

# CDL-165HUB

## USB to HDMI Display Converter

*Operation Manual*



**CDL-165HUB**

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Version 1.0 October 2009

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## • **Safety Precautions**

Please read all instructions before attempting to unpack or install or operate this equipment, and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

## • **Revision History**

<b>Version No</b>	<b>Date</b>	<b>Summary of Change</b>
<b>V1</b>	<b>20091119</b>	<b>Preliminary Release</b>

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## **1. Introduction**

Today people are spending more of their time around technology, especially for entertainment purposes, and often encounter problems. People spend a lot of their watching Internet TV (HULU for instance is a popular source for internet TV and movies) However when the Internet TV viewer requires a larger viewing screen for a more immersive experience they then have to go through the hassle of connecting multiple cables. The “USB to HDMI display” can allow you to view any PC information on a compatible TV. An additional feature of this product is that it includes extra USB ports allowing it to perform KVM operations next to the TV, which is an added bonus for those of us who are multi-taskers.

## **2. Applications**

- Audio and Video from your PC to an HDTV
- Watch Internet TV on big screen

## **3. Package Contents**

- USB to HDMI display Converter
- 5V DC power adaptor
- User Manual
- Driver CD

## **4. System Requirements**

- System Hardware Requirements: 2.4 GHz single core CPU with at least 1GB RAM for optimal performance
- Operating Systems:  
Windows 2K SP4  
Windows XP Home or Professional 32 bits SP2  
Windows Vista 32 bits  
Windows 7
- USB Port Extension:  
An available USB 2.0 port with USB to mini USB cable
- It is suggested to upgrade your systems graphics drivers, Display Link software and the mother boards chip set driver to their latest version

## 5. Features

- Supports HDMI & VGA outputs
- 16/32-bit Color for high-quality images
- HD resolution up to 1920 x 1080
- HDMI and RGB display connectivity
- EDID selection with switch for VGA or HDMI output
- Secure and easy to use

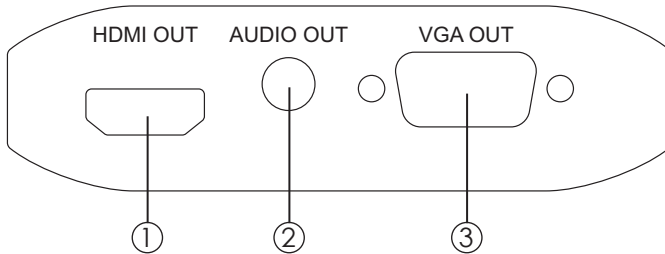
## 6. Specifications

Input Port	1 x Mini USB
Output Ports	1 x HDMI, 1 x D-Sub 15pin, 3.5Φ phone jack
Extender Ports	2 x USB Hubs (A type)
Power Supply	5V DC/2.6A (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
Dimensions (mm)	90(W) x 120(D) x 25(H)
Weight(g)	120
Chassis Material	Plastic
Silkscreen Color	Black
Power Consumption	8W
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

## 7. Operation Controls and Functions

The following sections describe the hardware components of the unit and include a step by step installation guide and other suggested settings.

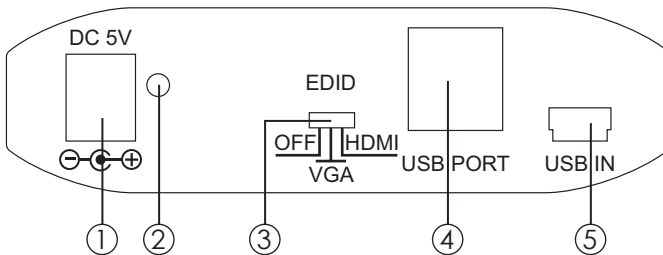
### 7.1 Front Panel



- ① HDMI OUT: Connect the HDMI output to the HDMI display.
- ② AUDIO OUT: Connect the audio output to the speaker or AVR.
- ③ VGA OUT: Connect the VGA output to the VGA monitor.

**Note: HDMI and VGA can output at the same time.**

### 7.2 Back Panel



- ① Power: This slot is where the user plugs in the 5V DC power supply of this unit before connecting the adaptor to an AC wall outlet.
- ② Link LED: When the LED is on it means the system is ready and there is audio and Video can be sent.
- ③ EDID control switch: The default setting for this switch is HDMI, leave the switch here as long as the connected display is compatible. When the EDID control is switched from HDMI to VGA the unit will detect the sources EDID and record it. Turn off in order to use the built in EDID.
- ④ USB Port: These ports allow the receiver to act like a USB hub, allowing you to connect an External Hard Drive, Keyboard or Mouse.

