

D-Link®



User Manual

Table of Contents

Safety Information	4	TV Type	28
Product Overview	7	Connection.....	29
Package Contents.....	7	Internet Connections	30
Minimum System Requirements.....	8	TCP/IP	30
Introduction	9	Network Connection	31
Features.....	9	Advanced.....	32
Hardware Overview	10	Password Setup	32
Front Panel.....	10	Video Setting	33
Back Panel	11	Sending Video From Your PC To Your TV	34
Using the Remote Control	12	Basic Steps To Show Video Or Graphics.....	34
Installation Wizard	13	Viewing Internet Videos	34
Wireless Setup.....	16	Recommended Media Player.....	35
Wireless Manual Setup	18	Viewing Pictures and Presentations	35
Connecting Your Television	20	Wireless Security.....	36
Wired Setup	21	What is WEP?.....	36
Finalizing Your Setup	22	What is WPA?	37
Using The Software	24	Wireless Installation Considerations.....	38
Starting the Software	24	Troubleshooting.....	39
Using the Wireless PC-on-TV Application	26	Installation Questions and Issues	39
Settings	27	Connection Questions and Issues	40
General	27	Frequently Asked Questions.....	41
Device Settings	27		

Wireless Basics45

Networking Basics50

 Check your IP Address50

 Statically Assign an IP Address51

Technical Specifications52

Contacting Technical Support.....53

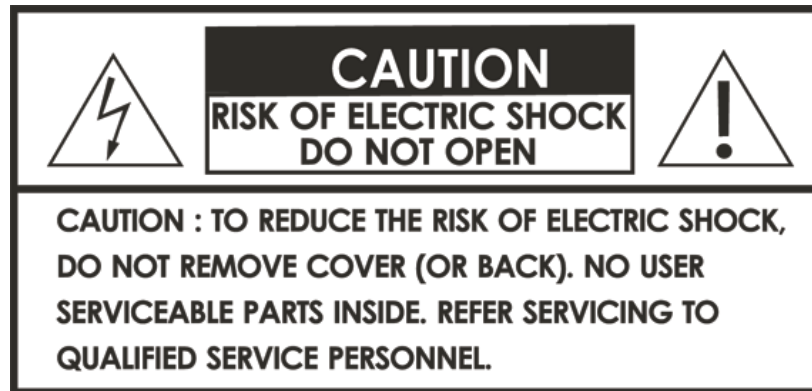
Warranty54

Registration.....59

Safety Information

For optimum performance, please read the following information carefully.

Safety Precautions



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert users to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION!
THE POWER SUPPLY CORD IS USED AS THE MAIN DISCONNECT DEVICE. ENSURE THAT THE SOCKET-OUTLET IS LOCATED/INSTALLED NEAR THE EQUIPMENT AND IS EASILY ACCESSIBLE.

CAUTION!
TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR PRODUCT DAMAGE, DO NOT EXPOSE THE UNIT TO RAIN, MOISTURE, DRIPPING, OR SPLASHING. DO NOT PLACE OBJECTS FILLED WITH LIQUIDS UPON THE UNIT.

CAUTION!

- **DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.**
- **DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.**
- **DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.**
- **DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY-FRIENDLY MANNER.**

CAUTION!

TO PREVENT ELECTRIC SHOCK, MATCH THE WIDE BLADE OF THE PLUG TO THE WIDE SLOT OF THE ELECTRICAL OUTLET AND FULLY INSERT.

This device is designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use, and servicing. This device does not contain any user serviceable parts.

- **Carefully read and follow the Manual and Install Guide.**
- **Do not place the product near heat sources such as radiators, heat registers, stoves, or other products that produce heat.**
- **Do not use this product near water.**
- **Unplug the unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.**
- **Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them.**
- **Do not overload wall outlets.**
- **Do not use this product during a storm. Unplug the unit from the wall outlet. If the product is to be left unattended for a long period of time. This will prevent damage to the product due to lightning and power-line surges.**
- **Do not attempt to service this product yourself. Opening the cover may expose you to dangerous voltage or other hazards. For service, please contact a qualified service technician.**

Radio and TV Interference:

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.**

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Important Note:

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

Industry Canada statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Important Note:

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device has been designed to operate with an antenna having a maximum gain of 2 dB. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

Package Contents



D-Link DPG-1200
Media Player



Vertical Stand



Remote Control
(2 AAA Batteries
Included)



Rubber Feet



Wireless
Antenna



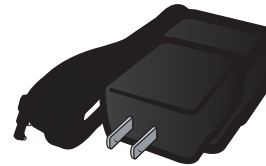
IR Extender



Composite
Audio/Video Cable



Ethernet Cable



Power Adapter



Software and
Warranty on CD

* Ethernet cable is required for initial setup and for a wired connection. If you are using a wireless connection, you will not need this cable.

Minimum System Requirements

Computer with:

- Windows® Vista™, Windows XP SP2, or Windows 2000 SP4
- 1.8GHz Processor
- CD-ROM Drive
- 130MB Hard Disk Space
- 512MB RAM
- Network Interface Card

Network with:

- Cable or DSL Modem
- Router (Wired/Wireless 802.11b/g)
- Subscription with an Internet Service Provider (ISP)

Television with:

- Available video input connection. VGA/Component Video/Composite Video
(Not recommended for CRT-based TVs)
- Available audio input connection.

Introduction

The D-Link PC-on-TV media player brings your favorite music, photo, and video files from your PC to your television. Enjoy television shows and sporting events from your favorite websites in the comfort of your living room. PC-on-TV enables you to connect your desktop or laptop computer to a television or home theater projector, allowing you to watch movies or share photos with friends and family with ease. With multiple video outputs to choose from, the PC-on-TV media player can connect to almost any television or home theater projector.

Many popular media players only allow for certain file formats to be played on their device, but PC-on-TV only requires that your media is able to play on your PC for it to play on your TV.

Features

- **Video Outputs:**
 - **VGA** (VGA cables are not included in this package)
 - **Component** (Component cables are not included in this package)
 - **Composite**
- **Installation Setup Wizard**
- **Supports all media formats (Playback is dependent on codecs installed on your PC)**
- **10/100Mbps Wired Ethernet Network Connection**
- **Supports 802.11b/g Wireless with WEP, WPA, WPA2 Wireless Encryption**
- **Upgrade software via the Internet**
- **Standard Definition Video**
- **Stereo Audio Output**

Hardware Overview

Front Panel



Power LED

Press the **Power** button on your remote control (see page 12), and the PC-on-TV device will illuminate.

Back Panel

Wireless Antenna Connector

Attach the supplied antenna by threading it onto the antenna connector.

Composite Audio/Video Output

Plug the supplied 3.5mm mini-jack connector into the PC-on-TV device.

