

# INSTALLING A USB TO VGA ADAPTER FOR YOUR "WINDOWS.. COMPUTER

by Francis Chao  
fchao2@yahoo.com



Web location for this  
presentation:

<http://aztcs.org>

Click on

“Meeting Notes”

# SUMMARY

If you have having problems with a VGA port on your desktop or laptop "Windows.." computer, you can install a "USB to VGA adapter" to bypass your existing VGA port.

All of the current USB to VGA adapters use chipsets from one of two manufacturers: "DisplayLink" and "Magic Control Technology" ("MCT").

# TOPICS

- Problem Description
- Bypassing a Failed VGA port by installing a "USB #-to-VGA Adapter"
- Two Chipset Manufacturers
- An Example of a "DisplayLink" Adapter
- An Example of a "Magic Control Technology" Adapter

# TOPICS (continued)

- Changing From One Model of Adapter to Another

# PROBLEM DESCRIPTION:



# PROBLEM DESCRIPTION

- In "Windows XP", "Windows Vista", "Windows 7", "Windows 8", or "Windows 8.1", despite the existence an currently-unused VGA port, the VGA port never shows up in the "Adapter" tab when you click on the "Advanced" button of the "Settings" tab of "Display Properties":



# Control Panel

File Edit View Favorites Tools Help

Back Forward Stop Search Folders Refresh Home Stop Refresh

Address Control Panel Go

- |  |   |   |  |   |  |
|--|---|---|--|---|--|
| <br>Accessi...<br>Options   | <br>Add<br>Hardware      | <br>Add or<br>Remov...   | <br>Admini...<br>Tools  | <br>Autom...<br>Updates  | <br>Date and<br>Time    |
| <br>Display                 | <br>Flash<br>Player      | <br>Folder<br>Options    | <br>Fonts               | <br>Game<br>Control...   | <br>Internet<br>Options |
| <br>Keyboard                | <br>Mouse                | <br>Network<br>Connec... | <br>Network<br>Setup... | <br>Phone<br>and ...     | <br>Power<br>Options    |
| <br>Printers<br>and Faxes | <br>Regional<br>and La | <br>Scanners<br>and C  | <br>Sched...<br>Tasks | <br>Security<br>Center | <br>Sounds<br>and     |



# Display Properties



Themes | Desktop | Screen Saver | Appearance | Settings

A theme is a background plus a set of sounds, icons, and other elements to help you personalize your computer with one click.

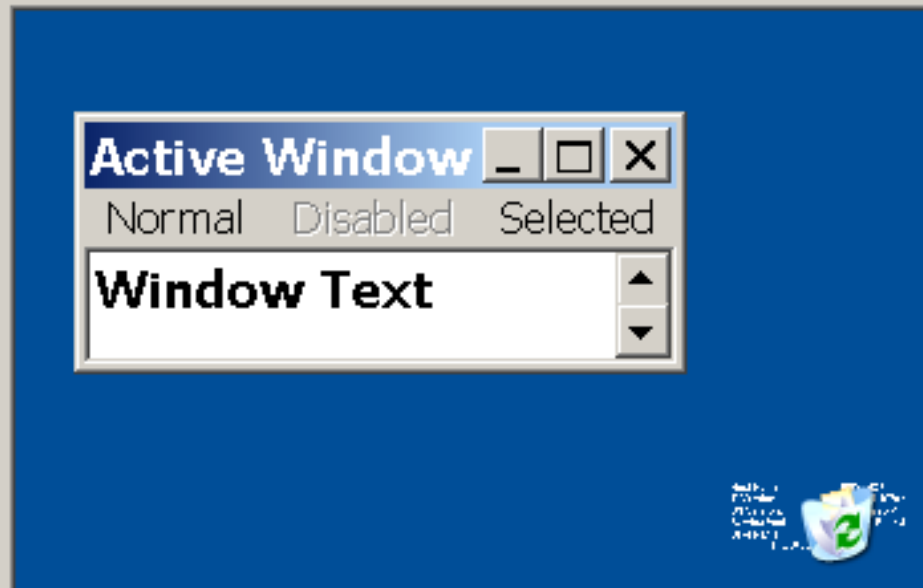
Theme:

Windows Classic (Modified)

Save As...

Delete

Sample:



OK

Cancel

Apply

# Display Properties



Themes

Desktop

Screen Saver

Appearance

Settings

A theme is a background plus a set of sounds, icons, and other elements to help you personalize your computer with one click.

