User's Guide

TRENDNET®

USB 3.0 to HD TV Adapter

TU3-HDMI

Contents

Product Overview

TU3-HDMI

Package Contents

In addition to your wireless adapter, the package includes:

- CD-ROM (Utility & Drivers)
- Multi-Language Quick Installation Guide
- 1 x USB 3.0 Micro-B cable (50 cm / 19.7 in.)

If any package contents are missing or damaged, please contact the retail store, online retailer, or reseller/distributor from which the product was purchased.

Features

TRENDnet's USB 3.0 to HD TV Adapter, model TU3-HDMI, adds a full HD 1080p monitor to a workstation in Extend Mode or displays a computer screen on an HD TV in Mirror Mode. Experience flawless video with the SuperSpeed USB 3.0 to HDMI connection. The adapter is powered by the connected computer, 5.1 digital surround sound audio, and is compatible with Windows® and Mac® operating systems.

Full HD 1080p

HDMI 1.3 supports full HD 1080p resolution (1920 x 1080) and resolutions up to 2048 x 1536

Extend Mode

Add a full HD 1080p monitor, with an available HDMI port, to a workstation in Extend Mode

Mirror Mode

See a 1080p computer display on an HD TV in Mirror Mode

Multiple Displays

Use up to 6 TU3-HDMI adapters to add 6 displays (requires 6 free USB ports on a computer)

Surround Sound

Experience 5.1 digital surround sound audio

Flexible Connector

A 50 cm (20 in.) USB 3.0 cable provides installation flexibility

USB Port

Compatible with USB 3.0 and 2.0 ports

Product Hardware Features

USB 3.0 Micro-B Port

(Connect to computer USB 3.0 port, USB 3.0 cable included)

HDMI Port

(Connect to Display, HDMI cable not included)

System Requirements

- Windows 8.1 (32/64-bit), Windows 8 (32/64-bit),Windows 7 (32/64-bit), Vista (32/64-bit), or XP (32-bit)
- Mac OS X 10.9, 10.8, 10.7, 10.6*
- Available USB 3.0 or 2.0 port (USB 3.0 recommended to ensure quality)
- 30MB of free disk space
- CD-ROM Drive (Driver & Utility Installation with included CD)

* Available supported features on Mac system depends on chipset driver provided by DisplayLink™.

- **System Requirement**
  - o Windows 8.1: Processor 1.2GHz or higher with SSE2 supported. RAM: 2GB
  - o Windows 8/7/Vista: Processor 1.2GHz or higher with SSE2 supported. RAM: 2GB
  - o Windows XP: Processor 1.2GHz: single core CPU or higher. RAM: 1GB.

Application Diagram
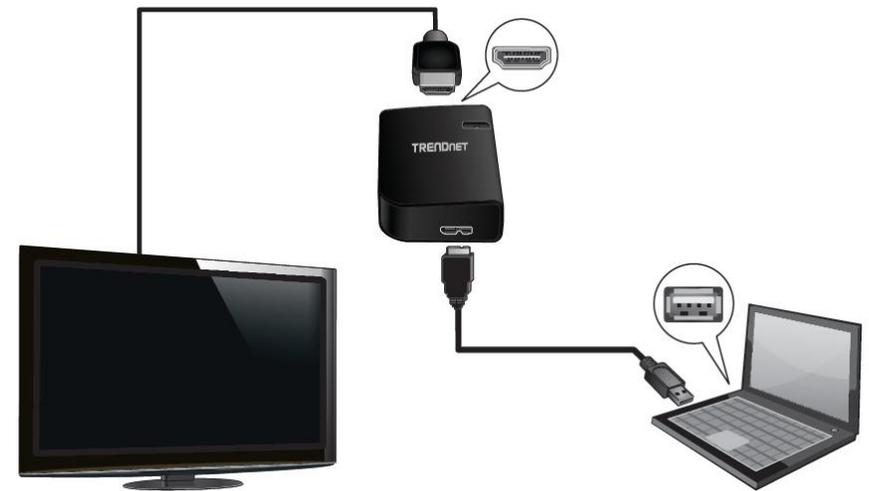
The laptop is able to extend or mirror its display on to an HD monitor or TV by connecting an available USB 3.0 port to the USB to HD TV adapter using the included USB 3.0 cable and connecting an HDMI cable from the USB to HD TV adapter to the HD monitor or TV.

TU3-HDMI Display Mode

There are 3 modes the USB to HD TV adapter can support.

Primary – Assigns the additional HD monitor or TV to be the primary display and your computer display as secondary.
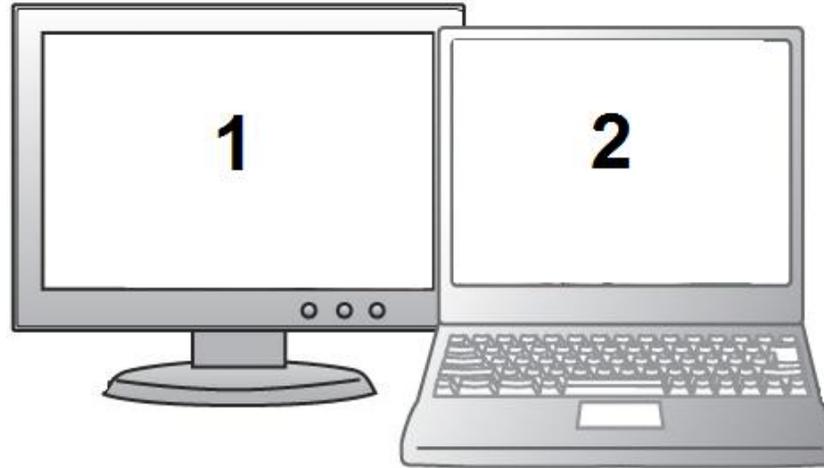
Mirror – Mirrors the primary display on to the secondary HD monitor or TV.

Extend – Extends the desktop display of the primary display on to the secondary HD monitor or TV.

Using USB to HD TV Adapter in Windows

This section describes how to install the software driver and utility for the USB to HD TV Adapter.

Windows Software Installation

1.   Insert the included CD-ROM into your computer's CD-ROM drive.

At the CD Autorun Prompt window, click *Run* **Autorun.exe**.