IR Extender port

Plug in the supplied IR extender that allows your remote control to access the PC-on-TV device, if your PC-on-TV device is not physically visible.

Power Receptor

Plug in the supplied power adapter into the PC-on-TV power receptor.



Component Output

Plug the component cables (not included) into the PC-on-TV device, and plug the other end into your television or home theater projector.

VGA Output

Plug one end of the VGA cable (not included) into the PC-on-TV device, and plug the other end into your television or home theater projector.

Reset

Using a small pointed object, depress the reset switch for 10 seconds.

RJ-45 Ethernet Connector

Connect the supplied Ethernet cable to the network cable connector, and attach the other end to a router or hub on your network.

Using the Remote Control



(1) Power	Turn the DPG-1200 ON or OFF .
(2) SETTINGS	Press to bring up the settings screen.
(3) DESKTOP	Press to minimize all windows and show the desktop.
(4) SCREEN SAVER	Press to launch default screensaver.
(5) Alphanumeric Keys	Allows you to enter alphanumeric key information
(6) Color-coded Keys	Programmable shortcut keys. (Yellow - www.youtube.com , Green - www.cnn.com , Orange - www.espn.com , Blue - On-Screen Keyboard)
(7) DELETE	Used to delete numbers or text. (Same as Backspace key on keyboard)
(8) ENTER	Same as Enter key on keyboard.
(9) BACK	Same as your Back button on web browser.
(10) FORWARD	Same as your Forward button on web browser.
(11) ROLLER BALL	Use to move the mouse cursor.
(12) LEFT	Same as your left mouse button.
(13) RIGHT	Same as your right mouse button.
(14) HOME	Returns to the Home menu page.
(15) VIDEO/PHOTO	Switches between Video and Photo mode.
(16) OK/NAVIGATION	Move the on-screen cursor to navigate through the user interface.
(17) PAGE UP	Press to scroll up a page.
(18) PAGE DOWN	Press to scroll down a page.
(19) INFO	Access the information on a music, photo, or video file that is currently playing on a third party application.
(20) Play Functions	While viewing and listening to your media on a third party application, you can use these keys to Stop , Play/Pause , Rewind , Fast Forward , go back (Prev), or go to the next item (Next).

Installation Wizard

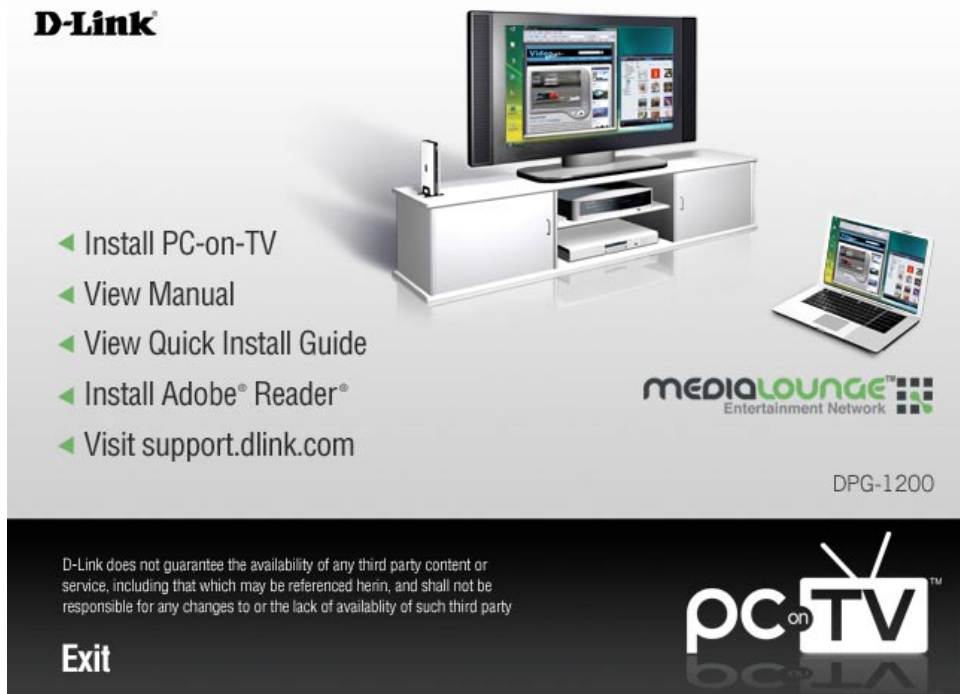
Follow the simple steps below to run the installation wizard to guide you quickly through the installation process.

Insert the included DPG-1200 Installation CD into the CD-ROM drive. The step-by-step instructions which are shown in Windows® XP, are similar to those in Windows Vista™.

If the Autorun CD function does not automatically start on your computer, click Windows® **Start** > **Run**. In the Run command box type “**D:\DPG1200.exe**”, where **D:** represents the drive letter of your CD-ROM drive.

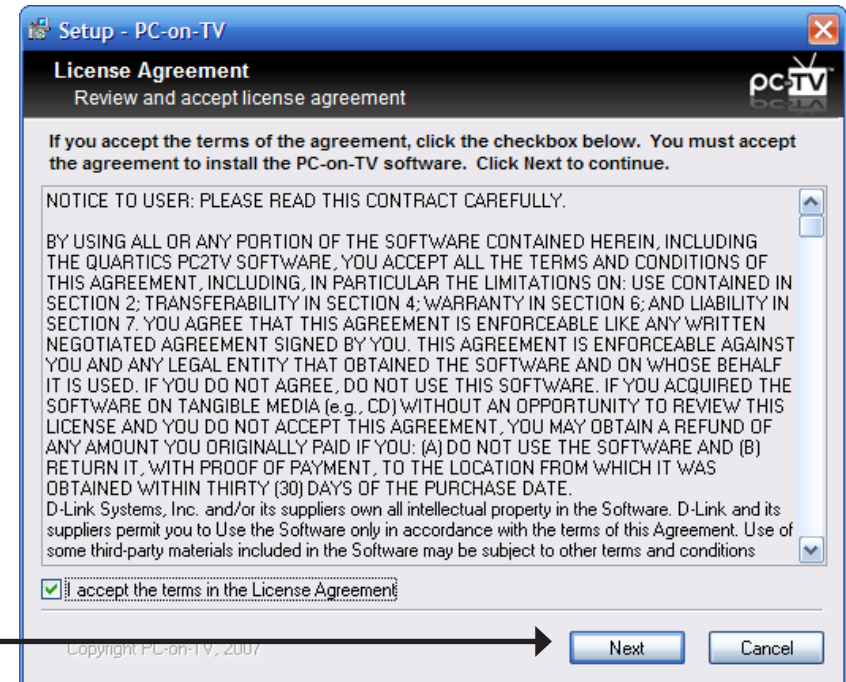
When the autorun screen appears, click the **Install PC-on-TV** button to begin the installation wizard.

