mac/PC	Mac/PC	Mac/PC
CineForm Neo 3D	Mac/PC	Mac/PC	—
CineForm Neo 4K	Mac/PC	Mac/PC	—
The Foundry Nuke	Mac/PC	Mac/PC	Mac/PC
Media 100	Mac	Mac	Mac
Softron	Mac	Mac	Mac
Gallery	Mac	Mac	Mac
Building4Media	Mac/PC	Mac/PC	Mac/PC
Bug.tv	Mac	Mac	Mac
ToolsOnAir	Mac	Mac	Mac

Unparalleled professional performance.

Ready for today's workflows and those of the future, KONA 3G gives video professionals unrivalled features and the highest standards in quality and performance.

KONA 3G is a video and audio desktop I/O card that provides video professionals with unparalleled features for handling everything from SD to HD, 2K and 4K with full 10-bit uncompressed clarity. With a broadcast quality up/down/cross converter and the ability to work in 3D, KONA 3G has the power for the work you do today and into the future.

KONA 3G offers users a single, powerful card with support for 4:2:2 and 4:4:4 color spaces to provide the highest quality for your images. The futureproof architecture means you can easily work with HD and 2K now and switch to working at 4K resolution when the need arises without the requirement for new hardware. Stereoscopic 3D support allows you to work with dual, full resolution SDI left/right eye signals and also output muxed HDMI for consumer 3D monitors.

KONA 3G supports Dual Link 4:4:4 HD-SDI, with full-bandwidth 4:4:4 RGB at 10-bits for 1080i, 1080p, 1080PsF and 720p formats. KONA 3G can also convert between 4:4:4 and 4:2:2 formats for single link HD-SDI monitoring and output.

For SDI video, the card features two 3G/HD/SD-SDI inputs and two outputs - or for 4K all four SDI connectors can be used for capture and output - HDMI 1.4a monitoring output, LTC input and output, one connection for Genlock input, and configurable 3x BNC HD/SD analog video output.

The built-in up/down/cross converter brings any video to a unified resolution, simplifying workflows and eliminating the need to adjust resolution within software.

KONA 3G also includes a powerful hardware downstream keyer that can place graphic files with an alpha channel over the video being input to the board - or a selectable color matte, or the contents of the card's framebuffer.

KONA 3G

Click here For full product specifications visit www.aja.com/kona-3g/techspecs

Features

From SD to 4K in a single card

KONA 3G is futureproof, allowing you to easily work in HD and 2K and switch to working at 4K resolution without the need for new hardware.

Leading the way for quality 4K capture, monitoring and output, KONA 3G offers 4K in both YCbCr and RGB. When 4K mode is selected, the four SDI connectors are remapped as I/O for handling the four quadrants of a 4K picture. A large number of 4K formats are supported for this emerging workflow.

Stereoscopic 3D workflows

Simple and affordable 3D workflows using the standard KONA 3G hardware.

Through SDI, you can output discrete left and right eye feeds with a simple Stereo button choice in the AJA Control Panel. In addition, all the muxed feeds for SDI stereo monitoring are accessible through tight integration with 3rd-party application timelines for side-by-side and Top Bottom. Through HDMI 1.4a, you can utilize more affordable 3D monitors for side-by-side and Top Bottom needs.