Theme:



# Display Properties



Themes Desktop Screen Saver Appearance Settings

Drag the monitor icons to match the physical arrangement of your monitors.



Display:

1. (Default Monitor) on VMware SVGA II

Screen resolution

Less



More

1600 by 942 pixels

Color quality

Highest (32 bit)



- Use this device as the primary monitor.
- Extend my Windows desktop onto this monitor.

Identify

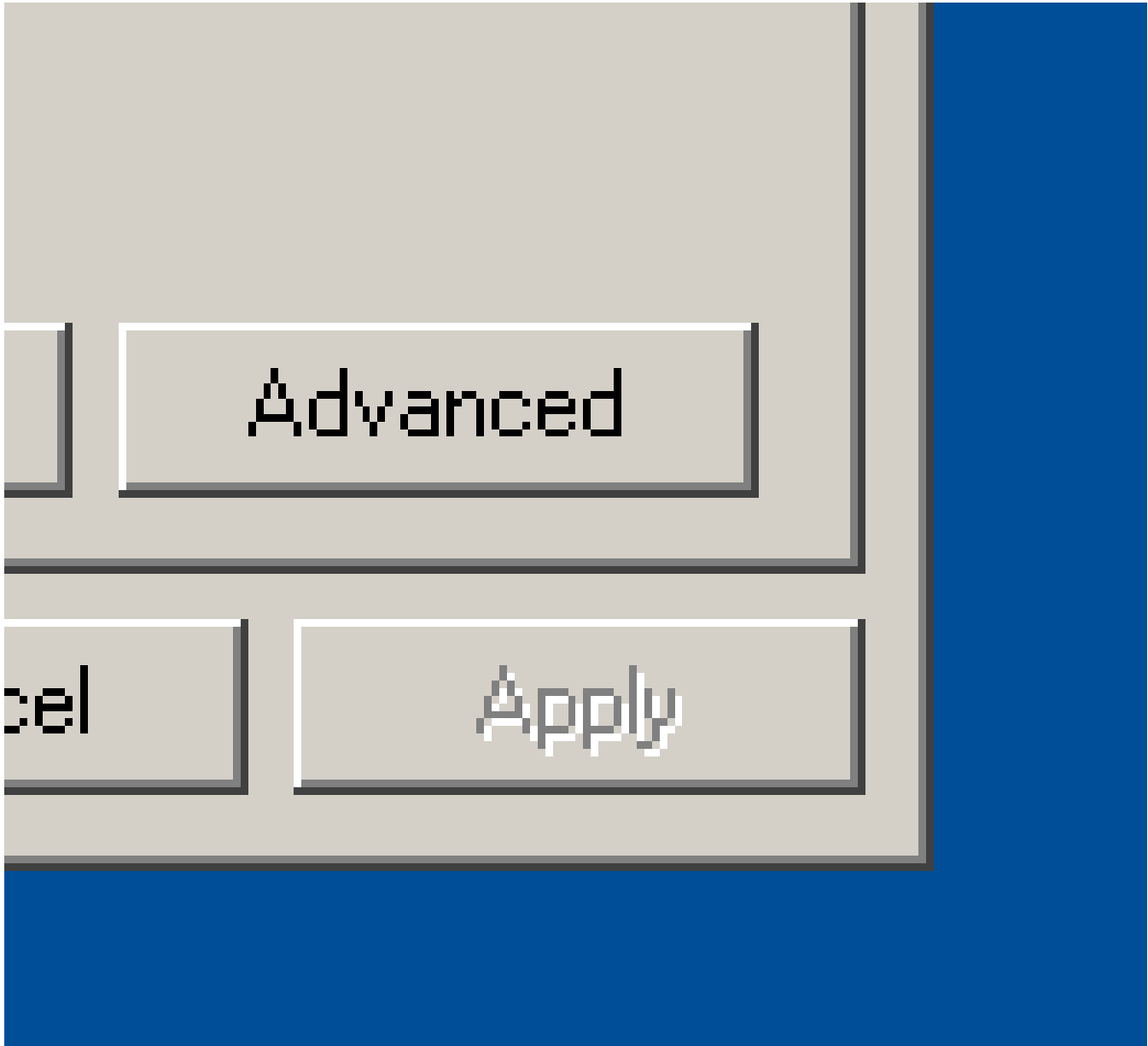
Troubleshoot...

