HDBaseT Extenders

EX200
DATA SHEET

HDMI RECEIVER WITH INTEGRATED STEREO AMPLIFIER AND LINE OUT

More features in less boxes equates to a more simple, cost-effective, and easy-to-maintain design. The EX200 accepts an HDBaseT input and outputs HDMI. Additionally, stereo audio is extracted and provided on a line level output (RCA) and on speaker outputs (L/R, 25 watt each). Audio is extracted even when the source is transmitting encrypted (HDCP) content, such as a movie originating from a BluRay™ player. In situations when you want to inject your own music, the EX200 features an integrated stereo audio input jack.

EX200 Front View

EX200 Back View

COMMON APPLICATIONS

Extenders are common when transmitting high resolution images long distances and when conduit space through floors and walls is limited.

The EX200 is typically located close to the display, at the front of the room or in the ceiling next to the projector. HDMI from the EX200 is fed to the display for vivid 1080p video. Audio extracted by the EX200 goes directly to the speakers for local sound reinforcement.

FEATURES

HDBASET The EX200 utilizes the latest HDBaseT chipset to transmit high resolution images up to 70 meters. The bi-directional nature of HDBaseT allows for RS232 or infra-red controls to work in both directions for independent control of source or display.

RS-232 CONTROL Using the EX200's RS-232 port, 3rd party controllers can control all major features of the EX200. Volume control, muting, EQ, and audio source selection are just a few options for the Crestron, AMX, or Extron control system programmers.

SPEAKER OUTPUT Audio is extracted from the HDMI stream and amplified for exceptional sound reinforcement. This Class D amplifier provides a powerful stereo output (2 channel) at 25 watts per channel (4/8 Ohm) - more than enough for small to mid-size classrooms or conference rooms.

EDID Periodically, integrators want to force source devices to output a specific image resolutions. The EX200 provides a feature, using external DIP switches, to select specific resolutions. By default, the EX200 just allows the source to negotiate directly with the display for the preferred resolution.

LINE LEVEL OUTPUT Line level audio is provided for situations when audio is needed for other reasons: microphone mixers, audio or video conference calls, audio recording, or when partition walls are retracted for larger venue amplifier/speaker systems.

AUDIO IN This feature allows users to insert audio from an iPod, MP3 player, or mobile device. For example, a user subscribing to an online service like Pandora or iHeart Radio might connect the headphone ouput from their mobile device directly to the EX200 for audio entertainment before or after a presentation.

IR CONTROL The EX200 provides bi-directional control of source devices (BluRay, DirecTV DVR/Receiver, Comcast Cable Box, etc) and displays (LCD screen, projector, TV, etc). This means a user can change the channel on the Dish Network receiver even though the receiver is located in a rack in another room.

HDCP Full HDCP (High Definition Content Protection) compliant.

Presentation Switchers

Extenders

TECHNICAL DATA

HDBASET INPUT

Format:	HDBaseT, RJ-45, female
Signal:	0.5-1.0Vp-p, DDC Lines: 5 Vp-p, TTL
Distance:	70m (229 ft) from Transmitter

VIDEO OUTPUT

Format:	(1) HDMI Type A, female, HDMI V1.4 6.75 Gbps (2.25 Gbps per color), 225 MHz Bandwidth
Resolutions, HDTV:	480i@29.97/30/60/199.88/120Hz, 480p@59.94/60/119.88/120/240Hz, 576i@25,50Hz, 576p@50/100/200Hz, 720p@50/59.94/60/100/119.88/120Hz, 1080i@25/29.97/30/50/59.94/60Hz, 1080p@23.976/24/29.97/30/50/59.94/60Hz
Resolutions, PC:	640x350@85Hz, 640x400@85Hz, 640x480@60/67/73/75/85Hz, 720x400@85, 800x600@56/60/72/75/85Hz, 832x624@75Hz, 852x480@60Hz, 1024x576@60Hz, 1024x768@42/60/70/75/85Hz, 1152x864@75Hz, 1152x870@75Hz, 1280x768@60/75/85Hz, 1280x960@60/85Hz, 1280x1024@60/75/85Hz, 1360x768@60Hz, 1365x1024@60/75Hz, 1400x768@60Hz, 1400x1050@60Hz, 1440x960@72Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@60Hz, 1920x1200@60Hz

AUDIO INPUT

Formats Supported:	DTS-HD Master Audio, Dolby True HD - 2.1, PCM

AUDIO INPUT, L/R

Format:	(1) 3.5mm, Mini Audio Jack (TRS), unbalanced stereo, female
Freq Resp:	20 Hz to 20 kHz, +/- 0.05 dB
THD+N:	0.03% @ 1kHz at nominal level
Sig/Noise:	> 90 dB at Vin = 0V, A-Weighted
Impedance:	> 10k Ohms, unbalanced, AC coupled
Nom Level:	-10 dBV (316 mVrms)
Max Level:	+6 dBV (2 Vrms), unbalanced at 1% THD+N

AUDIO OUTPUT, SPEAKER

Format:	(1) 4-location, Spring Captive
Amplifier:	Class D, 4/6/8 Ohm
Output:	25 Watts per Channel, 2-Channels

AUDIO OUTPUT, SPEAKER (CONTINUED)

Noise:	200uV, IHF-A weighted, AES-17 filter
Distortion:	0.03% @ 1kHz at nominal level
Voltage:	25V RMS
Freq Resp:	20 Hz to 10 kHz +/- 2dB at 1W
Chan Sep:	70 dB @ 1 kHz

AUDIO OUTPUT, LINE OUTPUT

Format:	(1) 2-location RCA, Left (white), Right (red)
Voltage:	2Vp-p
Impedance:	50 Ohm, unbalanced

RS-232 CONTROL PORT

Format:	(1) 3-pin (TX/RX/GND)
Voltage:	+3VDC to +15VDC
Data Rate:	9600 Baud, Fixed (non-adjustable)
Data Bits:	8
Parity:	None
Stop Bits:	1

ENCLOSURE

Dimensions:	21.59 x 17.78 x 3.18 cm, (8.5" x 7.0" x 1.25")
Weight:	1.0 kg, (2.2 lbs)
Power:	18 VDC, 45 Watts, On/Off Switch
BTU:	153.54
Material:	Metal, Black Matte Finish

CERTIFICATIONS

Safety:	CE
Environ:	CE, RoHS

ENVIRONMENTAL

Storage Temp:	-25° C to 75° C (-13° F to 167° F)
Storage Humidity:	10% to 90%, non-condensing
Operating Temp:	-5° C to 35° C (23° F to 95° F)
Operating Humidity:	10% to 90%, non-condensing

Note: All nominal levels are at +/-10%. Specifications are subject to change without notice.

Presentation Switchers