Click **Install PC-on-TV**



Read and agree to the **License Agreement** to continue.

Note: Before you start the installation wizard, remove any earlier versions of the PC-on-TV software.



Click **Next**

Note: If you are asked to reboot, please continue to reboot your PC.

To begin the PC-on-TV Installation Wizard, click the PC-on-TV icon on the Windows® desktop. You can also start the software via the Windows **Start -> All Programs -> PC-on-TV**.

Double-click the **PC-on-TV Icon**

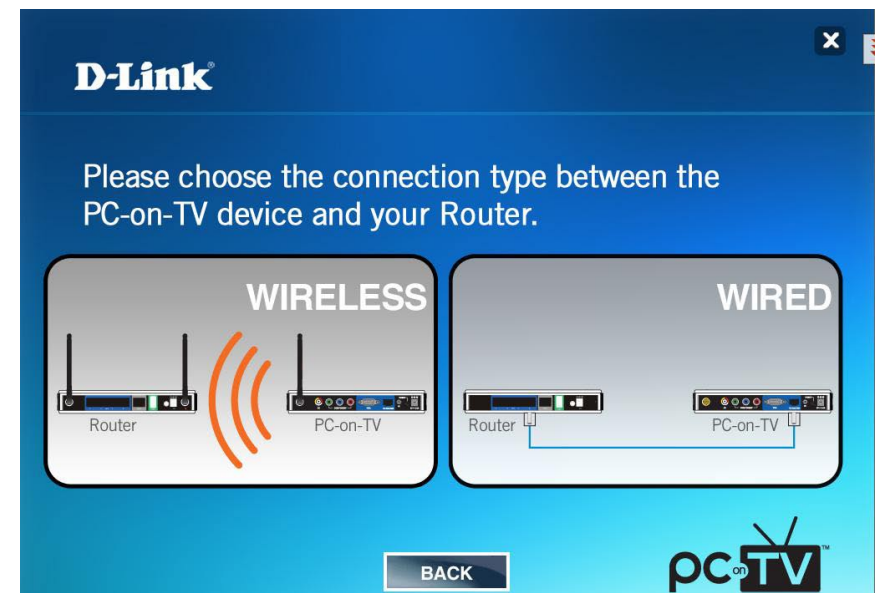


This Installation Wizard will guide you through the setup and installation of your PC-on-TV device.

Click **NEXT** to continue.

Click **NEXT**

Select the image if you want to connect to the device wirelessly or wired via Ethernet cable. If you select **WIRED**, skip to the “**Connecting Your Television**” section on page 20; or continue to page 16 if you select **WIRELESS**.



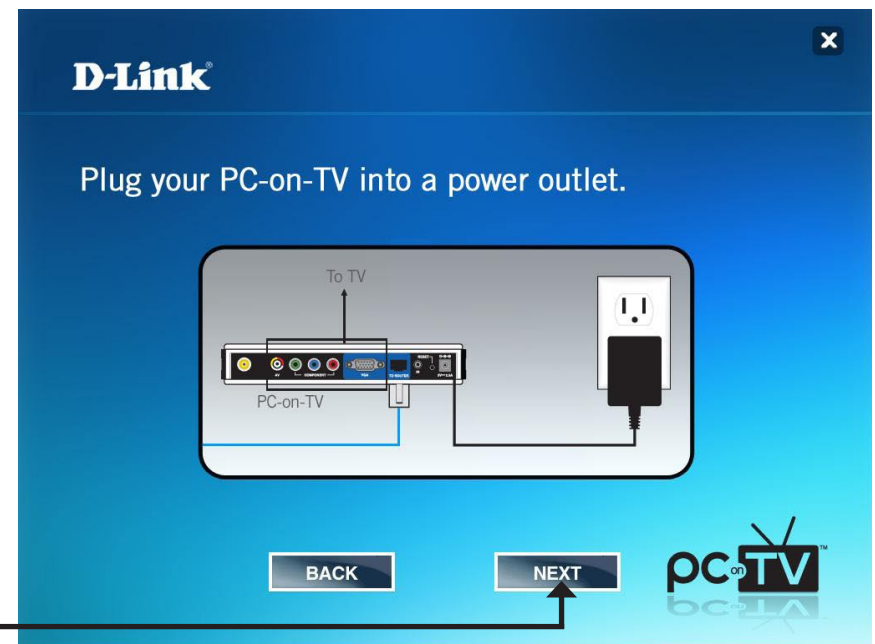
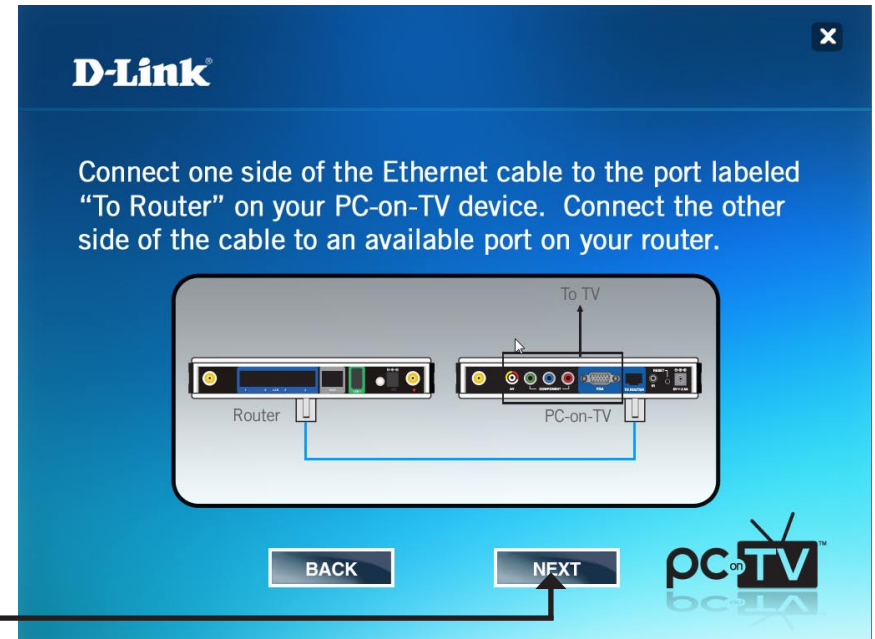
Wireless Setup

Connect the media player to your router or computer with the supplied Ethernet cable. This is a temporary connection for first time device setup only.