Advanced

OK

Cancel

Apply



# (Default Monitor) and VMware SV... ? X

General Adapter Monitor Troubleshoot

## Display

If your screen resolution makes screen items too small to view comfortably, you can increase the DPI to compensate. To change font sizes only, click Cancel and go to the Appearance tab.

DPI setting:

Normal size (96 DPI) ▼

Normal size (96 dpi)

## Compatibility

Some programs might not operate properly unless you restart the computer after changing display settings.

After I change display settings:

- Restart the computer before applying the new display settings
- Apply the new display settings without restarting
- Ask me before applying the new display settings

Some games and other programs must be run in 256-color mode. Learn more about [running programs in 256-color mode](#).

OK

Cancel

Apply

# (Default Monitor) and VMware SV... ? X

General Adapter Monitor Troubleshoot

Adapter Type



VMware SVGA II

Properties

Adapter Information

Chip Type: VMware SVGA II  
DAC Type: VMware SVGA II  
Memory Size: 32 MB  
Adapter String: VMware SVGA II  
Bios Information: VMware SVGA II

List All Modes...

OK

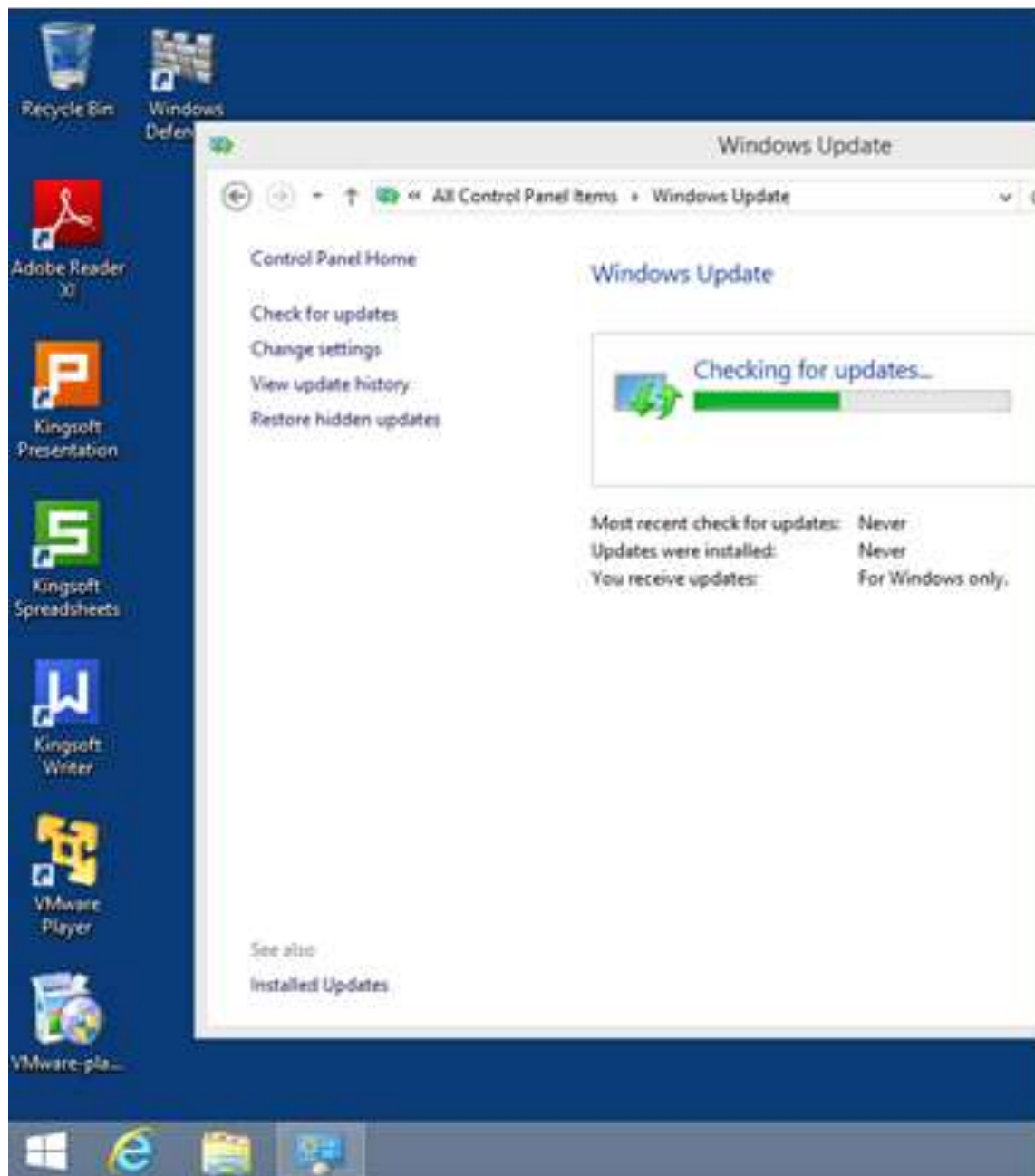
Cancel

Apply



# Problem Description (continued)

- In "Windows 7", "Windows 8", or "Windows 8.1", even though you have a VGA port that is connected by means of a VGA cable to a second monitor, when you press the Windows key and the p key at the same time, either nothing happens or you get the following error message:



## Project

Your PC can't project to another screen.  
Try reinstalling the driver or using a  
different video card.

# Project

Your PC can't project to another screen.  
Try reinstalling the driver or using a  
different video card.

**BYPASSING A  
FAILED VGA PORT  
BY INSTALLING A  
"USB # TO VGA"  
ADAPTER:**

# **BYPASSING A FAILED VGA PORT BY INSTALLING A "USB # TO VGA ADAPTER"**

You can install a  
"USB 2 to VGA adapter"  
or a  
"USB 3 to VGA adapter"  
to provide your computer with an  
additional VGA port:

# **BYPASSING A FAILED VGA PORT BY INSTALLING A "USB # TO VGA ADAPTER" (continued)**

"USB 2 to VGA adapters" work best with computers that have USB 2 ports while

"USB 3 to VGA adapters" work best with computers that have USB 3 ports.

# TWO CHIPSET MANUFACTURERS:

# Two Chipset Manufacturers

- There are two manufacturers of chipsets for "USB 2 to VGA Adapters" and "USB 3 to VGA Adapters":

