# **APATURE HIGH END HDMI CABLES**

HDMI is an international standard for baseband image data for home-use A/V products. The standard is compatible with DVI. An HDMi allows transmission of video and audio data together by a single cable. Recent flat-panel display TVs and DVD recorders generally have an HDMi terminal.

For video, HDMi supports RGB signals, Y. Cb, Cr component signals, and 480i, 480p. 720p. 1.080i and 1.080p video formats. However, commercially available products do not necessarily support all these formats.

For audio, HDMi supports linear pulse code modulation (PCM), Dolby Digital and Digital Theater System (DTS) technologies. The new HDMi Version 1.1 standard covers DVD-Audio with up to eight channels, 24 bits and 192kHz sampling frequency. The maximum transfer rate is 5Gbps for Type A adopted for consumer electronics. The dual-link version, Type B, with transfer rate of 10Gbps, can handle HDTV video data and finer resolutions that are likely CEC (Consumer Electronics Control) to enter the commercial market in coming years. Products with HDMi Type B technology have not yet reached the commercial release stage.

HDMi technology accommodates several functions besides those for the transmission of video and audio signals (Fig.19). One of these functions is the Display Data Channel (DDC), which has three transmission lines for data exchange related to display resolution, aspect ratios and other display features, as well as for data exchanges for mutual authentication of HDCP compliance.

Another function is Consumer Electronics Control (CEC), which provides mutual control of electronic products connected to an HDMi. No commercial products today support this function. However, in the future, this function will enable consumer electronic equipment to

7. B video + 15.DDC(SCL) 2. R video ground 8. B video ground 16. DDC(SDA) 9. B video - 9. CEC 17. DDC clock 3. R video -19. Hot plug 14.Backup 18.5V 4. G video + 10. Clock + G video ground 11. Clock ground 6 G video 12. Clock

A function for mutual control of electronic products connected with each other

DDC (Display Data Channel)

DDC exchanges data for mutual authentication of display resolution and HDCP compliance Hot Plug Detect

A function that makes it possible to plug in devices into the terminal and unplug devices from the terminal without turning power off

Fig. 19: Digital interfaces (HDMi terminals)

start reproduction automatically upon the switchover of the input of an A/V amplifier, or conversely, to turn on and off the A/V amplifier automatically upon the start of the player.

Digital interfaces have two advantages. First, these interfaces improve transmission quality, making for better images and sound than in competing systems. Second, digital interfaces enable added functions. Digital interfaces improve transmission quality by eliminating the need for digital-to-analog-to-digital conversion, thus preventing deterioration of signals normally caused by such conversion.

In addition, as numerous kinds of equipment begin to use digital signal processing circuits, signal processing will become smoother than ever before. Basically, a single cable can link to a TV and other equipment. Also, a single cable can simultaneously send and receive information about the signal undergoing transmission. This facilitates the interfaces in equipment for system construction.

The digital interface also provides copyright protection. From the point of view of content producers, this is an advantage over analog interfaces.

## **New HDMi Products**

#### Pre-Packaged, Hi-AWG, Triple Shielded, Flex Jacket, Gold Ends

Product Cat. #

HDMi - 1m

HDMi - 2m

HDMi - 3m

HDMi - 5m

#### Class 3 24 AWG, Triple Shield, Gold Ends

Product Cat. #

HDMi - 25'

HDMi - 35'

HDMi - 50'

### Repeater Class 3 Special Lengths

Product Cat. #

HDMi - 35' R

HDMi - 50'R

HDMi - 65'R

HDMi - 75'R

HDMi - 100'R

\*Note: Flat ribbon HDMi cable available 2007.

\*Note: Distribution splitters late 2006.

# Installer Series HDMi with Gold Ends - Poly Bags

Product Cat. #

HDMi IN -1m

HDMi IN - 2m

HDMi IN - 3m

HDMi IN - 4m

### New HDMi Splitters, Selectors, Adaptors, Wallplates

Product Cat. #

HDMi - DF (double female)

HDMi - DFR (double female repeater)

HDMi - WPC (wallplate HDMi w/ component)

HDMi - WP (wallplate HDMi female)

HDMi - WPR (wallplate HDMi w/ repeater)

HDMi - WPCR (wallplate HDMi w/ component/ repeater)

HDMi - SEL-3 (manual 3 to 1 selector)

HDMi - SEL-5 (manual 5 to 1 selector)

HDMi - SEL4RR (selected 3 to 1 w/ remote & repeater)

HDMi - SEL MRR(Multimedia Selector w/ remote & repeater)

HDMi - SPLR4 splitter with repeater (1 to 4) HDMi - SPLR8 splitter with repeater (3 to 8)

WPB-100 media plate wide

WPB-200 media plate double wide

## Apature Products, Inc.

Mailing:

P.O. Box 877

Phone: 386-437-5530

Shipping:

305 W. Lambert Street

Fax: 386-437-5316

Bunnell, FL 32110

http://www.apature.com e-mail jslaga@apature.com

