

What is EDID?

Extended display identification data (EDID) is a data structure provided by a display to describe its capabilities to a graphics card. It is what enables devices to know what kind of display is connected. Before EDID was defined, there was no standard way for a graphics card to know what kind of display device it was connected to.

What's the problem with EDID?

Newer Operating Systems such as Windows Vista and Windows 7 require stricter adherence to EDID standards. Some displays do not properly conform to EDID standards. Additionally, many video extenders and switching devices fail to extend EDID information from the display all the way to the source. The result is incompatible resolutions or sometimes no display at all.

What's the Solution?

Hall Research Technologies video switchers and extenders support EDID signal pass-through. Hall Research Technologies also offers model EM-EDID-HD15 EDID emulators. The EM-EDID-HD15 allows a video signal to pass through to a connected device and automatically supplies EDID information. The emulated EDID supports various display resolutions ranging from 640x480 to 1920x1080. The EDID information stored in the EM-EDID-HD15 strictly conforms to the EDID standards ensuring compatibility, regardless of what display is connected.

EDID Physical Layer Implementation

Each Display (LCD, Plasma, Projector, etc) stores its own specific EDID information in a non-volatile EEPROM that can be accessed and read by a PC through the same VGA connection. The VESA standard for the HD15 VGA connector dictates that the PC should provide +5v voltage on pin 9. The EDID EEPROM circuit in the display can be powered from this +5v coming from the PC through the VGA connection. The result of this is that the PC can read the EDID information in the LCD even if the LCD is powered off!

Pass-through EDID Emulator

The Hall Research Technologies, Inc. Model EM-EDID-HD15 gets its power through the pin 9 from the source. In most applications no external power supply is needed. The unit does have a power supply jack so if the source does not provide 5v on pin 9 an external power supply can be used.

The pass-through EDID emulator includes a myriad of 4x3 and 16x9 resolutions and refresh rates from 640x480 through 1920x1080. Customer specific custom resolutions can also be programmed in the device.



EM-EDID-HD15

Hall Research Products Support EDID!



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