**DisplayLink**

and

**Magic Control Technology  
("MCT")**



# Two Chipset Manufacturers

- The two manufacturers of chipsets for "USB # to VGA Adapters" also develop the drivers and software for their respective chipsets. These drivers and software programs are bundled onto the CDs that the various manufacturers of the adapters provide with their specific products.

# Two Chipset Manufacturers (continued)

- "DisplayLink" chip sets can be found in "USB 2 to VGA adapters" and "USB 3 to VGA adapters" that are made by Accel, Etekcitey, Diamond, Hewlett Packard, HIS, IOGear, Kensington, Plugable, Sewell, SIIG, StarTech, Targus, Unitek, and Winstars.

# Two Chipset Manufacturers (continued)

- "Magic Control Technology" ("MCT") chip sets can be found in "USB 2 to VGA adapters" and "USB 3 to VGA adapters" that are made by Belkin, j5create, Seanet, and SIIG,.

# Two Chipset Manufacturers (continued)

- Note that SIIG uses both "DisplayLink" and "Magic Control Technology" ("MCT") in their broad line of "USB 2 to VGA adapters" and "USB 3 to VGA adapters":

# Two Chipset Manufacturers (continued)

- SIIG's model JU-VG0512-S1 USB 3-to-VGA adapter has a "DisplayLink" chip set
- SIIG's model JU-VG0211-S1 USB 3-to-VGA adapter has a "Magic Control Technology" (MCT) chip set.

# Two Chipset Manufacturers (continued)

- Difference between MCT-based and DisplayLink-based "USB x to VGA adapters":

For DisplayLink adapters, each adapter that you buy can provide you with a VGA, a DVI, OR a HDMI port.

For MCT-based adapters, each adapter that you buy can only have one VGA port or one DVI port or one HDMI port.

# Two Chipset Manufacturers (continued)

- Difference between MCT-based and DisplayLink-based "USB x to VGA adapters":  
MCT-based adapters are more reliable for connecting to VGA projectors while DisplayLink-based adapters are more reliable for connecting to DVI and HDMI projectors.

# Two Chipset Manufacturers (continued)

- Difference between MCT-based and DisplayLink-based "USB x to VGA adapters":  
MCT-based software and drivers are much harder to install into "Windows 8" and "Windows 8.1" computers relative to DisplayLink-based software and drivers.



# Two Chipset Manufacturers (continued)

- Difference between MCT-based and DisplayLink-based "USB x to VGA adapters":  
DisplayLink-based adapters allow for much higher video resolutions relative to MCI-based drivers.