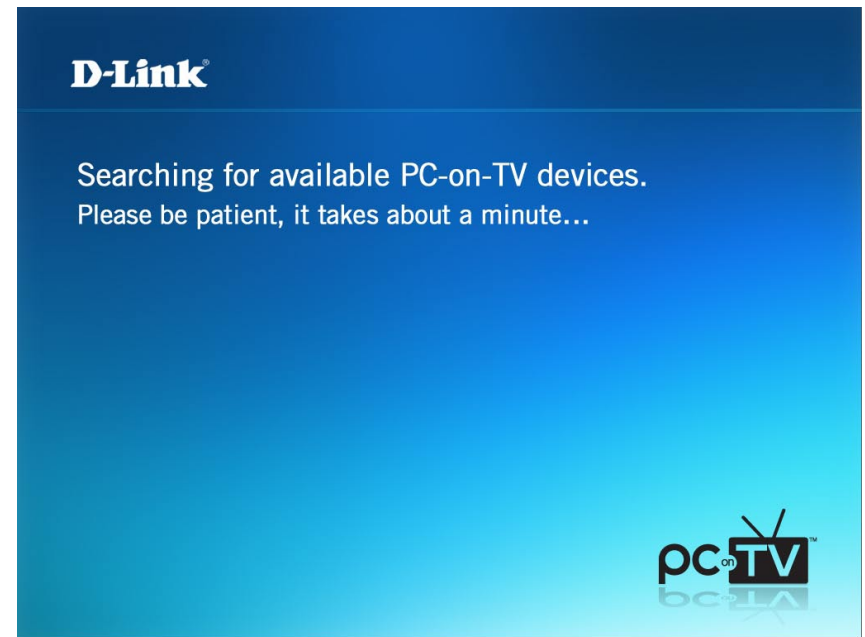
Click **NEXT**

Plug the power adapter into the PC-on-TV device and connect the other end to a power outlet.

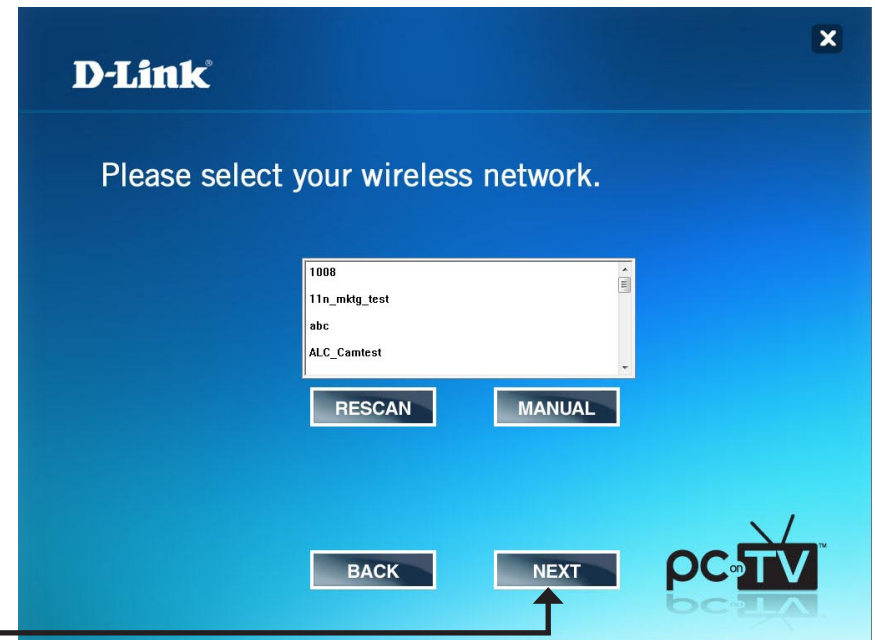
Click **NEXT**



The software will search for available PC-on-TV devices. Please allow up to 2 minutes.




Select the wireless network you would like to connect to and click **NEXT**. Click **RESCAN** if you need to refresh the wireless network list.



Click **NEXT**

Wireless Manual Setup

Provide the SSID, Channel and Encryption Type used for your wireless network. Please check your access point/wireless settings to verify the information required.

A screenshot of the D-Link wireless setup interface. The background is a blue gradient. At the top left is the D-Link logo, and at the top right is a close button (X). The text "Please select your wireless network." is centered. Below it are three fields: "SSID : 2.4GHzFull_QA:PC-on-TV[DPG-1200]" in a text box, "Channel : 7" in a dropdown menu, and "Encryption : WPA2-PSK [AES]" in a dropdown menu. At the bottom right are two buttons: "BACK" and "NEXT". An arrow points from the "NEXT" button to a callout box on the left that says "Click NEXT". In the bottom right corner, there is a logo for "pc on TV" with a television icon and the text "OC-11A" below it.

D-Link

Please select your wireless network.

SSID : 2.4GHzFull_QA:PC-on-TV[DPG-1200]

Channel : 7

Encryption : WPA2-PSK [AES]

BACK NEXT

pc on TV
OC-11A

Click **NEXT**

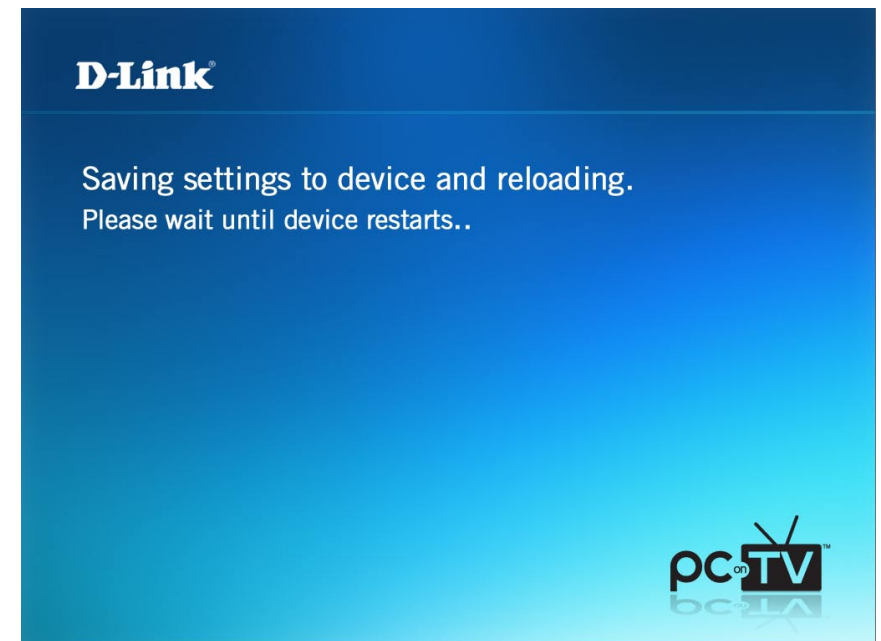
Enter the **Wireless Security Key** and click **NEXT**.

Note: Please write down or remember your key, you will have to enter it again.

Click **NEXT**



The unit will now reboot and attempt to connect to your wireless network. This may take about a minute.