## Note:

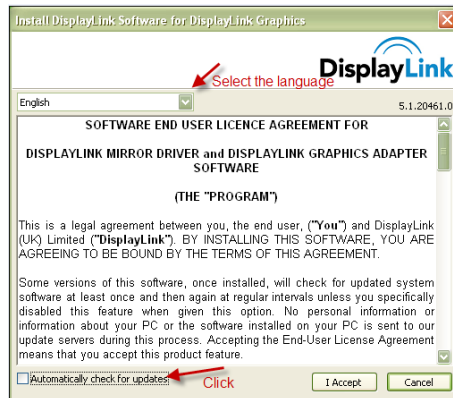
- These two USB ports cannot be connected to a USB extension hub, doing so will trigger the system to detect the external Hub and will cause a system failure.
  - Before removing the USB device, the user must follow the USB devices hardware removal procedure. Failure to do so will cause the system to crash.
- ⑤ Mini USB IN: This port supports This port support mirror or video extension (via USB cable) to your HDMI display, including both video and audio output signals.

## 8. Software Installation

The following sections list the procedures to follow when installing the USB to HDMI and USB device drivers. Insert the provided CD into your CD-ROM drive, then begin the USB Install Disc and follow the below steps to install the driver.

### 8.1 Install DisplayLink Software

Select the preferred language and click automatically check for updates, and then click "I Accept" to install the DisplayLink Manager

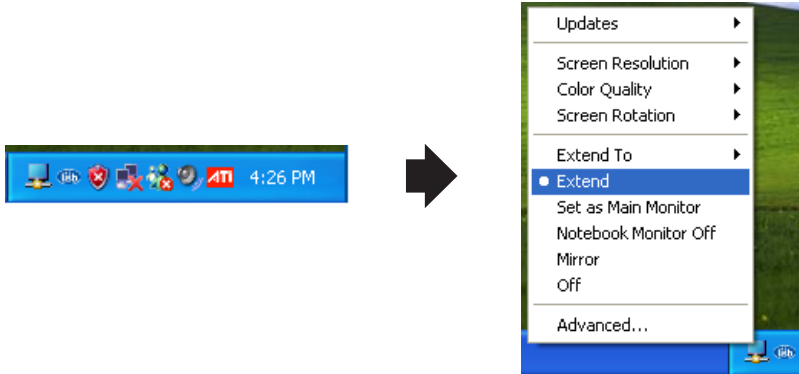




## 9. Using DisplayLink Manager

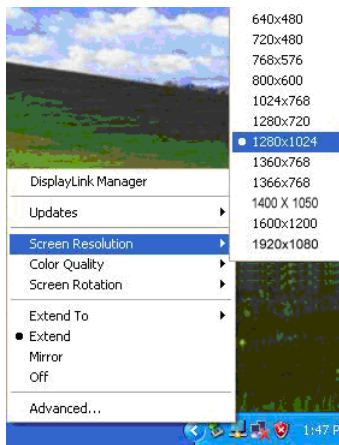
### 9.1 Using DisplayLink Manager

After the driver is installed, a utility (DisplayLink Manager) will automatically appear in the system tray. The utility allows you to quickly change the settings and resolution for DisplayLink Manager. Right click on the icon will bring out the context menu.

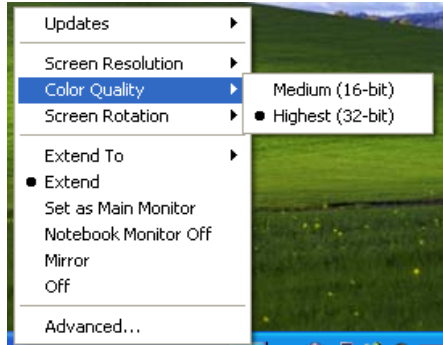


- **Screen Resolution:** Select the screen resolution (available only in extended mode).