# Two Chipset Manufacturers (continued)

- Difference between MCT-based and DisplayLink-based "USB x to VGA adapters":  
Both DisplayLink-based adapters and MCI-based adapters result in some aspect ratio distortion with DisplayLink adapters more likely to produce more aspect ratio distortion relative to MCI-based adapters.

AN EXAMPLE OF A  
"DISPLAYLINK"  
ADAPTER:

# **An Example Of "DisplayLink" Adapter:**

- **StarTech USB32HDDVII**

## USB 3.0 Dual Head Graphics Adapter - HDMI® and DVI-I

Connect an HDMI® and/or a DVI-I equipped display through a USB 3.0 port, for a 1080p HD external multi-monitor solution

FR: Carte vidéo externe USB 3.0 HDMI®/DVI-I  
DE: Externe USB 3.0-HDMI®/DVI-I-Videokarte  
ES: Tarjeta de Video Externa USB 3.0 HDMI®/DVI-I  
NL: USB 3.0 HDMI®/DVI-I Externe Videokaart  
PT: Placa de Video Externa USB 3.0 HDMI®/DVI-I  
IT: Scheda video esterna USB 3.0 HDMI®/DVI-I

PART # USB32HDDVII



## USB 3.0 Dual Head Graphics Adapter - HDMI® and DVI-I

FR: Raccordez un écran HDMI® et/ou DVI-I par le biais d'un port USB 3.0, pour une solution multi-écrans externe HD 1080p accélérée

DE: Schließen Sie ein HDMI®-Display und/oder DVI-I-fähiges Display über einen USB 3.0-Port an für eine externe beschleunigte 1080p HD Mehrfach-Monitor-Lösung.

ES: Conecte una pantalla equipada con HDMI® y/o DVI-I a través de una conexión USB 3.0 y obtenga una rápida solución externa de múltiples monitores HD de 1080p

NL: Sluit een HDMI®- en/of DVI-I-beeldscherm aan via een USB 3.0-poort voor een snelle (1080p HD) externe monitoraansluiting

PT: Ligue um monitor equipado com HDMI® e/ou DVI-I através de uma porta USB 3.0 para uma solução multi-monitor externa HD 1080p acelerada

IT: Consente di collegare un monitor con HDMI® e/o DVI-I tramite una porta USB 3.0, per una rapida soluzione multimonitor esterna con HD 1080p

### What's in the box:

USB 3.0 to HDMI®/DVI-I Graphics Adapter / Mini USB 3.0 Cable /  
DVI to VGA Adapter / Driver CD / Installation guide

For technical support visit: [startech.com/support](http://startech.com/support)

2 Year Warranty

Made in Taiwan



PART # USB32HDDVII



Scan for specs



ISO 9001  
REGISTERED MANAGEMENT SYSTEM







Page:

1/1/2013

**SOFTWARE END USER LICENSE AGREEMENT FOR**

**DISPLAYLINK MIRROR DRIVER and DISPLAYLINK GRAPHICS ADAPTER SOFTWARE**

**[THE "PROGRAM"]**

This is a legal agreement between you, the end user, ("You") and DisplayLink (US) Limited ("DisplayLink"). BY INSTALLING THE SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT.

Some versions of the software, once installed, will check for updated system software at least once and then again at regular intervals unless you specifically disabled this feature when given this option. No personal information or information about your PC or the software installed on your PC is sent to our update servers during this process. Accepting the End User License Agreement means that you accept this product feature.



AN EXAMPLE OF A  
"MAGIC CONTROL  
TECHNOLOGY"  
ADAPTER:

# **An Example Of A "Magic Control Technology" ("MCT") Adapter:**

- **SIIG JU-VG0211-S1**





**SIIG<sup>®</sup>**

*Connectivity Solutions You Can Trust!™*  
*Fremont, California, USA*



## **System Requirements**

- Desktop or notebook computer with an available USB 2.0/3.0 port (USB 3.0 recommended)
- Windows<sup>®</sup> 7 (32-/64-bit) / XP (32-/64-bit) / Server 2003 & 2008 (32-/64-bit)

## **Package Contents**

- USB 3.0 to VGA Multi Monitor Video Adapter
- Driver CD & user's manual

## **Key Features & Benefits**

- Supports standard and widescreen (16:9 & 16:10) aspect ratio
- Connects up to 6 adapters per system
- Compliant with SuperSpeed USB 3.0 and backwards compatible with USB 2.0 specification
- Supports 32-bit color depth at 1920 x 1200 (16:10), 2048 x 1152 (16:9) and 1600 x 1200 (4:3) resolutions
- Display rotation: 0°, 90°, 180°, and 270°
- Display modes: Primary, Extend and Mirror

