

## **Overview for Lenovo Universal USB 3.0 to VGA/HDMI Adapter (4X90H20061)**

The Lenovo Universal USB 3.0 to VGA/HDMI Adapter turns an available USB 3.0 port into a display port offering either VGA or HDMI output with support for high-definition 1080p and with audio (from HDMI port only).

The adapter delivers a convenient external video solution that makes it easy to add multi-monitor capability to a USB enabled desktop or laptop computer.

Leveraging the USB 3.0 SuperSpeed interface, the USB video adapter functions as a convenient external graphics card, no additional graphics card required. The adapter delivers smooth, high definition content to multiple displays.

With two video output ports, the dual head design of the adapter offers a compact multi-monitor solution across both VGA and HDMI technology.

The adapter is installed externally, through USB, which enables you to add graphics capability to your system without adding a new graphics card.

### **Modes**

- Single VGA or HDMI output
  - VGA up to 2048x1152@ 60 Hz
  - HDMI up to 2560x1440@ 50 Hz
- Dual VGA and HDMI output (connect VGA first) supporting resolutions up to 2048x1152@ 60 Hz.
  - Notes:
    - Connect VGA first
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### **ELECTRICAL SPECIFICATIONS**

- Maximum Power Consumption: 2.25w
- Upstream: USB2.0 or USB3.0 port;
- Downstream: Dual Display Ports output (VGA/HDMI)
- Fully meet HDMI specification V1.3
- Fully meet VESA standard V1r2
- Fully Meet USB Specification 3.0, backward compatible with USB2.0 port

<b>Characteristic</b>	<b>Specification</b>
OS supported	Win7(both 32bit & 64bit compatible), Win8 and Win8.1
Hot Plug Detect	When adapter power source power is up, USB connector and HDMI connector are attached or detached. HPD transition been generated. VGA port does not support HPD.
Audio	Support audio pass through to HDMI monitor
Resolution support details	<p><b>DL HDMI/VGA</b></p> <p>640x480@ 60,67,72,75,85 Hz  720x400@ 75,85,88 Hz  720x480@ 50,60 Hz  768x576@ 50,60 Hz  800x600@ 56,60,72,75,85 Hz  832x624@ 75 Hz  800x480@ 60 Hz  848x480@ 60 Hz  1024x600@ 60 Hz  1024x768@ 60,70,75,85 Hz  1152x864@ 75 Hz  1152x870@ 75 Hz  1280x720@ 50,60 Hz  1280x768@ 60,75,85 Hz  1280x800@ 60 Hz  1280x960@ 60,85 Hz  1280x1024@ 60,75 Hz  1360x768@ 60 Hz  1366x768@ 50,60 Hz  1368x768@ 60 Hz  1400x1050@ 60,75,85 Hz  1440x900@ 60 Hz  1600x900@ 60 Hz  1600x1200@ 60 Hz  1680x1050@ 60 Hz  1920x1080@ 50,60 Hz  1920x1200@ 60 Hz  2048x1080@ 60 Hz  2048x1152@ 60 Hz</p> <p><b>SL HDMI</b></p> <p>640x480@ 60,67,72,75,85 Hz  720x400@ 75,85,88 Hz  720x480@ 50,60 Hz  768x576@ 50,60 Hz  800x600@ 56,60,72,75,85 Hz  832x624@ 75 Hz  800x480@ 60 Hz  848x480@ 60 Hz</p>

1024x600@ 60 Hz  
1024x768@ 60,70,75,85 Hz  
1152x864@ 75 Hz  
1152x870@ 75 Hz  
1280x720@ 50,60 Hz  
1280x768@ 60,75,85 Hz  
1280x800@ 60 Hz  
1280x960@ 60,85 Hz  
1280x1024@ 60,75 Hz  
1360x768@ 60 Hz  
1366x768@ 50,60 Hz  
1368x768@ 60 Hz  
1400x1050@ 60,75,85 Hz  
1440x900@ 60 Hz  
1600x900@ 60 Hz  
1600x1200@ 60 Hz  
1680x1050@ 60 Hz  
1920x1080@ 50,60 Hz  
1920x1200@ 60 Hz  
2048x1080@ 60 Hz  
2048x1152@ 60 Hz  
2048x1280@ 60 Hz \*\*  
2048x1536@ 60 Hz \*\*  
2560x1440@ 50 Hz \*\*

