HDshāk®

HDautobahn
by intelix
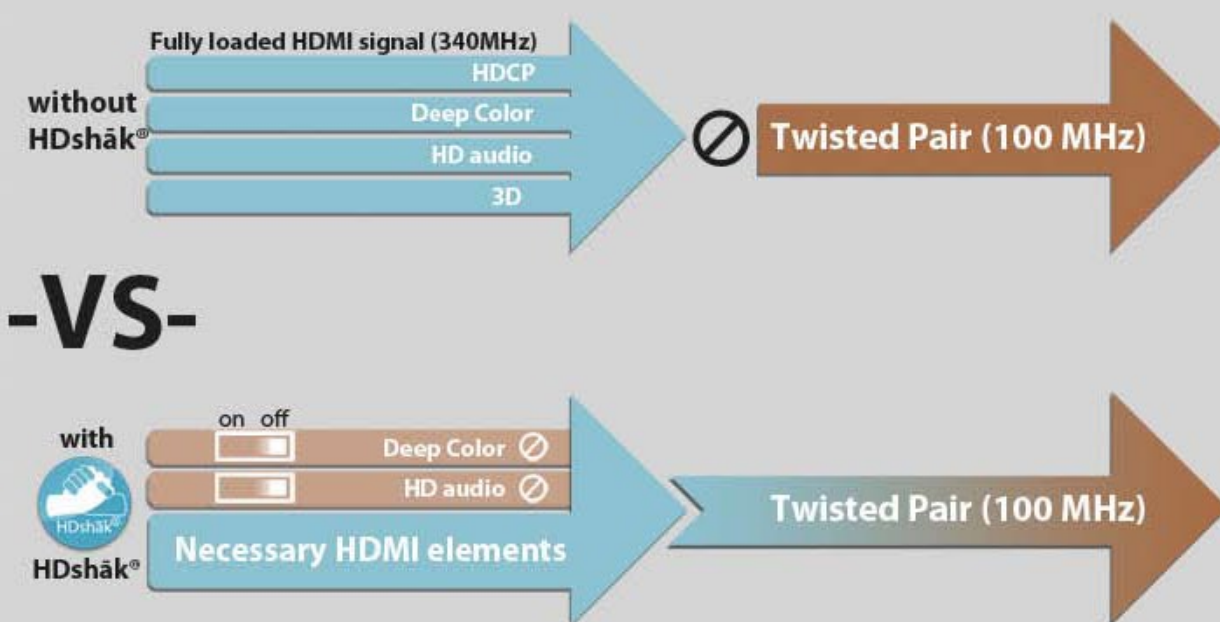
Finally, HDMI meets Install

bandwidth limiting | dynamic key processing | smart negotiation | EDID storing

HDshāk®

Intelix HDshāk® processing guarantees HDMI signal distribution. Through innovative processing and user-friendly controls, HDshāk® eliminates many of the challenges contractors face when designing and installing high-definition systems, including limited keys in source equipment, HDMI transmission distances, and limited bandwidth concerns when deploying twisted pair cable..
Finally, HDMI meets Install.

Bandwidth Limiting

without HDshāk®

Fully loaded HDMI signal (340MHz)
- HDCP
- Deep Color
- HD audio
- 3D

⊘ Twisted Pair (100 MHz)