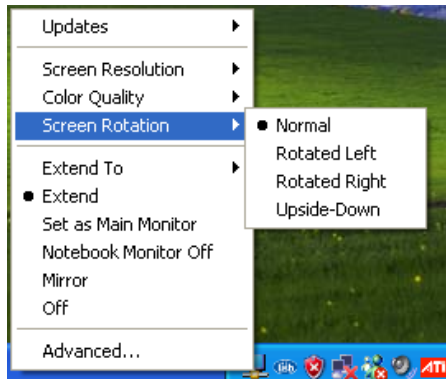
NOTE: When the display has a built in EDID the screen will show the displays resolution, if no EDID is present the screen has the following resolution (see below image)



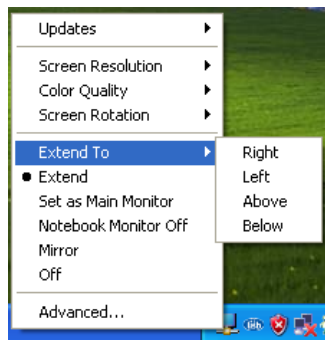
- **Color Quality:** Select the screen color quality (available only in extended mode).



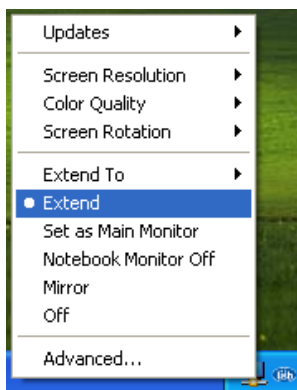
- **Screen Rotation:** Rotate the screen on the additional monitor by 90, 180 or 270 degrees.



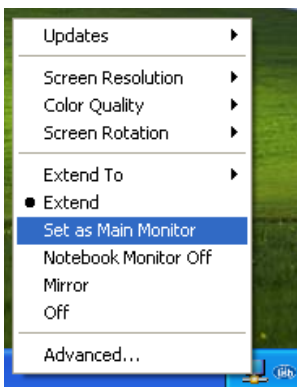
- **Extend to:** Reposition the extended screen to the top, bottom, left or right of the primary display.



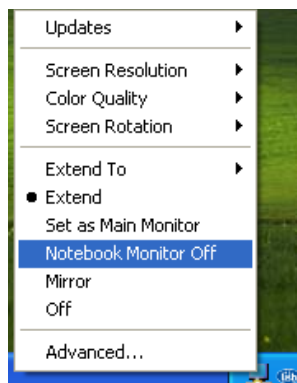
- **Extend:** Set the DisplayLink Manager to Extended mode.



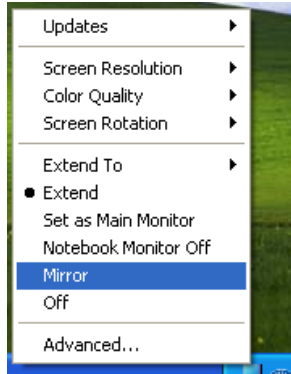
- **Set as Main Monitor:** Set the monitor to be the main monitor.



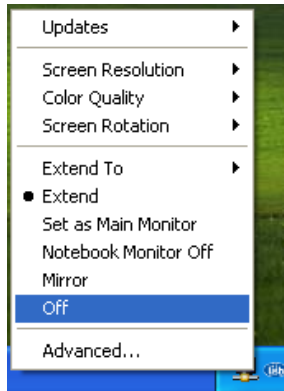
- **Notebook Monitor off:** Set the PC/notebook's monitor off.



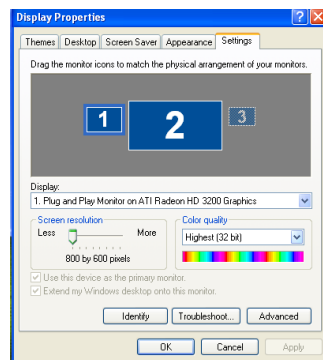
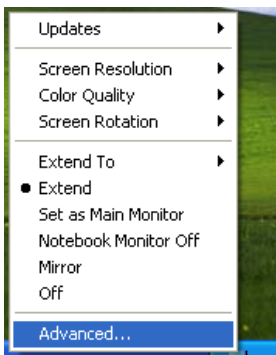
- **Mirror:** Set the DisplayLink Manager to Mirror mode. You can see the same desktop image on the additional monitor.



- **Off:** Disable the DisplayLink Manager on the system.

