OG-ROI-HDMI

AJA's OG-ROI-HDMI is an openGear card that allows exceptionally high-quality conversion of computer and HDMI outputs to 3G-SDI baseband video. With incredible region-of-interest image scaling as well as aspect ratio and frame rate conversion, OG-ROI-HDMI fulfills the growing need to properly incorporate extractions from HDMI sources and computer signals into the video world without sacrificing budget or space.

https://www.aja.com/products/og-roi-hdmi

Video Input Formats

- Computer Signals:
  - WUXGA (1920 x 1200) 60 Hz max
  - VGA (640 x 480) minimum
- Video Signals:
  - (HD) 1920 x 1080i 50, 59.94
  - (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
  - (HD) 1280 x 720p 50, 59.94, 60
  - (SD) 625i, 525i
  - (SD) 580p, 480p

Note: Frame rates limited by the 166 mHz max pixel rate of the HDMI receiver.

Video Output Formats

- (HD) 1920 x 1080p 50, 59.94, 60, SMPTE 425-1 Level A mapping structure 1 (4:2:2 10-bit YCbCr)
- (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30
- (HD) 1920 x 1080i 50, 59.94, 60
- (HD) 1280 x 720p 50, 59.94, 60
- (SD) 625i 25
- (SD) 525i 29.97

Color Range

- Full
- SMPTE

Reference Source

- Free Run

- Card Ext Ref
- OG Frame Ref 1
- OG Frame Ref 2

Reference Input

- Supported reference video inputs include:
  - 1080i tri-level sync
  - 1080p tri-level sync
  - 720p tri-level sync
  - 625i Color Black
  - 525i Color Black
- 75 ohm terminating

Video Input

- 1x HDMI input connector (with embedded audio, up to 8-channels)

Video Outputs

- HDMI
  - 1x HDMI loop through connector (with embedded audio, up to 8-channels)
- SDI
  - 3G-SDI, SMPTE-259/292/424, 1x BNC

HDCP

- ROI does not encode the HDMI output with HDCP encryption
- ROI does not accept HDCP input

Audio Inputs

- 2-channel Balanced analog audio inputs, 2x 3-Pin terminal blocks

connectors
- HDMI embedded audio, 24-bit, 8-channel

Audio Output

- SDI embedded audio, 24-bit, 2-channel or 8-channel

User Interface

- openGear DashBoard network control software via Windows, macOS or Linux

Size (w x d x h)

- openGear standard form factor, front slot, and rear card. Two slots required for each card

Weight

- 0.5 lb (0.3 kg)

Power

- openGear frame compatible, 12.0 watts max per card

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)