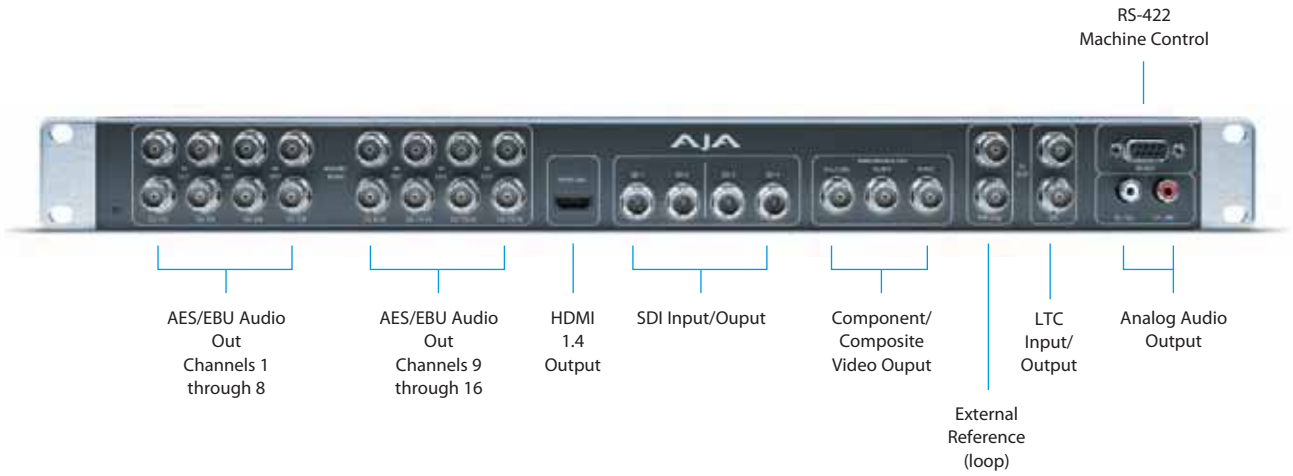
Integrated AJA hardware conversion

KONA 3G features full 10-bit, broadcast-quality, motion-adaptive SD to HD up conversion, HD to HD cross conversion, HD to SD down conversion, and automatic HD/SD 12-bit component analog output. Since all conversion functionality on the KONA 3G is hardware-based, it's available on ingest or playback.

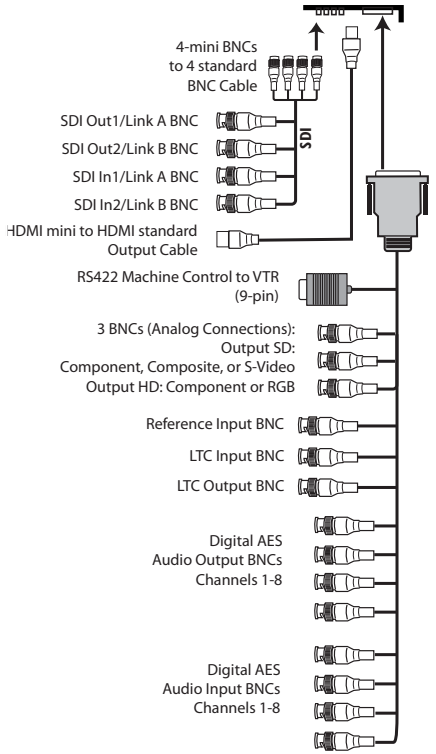
Uniquely, the KONA 3G can cross convert 720p 23.98 to 1080PsF 23.98. Cross conversion is particularly valuable in today's multiformat HD post environment where producing pristine 720p or 1080i signals at-will helps streamline dailies and deliverables.

Connections

K3G-Box Breakout Box
(Optional)



Breakout cables
(Supplied)



Click here For full product specifications visit www.aja.com/kona-3g/techspecs

Multi-format analog and digital I/O.

The most flexible card for analog and digital Standard and High Definition workflows.

If your post-production facility works with a wide variety of formats, frame rates and audio/video sources, the KONA LHi provides the connectivity you need, bridging the gap between analog devices and the latest 3G SDI and HDMI enabled products to provide editing, monitoring and mastering of professional quality video in an affordable, powerful, easy to use product.

Connecting to everything from an HDMI enabled camera to an HD-SDI VTR, KONA LHi offers a full host of no-compromise features, including 10-bit or 8-bit uncompressed video, 2-channel AES digital audio and 8-channel SDI embedded digital audio, analog composite or S-video or SD/HD component video I/O, 2-channel balanced analog audio I/O, and broadcast-quality hardware-based up/down/cross-conversion for flexible SD and HD post production. KONA LHi supports a full HDMI workflow with 10-bit 'deep color' output for the best image quality possible. HDMI signals can also be converted to SDI for use in more professional environments.