Connecting Your Television

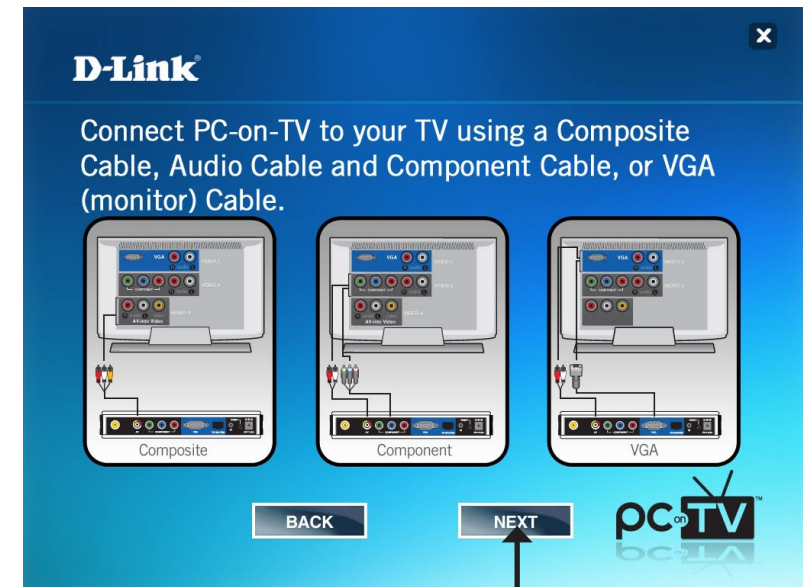
Disconnect the PC-on-TV device from your router and place it near your TV.



Click **NEXT**

Select one of the three connection methods shown. Once you connect the PC-on-TV device to your TV, click **NEXT**.

Note: If you are connecting wirelessly, skip to the “*Finalizing Your Setup*” section on page 22.



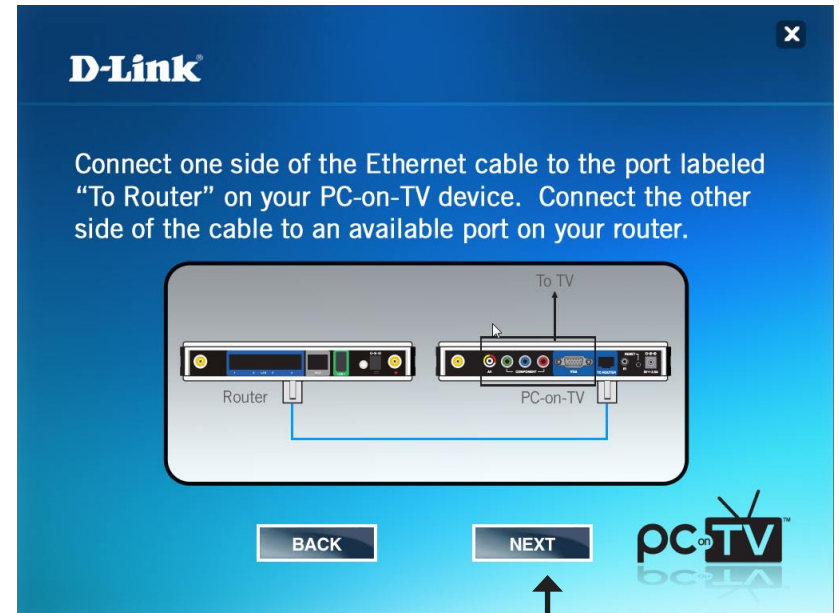
Click **NEXT**

Wired Setup

If you are using an Ethernet (wired) connection, attach the Ethernet cable from your switch or router to the PC-on-TV device.

Note: *This following screen will appear only if you choose to connect with a wired connection.*

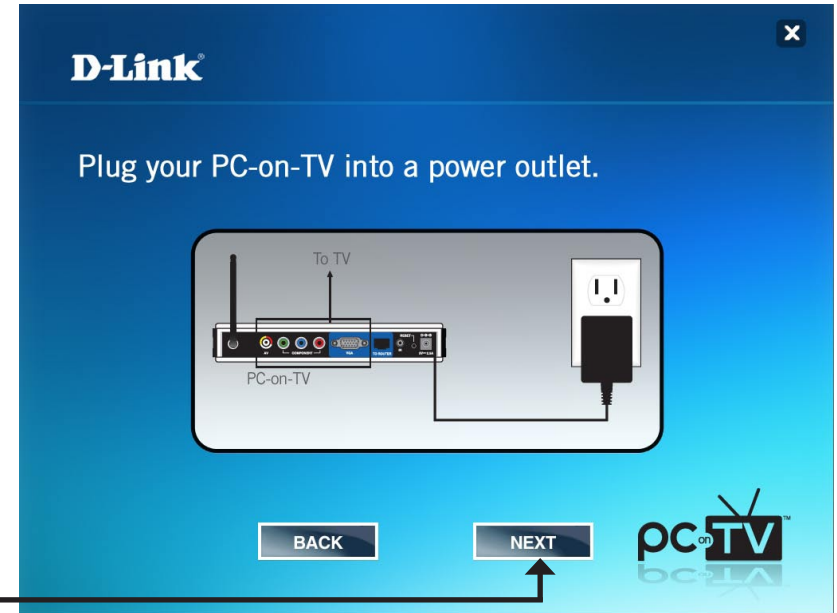
Make sure you visit the “**Connecting Your Television**” section on the previous page before you begin the wired setup instructions.



Click **NEXT**

Finalizing Your Setup

Connect the power adapter to the PC-on-TV device, and plug the other end into a power outlet.



