



# Users Guide

EX200

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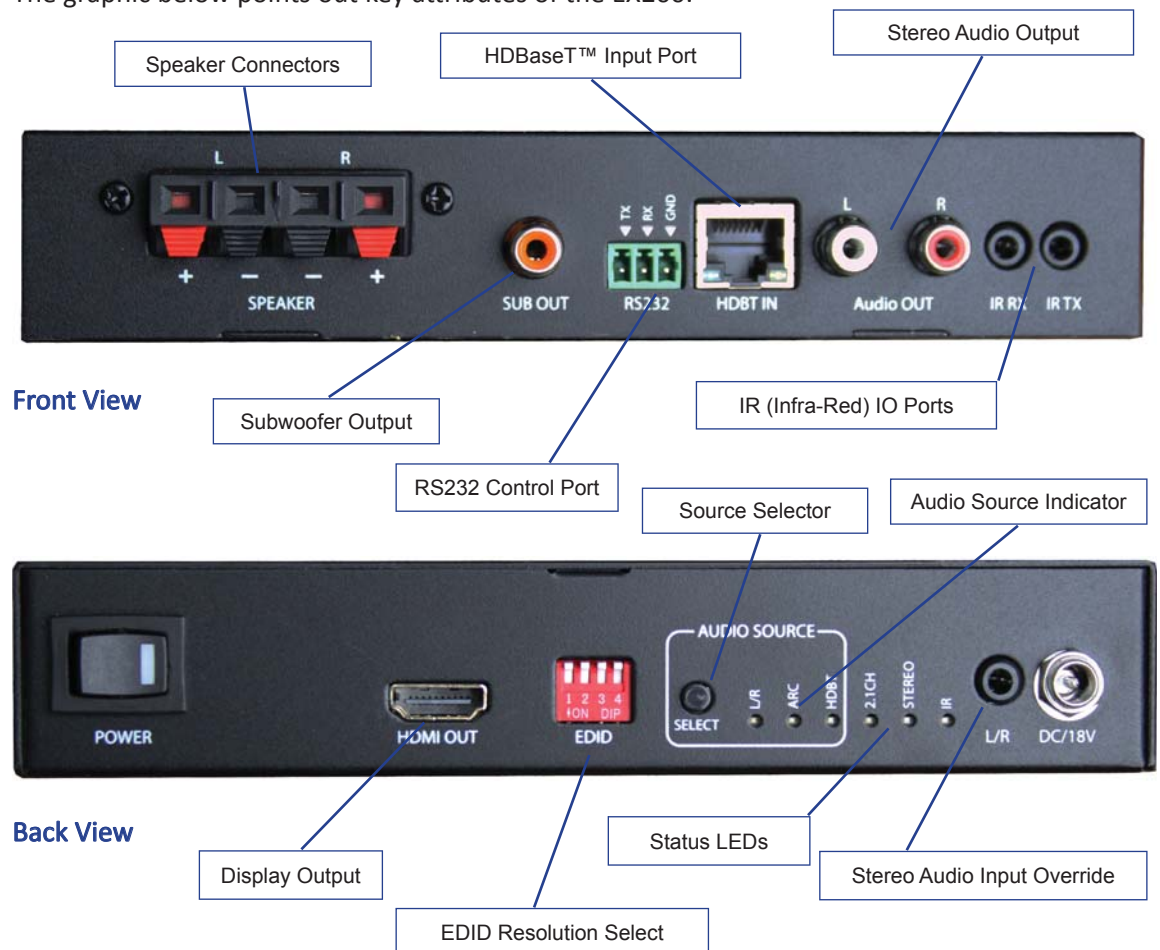
# Introduction

## Introducing the EX200 HDBaseT™ Receiver with Integrated Class-D Amplifier

The EX200 is a multi-function HDBaseT™ Receiver that extracts HDMI for a local display or projector. Audio associated with the HDMI source is sent to the HDMI display and simultaneously extracted for local stereo audio “line level” output and/or local speakers. A stereo audio input jack offers an audio override for paging, background music, or a local microphone. Bi-directional IR is used with certain transmitters for bi-directional control of source devices and displays. Finally, the EX200 provides display resolution control of source devices (computer, laptop, iPad™, etc.) using an EDID table setting.