-VS-

with HDshāk®

on off
- Deep Color ⊘
- HD audio ⊘

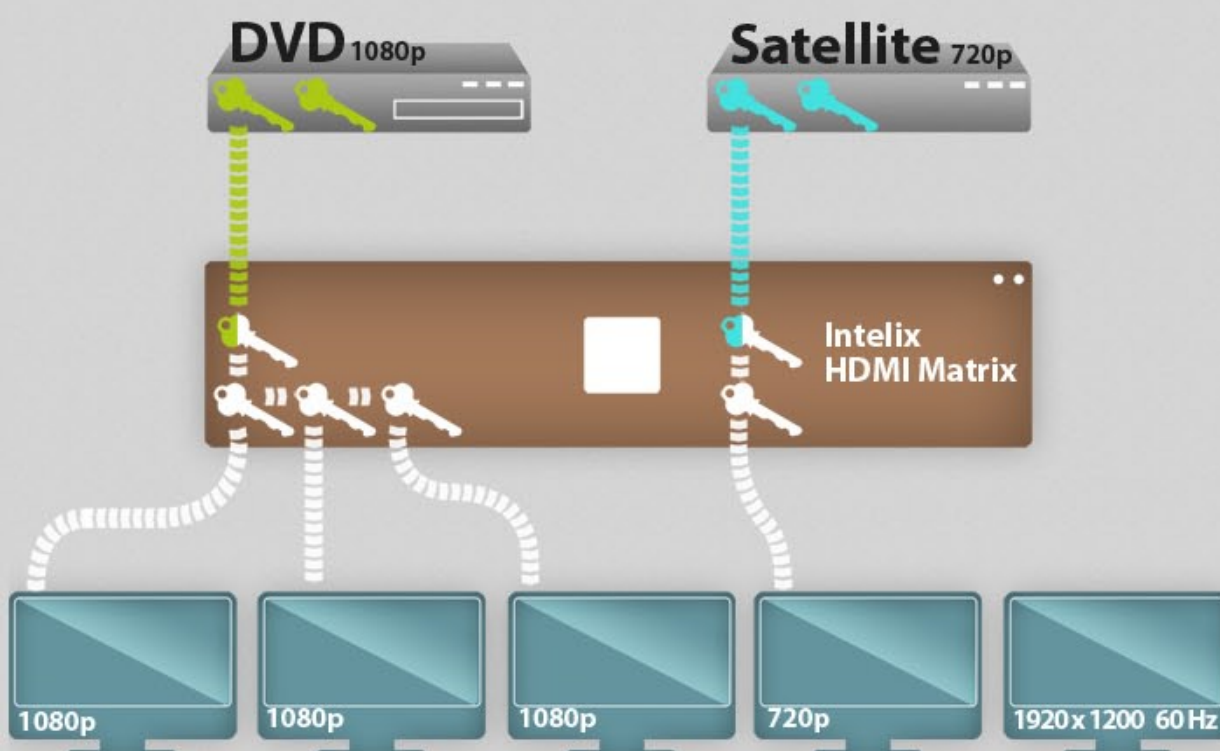**Necessary HDMI elements**

Twisted Pair (100 MHz)

The Skinny

Twisted pair cable simply cannot match HDMI cable's bandwidth carrying capabilities. So how do you push a high-bandwidth signal down a restricted cable? HDshāk® processing allows the installer to select which HDMI elements are transmitted over the twisted pair cabling, effectively allowing customization of the signal based on the installation's requirements. For example, elements such as deep color and multi-channel digital audio may be disabled to free bandwidth for signals that are required.

Bandwidth limiting increases twisted pair cable make and grade compatibility, and guarantees required high-performance HDMI features are delivered.