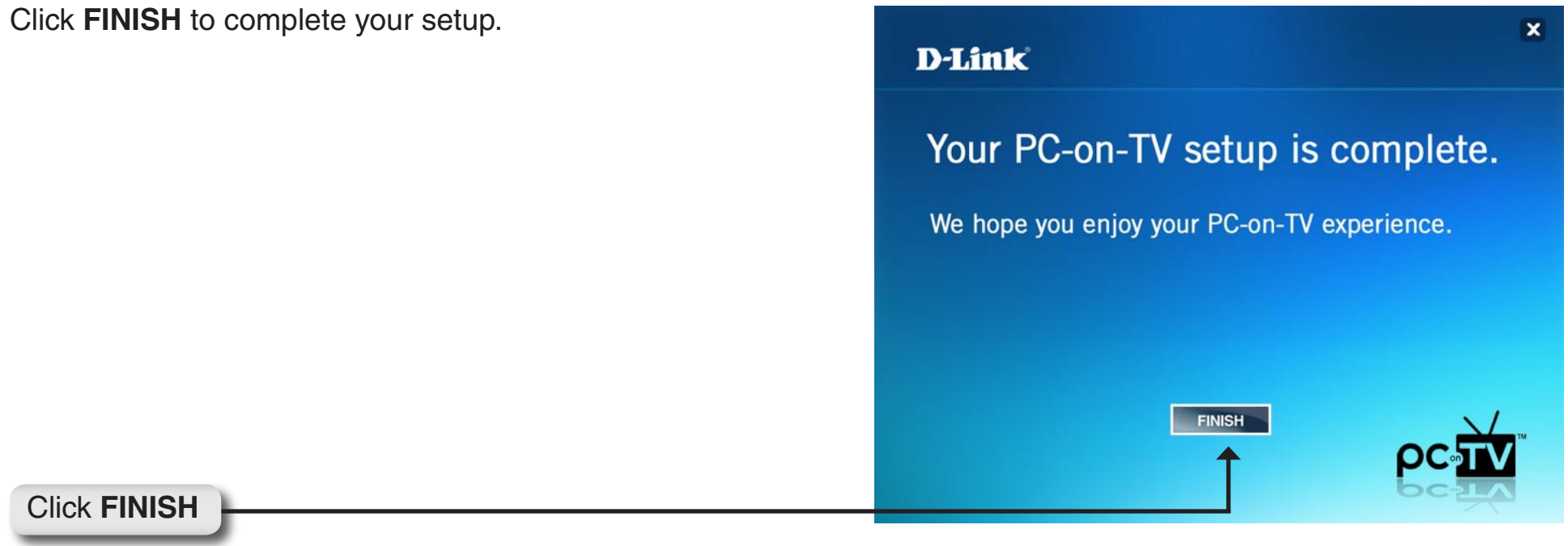
Click **NEXT**

From your TV, select the correct input source. Please refer to your TV's user manual for more information.



Click **NEXT**

Click **FINISH** to complete your setup.



Using The Software

Starting the Software

To start PC-on-TV, click the PC-on-TV icon on the Windows® desktop. You can also start the software via the Windows **Start -> All Programs -> PC-on-TV**.

Double-click the **PC-on-TV Icon**



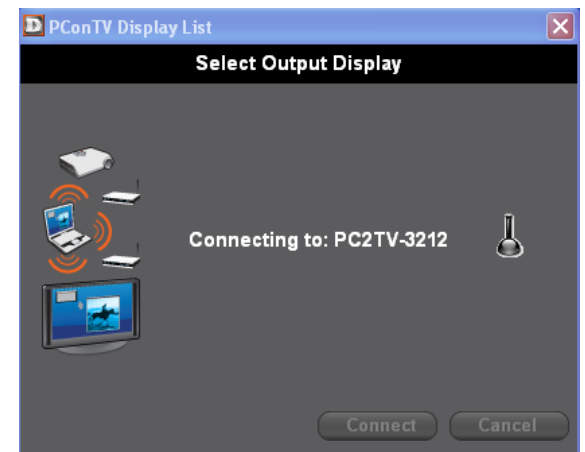
At start-up, the application automatically scans for PC-on-TV devices. The following image is the Connection Status window.



If only one PC-on-TV device is located, it automatically connects to that PC-on-TV device.

Once there is a connection, the device name will appear in the Connection Status panel. If a PC-on-TV device is not located, the Display List will be empty. Click the **Refresh** button to search for the device again.

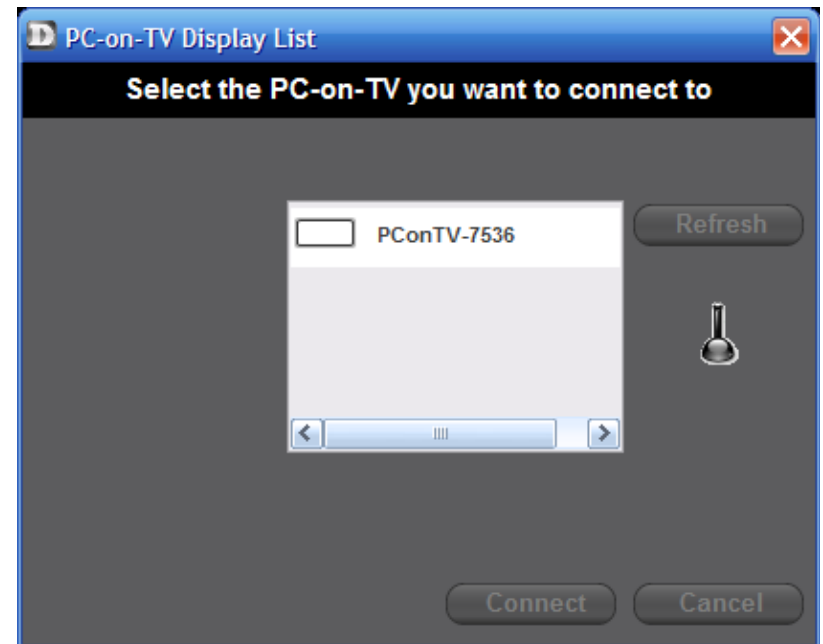
If the device is still not listed, your PC-on-TV may not be properly connected. Run the wizard again or check the Troubleshooting section of this manual to remedy the problem.



If multiple PC-on-TV devices are located, a list of device names for available PC-on-TV devices will appear.

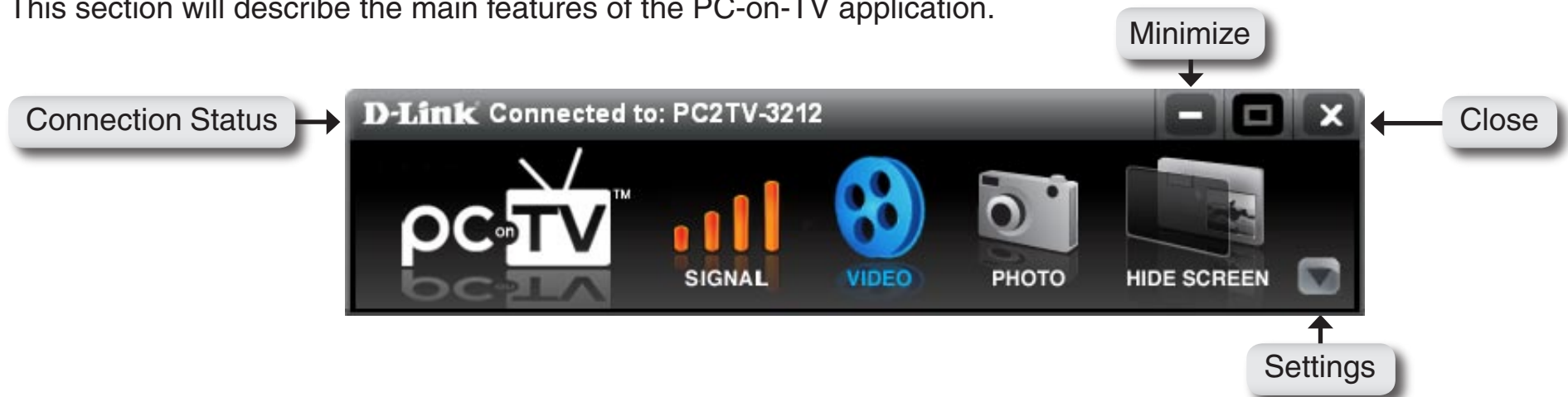
Select the device you want to connect to, and click the **Connect** button.

