

## VGA over IP Extender - 1920 x 1200

IPUSB2VGA2



\*actual product may vary from photos

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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## Overview

## About this product

This VGA over IP extender gives you two options to interface your computer with a VGA display and 2-port USB peripheral set.

#### In Ethernet mode: (Windows only)

You can connect a VGA display and two USB peripherals to your network, creating a remote console that can interface with any Windows computer on your network. This mode enables you to extend or mirror the desktop of your Windows computer over long distances using your wireless or wired NIC.

#### In USB mode: (Windows or Mac)

You can connect your computer to a VGA display and two USB peripherals using a USB port on your computer. This mode enables you to extend or mirror the desktop of your computer over a short distance using your USB controller.

### **Packaging contents**

- 1 x VGA over IP extender
- 1 x USB cable
- 1 x CAT5 cable
- 1 x universal power adapter (NA / EU / UK / AU)
- · 1 x mounting bracket
- 1 x mounting screw kit
- 1 x rubber foot set
- 1 x quick start quide

### System requirements

- VGA enabled display device with cabling
- Computer with:

Minimum CPU: Intel® or AMD® 2.4 GHz single core

Minimum RAM: 1GB

Microsoft® Windows® (32 or 64 bit) 10, 8 or 8.1, 7, Vista

С

(USB mode only) Apple OSX El Capitan (10.11), Yosemite (10.10), Mavericks (10.9) Mountain Lion (10.8), Lion (10.7), Snow Leopard (10.6)

System requirements are subject to change. For the latest requirements, please visit www.startech.com/IPUSB2VGA2

## Front view



- 1. VGA output port
- 2. USB 2.0 peripheral ports
- 3. Audio line in
- 4. Audio line out

### **Rear view**



- 1. Power adapter port
- 2. LAN port
- 3. USB host port
- 4. Factory reset button



## Software installation



To use the video adapter in USB mode, ensure the software installation steps have been completed before you connect the adapter to your computer.

## **Software installation for Windows computers**

Note: you will need to restart your computer during the software installation process. Please be sure to save any unsaved material before you install the software.

- Download the latest software from the StarTech.com website: http://www.startech.com/IPUSB2VGA2
- The software will be compressed in a .zip folder. Extract the contents of the folder to a location on your computer that's easy to access, such as your **Desktop** or **Downloads** folder.
- Once the files have been extracted, open the Windows folder, and launch the Driver-Setup(.exe) file, to install the DisplayLink drivers.
- 4. Follow the on-screen prompts to complete the installation steps and when instructed to do so, restart your computer.

**Note:** If you're using the video adapter in USB mode only, the software installation steps have now been completed. Please proceed to **Hardware installation for USB mode**.

- 5. Once your computer has restarted, install the USB Server software to operate the video adapter in Ethernet mode. Reopen the Windows folder, followed by the APP folder, and launch the Setup(.exe) file.
- Follow the on-screen prompts to complete the installation steps and when instructed to do so, restart your computer.
- 7. Once your computer has restarted, the software installation is complete.

## Software installation for Mac computers (USB mode only)

**Note:** you may need to restart your computer during the software installation process. Please be sure to save any unsaved material before you install the software.

- Download the latest software from the StarTech.com website: http://www.startech.com/IPUSB2VGA2
- 2. The software will be compressed in a .zip folder. Extract the contents of the folder to a location on your computer that's easily to access, such as your **Desktop**.
- 3. Once the files have been extracted, open the **MAC OS** folder, followed by the folder that corresponds with your version of Mac OSX, and launch the DisplayLink installer file.
- 4. Follow the on-screen prompts to complete the installation steps and when instructed to do so, restart your computer.
- 5. Once your computer has restarted, the software installation is complete.

## Hardware installation

#### Hardware installation for USB mode

- Connect a VGA cable (not included) to the video adapter's VGA output port to your VGA display.
- Connect the included power adapter to an AC outlet and to the video adapter's power adapter port.
- Connect the included USB cable to the video adapter's USB host port, to a USB port on the your computer system.
- 4. Your computer will automatically detect the USB drivers for the video adapter and install them.
- 5. (Optional) You can connect up to two USB devices to video adapter's USB 2.0 peripheral ports.
  - **Note:** In order for your computer to recognize the USB peripherals that you've connected, the drivers for any connected USB device must be installed on your computer before you connect the USB peripherals to the video adapter.
- 6. Hardware installation for USB mode is now completed.

#### Hardware installation for Ethernet mode

 Connect a VGA cable (not included) to the video adapter's VGA output port to your VGA display.



- Connect the included power adapter to an AC power outlet and to the video adapter's power adapter port.
- 2. Connect the CAT5 cable (included) to the video adapter's LAN port and to an Ethernet port on your network, such as a router or NIC on your computer.
- 3. (Optional) You can connect up to two USB devices to the video adapter's USB 2.0 peripheral ports.

**Note:** In order for your computer to recognize the USB peripherals that you've connected, the drivers for any connected USB device must be installed on your computer before you connect the USB peripherals to the video adapter.