Dynamic Key Processing

DVD 1080p   **Satellite** 720p

Intelix HDMI Matrix

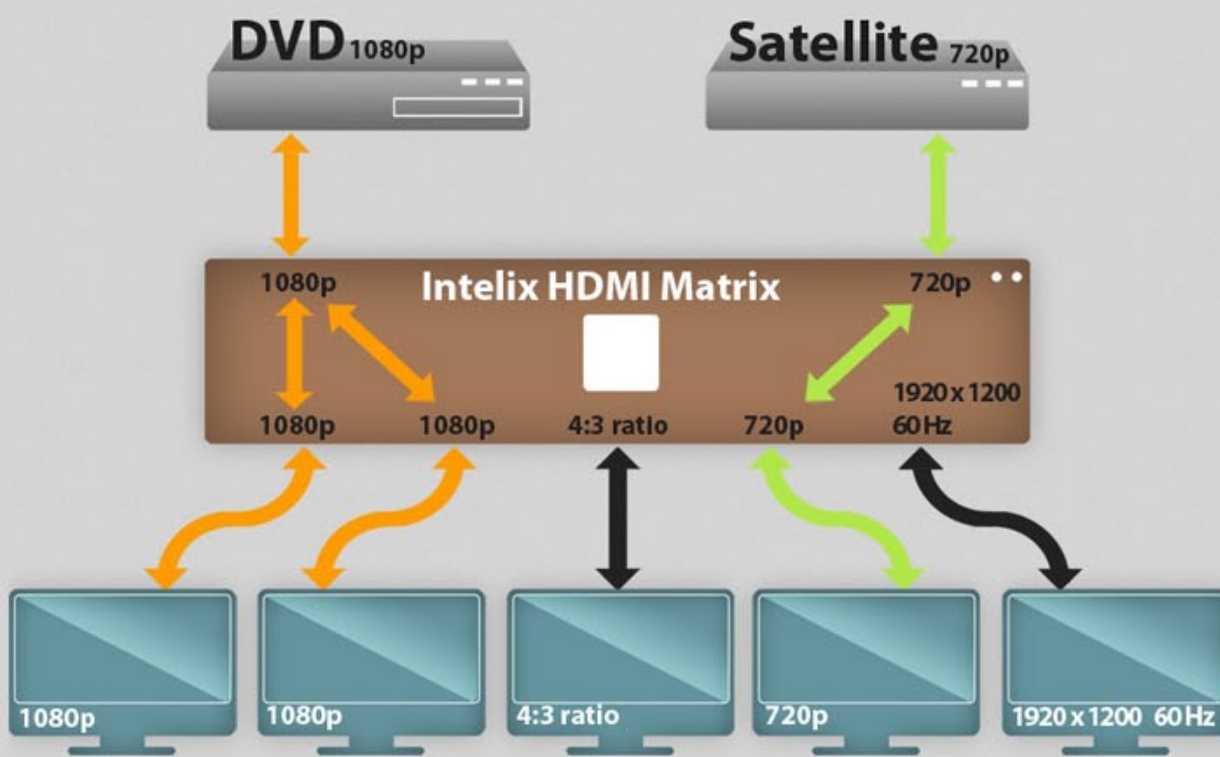1080p | 1080p | 1080p | 720p | 1920 x 1200 60 Hz

The Skinny

To ensure the highest quality native audio/video signal and to prevent unauthorized signal copying, HDMI devices contain signal encryption known as keys-and each device has a limited number. So what happens when a source doesn't have enough keys to talk to all of the required destinations? Intelix switchers employ independent key negotiation on the inputs and outputs of the matrix, thereby allowing limited key source devices to talk to numerous destination devices. Intelix switchers accept incoming audio, video and keys from source devices, process and store the source keys, and then create a new key with the audio and video for each output destination.

Dynamic key processing allows devices with limited keys to be transmitted to numerous destinations. destinations.