**SL VGA**

640x480@ 60,67,72,75,85 Hz  
720x400@ 75,85,88 Hz  
720x480@ 50,60 Hz  
768x576@ 50,60 Hz  
800x600@ 56,60,72,75,85 Hz  
832x624@ 75 Hz  
800x480@ 60 Hz  
848x480@ 60 Hz  
1024x600@ 60 Hz  
1024x768@ 60,70,75,85 Hz  
1152x864@ 75 Hz  
1152x870@ 75 Hz  
1280x720@ 50,60 Hz  
1280x768@ 60,75,85 Hz  
1280x800@ 60 Hz  
1280x960@ 60,85 Hz  
1280x1024@ 60,75 Hz  
1360x768@ 60 Hz

	1366x768@ 50,60 Hz 1368x768@ 60 Hz 1400x1050@ 60,75,85 Hz 1440x900@ 60 Hz 1600x900@ 60 Hz 1600x1200@ 60 Hz 1680x1050@ 60 Hz 1920x1080@ 50,60 Hz 1920x1200@ 60 Hz 2048x1080@ 60 Hz 2048x1152@ 60 Hz	
Video display limitation	To connect the Lenovo Universal USB 3.0 to VGA/HDMI Adapter to both a High Definition Multimedia Interface (HDMI™) monitor and a video graphics array (VGA) monitor, it is recommended that you connect the Lenovo Universal USB 3.0 to VGA/HDMI Adapter to the VGA monitor first. If you connect the HDMI monitor first, ensure that the HDMI monitor resolution is no higher than 2048 x 1152 pixels at 60 Hz. Otherwise the VGA monitor would not display output.	

**Note:**

# Only available over the HDMI;

\* Only available when using a single video output, not supported in dual-head mode;

**PHYSICAL SPECIFICATIONS W/O Package**

Net Dimensions & Weight:

- Weight: 0.045kg (1.59 ounces)
- Length: 21.5cm (8.46 inches)

**PHYSICAL SPECIFICATIONS W Package**

Gross Dimensions & Weight

- Weight: 0.1140kg (4.1760 ounces)
- Length: 20.7cm (8.15 inches)
- Width: 14.2cm (5.59 inches)
- Height: 3.7cm (1.46 inches)

## SOFTWARE REQUIREMENTS:

- Microsoft Windows 7 (32 bit & 64 bit)
- Microsoft Windows 8 64 bit
- Microsoft Windows 8.1

**Note:** Before using the product, go to <http://www.support.lenovo.com/docs/u3tovgahdmi> and check the driver version.

Ensure that you install the latest device driver for the Lenovo Universal USB 3.0 to VGA/HDMI Adapter.

## OPERATING ENVIRONMENT

- Temp.: -5°C to 40°C
- Humidity: 20%~95%RH.

## AGENCY APPROVALS

- CB
- USA: FCC
- Canada: ICES
- European Union: CE-EMC
- Australia / New Zealand: C-tick
- Japan: VCCI
- Taiwan: BSMI-EMC
- Korea: KC

## PACKAGING:

- Brown box

## SHIPMENT GROUP

- Lenovo Universal USB 3.0 to VGA/HDMI Adapter
- Poster

## WARRANTY TERMS

- 1 year Warranty

## CHARGES - FRU PARTS

Description	FRU Part #	Option Part #	H S
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Lenovo universal USB3.0 to VGA HDMI Adapter	03X6959	4X90H20061	R 1