



# BRIDGE NDI<sup>®</sup> 3G

BRIDGE NDI 3G is a 1RU gateway offering high density conversion to and from 3G-SDI to NDI and NDI to 3G-SDI for both HD and 4K/UltraHD. Designed to drop into any existing NDI or SDI workflow as a plug and play appliance, easy to deploy and administer.

**\$12,999 US MSRP**

BRIDGE NDI 3G brings immense conversion power and flexibility, fully controllable remotely for AV use, security and surveillance, broadcast, eSports, entertainment venues and a wide range of other facilities needing high quality, efficient NDI encode and decode. Set and forget, or use more dynamically as project needs dictate.

<https://www.aja.com/products/bridge-ndi-3g>

## Video Formats

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1080i 50, 59.94, 60
- (HD) 720p 50, 59.94, 60

## Video Codecs

- NDI
- NDI HX (input only)

## Audio Streams/Codecs

- NDI (uncompressed float)
- SDI (PCM)

## Color Component Sampling, Color Space, and Bit Depth

- SDI
  - YCbCr, 4:2:2, 10-bit
- NDI
  - UYVY, 4:2:2, 8-bit
  - UYVA, 4:2:2, 8-bit
  - P216, 4:2:2, 16-bit (output only)

## Video Processing

- Scaling
- Letterbox/Pillarbox
- Video/Key Pair (2x SDI to 1x NDI + Alpha, or, 1x NDI + Alpha to 2x SDI)
- Reclocking for integer/fractional rate conversion

## Audio Processing

- Audio reference level per video channel / group (up to 16 audio channels)
- Sample Rate conversion

## Performance

- Up to 16x HD (NDI/SDI)
- Up to 4x 4K (NDI/SDI)
- Ultimate performance based on network conditions, concurrent video processing, and other parameters

## NDI Video Input

- NDI (approx. 150–250Mbit/s)
- NDI HX (approx. 8-20Mbit/s)

## NDI Video Output

- NDI (approx. 150–250Mbit/s)

## SDI Video Input Digital

- 3G-SDI, SMPTE 424, 10-bit
- 1.5G-SDI, SMPTE 292M, 10-bit

## SDI Video Output Digital

- 3G-SDI, SMPTE 424, 10-bit
- 1.5G-SDI, SMPTE 292M, 10-bit

## NDI Audio Input

- Up to 16-channel, uncompressed float, 48 kHz sample rate, per NDI connection

## NDI Audio Output

- Up to 16-channel, uncompressed float, 48 kHz sample rate, per NDI

connection

## SDI Audio Input Digital

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- Up to 16-channel, 16 and 24-bit SDI embedded audio, 48 kHz sample rate, synchronous per SDI connection

## SDI Audio Output Digital

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- Up to 16-channel, 16 and 24-bit SDI embedded audio, 48 kHz sample rate, synchronous per SDI connection

## Reference

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- Dual Analog Color Black or HD Tri-level sync

## Timecode

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- VITC1, VITC2, LTC (embedded), Time-of-Day

## Configuration and Monitoring

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- NDI 5 or NDI 4 library can be used via interface toggle
- Browser via network attached client system
- Local "Kiosk" interface via monitor (VGA), keyboard, and mouse (not included)
- Local Dual Channel Audio via USB sound card (included)
- REST API

## Form Factor

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- 1RU turnkey system
- 18x BNC (Din 1.0/2.3, 3G/1.5G-SDI compatible)
- 2x 10GigE
- Local interface via VGA and USB
- OS custom image
- Updates via download

## Size (w x d x h)

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- 17.2" x 16.9" x 1.7" (436.88 x 429.26 x 43.18 mm)

## Weight

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- 28 lb. (12.7kg) in box
- 18 lb. (8.2kg) server only

## Power

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- 100-240 VAC 50/60 Hz (Dual, redundant power supplies)
- 190W typical, 245W Maximum

## Environment

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- Safe Operating Temperature: 5 to 35 C (41 to 95 F)
- Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F)
- Operating Relative Humidity: 8-90% noncondensing
- Nonoperating Relative Humidity: 5-95% noncondensing