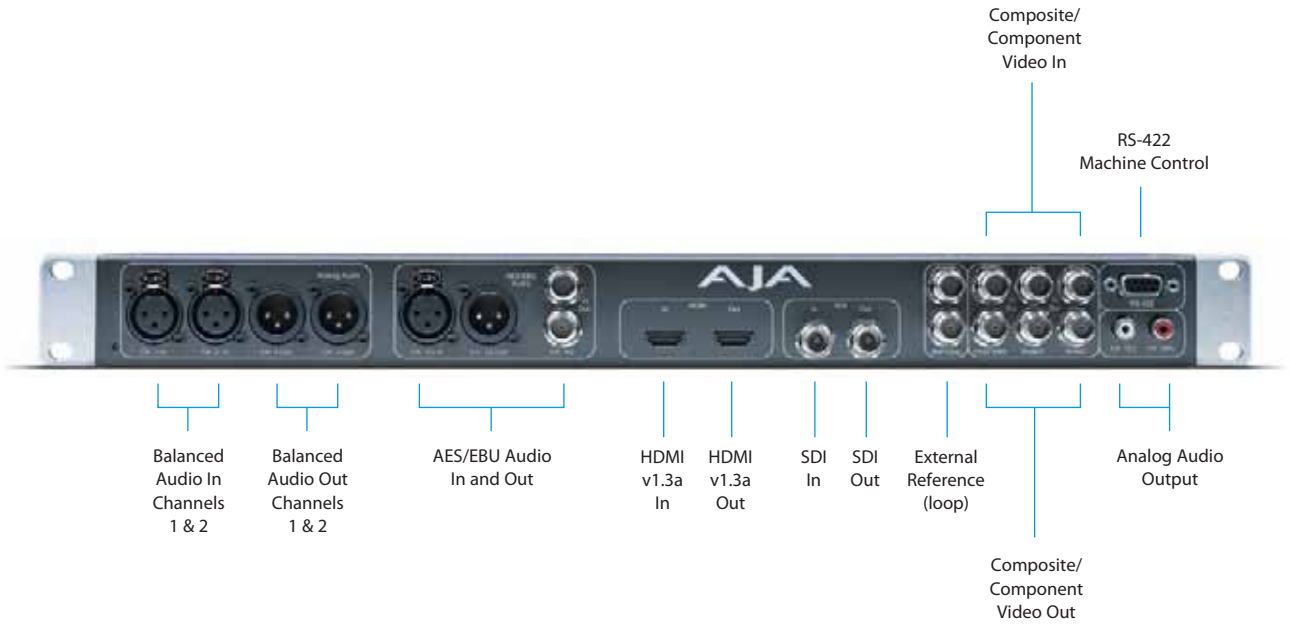
Like the KONA 3G, KONA LHi features full 10-bit, broadcast quality, motion-adaptive SD to HD up-conversion, HD to HD cross-conversion, HD to SD down-conversion, and automatic HD/SD 12-bit component analog output. Since KONA LHi's conversions are hardware-based, they are available all the time - during ingest or playback. Outputs can be configured independently allowing you to have simultaneous HD and SD output - or two different types of HD: 720 or 1080 - output at the same time via cross-conversion.

In addition to a full set of video and audio I/O, KONA LHi can lock to external reference signals, accept timecode in and out and control a variety of tape decks via the industry standard RS-422 9-pin connection.

KONA LHi

Connections

KLHI-Box Breakout Box
(Optional)



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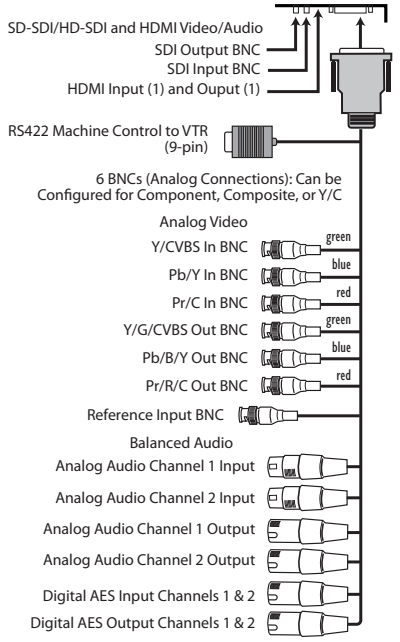


Affordable, flexible KONA power.

