



ViewSonic VGA Non-DDC Adapter Solution



Photo 1, Back-side



Photo 2, Front-side

1. Introduction:

Each computer system is composed of many components; one of the most common components on the computer is the Video Card (See Photo 3). Some computers like laptops do not use a video card; instead they use an on-board video chip Integrated Circuit (IC) to drive video simultaneously to the laptop LCD panel and to an external device, such as a monitor or projector. There are many video card vendors in the industry, offering many types of video card features such as VGA, DVI, S-video, component, composite and TV-out. This wide variety of video chips can cause compatibility issues with many monitors in the industry, especially DDC related issues on VGA ports.

2. Typical problems Related to VGA DDC ports:

- 1) Monitor will not boot-up properly.
- 2) Monitor is blinking intermittently.
- 3) Reboot/Restart issues (Image will not reappear properly after the reboot).

3. What is a Non-DDC Adapter?

A non DDC adapter can be described as a very useful device in eliminating most common DDC issues between the video card and the monitor (The ¼" thin profile adapter can be seen in Photos 1 & 2).

4. Comments about Video Cards.

- Personal computers containing popular video cards like: ATI, NVIDIA, Matrox, 3D Labs and Intel, just to name a few, tend to have less compatibility issues than computers with low-end video cards. One of the main reasons for this is, because the vendors of the high-end video cards tend to conduct more extensive compatibility testing during the development cycle; therefore, producing a more robust and compatible product.
- There are also computers on the market with built-in video chipsets on the motherboard, also known as on-board video. Usually the same principle above will apply to the quality of the video chipset.



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- There are special computer terminals on the market, where most of the processing is conducted at the local network server level. Often known as “dumb terminal”, these units also contain an integrated Video IC on the device.
- These units contain a unique build in Operating System (OS) with limited DDC capabilities as part of the firmware. Many times the DDC compatibility may not be supported by the OS. The same principle above can apply to the quality of the video chipset.



Photo 3, Typical AGP Video Card with DVI and VGA support

5. How does the Non-DDC adapter work?

The typical VGA connector contains 15 pins on the mini d-sub connector (See Photo 4). In order to eliminate all common DDC issues between the video card and the monitor, we have removed the DDC connectors on the Non-DDC adapter, canceling all DDC communications at Pin 15 (DDC-SCL), Pin 12 (DDC-SDA) and Pin 9 (DDC +5 volt load).



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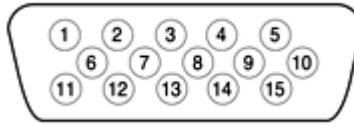


Photo 4, Standard Pin Configuration for VGA Video

Pin	DDC Display	Pin	DDC Display
1	Red Video	9	DDC +5 volt load
2	Green Video	10	Sync. return
3	Blue Video	11	Optional
4	Optional	12	Bi-directional data (SDA)
5	Return	13	Horizontal sync.
6	Red video return	14	Vertical sync.
7	Green video return	15	Data clock (SCL)
8	Blue video return		

6. Installation Instructions:

- Shut down computer system with Start/Shut Down Option.
- Disconnect video cable from the video card.
- Connect the ViewSonic Non-DDC adapter to the video card VGA port.
- Connect the VGA cable to the non-DDC adapter.
- Turn on computer.

For optimal video performance, please be sure to set your monitor to the preferred resolution and refresh rate, as indicated in your User Guide.

7. Problems/Trouble Shooting:

The Non DDC adapter is design to resolve most DDC compatibility issues immediately after installation. If for some reason your monitor continues to display any of the issues described in step 2, please install the CD Wizard that was enclosed in the box of the product. This CD contains the proper INF and ICM files for the monitor. These files are necessary for the operating system to understand all the resolutions that the monitor is able to support. These files can also be obtained from the ViewSonic website at <http://www.viewsonic.com/support/drivers/index.cfm>.

The files can be installed manually using the automatic installer from the web. After completing the driver installation, try changing your resolution settings under: *Display properties/Settings/Screen Resolution*, to the primary resolution.

In the event that none of steps above are able to resolve your problem, please contact the ViewSonic Customer Support department at:

<http://www.viewsonic.com/contactus/index.htm> or 1-909-444-8888.



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Note 1: All ViewSonic monitors are VESA compliant and ViewSonic is a member of the Video Electronics Standard Association (VESA). VESA is the industry standards organization that provides all guidelines for computer Display Monitor Timings.

Note 2: The adapter was designed to resolve only VGA DDC compatibility issues and not DVI.

Note 3: ViewSonic monitors are Microsoft Certified for WHQL.

Note 4: Step 8 Indicates the location in the operating system where the INF & ICM files are installed, as well as the User Guide in PDF format file.

Note 5: The ViewSonic Part number for the Non-DDC adapter is: **A-AD-0114-0111**.

8. Typical Location of INF, ICM and ViewSonic Users Guide files on Microsoft Operating Systems & Mac.

Windows XP

INF Locations: C:\Windows\Inf\OEM1-14??? "VG150.inf"

ICM Locations: C:\Windows\System32\Spool\drivers\Color\VG150.ICM

ViewSonic Folder: Start\programs\ViewSonic\VG150.Pdf

Windows 2000

INF Locations: C:\Windows\Inf\OEM1-14??? "VG150.inf"

ICM Locations: C:\Windows\System32\Spool\drivers\Color\VG150.ICM

ViewSonic Folder: Start\programs\ViewSonic\VG150.Pdf

Windows ME

INF Locations: C:\Windows\Inf\VG150.inf

ICM Locations: C:\Windows\System\Color\VG150.ICM

ViewSonic Folder: Start\programs\ViewSonic\VG150.Pdf

Window 95/98

INF Locations: C:\Windows\Inf\VG150.inf

ICM Locations: C:\Windows\System\Color\VG150.ICM

ViewSonic Folder: Start\programs\ViewSonic\VG150.Pdf

Mac

Wizard.ini Locations: MacHD\System folder\preferences\Vswizard.ini