Note: If the Autorun prompt does not appear automatically, open the CD contents and double click **Autorun.exe***.*

2.   At the CD-ROM main menu, click **Install Driver & Utility**.
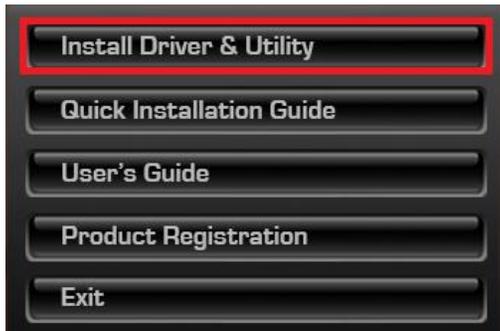
3.   At the installation window, click **I Accept** to accept the license agreement.
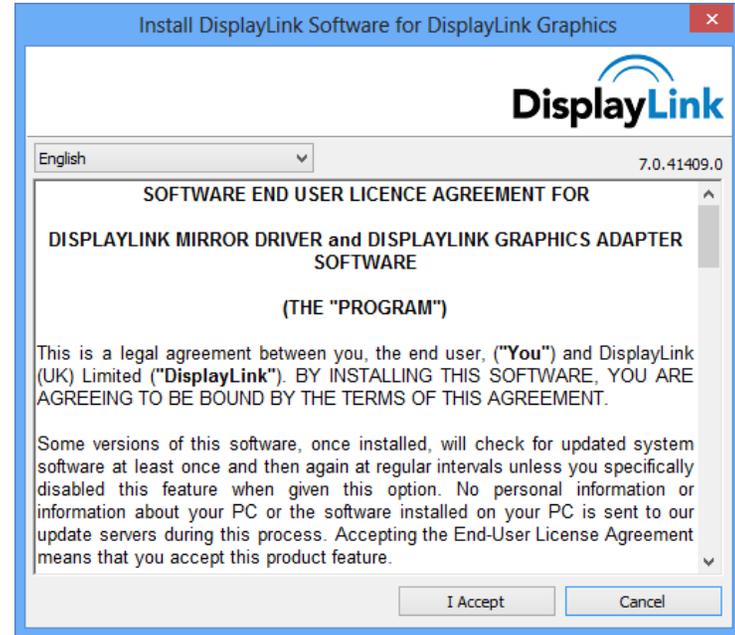
4.   Please wait for the installation to complete. There is no message will be showed at the end of the installation. When the installation window disappears from your task bar, the software installation is complete.

Note: Your display may temporarily turn black or flash during the installation.

Hardware Installation

1. Connect the included USB 3.0 cable from an available USB 3.0 (or USB 2.0) port on your computer to the USB 3.0 micro-B port on the adapter.

   Note: Please check your computer documentation to verify which ports are designated USB 3.0 ports or USB 2.0 ports. You can also easily identify the USB 3.0 ports with the blue color on the inside of the port or USB 3.0 symbol next to the port.
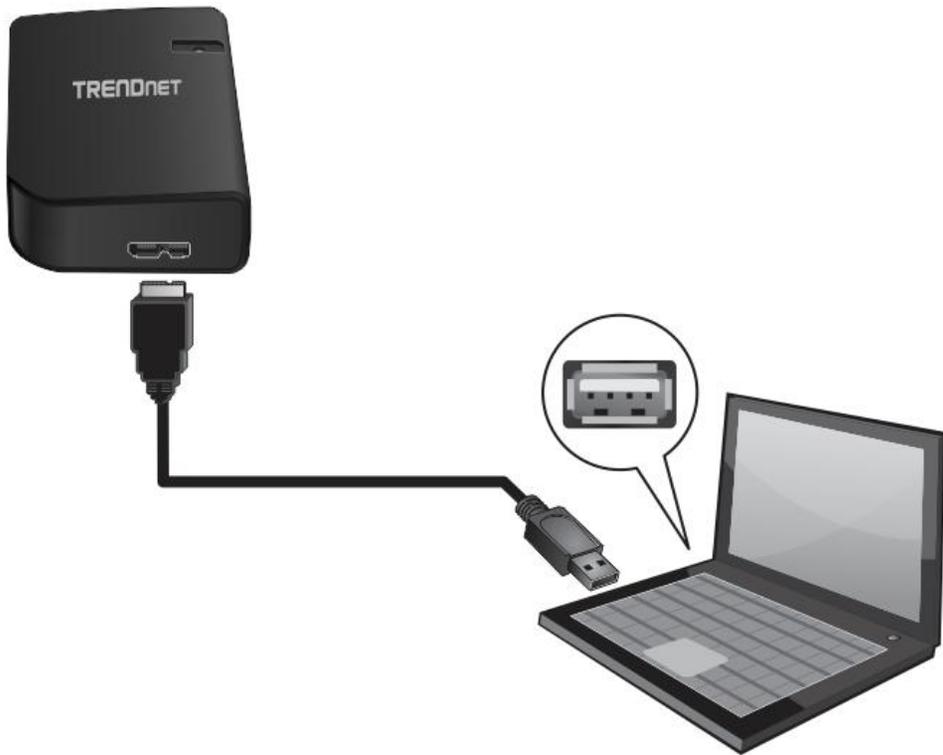
2. Wait until computer finish the software configuration.
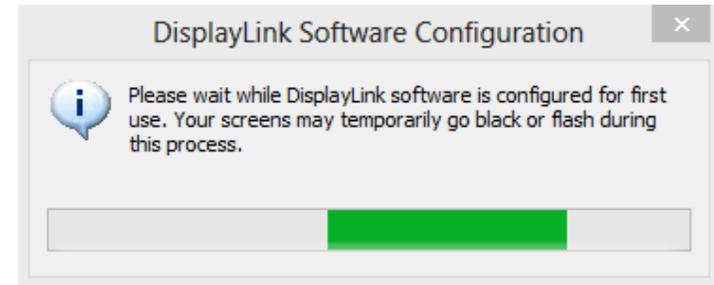
3. Connect an HDMI cable from the adapter HDMI port to the HD monitor or TV.

4. Turn on your HD monitor or TV and make sure the input is set to the corresponding HDMI input. Your installation is complete

General Settings

Upon completing the software installation, the task tray utility icon should appear in your desktop task tray at the bottom right-hand corner. The task tray utility icon will not be available until your computer is connected to the USB to HD TV adapter. The general settings allow you to setup your video and audio configuration of your computer display and check for driver/ and utility updates.