Powerful video and audio I/O with a full set of no-compromise features for video professionals.

KONA LHe Plus offers video professionals at all levels an affordable desktop I/O solution that doesn't compromise on quality or essential functionality.

KONA LHe Plus supports both HD/SD analog and digital I/O for video and audio, providing maximum capability in a single card, simplifying integrating analog and digital signals into a single workflow and provides multiple output options to ensure you can deliver whatever formats are required.

For SDI video, the KONA LHe Plus features one input and two outputs and can be configured independently for HD or SD. It offers Genlock input, and three BNCs which may be configured for analog video input and output (HD or SD). Also included is a 9-pin connector for RS-422 machine control. Because the KONA LHe Plus supports 12-bit analog component HD input and output, devices with analog HD output, such as decks and even game consoles, can be connected for a variety of workflows.

The broadcast-quality down-converter in the LHe Plus allows it to connect to analog SD devices for output. This can be used to check framing and color for SD versions while still working in full resolution HD within your application, ensuring proper quality for multi-format deliveries. Since conversion is hardware-based, it's available all the time - during ingest or playback.

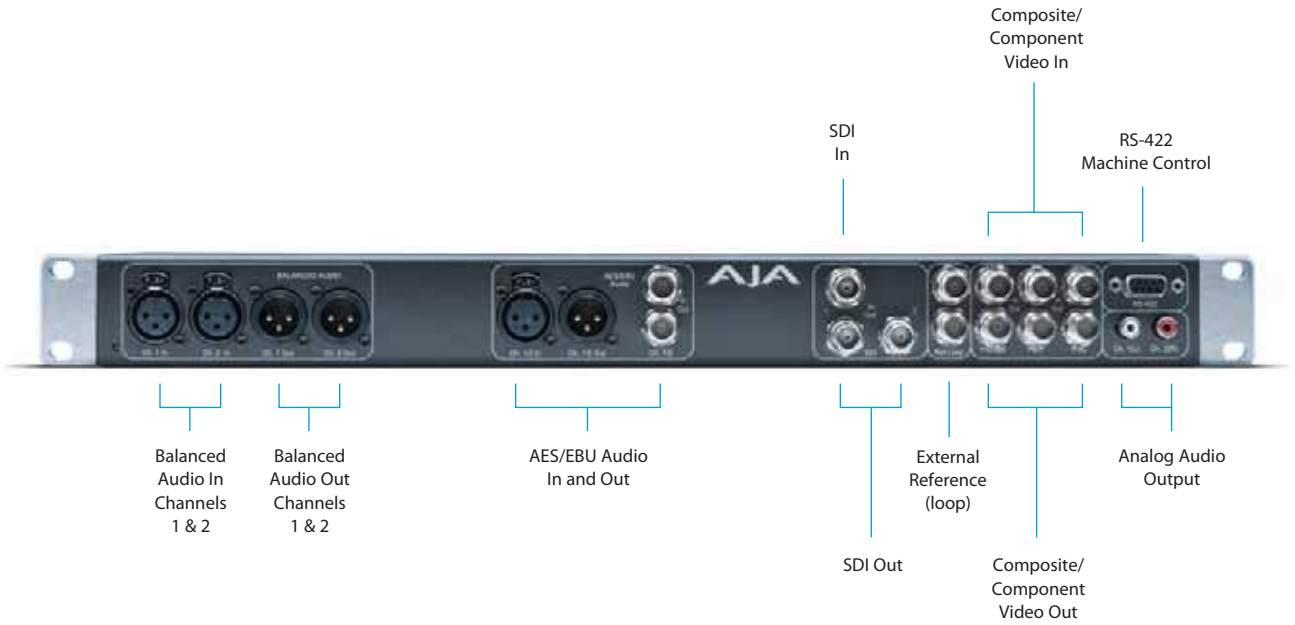
Like all KONA cards, LHe Plus connectivity can be extended via the KL-Box-LH breakout box, enabling simple integration into rack environments, with quick access to all video and audio connections and additional AES/EBU audio connectivity without having to access the back of the computer tower.