Smart Negotiation

DVD 1080p   **Satellite** 720p

Intelix HDMI Matrix

1080p | | | | 720p
1080p | 1080p | 4:3 ratio | 720p | 1920 x 1200 60 Hz

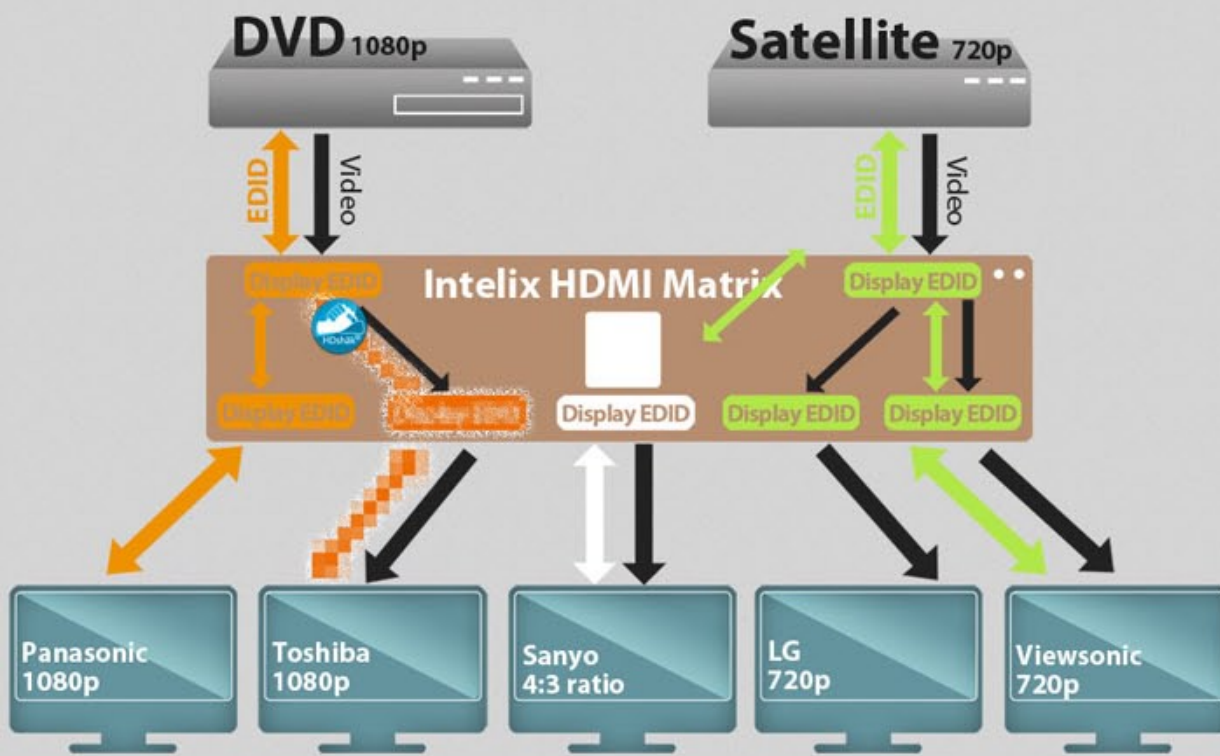1080p | 1080p | 4:3 ratio | 720p | 1920 x 1200 60 Hz

The Skinny

The chain is only as strong as its weakest link, but that doesn't mean the link has to break the chain. Each channel within Intelix switchers are discreet, allowing multiple signal resolutions to transmit simultaneously from sources to destinations-and switching one source won't affect destinations viewing a different source. Plus, Intelix HDshāk® processing automatically determines the common resolution between multiple destinations and instructs the source device to output a common resolution that everyone can view.

Smart negotiation avoids unnecessary signal interruptions and ensures every destination can view every source no matter what resolution.

EDID Storing

DVD 1080p   **Satellite** 720p

EDID | Video   EDID | Video

Intelix HDMI Matrix

Display EDID

Display EDID | Display EDID | Display EDID

Panasonic 1080p | Toshiba 1080p | Sanyo 4:3 ratio | LG 720p | Viewsonic 720p

The Skinny

HDMI destination devices transmit their display properties—known as EDID—to source devices. This ensures both sources and destinations cooperate on aspect ratios, resolutions, and refresh rates. So what happens if there is a corrupted or incompatible EDID signal—a common problem when switching, splitting, or extending HDMI? HDshāk® processing stores and consolidates destination EDID at every matrix input. This not only reduces the incidence for error and guarantees a proper hand shake, but it also greatly increases matrix switching speeds. Plus, HDshāk® technology includes pre-stored EDID with the most common display settings, ensuring installers have one more trick up their sleeves.

EDID storing increases matrix switch speeds and ensures brilliant video quality.

Revolutionize your audio-visual installations with Intelix
Convert analog signals to HDMI. Upscale standard resolutions to HD. Switch HDMI inputs to any or all outputs. Extend HDMI up to 300 feet over twisted pair cabling.

SVI TRADE WINNER 2010 | FINALIST 2009 InfoComm AWARD CEDIA Best New Product | 2009 InfoComm AWARD FINALIST | CEPro BEST | 2010 ATTENDEES CHOICE AWARD

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