Note: If you do not see the task tray utility icon, please check your USB connections.

Right-click the task tray utility icon to configure your adapter settings.

DisplayLink Manager – Display the Display Manager software version.

Video Setup – Open to use your operating system's built-in display settings to set your computer's display resolution, orientation, and the multiple displays.
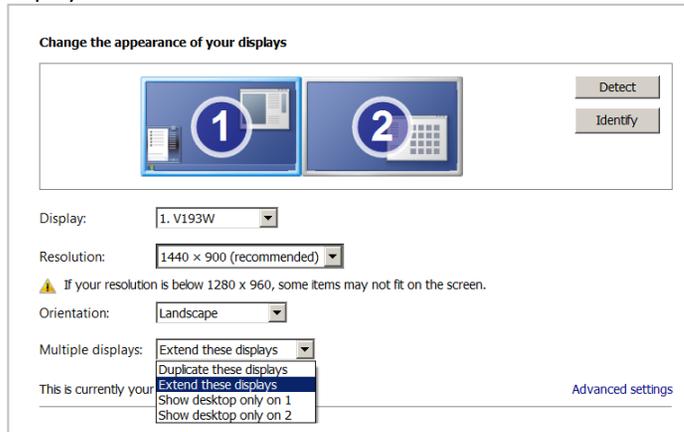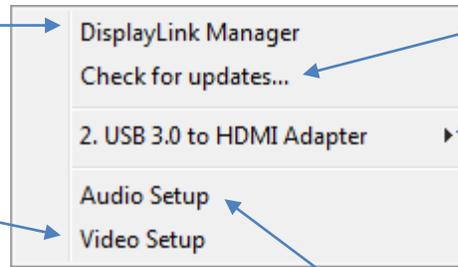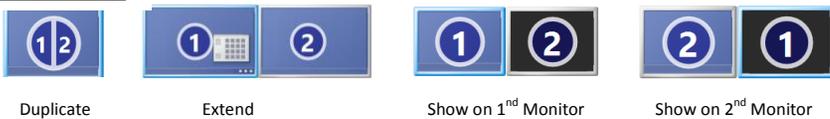
Check for updates… – Checks for utility/driver updates for your USB to HD TV adapter.

USB 3.0 to HDMI Adapter – Lists the USB to HD Adapter display number and provides the configuration options for the adapter or display. Up to 6 USB to HD Adapters can be connected to a single computer.

Audio Setup – Open the built-in audio configuration of your operating system. To send the audio from your computer to your HD monitor or TV using the USB to HD TV Adapter, select the item **DisplayLink Audio** and click **Set Default**, then click **OK** to apply the configuration.

Multiple displays

| Duplicate | Extend | Show on 1ⁿᵈ Monitor | Show on 2ⁿᵈ Monitor |

Adapter Settings

The adapter settings allow you to configure the settings of your adapter and the HD monitor or TV display connected.

Screen Resolution – Allows you to select the screen resolution of the HD monitor or TV. Please note that this option is not available in Mirror Mode as the resolution is dependent on the settings of the primary display. The available resolution options will be dependent on the capabilities of your HD monitor or TV.

Screen Rotation – Allows you to rotate the screen orientation of the HD monitor or TV. (Normal (default), Rotated Left, Rotated Right, Upside-

Extend To – (Extend mode only) Allows you to select where to extend the primary display on to the secondary HD monitor or TV. (Right (default), Left, Above, or Below the primary display.)

Off – Turns off/disables the adapter and disconnects the connected HD monitor or TV.

Extend (Extend Mode default) – Sets the adapter to Extend mode to extend your primary computer display on to the HD monitor or TV.

Set as Main Monitor (Primary Mode) – Set the HD monitor or TV to the primary display and your computer display as secondary. By default, your computer is set to the primary display.

Notebook Monitor Off – Turns off your computer display only and leaves your HD monitor or TV display on.

Mirror (Mirror Mode) – Sets the adapter to Mirror mode to mirror your primary computer display to the HD monitor or TV.

Optimize for Video – Optimizes the video quality for play back for the HD monitor or TV. Please note that text may not appear as clear or may not be as high quality when selecting this option.

Fit to TV – Allows you to adjust the vertical and horizontal size of the desktop displayed on the HD monitor or TV.

Screen Resolution ▶
Screen Rotation ▶
Extend To ▶
● Extend
Set as Main Monitor
Notebook Monitor Off
Mirror
Off
Optimize for Video
Fit to TV...

DisplayLink Manager
Check for updates...
2. USB 3.0 to HDMI Adapter ▶
Audio Setup
Video Setup
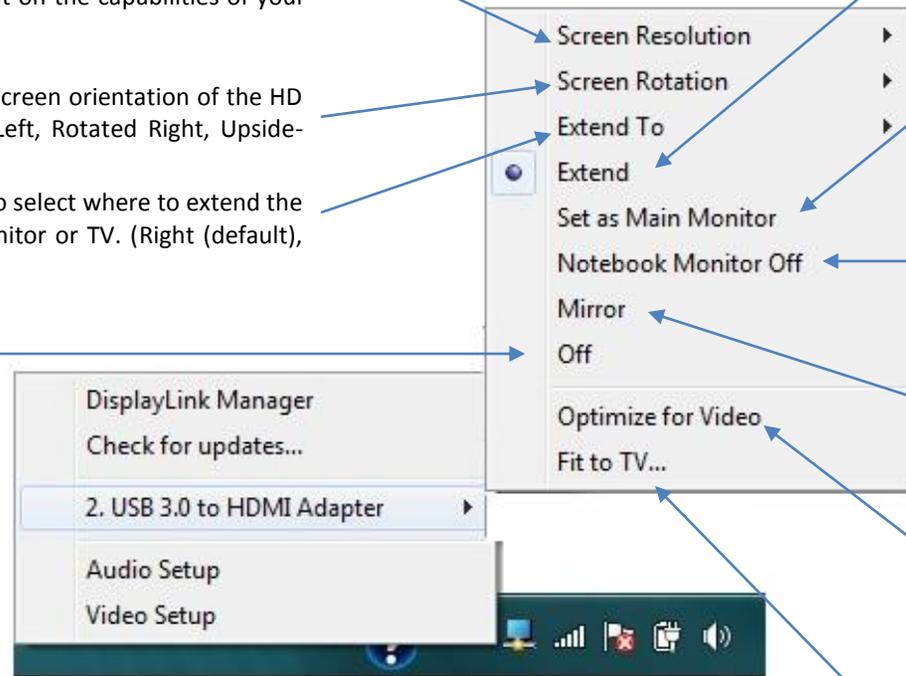
Using Multiple Adapters

Up to 6 USB to HD TV adapters can be connected and used concurrently with one computer, each adapter connecting to an additional HD monitor or TV. To use multiple displays, simply connect the additional adapters to your computer via USB and HDMI to the displays.