4. Hardware installation for Ethernet mode is now completed.

# Display configuration

# Display configuration for Windows computers USB mode

1. Click the DisplayLink icon that appears in your Windows system tray after you've completed the **Hardware Installation for USB mode** steps.



- When the DisplayLink menu opens, click Video Setup to launch the Windows display settings.
- 3. Configure the monitor to your desired settings, including resolution and orientation.

#### Ethernet mode

 Double-click the Launch USB Server icon on your desktop, to open the USB server software



2. The USB Server software will now display a list of connected devices. If your network supports DHCP (assigns IP addresses automatically) the video adapter will be listed below the **Devices** column along with your display below it and the status of your display will be listed as **Free** and you can continue to step 3.



If your network does not support DHCP (such as when the adapter is connected directly to your computer, without a router) your VGA adapter and display will be listed below the **Devices** column, but with a ? icon on the adapter and display, and the status for each device may be listed as **Different Network Segment with Error**.



If your network does not support DHCP the adapter and your computer will need to have different IP addresses assigned on the same subnet, in order to detect each other. The VGA adapters default IP address is **192.168.1.50**.

#### Change your computer's IP address

If your computer's IP address can be changed to any subnet, if for example the computer is connected directly to the VGA adapter, the easiest solution is likely assigning your computer a (static) IP address of 192.168.1.51. For information on how to do this, visit Microsoft's <a href="Configuring a DHCP server static IP address">Configuring a DHCP server static IP address</a> TechNet article or contact your network administrator.



#### Change the VGA adapter's IP address

If your computer's IP address can not be changed, if for example your entire network is on a non-DHCP network with different subnet than the VGA adapter's default IP address, you can follow the steps below to configure the VGA adapter to match your network's subnet.

- a) With the USB server application open, right-click on the main VGA video adapter device and select **Server Configuration**.
- b) Uncheck the **Use DHCP** option and manually enter an **IP address** and **Subnet Mask** that matches your network settings.
- c) Click **Set** to save your new settings and return to the main window.
- Your IP extender will appear in the **Device** list, with the connected VGA display listed below it. Select the VGA display from the **Device** list, then click the **Connect Device** button.

**Note:** if your VGA display has a built-in audio controller, the audio controller will also be listed in the **Device** list, along with any attached USB peripheral devices. Each device must be connected using the **Connect Device** button individually, for your computer to recognize the device.

After you click the Connect Device button, the status of the device will change to locally connected, and your computer will detect the device and automatically install the required drivers.

#### Notes:

- To disconnect any device, select it from the **Device** list and click the **Disconnect Device** button.
- When connecting an audio controller, the controller becomes the default audio device on your computer. Windows does not allow multiple audio devices to be used simultaneously.
- Now that your computer has installed the drivers for your display adapter, the DisplayLink icon will appear in your Windows system tray. Close the USB Server software and click the DisplayLink icon.



- 4. Once you click the icon, a menu will open. From the menu click **Video Setup**, to launch the Windows display settings.
- 5. Use the Windows display settings to configure the monitor to your desired settings, including resolution and orientation.

# Display configuration for Mac computers USB mode only

- After you've completed the Hardware Installation for USB mode steps, click the System Preferences menu, and then click Display Preferences.
- 2. Use the **Display Preferences** screen to configure the monitor to your desired settings, including resolution and orientation.

## Display configuration for Mac computers

- 1. After you've completed the **Hardware Installation for USB mode** steps, click the **System Preferences** menu, and then click **Display Preferences**.
- Use the **Display Preferences** screen to configure the monitor to your desired settings, including resolution and orientation.

## **USB Server Configuration (Windows only)**

#### Automatic startup

The USB Server software can be configured to automatically startup when Windows starts and also connect certain devices automatically.

- 1. Launch the USB Server software.
- Click the options menu and select the Run this application when PC Starts up option
  to start the software automatically on Windows bootup is available. This will allow the
  software to automatically run, if the computer ever is restarted, instead of having to
  manually double-click the desktop icon each time.





#### **Automatic Device Connection**

Certain devices can be set to automatically connect (if available) to the host computer, when the software is running. This will allow the video and/or the audio to automatically connect, whenever the USB Server software is launched, or if unavailable originally, to automatically connect whenever the device does become available.



This can also be applied to USB devices connected to the USB Hub ports. **Right-clicking** on the device and selecting the **Connect Device Automatically** option will enable this feature for the specific USB device.

Alternatively, devices on the USB Hub ports can be set to connect automatically, based on the USB port they are plugged into on the VGA video adapter (instead of based on the specific USB device itself). This will allow for any type of USB device to be automatically connected to the host computer, so long as it is connected to the specified physical port on the VGA video adapter. This option can be accessed by right-clicking on the VGA Video adapter itself, and going into the Server Configuration.

**NOTE:** The software will show Port 3 and Port 4, however enabling these ports for automatic connection will have no result.

# **Technical Support**

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit www.startech.com/support and access our comprehensive selection of online tools, documentation, and downloads.

For the latest drivers/software, please visit www.startech.com/downloads

# Warranty Information

This product is backed by a two year warranty.

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