

## HDMI 1.4 Overview

### What is HDMI 1.4?

As high-definition audio/video technology continues to advance, the specification for HDMI equipment and cabling is occasionally modified to ensure broad compatibility and maximum performance. Version 1.4 is the latest iteration of the HDMI spec, as issued by HDMI Licensing, LLC.

### What you should know?

Per the HDMI specification, only four HDMI cable types exist: Standard Speed, Standard Speed with Ethernet, High Speed, and High Speed with Ethernet. The HDMI organization has put in place a rule that requires all HDMI cables to be marketed in this manner. Therefore, you will not see our cables marketed as HDMI 1.4 cables. Keep in mind that installing a cable supporting HDMI 1.4 features does not give your existing devices of previous HDMI specifications the ability to experience 4K x 2K resolution, 3D, audio return or Ethernet. New A/V equipment supporting desired features is required in order to experience the newly specified features.

### Which features were added by the 1.4 specification?

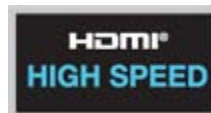
- **HDMI Ethernet Channel:** A data channel will be added to the HDMI connection, enabling high-speed bi-directional communication.
- **Audio Return Channel:** The new spec will enable a TV to send an audio signal back to an A/V receiver for processing and playback.
- **3D Over HDMI:** While some 3D applications and equipment exist today, the new spec defines common 3D formats and resolutions for HDMI-enabled devices.
- **4K x 2K Resolution Support:** The new spec enables HDMI devices to support extremely high HD resolutions, effectively four times the resolution of a 1080p device.
- **Content Type:** Allows for real-time signaling of content types between the display and source devices, enabling a TV to optimize the picture settings based on content type.
- **Expanded Support for Color Spaces:** HDMI now supports color spaces designed specifically for digital still cameras, enabling more accurate color rendering when viewing digital photos.

#### *High Speed HDMI with Ethernet*



- HDMI Ethernet Channel
- 10.2 GHz Bandwidth
- Audio Return Channel
- 3D Over HDMI
- 4K Resolution Support
- Expanded Support for Color Spaces
- HDMI Micro Connector (Type D)
- Automotive Connection System (Type E)

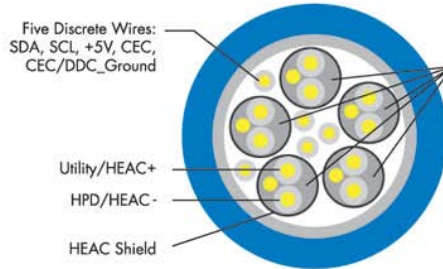
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## HDMI® Cutaway Views

High Speed HDMI with Ethernet

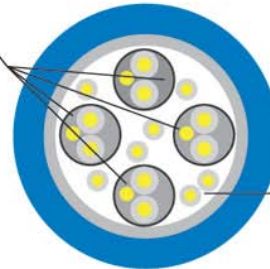


Five Discrete Wires:  
SDA, SCL, +5V, CEC,  
CEC/DDC\_Ground

Utility/HEAC+  
HPD/HEAC-  
HEAC Shield

4 x High Speed  
Differential Pairs

High Speed HDMI



Seven Discrete Wires:  
SDA, SCL, +5V, HPD,  
DDC/CEC\_GND,  
RSVD, CEC

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