Additional adapters will be listed in this section numbered 3, 4, 5, etc.

Minimum System Requirements for Multiple Adapters

Windwos 8.1

- Processor: 1.2GHz or higher with supported SSE2
- RMA: 1 display (2GB), 2 or more displays (4GB)

Windwos 8/7/Vista

- Processor: 1.2GHz or higher with supported SSE2
- RMA: 1 display (2GB), 2 or more displays (4GB)

Windwos XP

- Processor: 1.2GHz Single Core CPU or higher
- RMA: 1 display (1GB), 2 or more displays (2GB)

Note: Only the first USB to HD TV adapter connected may be able to use extended mode and the others will be forced to mirror if using a computer with hardware below the minimum system requirements.

Disconnecting the Adapter

You can simply disconnect the adapter by physically disconnecting the USB cable from your computer.

Uninstalling the Adapter drivers and Software

Windows 8.1/8
   a. Click **Windows key** and **X key** from the keyboard, select **Programs and Features**.
   b. Select the **DisplayLink Core Software** item in the list, click **Uninstall** and follow process to uninstall the software.
   c. Select the **DisplayLink Graphics** item in the list, click **Uninstall** and follow the process to uninstall the software.

Windows 7
   a. Go into the **Control Panel**, click **Programs and Features**.
   b. Select the **DisplayLink Core Software** item in the list, click **Uninstall** and follow process to uninstall the software.
   c. Select the **DisplayLink Graphics** item in the list, click **Uninstall** and follow the process to uninstall the software.

Windows Vista
   a. Go into the **Control Panel**, click **Programs and Features**.
   b. Select the **DisplayLink Core Software** item in the list, click **Uninstall** and follow process to uninstall the software.
   c. Select the **DisplayLink Graphics** item in the list, click **Uninstall** and follow the process to uninstall the software.

Windows XP
   a. Go into the **Control Panel**, double-click the **Add or Remove Programs** icon
   b. Select the **DisplayLink Core Software** item in the list, click **Remove** and follow process to uninstall the software.
   c. Select the **DisplayLink Graphics** item in the list, click **Remove** and follow the process to uninstall the software.

Using USB to HD TV Adapter in Mac

Mac Software Installation

1. Insert the included CD-ROM into your computer's CD-ROM drive. Double click **TU3-HDMI** disk icon.

2. Navigate to **Driver** > **Mac Driver** , then click the DisplayLink_Mac_2.2.dmg
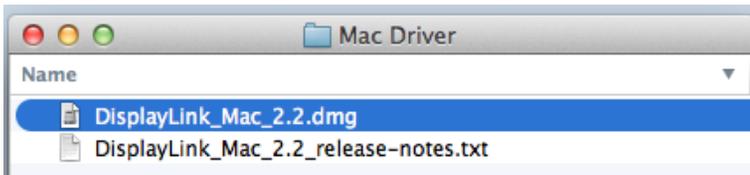
3. Click **DisplayLink Software Installer.pkg**.

4. Click **Continue**.

5. Click **Continue Installation**.

6. Enter username and password on your Mac computer, then click **Install Software**.
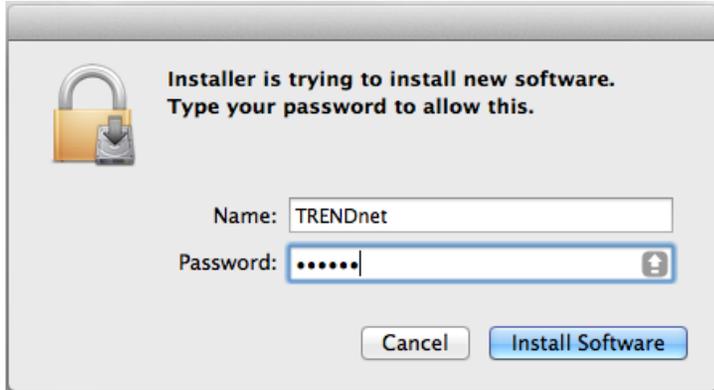
7. Follow the screen to finish the installation and wait for the following screen appears. Click **Restart.**
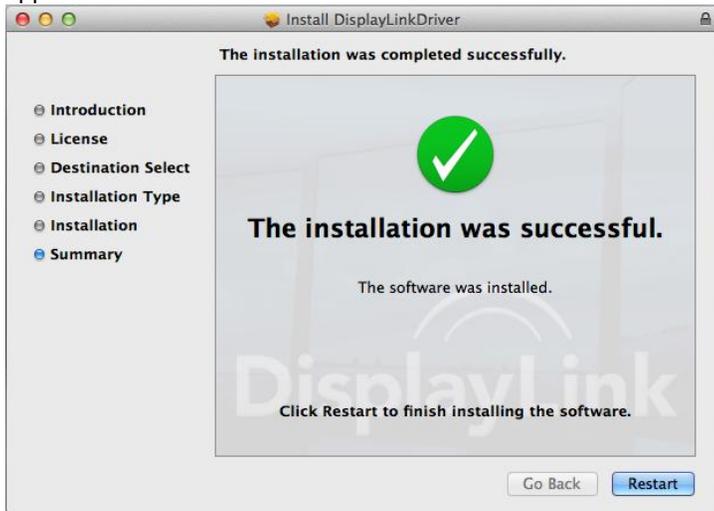
Hardware Installation

1. Connect the included USB 3.0 cable from an available USB 3.0 (or USB 2.0) port on your computer to the USB 3.0 micro-B port on the adapter.

    Note: Please check your computer documentation to verify which ports are designated USB 3.0 ports or USB 2.0 ports. You can also easily identify the USB 3.0 ports with the blue color on the inside of the port or USB 3.0 symbol next to the port.