*\* Product may vary slightly from photo*

Serial Number:

S/N BCZ1244X0226 JU-VG0211-S1



**SIIG, Inc.** 6078 Stewart Ave., Fremont, CA 94538-3152, USA

Visit our website at [www.siig.com](http://www.siig.com) for more warranty, support and product information

**Copyright © 2011 SIIG, Inc. All rights reserved.**

USB 3.0 to VGA Multi Monitor Video Adapter is a trademark of SIIG, Inc. SIIG and SIIG logo are registered trademarks of SIIG, Inc. Microsoft and Windows are registered trademarks of Microsoft Corporation. All other trademarks are the property of their respective owners.

06-1022A

Made in Taiwan



#### **SIIG, Inc. Limited Five Year Warranty**

This warranty covers the original purchaser and guarantees the product to be free of any defects in materials or workmanship for the five (5) years from the date of purchase of the product.

SIIG will, at our discretion, repair or replace (with an identical product or product having similar features and functionality) the product if defective in materials or workmanship.

Please go to the Support section at [www.siig.com](http://www.siig.com) and select the "**Request RMA**" link to submit an RMA request or fax a request to 510-657-5962. SIIG, Inc. is located at 6078 Stewart Ave., Fremont, CA 94538-3152 USA. You do not have to complete any registration with SIIG to obtain warranty service.

The customer is responsible for shipping costs to SIIG, Inc., but SIIG, Inc. will pay the return postage.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

CHANGING FROM  
ONE MODEL OF  
ADAPTER TO  
ANOTHER:

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..

- The software and drivers for "DisplayLink" and the software and drivers for "Magic Control Technology" ("MCT") are not compatible with each other.

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

- If you already have one model of "Magic Control Technology"-based USB-to-VGA Adapter installed and working in your computer and you want to install another model of "Magic Control Technology"-based USB-to-VGA Adapter:



# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER.. (continued)

Step1: Make sure that your computer is connected to the Internet

Step 2: Remove the currently-installed "Magic Control Technology"-based adapter

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

Step 3: Attach the new model of "Magic Control Technology" adapter

Step 4: Watch for the completion of the download of drivers on the Windows "Taskbar" or the Mac "Menu bar"

Step 5: Reboot the computer

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

Step 6: If you are running "Windows 7, 8, or 8.1, press Windows key + p key to select your multiple monitor options.

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

- If you already have one model of "DisplayLink"-based USB-to-VGA Adapter installed and working in your computer and you want to install another model of "DisplayLink"-based USB-to-VGA Adapter:

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER.. (continued)

Step1: Make sure that your computer is connected to the Internet

Step 2: Remove the currently-installed "DisplayLink" -based adapter

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

Step 3: Attach the new model of "DisplayLink" adapter

Step 4: Watch for the completion of the download of drivers on the Windows "Taskbar" or the Mac "Menu bar"

Step 5: Reboot the computer

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

Step 6: If you are running "Windows 7, 8, or 8.1, press Windows key + p key to select your multiple monitor options.

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

- If your computer already has "DisplayLink" software and drivers in it and you need to replace the "DisplayLink" "USB # to VGA" adapter with a "Magic Control Technology" adapter, please follow the detailed



# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

uninstall instructions for DisplayLink software and drivers  
at  
<http://displaylink.com/support/ticket.php?id=297> prior to installing the "Magic Control Technology" adapter.

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

- If your computer already has Magic Control Technology ("MCT") software and drivers in it and you need to replace the MCT "USB # to VGA" adapter with a "DisplayLink" adapter, please follow to detailed

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

uninstall instructions for MCT software and drivers at <http://displaylink.com/support/ticket.php?id=359> prior to installing the "Magic Control Technology" adapter.

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

- If "MCT" software and drivers are already installed in your computer and you do not remove them prior to installing "DisplayLink" software and drivers, you will probably crash the "Windows.." operating system which will require either a System Restore to a "restore point" or a restore of the entire C: hard drive with a Windows or Acronis backup image.

# CHANGING FROM ONE MODEL OF ADAPTER TO ANOTHER..(continued)

- If "DisplayLink" software and drivers are already installed in your computer and you do not remove them prior to installing "MCT" software and drivers, you will probably crash the "Windows.." operating system which will require either a System Restore to a "restore point" or a restore of the entire C: hard drive with a Windows or Acronis backup image.