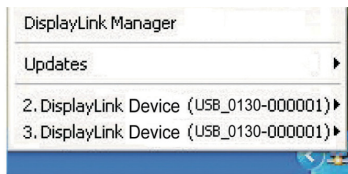


- **Advanced:** Opening the **Display Properties** will allow you to adjust the resolution, color quality, position and refresh rate.



## 9.2 Using More DisplayLink manager

You don't have to install a new driver as long as you have completed the above installation process in advance. It will automatically define the ID of the new Display Link Manager and will list everything in the Display properties or the display manager menu.

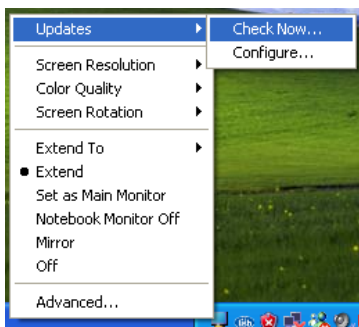


**NOTE:** When connecting more DisplayLink Manager to a computer, a system with higher CPU performance is recommended.

## 9.3 Firmware Update

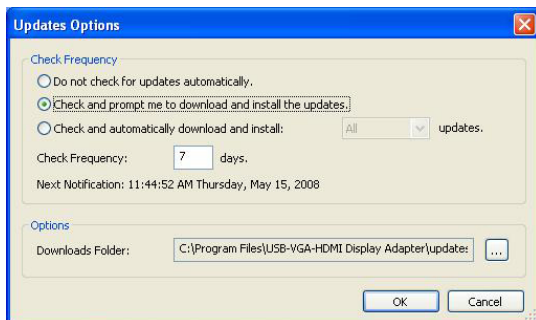
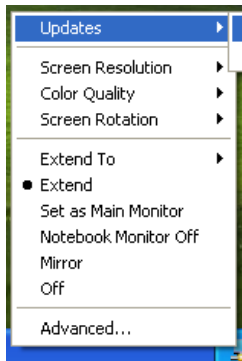
Click the **Updates** → **Check Now...**, to search for and download the latest firmware.

**NOTE:** Confirm that your computer is already connected to the network.



### Automatic Update

Click the **Updates** → **Configure...**, the **Updates Options** window will appear as shown below. You can set the update method and frequency in the windows.

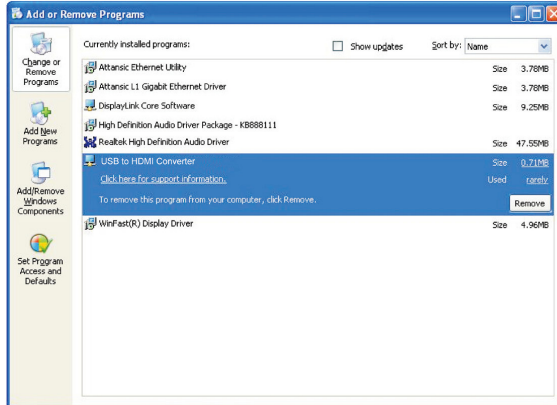


## 10. Uninstall the Device Driver

Follow the steps below to uninstall the Multi View driver.