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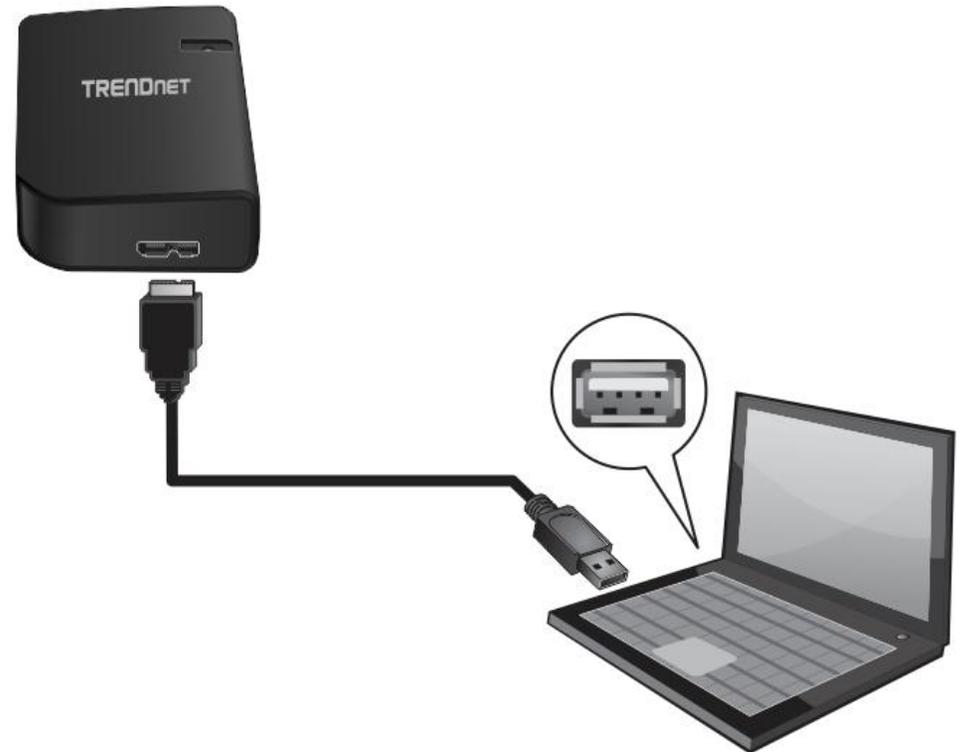
2. Connect an HDMI cable from the adapter HDMI port to the HD monitor or TV.

3. Turn on your HD monitor or TV and make sure the input is set to the corresponding HDMI input. Your installation is complete

General Setting

When attaching a display that the software has not seen before, the display will default to being extended to the right of the primary display.

To configure the settings for each of your USB attached displays, click **System Preference** on the duct .

Click **Displays**.

General Setting Continue
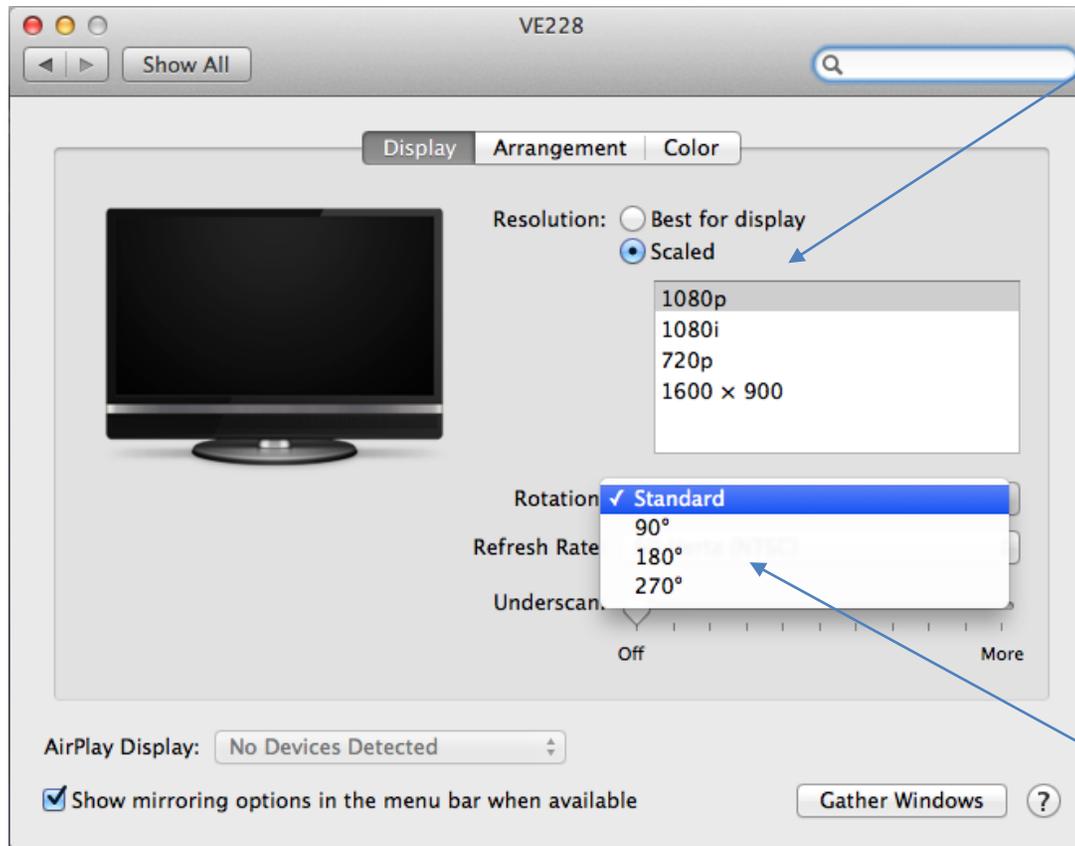
Screen Resolution – Allows you to select the screen resolution of the HD monitor or TV. The available resolution options will be dependent on the capabilities of your HD monitor or TV.

Rotation a Display – Allow you to rotate the screen orientation of the HD monitor or TV (standard (default), 90°, 180°, 270°). Any changes made to the mode, resolution, frequency or depth will be remembered for next time user switch to that specify angle.