Note: Please allow up to 30 seconds to connect to the PC-on-TV device.



Using the Wireless PC-on-TV Application

This section will describe the main features of the PC-on-TV application.



PC-on-TV: Displays a list of all PC-on-TV devices that are connected on the network.

Connection Status: When a PC-on-TV device is connected the Name (SSID) of that device appears in the Connection Status window.

Settings: The Settings button expands the PC-on-TV application, allowing you to configure the settings.

Signal: Indicates the strength of the wireless signal that is connected to the PC-on-TV device. Four orange bars indicate a good signal, while one orange bar indicates a weak signal.

Display Modes: Use the Display modes to change the display on the connected television or home theater projector. To change display modes click one of the following:

Video: Select this option when you want to optimize PC-on-TV for video playback (800 x 600 is full line mode and 640 x 480 is half line mode). The display will automatically switch to optimized (half-line) mode when neither a keyboard or mouse movement is detected for 3 seconds. The default is set to Video mode.

Photo: Select this option when you want to view slide shows, graphic/text applications, or normal web pages. This mode allows you to view PC-on-TV in high resolution (1024 x 768).

Hide Screen: Causes a blank screen to appear (Video/Audio mute). Select this option when you want to “hide” the screen.

Close: Clicking this button stops the display and disconnects your computer from the PC-on-TV device.

Settings

This section describes how to configure advanced settings, click the **Settings** button shown on page 25.

General Device Settings

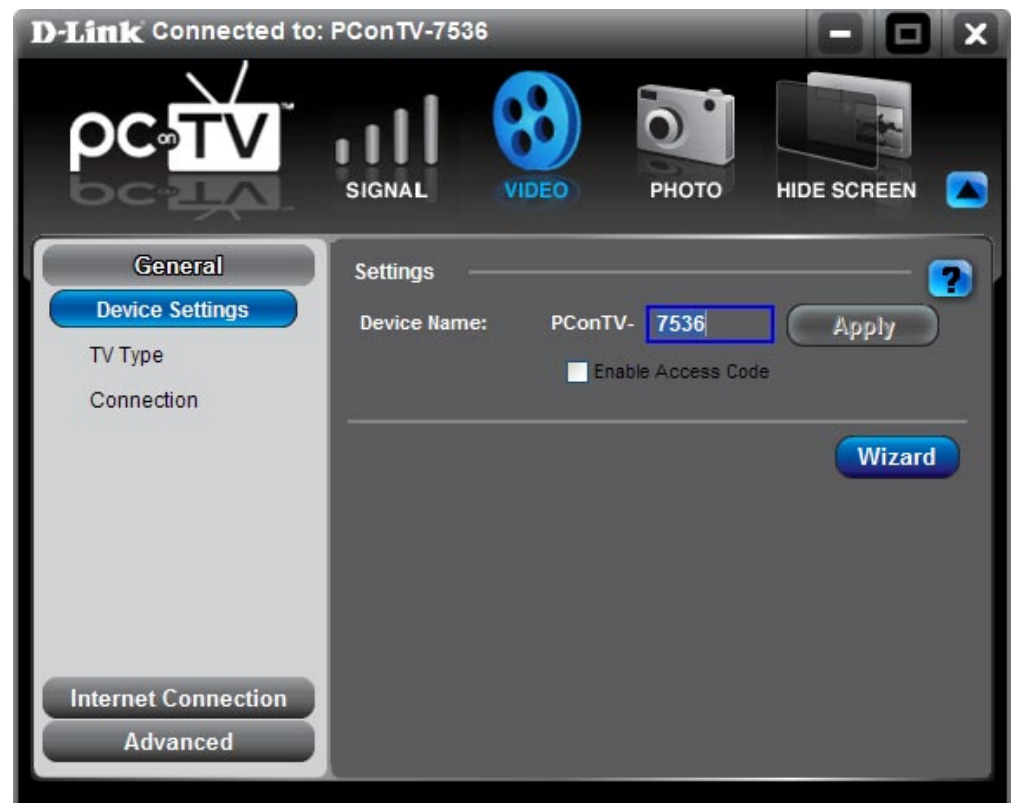
The Device Settings dialog allows the User to change the Device Name or enable an access code. If you check the Enable Access Code option, you will be required to enter the access code displayed on your television in order to connect. The PC-on-TV device will reboot, and a randomly generated access code will appear on your television.

Device Name: Allows you to use a name in place of the PC-on-TV device number. The Device Name is optional and can be up to 4 alphanumeric characters in length.

Enable Access Code: Configures the PC-on-TV device to display an access code on the television. To enable a connection to the PC-on-TV device, this code must be entered when the PC-on-TV application prompts you for the access code. The Access Code insures that anyone attempting to connect to the PC-on-TV device is physically in the same location as the television or home theater projector.

Apply: Click the **Apply** button to save the Device Name settings.

Wizard: The **Wizard** button activates the Installation Wizard.



TV Type

If you are connecting the PC-on-TV device to a High-Definition TV, click on the **HDTV** picture. Otherwise, click on the **Standard TV** picture. Selecting the appropriate Television Type will improve the video quality and performance.



Connection

The PC-on-TV device will automatically detect the type of cable that's connecting your PC-on-TV device to your television or home theater projector. The Connection Summary screen allows the user to manually change the connection method by selecting the cable type and clicking the **Apply** button. By default, the connection method is automatically selected from the highest to lowest video quality, where the order of precedence for video quality is VGA (highest), component, and then composite (lowest).

Composite: A composite video connection allows both the color and black and white portions of the video signal transferred together.

Component: Highest quality video signal that has been split into two or more components.

VGA: This is the recommended connection for high video quality, and is the standard analog computer display connector.



Internet Connections

TCP/IP

PC-on-TV can access the Internet via a physical Ethernet (CAT5 Ethernet cable) or wireless connection. Refer to “Networking Basics” on page 54 of this manual for more information. By default, the PC-on-TV device is set to receive an IP address automatically (i.e., via your router). This IP address can also be defined by whoever maintains the network.

IP Address: Used for an Ethernet wire connection between your computer and the PC-on-TV device.

Subnet Mask: Enter the Subnet Mask IP Address.

Gateway: Enter the Gateway IP Address.

DNS: Enter the DNS IP Address.



Network Connection

The Network Connection interface allows the user to determine how to connect to the PC-on-TV device. There are two types of connection, a wired connection (CAT5 Ethernet Cable) or a wireless connection (802.11g). If the User selects a wireless connection, they can set security options to encrypt the data sent between the computer and the PC-on-TV device.

