TECH SPEC

AV Bridge™ CONFERENCE

Bring Room AV Devices In & Out of the Digital Domain

Part Numbers: 999-8215-000 (North America), 999-8215-001 (International)

The Vaddio™ AV Bridge CONFERENCE is a room based HD Media Streaming solution enabling IP or USB streaming. Like the original AV Bridge, it's an appliance that "bridges" the room's analog audio and video into a computer (PC or Mac) for UC applications, but with one important distintction. The AV Bridge CONFERENCE has been designed as an HD Encoder with 2-way analog audio to send the near-end audio to the far-end and return the far-end audio to the room's pro mixer with AEC.

The AV Bridge CONFERENCE offers a flexible A/V interface that is controllable with an embedded web server and the current settings are viewable from front panel menu system. It accepts a multitude of video input resolutions from standard definition composite video (480i/NTSC and 576i/PAL) all the way up to HD 1080p/60 in HDMI and YPbPr, including the most relevant wide-screen VESA type PC resolutions (RGBHV or DVI-D).

The USB streaming functions using MJPEG (Motion JPEG) and standard UVC (USB Video Class) with UAC (USB Audio Class) drivers eliminate the need for installation of custom software drivers on the Host PC. The IP streaming uses RTSP or HLS (Apple's variant on HTTP streaming) and encodes H.264 video with AAC Audio. The Ethernet port also provides access to internal web pages for control, setup, and updating the software.

Use the AV Bridge CONFERENCE in UC conferencing applications to "bridge" video and audio signals into a PC or retrofit existing conference rooms by simply plugging a USB cable into a Host PC or connecting to an IP network.

The AV Bridge CONFERENCE supports high definition encoding of audio and video sources, producing superior quality results at the fraction of the cost of other similar products. It seamlessly integrates with Vaddio's HD cameras, presentation systems, video mixing consoles, and other pro audio products with AEC. The AV Bridge CONFERENCE is an unsurpassable value due to its ease of use, flexibility, and plug & play functionality, really.

WHAT'S INCLUDED

One (1) AV Bridge CONFERENCE HD Audio/Video Encoder (shown above/right with Rack Mount Ears)
One (1) Pair of 1-RU Rack Mount Ears
One (1) 18 VDC, 2.75 Amp Switching Power Supply with AC Power Cord Set
One (1) 6' (1.83m) USB 2.0 Cable, Type-A Male to Type-B Male (black)
Four (4) Rubber feet for the bottom of enclosure (if not rack mounted)
One (1) Installation and User Guide

TECHNICAL FEATURES

Flexible Applications: AV Bridge CONFERENCE supports USB 2.0 A/V streaming (MJPEG/PCM) or IP A/V streaming (H.264/AAC) for UC conferencing applications, lecture capture, or content delivery and more!

High Definition A/V Encoder: Stream directly to a PC or Mac with USB 2.0 using MJPEG video with resolutions up to 720p/30 (limits of USB 2.0) with PCM uncompressed audio or use IP streaming with resolutions up to 1080p/30 using H.264 video with AAC audio encoding.

2-Way Analog Audio Ins and Outs: An important feature of the AV Bridge CONFERENCE is the addition of 2-way analog audio to send the near-end room audio to the far-end and return the far-end audio to the local room's pro mixer with AEC. The AV Bridge CONFERENCE is the ideal choice for existing rooms as well as new designs.

Emulates USB Webcam and Speakerphone: AV Bridge CONFERENCE minimizes interoperability problems by implementation of standards based UVC (Universal Video Class) and UAC (Universal Audio Class) drivers. Since these drivers are built-in the OS of the PC or Mac there are no pesky interoperability or driver issues.

Common Media Players: IP streams are standard based MPEG4 allowing playback of content on market leading players like Quick-Time, RealPlayer, or VLC Media Player. Custom players are not required for playback.