**Step 1:** Open the Control Panel: **Start** → **Control Panel** → **Add or Remove Programs**.

**Step 2:** Select **USB-VGA-HDMI DisplayLink Adapter** and click **Remove**.



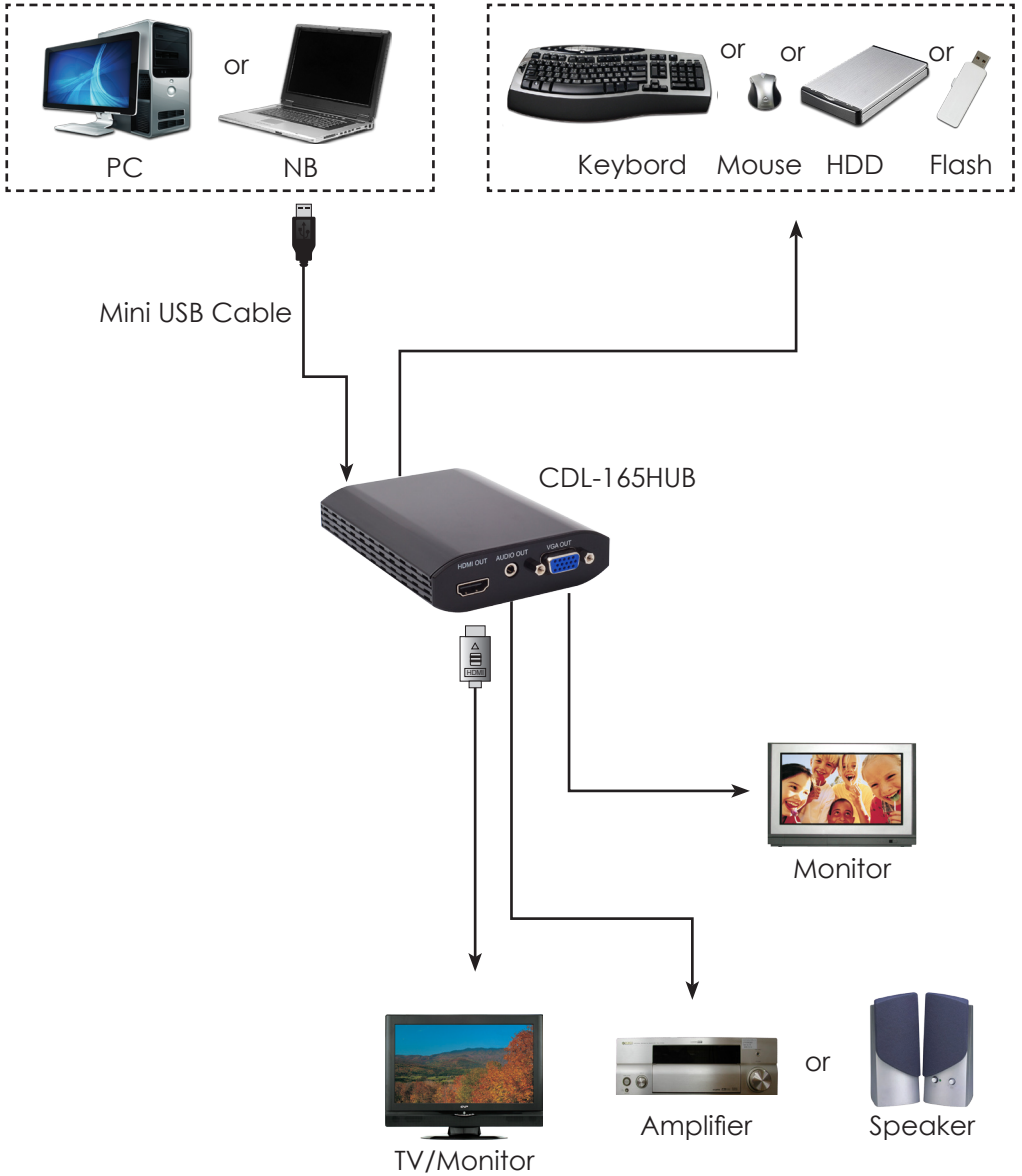
**Step 3:** Click Yes to confirm the removal.



**Step 4:** Click Yes to restart your computer.



# 11. Connection and Installation



## 12. Troubleshooting

<b>Situation</b>	<b>Check Point</b>
The device driver has been installed, but the DisplayLink Manager is not working	<ol style="list-style-type: none"><li>1. Make sure you restart your computer after the driver installation.</li><li>2. Check all the connectors are plugged in correctly.</li><li>3. Make sure the USB port that you are using is USB 2.0.</li><li>4. Check the additional monitor is connected correctly and the power is on.</li><li>5. Make sure the operating system, the DisplayLink Manager is compatible with Windows 2000, XP, Vista (32bit) and Windows 7.</li><li>6. Try a different USB 2.0 or computer.</li><li>7. Check USB cable's specification.</li></ol>
DVD player is not working when moved to the extended display	<ol style="list-style-type: none"><li>1. Try running the program on another display before playing the DVD.</li></ol>
The mouse does not move passed the right side during extended desk top mode.	<ol style="list-style-type: none"><li>1. Check the display settings and make sure that your display number 2 is on the right side of display number 1.</li></ol>





# Acronyms

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## **Acronym**

## **Complete Term**

EDID	Extended Display Identification Data
HDMI	High-Definition Multimedia Interface
VGA	Video Graphics Array







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20100427 MPM-CDL165HUB