Display Mode Setting
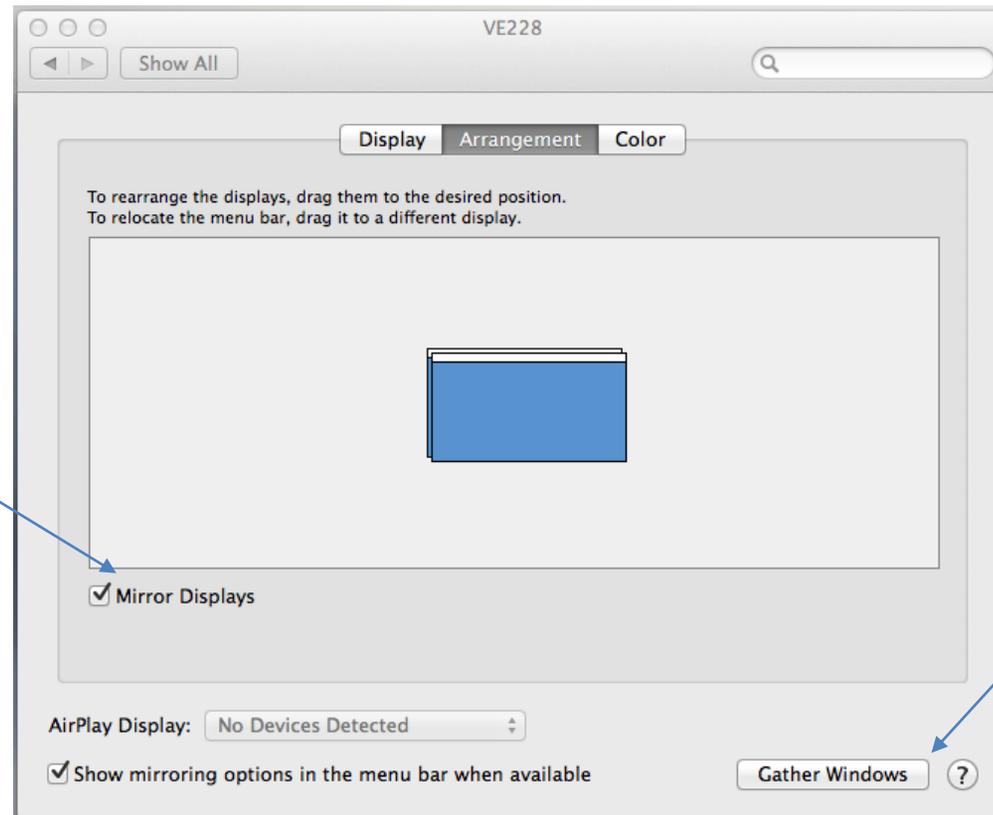
Mirror (Mirror Mode) – Sets the adapter to Mirror mode to mirror your primary computer display to the HD monitor or TV.

Gather Windows – Allow you to bring all the Display Preference windows onto the main display.

VE228

Show All

Display | Arrangement | Color

To rearrange the displays, drag them to the desired position.
To relocate the menu bar, drag it to a different display.

☑ Mirror Displays

AirPlay Display: No Devices Detected

☑ Show mirroring options in the menu bar when available   Gather Windows   (?)

Display Mode Setting Continue

Set the Primary Monitor – Set the HD monitor or TV to the primary display and your computer display as secondary. Click the white menu bar and drag it to the desired HD monitor or TV. By default, your computer is set to the primary display.

Using Both Mirror and Extend Mode – To use both function, make sure the **Mirror Display** selection is off. In the Arrangement tab, press and hold **cmd** and **alt** keys and drag and drop the display you would like to mirror over the primary display. Repeat the same steps for more displays. For those unchanged displays, it will remain in the extend mode.

Extend position - Extend the primary display on to the secondary HD monitor or TV to right (default), left, above, or below the primary display.
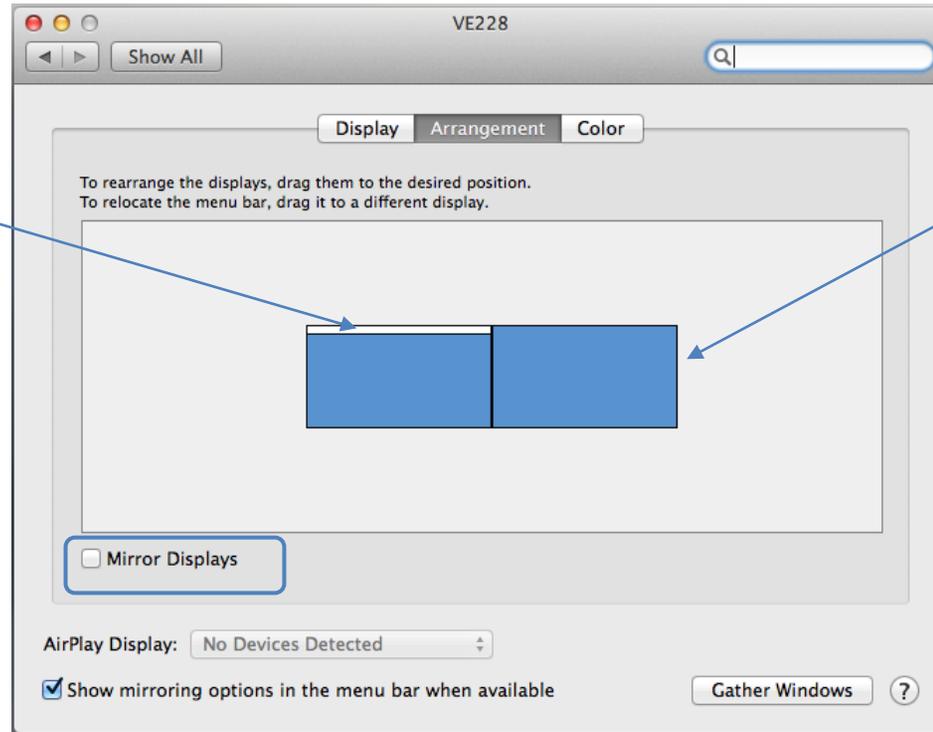
Extend (Extend Mode default) – Sets the adapter to Extend mode to extend your primary computer display on to the HD monitor or TV. Make sure the **Mirror Displays** is unselected.