## Getting to Know the EX200

The graphic below points out key attributes of the EX200.



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# Connecting to the System



## HDBaseT™ Input

Using a CAT5e/CAT6 cable, connect an HDBaseT™ transmitter to the EX200. Two LEDs show the connection status between the transmitter and the EX200 receiver. The green (left) LED indicates link status. The amber (right) LED indicates video and HDCP signal presence.



## HDMI Output

Connect an HDMI cable from the EX200's HDMI Out port to the display. The display will receive high resolution video along with the associated audio from the source device or the audio injected from the Stereo Audio Input Override. To hear the audio coming from the HDBaseT™ source device, press the audio Source Selector button until the HDBT indicator is illuminated.



## Speakers

Connect speakers to the spring loaded connectors. Speakers must be 4 or 8 Ohm and able to handle up to 25W. Audio volume is adjustable by RS232 control and the source device's volume control. Integrators frequently use RS232 to adjust the "nominal level" used by devices such as Sony® BluRay™ players that do not have volume control. Volume control from desktop computers, laptops, and mobile devices can be adjusted by those devices as necessary.



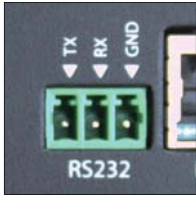
## Powered Speakers or External Amplifiers

When using an external sound reinforcement system, connect the audio line out (RCA Left and RCA Right) to the amplifier. The EX200's line out volume level is not adjustable. It is up to the external sound reinforcement system to adjust volume levels.



## Aux Stereo Audio Input

Background audio, from an Apple® iPod™ or other MP3 player, can be attached at the auxillary stereo input connector (L/R). To use this input, simply press the audio Source Selector until the L/R Audio Source Indicator is illuminated. At this point, you should hear the background audio. Using the RS232 interface, external controllers can select this audio source as necessary.



## RS232 Control

External 3rd-party control devices, such as those manufactured by Crestron, AMX, Extron, and FSR, can control the EX200 using the RS232 interface. A computer running a terminal emulation program can also control an EX200 using this interface. When connecting an RS232 cable from a computer to the EX200, use a straight through cable. When connecting an external 3rd party control device, the requirement is often to use a null-modem cable.

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# Advanced Features



## Change Image Resolutions

External 3rd-party control devices, such as those manufactured by Crestron, AMX, Extron, and FSR, can control the EX200 using the RS232 interface. A computer running a terminal emulation program can also control an EX200 using this interface. When connecting an RS232 cable from a computer to the EX200, use a straight through cable. When connecting an external 3rd party control device, the requirement is often to use a null-modem cable.

Most source devices send an electronic inquiry to the display asking for information about its capabilities. The display sends a table of information called the Extended Display Identification Data (EDID). Using this information, the source device changes its resolution to match the native resolution of the display or some other resolution that is supported by both source and display.

The EX200 intercepts the display's response to the EDID table request and sends its own EDID information to "trick" the source into sending its content in a particular resolution and/or audio format. This method allows us to change the resolution of the source device without reprocessing the video image and degrading the quality of the native image.

The EDID Resolution Select dip switches can be changed using a standard flat-blade screw driver or fingernail. Each location (1-4) can either be ON or OFF. Look at the following table to determine the proper EDID setting for your specific application.

Position				EDID
1	2	3	4	Format
OFF	OFF	OFF	OFF	Copies the EDID information from the display and makes it available for quick access to all Source Devices. Information is extracted at the time the EX200 is powered up. The display must be powered but does not necessarily need to be operating in order to obtain the display information. (DEFAULT)
OFF	OFF	ON	OFF	1080p 3D 2 Channel, Stereo Audio
OFF	OFF	ON	ON	1080p with 2 Channel, Stereo Audio



Power must be cycled (powered down then powered back up) in order to enable change in EDID settings.

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