Corvid 44 12G BNC

Take command of the most challenging projects using the immense power of the newest member of the Corvid product line. Corvid 44 12G BNC is AJA's blazingly fast, compact 8-lane PCIe 3.0 I/O card with four bidirectional 12G-SDI full-sized BNC connections, designed for today's most demanding video and audio workflows. Corvid 12G 44 BNC is available in several configurations with passive or active cooling options.

$3795 US MSRP

Whether you are working with HFR 8K/4K/UltraHD, 2K/HD, SD, Deep Color and/or HDR, experience the quality and peace of mind that Corvid 44 12G BNC brings to your projects. Supporting 10-bit 4:2:2 and 4:4:4, at up to 12-bit color spaces, Corvid 44 12G BNC offers ingest and output over 12G-SDI, which is also backwards compatible with 6G-SDI, 3G-SDI, and 1.5G-SDI. The bidirectional 12G-SDI ports provide immense flexibility for capture and simultaneous pass-through for a range of solutions.

https://www.aja.com/products/corvid-44-12g-bnc

Video Formats

- (8K) 8192 x 4320p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
- (UltraHD2) 7680 x 4320p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
- (2K) 2048 x 1080PsF 23.98, 24, 25
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1080i 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 625i 50
- (SD) 525i 59.94

Note: High Frame Rate and 8K/UltraHD2 capabilities are dependent on host system attributes. Not all systems and configurations will support all frame rates and raster sizes.

Video Inputs Digital

- 12G-SDI, SMPTE-2082, 12-bit*, 10-bit
- 6G-SDI, SMPTE-2081, 10-bit
- 3G-SDI, SMPTE 425
  - RGB 4:4:4 12-bit*, YCbCr 4:2:2 10-bit
- 1.5G-SDI, SMPTE 292M
  - Single Link HD-SDI YCbCr 4:2:2 10-bit
  - Dual Link RGB 4:4:4 12-bit*, Dual Link YCbCr 4:2:2 10-bit
- 270 Mbps SDI, SMPTE 259M-C
  - YCbCr 4:2:2 10-bit, 8-bit

*Bit depth support is application dependent. Check with your software manufacturer for compatibility.
Note: Corvid 44 12G BNC SDI connectors are full-size BNC

Video Outputs Digital

- 12G-SDI*, SMPTE-2082, 12-bit*, 10-bit
- 6G-SDI*, SMPTE-2081, 10-bit
- 3G-SDI, SMPTE 425
  - RGB 4:4:4 12-bit*, YCbCr 4:2:2 10-bit
- 1.5G-SDI, SMPTE 292M
  - Single Link HD-SDI YCbCr 4:2:2 10-bit
  - Dual Link RGB 4:4:4 12-bit*, Dual Link YCbCr 4:2:2 10-bit
- 270 Mbps SDI, SMPTE 259M-C
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HDR

- SDI: VPID signaling for SDR/HDR Transfer Characteristics, Colorimetry and Luminance

SDI I/O

- SDI connections are bidirectional
  - 2K/HD, capture and monitoring is simultaneous
  - 4K/UltraHD with 12G-SDI, capture and monitoring is simultaneous
  - 4K/UltraHD with 3G-SDI, all four connections must be used for either Input or Output
  - 8K/UltraHD2 with 12G-SDI, connections must be used for either Input or Output

Note: When connections are configured for 12G-SDI or 6G-SDI, only UltraHD/4K/UltraHD2/8K formats are supported.

Audio Inputs Digital

- 16-channel, 24 and 16-bit SDI embedded audio, 48 kHz sample rate, synchronous

Audio Outputs Digital

- 16-channel, 24-bit SDI embedded audio, 48 kHz sample rate, synchronous

Downstream Keyer

- Supports graphics with alpha channel over video, matte or framebuffer, or framebuffer content over incoming video or matte up to UltraHD/4K

Reference

- Analog Color Black (1V) or Composite Sync (2 or 4V) or HD Tri-Level Sync (1V) via 1x full-size BNC on PCIe bracket
- Reference input is terminated into 75 ohms when Genlock is set to Ref In

Timecode

- LTC timecode input via 2-pin header on PCIe card, or via full-size BNC Ref In connector (switchable) on PCIe bracket

Electrical Interface

- 8-lane PCIe 3.0

Machine Control

- RS-422, Sony 9-pin protocol via header on PCIe card
- 9-pin D-connector pinout is as follows:

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

Size (w x d x h)

- 0.75" x 7.0" x 4.75" (19 x 178 x 121 mm)

Noise

- <50dBA (A-weighted at 1m in free air) [models with active cooling (fan)]
- Ultra quiet (virtually silent) [models with passive* cooling (no fan)]
- Passive cooling requires in-host/chassis air-flow minimum of 150 LFM (linear feet per minute) at 30 C

Weight

- PCIe Card: 0.6 lbs (0.3 kg)

Power

- 25W typical, 32W maximum

- PC Internal ATX Power Connector (Molex p/n 45559-0002)

Note: Unlike other Corvid cards, Corvid 44 12G can use either PCIe power from a 6 pin ATX connector, or via the PCIe slot

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)