

What is hdmi?

HDMI is a term you will come across if you buy a TV or a media player.

But, **what is HDMI**? How is it different from the other available standards? What does it offer you? Let's go for it. **HDMI** (High Definition Multimedia Interface) is a licensable audio/video connector interface for transmitting uncompressed, encrypted digital streams. Consumer electronics companies Hitachi, Matsushita, Philips, Silicon Image, Sony, Thomson, and Toshiba had founded this standard and released first version on December 9th 2002. This standard uses a single cable to carry uncompressed digital HD video, multi-channel audio and some control signals. **HDMI** uses a single 15mm, 9pin cable to carry both video and audio signals and a single remote control to operate all the devices in your home theatre. **HDMI** Devices have built-in intelligence that helps devices recognize TV resolution and auto adjust it so you don't have to bother about choosing the screen format.

HDMI is an enhanced and robust form of DVI. It is widely replacing DVI and is becoming the de facto standard for the consumer electronics manufacturers. It uses HDCP (High-Bandwidth digital content protection) protocol which protects the output from piracy and provides a secure link between the source and the sink. HDCP helped **HDMI** wide adoption as cable and satellite broadcasting associations have made HDCP compliance mandatory to avoid piracy. Though the latest release of **HDMI** is ahead of previous versions, it is backward compatible with the earlier versions as well as with DVI devices.

Since the first release of **HDMI** in 2002, new features have been added in each of the versions. Though all of them support 1080pi video resolution, they differ in their audio capabilities. Version 1.0 could decode most versions of audio contained in DVD and digital TV signals, including Dolby, Digital and DTS. Version 1.1 added DVD audio support, which means users with compatible disks and players can listen to 5.1 channel audio streams without the need for six separate audio RCA cables. Version 1.2/1.2a added Super Audio CD (SACD) support getting rid of the need to rely on iLink or analog cables to listen to SACDs. The standard also adds support for Type A PC connector.



The latest Version 1.3b/1.3a/1.3b adds support for Dolby TrueHD and DTS-HD Master Audio which are used in Blu-ray and HD DVD players. It supports an increased bandwidth of 10.2Gbps to support the future demands of HD display devices. With support for color depths of 30 bit, 36 bit, and 48bit, the devices can represent any color in the nature with as fine details as a human eye can perceive. It significantly removes on-screen color banding, for smooth tonal transitions and subtle gradations between the colors. It synchronizes video and audio with greater accuracy so you can experience crystal-clear video and audio quality.

HDMI is now enhanced for easier integration with low voltage, AC coupled PC graphics controllers thus bridging the gap between consumer electronics and the PC world. Simple cabling, crystal-clear audio/video, HDCP compliance and interoperability with PCs have put **HDMI** in the fore-front of connectivity standards and made it the de facto standard.