Extend to Right   Extend to Left   Extend to bottom   Extend to top
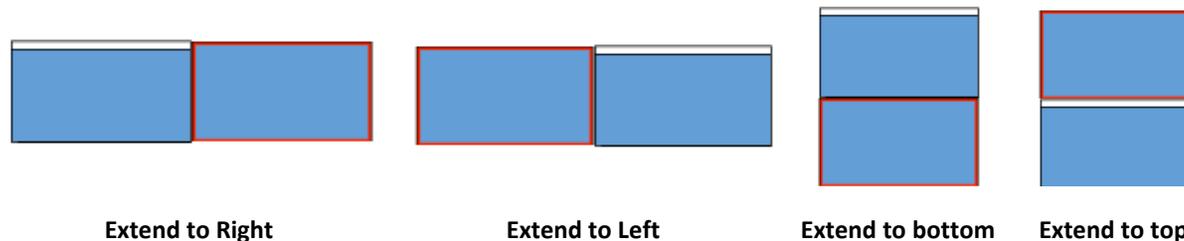
Using Multiple Adapters

Up to 4 USB to HD TV adapters can be connected and used concurrently with one computer, each adapter connecting to an additional HD monitor or TV. To use multiple displays, simply connect the additional adapters to your computer via USB and HDMI to the displays.
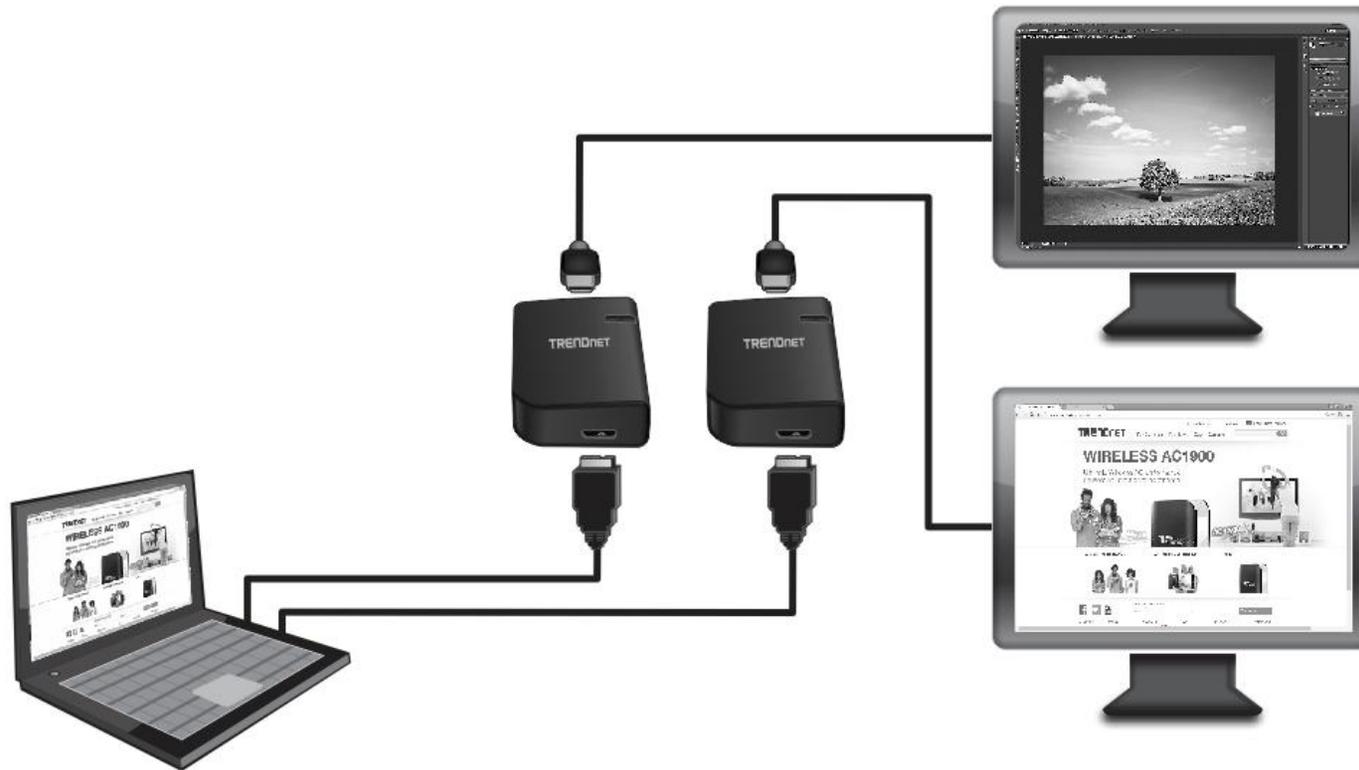
* Available supported features on Mac system depends on chipset driver provided by DisplayLink™.

Disconnecting the Adapter

You can simply disconnect the adapter by physically disconnecting the USB cable from your computer.

Uninstall the Adapter drivers and Software

1. Click **Go** > **Applications** then open the **DisplayLink** folder.

2. Click **DisplayLink Software Uninstaller** to uninstall the software.
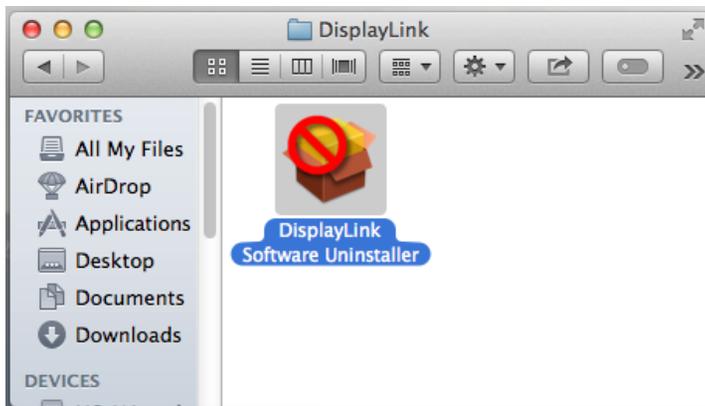
Troubleshooting

I inserted the Utility & Driver CD-ROM into my computer's CD-ROM Drive and the installation menu does not appear automatically. What should I do?
Answer:

1. For Windows 8.1/ 8/7, if the installation menu does not appear automatically, click on the Windows Icon on the bottom left hand corner of the screen,, click the "Search programs and files" box, and type D:\Autorun.exe, where "D" in "D:\Autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard
2. For Windows Vista, if the installation menu does not appear automatically, click **Start**, click the **Start Search** box, and type **D:\Autorun.exe** where "**D**" in "D:\autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard.
3. For Windows XP, if the installation menu does not appear automatically, click **Start**, click **Run**, and type **D:\Autorun** where "**D**" in "D:\Autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard.

