ATLONA
Connecting Technology

HDVS Application for Boardroom solution

An Atlona HDVS Application Solution

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Application Solution

Regardless the size of the boardroom it is always essential to have a reliable signal. Some basic fundementals will always need to be considered like distance, control, power. With Robust technology we can ensure a hassale free appliction every time.
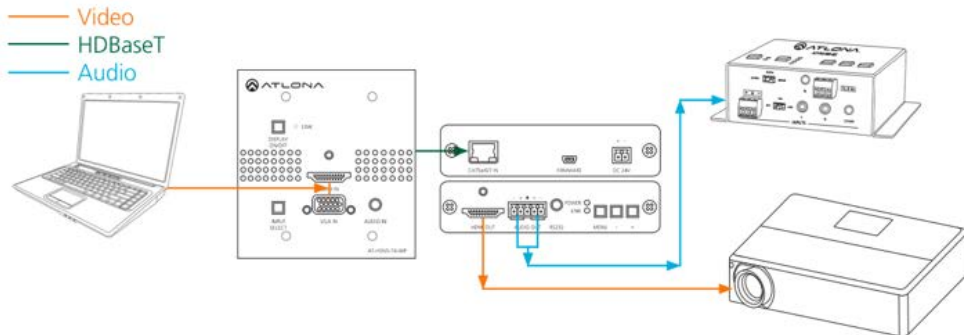
Signal Distance

One of the greatest challenges in delivering digital content is reliably transmitting the signal over extended distances. In this effort we must be able to consistently deliver multiple types of signals like audio, video, control, power and Ethernet over these extended distances. In a commercial market we must consider many different applications such as conference rooms, digital signage, healthcare, house of worship, education and more.

Lets consider the conference room for example. In a conference room the main focus is to have a presenter lead the presentation on a specific topic for the audience. Meetings in conference rooms are time allocated and everyone is on a tight schedule. The presenter must walk up to the connection panel, connect a laptop or other source in the appropriate connection and start presenting with no time wasted.

In almost all applications there will be a challenge to distribute the signal over extended distance to the display. In a tabletop connection application you may require multiple different connections such as VGA, HDMI, USB, and power for quick connectivity. For video signals like HDMI and VGA it is not always feasible to run multiple cables to the display. By having only one cable ran we can utilize equipment that is built on HDbaseT technology. HDbaseT allows us to run uncompressed audio, video, Ethernet, power and control on a single category cable.
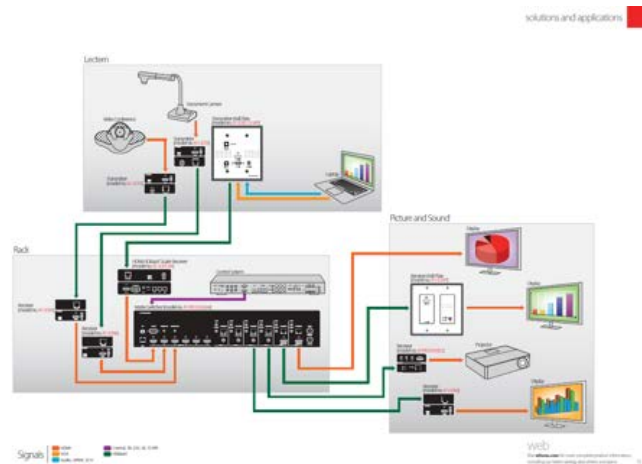

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HDbaseT

HDbaseT supports uncompressed video for TV and PC resolutions. There is also support for 3D and 4kx2k. All standard audio formats are also supported and transmitted without any signal degradation. Support for Ethernet is important in applications where the Ethernet signal needs to be extended with other combined signals like audio and video. By extending the Ethernet signal we can ensure that Internet ready devices like Smart TV's, PC's, and media players are all able to stream content such as pictures, music and videos. Power over Category cable (PoCc) can power up remote devices over the same single cable. By powering devices via the PoCc method we can clean up the installation behind the displays. The last element in what is called the 5-play convergence is control. Multiple types of equipment have different control such as IR, USB, CEC, RS232 and those are passed through the category cable as well. Recognizing all of these challenges Atlona developed numerous types of equipment utilizing the HDbaseT standard.

Atlona Solutions

Atlona offers HDBaseT products for application solutions in every market. For large commercial applications Atlona offers a wide range of matrix switchers depending on the size of the install. For digital signage applications, Atlona boasts distribution amplifiers designed for varying distances that can be cascaded to more than 60 displays. Lets refer back to our initial application with the conference room where the presenter needs to present reliably to a display over an extended distance. For this application Atlona offers the HDVS series family of products.

The HDVS series of products were influenced by these common challenges and Atlona quickly answered with a solution. First the presenter who enters a conference room needs an easy connection to the display. For this Atlona offers two simple solutions. One is a wall plate style unit

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that can be installed in a two-gang wall outlet, tabletop port or podium. Additionally a custom plate can be ordered through an Atlona partner that will fit inside a floor box or a tabletop connection panel. Atlona also made a tabletop version that comes in a box unit that can sit on top of a table or be hidden inside.

Both of the transmitter units offer VGA connectivity with audio embedding via a 1/8th (3.5mm) plug. The wall plate version offers a single HDMI connection and the box unit has two HDMI connections. When a presenter connects a source via HDMI or VGA cable to the AT-HDVS-TX-WP (wall plate) or AT-HDVS-TX (box unit) the input is automatically switched to the appropriate connection. This auto-switching feature is one of the primary reasons that this product is so easy to use. The HDVS transmitter also includes a physical RS-232 programmable button to easily power a display on or off or enter into standby mode.

A single category cable runs from the transmitter unit to the display on the wall or projector hanging from the ceiling. Using the AT-HDVS-RX (receiver), which is being fed from the wall plate, it is able to deliver a clear image as well as control for the projector from the RS232 port. The RS232 port on the receiver unit is linked to the display on/off button on the Transmitter wall plate or box unit. The receiver unit also includes a built in scaler to ensure that the image looks correct on the display each time a source is connected with no additional work required from the presenter. The presenter can now easily plug in a source to the AT-HDVS-TX wall plate unit with either an HDMI or VGA connection, the transmitter will auto-switch to the correct input. The presenter can simply press the power button on the transmitter to turn the display on. The source is now displayed for the audience.

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Products Mentioned

AT-HDVS-TX
AT-HDVS-TX-WP
AT-HDVS-RX

About Atlona®

Atlona® is a leading provider of innovative, AV distribution solutions. Since 2003, the company has been designing and engineering award-winning products for a diverse range of residential and commercial AV and IT markets, including education, business, government, entertainment, and healthcare.

Atlona's products and services enable system designers, integrators, consultants, and installers to simplify installation, minimize maintenance, and maximize the versatility of premier automated control solutions. Atlona's vision is simple: deliver customer-driven products designed and developed with the features, performance, and reliability that industry leaders demand; and deliver the best value in the industry.

More information about Atlona is available at www.atlona.com.

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