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TECHNICAL FEATURES (CONTINUED)

Simple User Interface: The user interface is provided with a built-in web server. Simply connect it to the network and the web pages are served up in an easy to use menu based system. The menus include A/V Configuration, Streaming, Room Labels, Networking, Security, Diagnostics, System Configuration, Help Menu and more! The front panel menu system has the ability to affect the most accessed controls with the spin of a knob and a push of a button. These controls include setting Audio Inputs (Balanced or Unbalanced) and setting the Video Inputs (HDMI or YPbPr or RGBHV and composite video). All of the IP network and USB information can be viewed from the front panel quickly and easily.

Made in the USA: The AV Bridge CONFERNECE was designed and is fabricated at the Vaddio headquarters in Minnetonka, Minnesota.

Web Page Example

TECHNICAL IMAGE

Rear Panel Connections

Rear Panel Connections (left to right): Power on 5.5mm OD x 2.5mm coaxial connector, super-secret recessed tactile switch (future use), 8-position dip switch for resetting to default settings and future use, RS-232 on RJ-45 connector, USB 2.0 Type-B connector, RJ-45 for network connectivity, Video Content IN ports include HDMI (DVI-D with color space set on web pages), DE-15 for Analog YPbPr or RGBHV, BNC for composite video, Audio Content I/O Balanced Audio IN and OUT or Unbalanced Audio IN and OUT.

TECHNICAL DRAWING

UC Conferencing Application Example: USB 2.0 Streaming

BASIC SPECIFICATIONS

Part Numbers	999-8215-000 (North America), 999-8215-001 (International)
A/V Encoding	IP (H.264 & AAC Audio) Resolutions up to 1080p/30, USB 2.0 (MJPEG & PCM Audio) Resolutions up to 720p/30
Media Players	Quick-Time, RealPlayer and VLC Media Player (for IP Streaming)
Supported Input Resolutions	**HDMI & YPbPr:** 1080p/60/59.94/50/30/25 frames/s, 720p/60/59.94/50 frames/s, 1080i/59.94/50 fields/sec **RGBHV** (VESA): 1280 x 720@60Hz (16:9), 1280x768@60Hz (15:9)m, 1280x800@60Hz (16:10), 1360 x 768@60Hz (16:9), 1024 x 768@60Hz (4:3 centered in 16:9 frame) **DVI-D** (on HDMI connector using sRGB color space)**:** 1080p/60/59.94/50/frames/s**,** 720p/60/59.94/50Hz frames/s 1080i/59.94/50Hz, fields/sec, 1440 x 900@60Hz, 1360 x 768@60Hz, 1280 x 800@60 Hz, 1280 x 768@60Hz, 1280 x 720@60Hz **EDID Supported Resolutions:** 1080p/60/59.94/50/frames/s**,** 720p/60/59.94/50Hz frames/s, 1440 x 900@60Hz, 1360x768 @ 60Hz, 1280x800 @ 60 Hz **Composite (Standard Definition):** 480i/29.97Hz NTSC, 576i/25Hz PAL
Video/Audio DSP	**Video:** Auto-scaling, Noise Filter and Deinterlacing, **Audio:** Compressor, Equalizer and Filters
Audio I/O	Connectors: 2-XLR (Balanced In & Out) & 2-RCA (Unbalanced In & Out), Nominal Levels: +4dBu Balanced, -10dBu Unbalanced
Control	**Embedded Web Server** for advanced configurations and administration, front panel controls for switching A/V, muting and volume **Telnet** on the Network RJ-45 Port, **RS-232** on the unshielded RS-232 Port (for support of legacy control products)
USB and Network	**USB**: Type-B USB 2.0 Compliant Connector, **Network:** RJ-45 10/100 Base-T
IP Streaming	RTSP or HLS (Apple's HTTP Live Streaming)
Dimensions & Weight	18.93" (480.8mm) W x 1.72" (43.69mm) H x 7.0" (177.8) D with Rack Ears, Weight 3.1415643 lbs. (1.4249896 kg)