The HD monitor or TV is blank.
Answer:
1. Verify that your USB and HDMI cable connections are secured and properly connected.
2. Verify your computer is on and not in standby or hibernation mode. The adapter will automatically disconnect and the HD monitor/TV will turn blank in these modes.
3. Please ensure that the software and drivers are installed. You can find the installation procedure on Page 3.
4. Verify that you have selected the correct HDMI input on your HD monitor or TV.
5. 5.. Reboot your computer.
6. Connect the USB to HD TV Adapter to a different USB port on your computer.
7. If the HD monitor or TV power is on (typically, LED indicator is green), wait a few moments for your HD monitor or TV to display video on the screen.

8. If the HD monitor or TV LED power is in standby (typically, LED indicator is red), uninstall the drivers and software (Page 9), disconnect the adapter, and re-install the drivers and software.

Windows is unable to recognize my hardware. What should I do?
Answer:

1. Make sure your computer meets the minimum requirements.
2. Verify that the adapter is connected to a USB 3.0 port or USB 2.0 port (USB 3.0 recommended).
3. Please ensure that the software and drivers are installed. You can find the installation procedure on page 3.
4. Try another USB
5. Connect the USB to HD TV Adapter to a different USB port on your computer.

The HD monitor or TV is flickering.
Answer:
The issue may be caused by a low refresh rate settings.
a. In Mirror mode, increase the refresh rate of the your primary computer monitor which will increase the refresh rate of your HD monitor or TV.
b. In Extended mode, increase the refresh rate of the HD monitor or TV.

When playing MPEG files on Windows ˚ Media Player (WMP) in Extended mode, full screen does not display correctly.
Answer:
If you are using Windows ˚ XP SP1, please upgrade to at least SP2.

When playing video in full screen mode, playback is not smooth.
Answer:

1. Reduce the resolution of your primary computer display to 680x480 or 800x600 screen resolution.
2. Use the adapter in Extended Mode.
3. Terminate any other CPU intensive applications running on your computer.
4. Some media players require DirectX hardware support to operate correctly. Please try a different media player application.

5. In Extended Mode, drag the media player application playing the video to the HD monitor or TV desktop display, then close and re-open the Media Player application.
6. Try reducing the hardware acceleration of your primary computer display levels on your computer to levels 1,2,or 3 and restarting the media player application. The hardware acceleration settings can be found by right-clicking **Desktop** > click **Properties** > **Settings** > **Advanced** > and **Troubleshoot.**
7. Video playback may not display correctly, if the primary display is mirrored on to the HD monitor and TV display and there is another monitor extending the display on to the HD monitor and TV display at the same time. The extension mode must be disabled.

In Extended Mode, the HD monitor or TV has a black border around the desktop.
Answer:
This occurs when the screen resolution used by the HD monitor or TV is higher. To resolve this issue, configure the HD monitor or TV to use the same resolution as the primary computer display.

No playback on screen when attempting to play protected media files.
Answer:
Some protected videos cannot be played back when connecting to an HDMI ® TV or monitor.

Full screen menus may not display correctly or lose quality.
Answer:
This may occur when the computer does not have enough memory to render the screen in full quality.
This may also occur when using the **Optimize for Video** option in the adapter task tray utility. You can try the following resolve the issue.
- Disable the **Optimize for Video** option.
- Close any unnecessary programs, especially applications that are CPU intensive.
- If using a laptop, set the computer power plan/options to High Performance (or highest available power plan) to ensure the computer does not go into a low power or power saving mode.

Only the first adapter can be configured to extend mode and the other adapters are forced to mirror mode.
Answer:
This may occur if the computer does not meet the minimum system requirements or there is too much CPU utilization used by other applications which will limit the usage capabilities of the adapters. Please ensure your computer meets the minimum system requirements according to the number of adapters you are using and make sure that all applications that require a lot of CPU utilization are closed.

Hardware acceleration was not working properly.
Answer:
Hardware acceleration may not be available for the following applications.

Interface	Windows® 8.1 / 8 / 7 / Vista	Windows® XP
DX10	Yes, if supported by the primary graphics card.	No
DX9	Yes, but not in full screen, windowed only	No
DxVA	Yes, if supported by the primary graphics card.	No
Direct3D	Yes, but not if the TU3-HDMI screen is set to primary	No
DirectDraw	Yes	Yes
OpenGL	Yes, but not in full screen, windowed only	No

TU3-HDMI is not working properly on Mac System.
Answer:
Available features on Mac system are provided by DisplayLink™ device driver. For latest device driver and supported features, please visit http://www.displaylink.com/mac .

Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

TU3-HDMI – 2 Years Limited Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDnet within the applicable warranty period and providing a copy of the dated proof of the purchase. Upon proper submission of required documentation a Return Material Authorization (RMA) number will be issued. An RMA number is required in order to initiate warranty service support for all TRENDnet products. Products that are sent to TRENDnet for RMA service must have the RMA number marked on the outside of return packages and sent to TRENDnet prepaid, insured and packaged appropriately for safe shipment. Customers shipping from outside of the USA and Canada are responsible for return shipping fees. Customers shipping from outside of the USA are responsible for custom charges, including but not limited to, duty, tax, and other fees.

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Governing Law: This Limited Warranty shall be governed by the laws of the state of California.

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Go to http://www.trendnet.com/gpl or http://www.trendnet.com Download section and look for the desired TRENDnet product to access to the GPL Code or LGPL Code. These codes are distributed WITHOUT WARRANTY and are subject to the copyrights of the developers. TRENDnet does not provide technical support for these codes. Please go to http://www.gnu.org/licenses/gpl.txt or http://www.gnu.org/licenses/lgpl.txt for specific terms of each license.

PWP05202009v2   V2.0R (09/15/2014)

TRENDnet®

Product Warranty Registration

Please take a moment to register your product online.
Go to TRENDnet's website at http://www.trendnet.com/register

TRENDnet
20675 Manhattan Place
Torrance, CA 90501. USA