Windows Vista and your NEC monitor: FAQs

Can I use the same monitor once Vista is installed?

Yes, you can. Basically, nothing changes (except your OS). You can continue to use your monitor as you have with your previous or current OS. All monitors (even non-Vista certified monitors) are expected to work fine with Vista right out of the box.

However, NEC is in the process of obtaining official certification for Microsoft Vista. There are two levels of monitor certification for Windows Vista:

Premium – "Certified for Windows Vista"
Basic – "Works with Windows Vista"

Display drivers compatible with Windows Vista are available at www.necdisplay.com. This list will be updated as new monitors are added.

Why should I install an official certified driver?

Although you monitor will most likely work fine with Vista out of the box, by installing the Vista driver you will be able to maximize the monitor's resolution capabilities.

Updated display monitor drivers will be available as part of Microsoft Windows update, and for download from www.necdisplay.com.

There are also updated Vista-compatible versions of NaViSet™, NaViSet Administrator, and SpectraView$_{II}$™, available from NEC. GammaComp™ and GammaCompMD are currently not compatible with Vista.

What's the difference between Vista Premium and Basic?

Premium:
1. Digital Video Input required (DVI, HDMI, etc..)
2. EDID 1.3 required

3. DDC/CI required
4. Satisfies "Windows Color Fidelity" requirements (sRGB)
5. HDCP required (beginning June 1, 2007)
6. 640x480 mode required (beginning June 1, 2007)

Basic:
1. Digital video NOT required
2. EDID 1.3 required
3. DDC/CI optional
4. 640x480 required (beginning June 1, 2007)

All NEC monitors manufactured after 2001 will meet at least the Vista Basic requirements. Although not all compatible monitors will be certified.

What is EDID and why is version 1.3 important?

Extended Display Identification Data (EDID) is a VESA (not Vista) standard for the data format that contains basic information about a monitor and its capabilities. The information stored in the monitor includes the manufacturer's monitor name, resolutions supported, color depth, the actual monitor name and serial number. This information is stored in the hardware of the monitor and accessed through a Data Display Channel (DDC). Version 1.3 includes support for a secondary Generalized Timing Format (GTF) and requires a certain set of monitor descriptors. Microsoft requires this version for full compatibility with Vista. EDID 1.3 has been used in NEC monitors since 2001.

What is DDC/CI?

Data Display Channel/Command Interface (DDC/CI) is an extension to DDC specified by VESA in August 1998. It allows a computer with a suitably designed graphics adapter to adjust monitor parameters such as brightness and color balance, or to initiate degaussing. The SpectraView$_{II}$ line of NEC monitors use DDC/CI and a supplied external color sensor to provide automatic calibration of the monitor's color balance.

NaViSet, NaViSet Administrator and SpectraView$_{II}$ all take advantage of DDC/CI to better enhance the user's experience. The latest version of the specification was released as: Standard- Version 1.1", October 2004 (VESA document VESA-2004-10).

What is HDCP?

High-bandwidth Digital-Content Protection (HDCP) is a specification developed by Intel for protecting digital entertainment

content that uses the DVI and HDMI interface. HDCP encrypts the transmission of digital content between the video source or transmitter—such as a computer, DVD player or set-top-box—and the digital display, or receiver—such as a monitor, television or projector. HDCP is not designed to prevent copying or recording of digital content but to protect the integrity of content as it is being transmitted.

Implementation of HDCP requires a license obtainable from Digital Content Protection, LLC, which then issues a set of unique secret device keys to all authorized devices. During authentication, the receiver will only accept content once it demonstrates knowledge of the keys. Furthermore, to prevent eavesdropping and data theft, the transmitter and receiver will generate a shared secret value that is consistently checked throughout the transmission. Once authentication is established, the transmitter encrypts the data and sends it to the receiver for decryption.

References

Webopedia - http://www.webopedia.com/term/h/hdcp.html

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