



## USB 3.0 UNIVERSAL DOCKING STATION FOR WINDOWS



## Features

- Provides SuperSpeed USB 3.0 (5 Gbps) link between computer to video, audio, network, and two additional USB 3.0 ports
- Compatible with Windows 10, 8, 7, and XP. Intel/AMD only (no Windows RT/ARM). **Not supported for Mac or Linux at this time**
- Backwards compatible with USB 2.0 (480Mbps) for both the PC and attached devices
- HDMI and DVI/VGA ports for two external monitors supports display resolutions up to 2560×1440\* (HDMI) and DVI / VGA to 2048×1152 / 1920×1200  
\*Note: 2560×1440 output only available when using a single HDMI display connected through the dock
- Network port offers wired Gigabit Ethernet connectivity (also 10/100 capable)
- Graphics, audio, and networking all managed by single DisplayLink DL-3900 chipset
- USB 3.0 ports and components controlled by VIA VL811 chipset; four USB 2.0 ports controlled by Terminus chipset
- Stereo audio in/out with hotplug detection. Comes with four-amp AC power adapter, USB 3.0 Type-A male to Type-B male cable, and DVI-to-VGA passive port adapter

## Integrated Chipsets

The heart of the docking station is its DisplayLink DL-3900 chipset, which manages dual graphics and audio output and Gigabit Ethernet functions. The integration of these functions on a single chipset means fewer internal components need to be bolted together, leading to increased compatibility and reliability overall. Drivers are installed automatically from Windows Update if an Internet connection is present when the docking station is first connected (a drivers CD also comes in the box).

You can extend or mirror your primary Windows desktop to a monitor connected to the UD-3900. With DisplayLink technology, graphics processing still is handled by connected computer's central processor and graphics processor. The DisplayLink drivers on that PC compress and transmit pixels to the DL-3900 chipset, which decodes the data and displays it.

## Speed and Power

Performance is best when hooking up the UD-3900 docking station to a USB 3.0 port on a PC, allowing SuperSpeed data-transfer rates of up to five gigabits per second between the computer and the dock's USB 3.0 components and ports. The UD-3900 also can be connected to a computer's USB 2.0 port, though communications between the computer and the docking station will be no faster than the USB 2.0 maximum of 480 megabits per second.

## Hardware Requirements

Dual Core Intel or AMD CPU, 2GHz or better. Windows GPU should be Intel, AMD, or Nvidia.

## In the Box

The Plugable UD-3900 comes with a four-amp, five-volt power supply; a USB 3.0 Type-A male to Type-B male cable; a passive DVI-to-VGA port adapter; a quick-install guide; and a drivers CD.

## Operating System Compatibility



10 8 7 XP

# Operating System and Driver Details

## WINDOWS VERSION COMPATIBILITY:

Drivers can be installed automatically via Windows Update with support for Windows 10, 8, 7, and XP. Not compatible with ARM-based Windows RT/Surface RT. Note that Microsoft limits multiple display support in Windows 7 "Starter" Edition to mirroring screens. Even though drivers are provided automatically, we recommend visiting the Plugable driver webpage for the most recent drivers and other information.

DisplayLink's Windows drivers make use of the main GPU for rendering, and require an Intel, nVidia, ATI/AMD primary graphics driver supporting WDDM to be installed. Most systems since Windows 7 satisfy this requirement.

Different USB graphics driver types (DisplayLink, MCT/Tritton, SMSC, Fresco) are not compatible on the same system. In particular, some versions of MCT drivers will bluescreen when other USB graphics drivers are also present. Uninstall other USB graphics driver types before switching types, and stay with a single type (e.g. DisplayLink based) on a single system.

## MAC COMPATIBILITY:

Mac is not supported due to significant limitations in the operating system.

## LINUX COMPATIBILITY:

Linux is not supported for this device.

## HDMI TV Compatibility

The docking station supports HDMI through the 1.3 standard. To use a TV as a monitor via the dock, the TV must support EDID, the extended display identification standard for communicating monitor capabilities to a PC. Many TVs that have a VGA port in addition to an HDMI port assume that computers will use VGA for connectivity rather than HDMI. In these cases, a VGA connection from the PC's internal video card to the TV might provide the best results.

HDCP protected content not supported.

## Frequently Asked Questions

### 2560×1440 Functionality

2560×1440 output is only available when a single HDMI monitor is connected to the dock, and requires a "High Speed" HDMI cable. 2560×1440 mode will operate at a 50Hz refresh rate; all lower modes support 60Hz refresh rate. 2560×1440 output requires current DisplayLink drivers and attached monitor must natively support 2560×1440 via HDMI input. Please note that most monitors that support 2560×1600 do not support 2560×1440.

**When I plug an Ethernet cable into the dock, none of the LEDs light up, and I do not get assigned a valid IP address. What could be causing this?**

The Ethernet controller in the docking station requires a full duplex connection. Half duplex connections are not supported.

Often, the issue is caused by older Ethernet hubs and/or cabling that do not support full duplex connections.

**Why does the "Display Color Calibration" tool in Windows seem to have no effect on the display(s) attached to my dock?**

The DisplayLink GPU does not support color calibration functionality. Most monitors have built-in controls that can be used to adjust the characteristics of the display, though we realize this approach may not be ideal in all cases. For environments that necessitate near-perfect color reproduction and display calibration capabilities via software, a dedicated graphics card is recommended.

**My wireless keyboard/mouse isn't working at all, or isn't working properly when connected to the dock.**

2.4Ghz wireless devices such as wireless keyboard/mouse receivers, Bluetooth and WiFi adapters, may not work in the USB 3.0 ports on the dock. Connecting wireless devices to the USB 2.0 ports on the rear of the dock is recommended for best results. If the problem still occurs, a short USB 2.0 extension cable to move the wireless device further from the dock will often resolve the issue.

## Performance Tuning

If you're experiencing slowness or latency on your UD-3900 connected display:

- Make sure your adapter is connected to a USB 3.0 port (if available) on your computer.
- If USB 3.0 is not available, play 3D games and videos on a display that isn't connected via USB.
- When all else fails, reduce your USB-connected monitor's screen resolution via the Windows display control panel.

By reducing the amount of data that needs to be compressed and sent over USB, you'll increase responsiveness.

## Not Recommended for Gaming

USB graphics devices, like the UD-3900, are "virtual" devices where much of the heavy lifting is done by the CPU, by hooking into the graphics stack. The DirectX APIs used by games assume direct hardware access (a PCIe graphics card). DisplayLink's drivers attempt to emulate as much of the functionality as possible, which is why some 3D functionality (like that needed for desktop and apps) works.

We don't recommend running games with USB graphics, because this emulation cannot be perfect. And even without specific compatibility problems, performance will always be a challenge - the extra CPU work required for USB graphics will be a source of reduced frame rates and problems. Normal desktop and application use are fine because they don't push the system as hard as 3D games do.

Common problems experienced when trying to run a game on a USB graphics adapter include:

- Games not launching
- Games crashing
- Screen flickering
- Screen going black