KONA LHe Plus

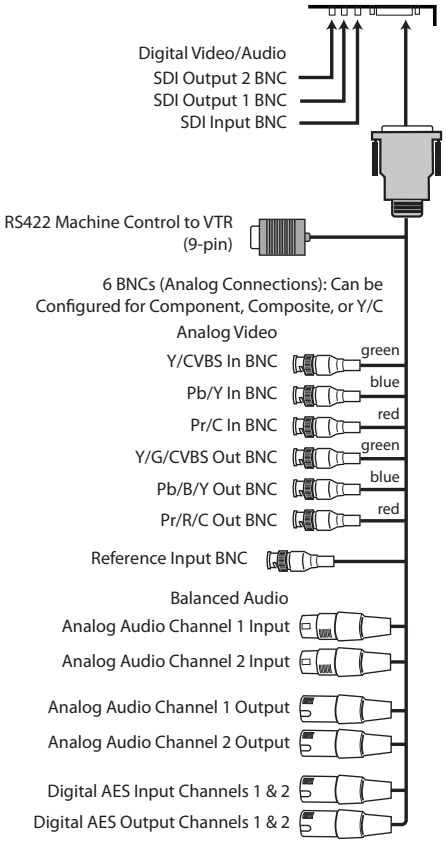
Click here For full product specifications visit www.aja.com/kona-lhe-plus/techspecs

Connections

KL-Box-LH Breakout Box
(Optional)



Breakout cables
(Supplied)



Features comparison chart

KONA capture cards are available in three models to meet your workflow needs, all built with AJA's reputation for quality, reliability and support.

KONA features

	KONA 3G	KONA LHi	KONA LHe Plus
SD (NTSC and PAL)	yes	yes	yes
HD (720p, 1080i, 1080sf)	yes	yes	yes
2K (2048 x 1556, 2048 x 1080) Dual Link HD, 2K HSDL, 4:4:4 RGB	yes	2K x 1080 video at 4:2:2, non-RGB	-
4K (3840 x 2160, 4096 x 2160) YCbCr and RGB colorspaces	yes	-	-
3G SDI	yes	yes	-
HDMI	HDMI 1.4a output	HDMI 1.3a input/output	-
HD to SD Down-conversion (10-bit, in hardware)	yes	yes	yes
SD to HD Up-conversion (10-bit, in hardware)	yes	yes	-
HD to HD Cross-conversion (1080 to/from 720, 10-bit, in hardware)	yes	yes	-
12-bit Analog Video (component, composite, and Y/C)	output SD/HD	input/output SD/HD	input/output SD/HD
10-bit SDI Digital Video (BNC)	input/output SD/HD/3G	input/output SD/HD/3G	input/output SD/HD
HD Video+Key	yes	-	-
Analog Audio (balanced XLR)	-	input/output 2-channel	input/output 2-channel
AES Digital Audio	8-ch I/O w/cable, 16-ch I/O w/K3G-Box	input/output 2-channel	input/output 2-channel
Embedded SDI Audio (via BNC)	input/output 16-channel	input/output 8-channel	input/output 8-channel
Professional Genlock	yes	yes	yes
LTC Input/Output	yes	LTC input (shared with reference BNC)	-
RS-422 Machine Control	yes	yes	yes
1RU Breakout Box (optional)	yes	yes	yes
3-year AJA Warranty with Advanced Exchange	yes, included	yes, included	yes, included
Capture DPX, Cineon, and DVCPRO HD	Mac/PC	Mac/PC	Mac/PC
Capture TGA, TIF, BMP, YUV, AVI (PC only) and QuickTime	Mac/PC	Mac/PC	Mac/PC
DVCPRO HD hardware scaling acceleration	Mac/PC	Mac/PC	Mac/PC
HDV hardware scaling acceleration	Mac/PC	Mac/PC	Mac/PC
Dynamic RTExtreme hardware scaling acceleration	Mac	Mac	Mac