Wired connection: This setting means you have an Ethernet cable connected from your PC-on-TV device to your router/network.

Wireless connection: This setting means you will use the wireless access point (that you select from the list) to access the Internet.

Enable Display Encryption: This setting allows you to encrypt the wireless link from your computer to the PC-on-TV device.

Change Encryption Key: Allows you to enter a new Encryption Key.



Advanced Password Setup

The Password Setup option allows the person in charge of the network to “lock out” an unauthorized user from changing the system configuration. If for some reason, the password is lost or forgotten, the system can be reset to the initial configuration by depressing the reset button on the PC-on-TV device for 10 seconds.

Note: A small pointy object, such as a small paper clip, is needed to depress the reset button.

Password: Enter a password to restrict access to Advanced and Internet Connections. The password can be alphanumeric and up to 32 characters in length.

Confirm Password: Re-enter the exact same password you entered above.

Apply: Click **Apply** to save your new settings.



Video Setting

The Video Setting dialog allows the User to enable or disable the Pan and Scan option.

Optimize Video Playback for Image Quality: Select this option if you would like to optimize the video playback for image quality.

Optimize Video Playback for Frame Rate: Select this option if you would like to optimize the video playback for frame rate.



Sending Video From Your PC To Your TV

This section describes how to show video or graphics on your PC-on-TV device.

Basic Steps To Show Video Or Graphics

The PC-on-TV software works in conjunction with standard media players (i.e., PowerDVD, Windows Media Player, etc.) to capture the video output displayed on the computer monitor, and project the video to the television or home theater projector via the PC-on-TV device. The user select some media content (i.e., DVD, Movie, Music files, etc.) and view that media content via a audio/video Media Player.

Your screen display can be expanded to a full screen using your Media Player (check your media player for details on full screen options).

Viewing Internet Videos

The PC-on-TV device must be successfully connected to the Internet to view web content such as ABC.com, YouTube.com and other popular sites. A physical Ethernet cable or wireless connection must be established from the PC-on-TV device to an access point (e.g., a wireless router) that is connected to your Internet service provider. (Refer to the “Configuring Advanced Settings” chapter, Internet Connection Tab section, Wireless Settings screen, External Network Connection Wired or Wireless for more details.)

If you are properly connected to the Internet, the PC-on-TV device will act as a router to access web content via your Internet browser. The PC-on-TV Application will in-turn capture the PC monitor display and transmit the screen capture to the PC-on-TV device to be projected to your TV.

Web content can be streamed to your PC and viewed immediately, therefore, eliminating the need to download the entire file before viewing with a media player.

Recommended Media Player

Use PowerDVD 6 or Media Player Classic when possible to display video media on your PC. PowerDVD 6 demonstrates excellent performance and versatility when viewing MPEG and DVD files, while Media Player Classic is very robust with MPEG, DVD, DivX (if the DivX codec is installed) and WMV file formats. The behavior of each player is specified below.

- **PowerDVD 6** - PowerDVD 6 is one of the most reliable player for playing MPEG files and DVDs. **Highly Recommended**
- **Media Player Classic** - This is also one of the most reliable players for MPEG, DVD, DivX (if DivX codec is installed) and WMV files. **Highly Recommended**
- **VLC Player** - The VLC Player is reliable while playing MPEG and DVD files.

Viewing Pictures and Presentations

Pictures and presentations (such as Microsoft Power Point) are best displayed using “Photo” mode. This option can be selected from the main dialog interface by clicking on the “Photo” button.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DPG-1200 offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WEP (Wired Equivalent Privacy)

What is WEP?

WEP stands for Wired Equivalent Privacy. It is based on the IEEE 802.11 standard and uses the RC4 encryption algorithm. WEP provides security by encrypting data over your wireless network so that it is protected as it is transmitted from one wireless device to another.

To gain access to a WEP network, you must know the key. The key is a string of characters that you create. When using WEP, you must determine the level of encryption. The type of encryption determines the key length. 128-bit encryption requires a longer key than 64-bit encryption. Keys are defined by entering in a string in HEX (hexadecimal - using characters 0-9, A-F) or ASCII (American Standard Code for Information Interchange – alphanumeric characters) format. ASCII format is provided so you can enter a string that is easier to remember. The ASCII string is converted to HEX for use over the network. Four keys can be defined so that you can change keys easily.

What is WPA?

WPA, or Wi-Fi Protected Access, is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard instead of TKIP.
- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

Wireless Installation Considerations

The D-Link PC-on-TV allows you to access your network virtually using a wireless connection anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the D-Link PC-on-TV and router to a minimum - each wall or ceiling can reduce your PC-on-TV's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized between the PC-on-TV and your router.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building Materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

Troubleshooting

Installation Questions and Issues

Do I have to reboot after installing the Wireless PC-on-TV device application?

After the application is installed, the application checks if the driver installation requires a reboot or not. This determination is made by Windows®. The PC-on-TV device application simply looks for the Windows indication. If required, the installation prompts you to reboot your computer. If it's not required, the application launches automatically.

I can't complete the installation of the PC-on-TV device?

There are instances where the wireless install of software/drivers may not be allowed in your network. For example, a laptop may be configured so that third-party software cannot be installed (this is generally the case in corporate environments). In this case the MIS staff may provide access to the software over a network drive or provide you with an installation CD. The auto-install feature described in the field allows you to download and install the application from the PC-on-TV device.

How do I use the “auto-install” feature?

The “auto-install” feature allows the PC-on-TV device to use a wireless link to install the PC-on-TV device application onto a computer. To initiate “auto install”:

- Make sure that an Ethernet network cable is not connected to the computer LAN port(s).
- Connect the PC-on-TV device to the TV or projector and power outlet.
- After the PC-on-TV device displays the PC-on-TV screen with the Name (SSID), record the Name (SSID).
- On the computer, using the computer's WLAN control program, search for a connection to the Name (SSID) previously noted and established a connection.
- Open an Internet browser that is not set to a blank page. This initiates the installation of the PC-on-TV device application. Follow the instructions to complete the installation.

Why do WHQL certification messages appear during installation?

During the driver installation, you may see WHQL warning messages. The PC-on-TV device drivers have received certification, but may be in the process of being re-certified for this latest version. Click Yes to these messages.

Will the PC-on-TV device work behind a firewall?

Windows® Firewall must be configured to allow the PC-on-TV device to access the Internet. If third-party firewalls are installed (such as Zone Alarm), they can restrict access to the PC-on-TV device.

Either completely disable the firewall or configure it to allow FTP and HTTP traffic through to the device. Also make sure it allows complete network access to/from the PC-on-TV device application.

Connection Questions and Issues

The PC-on-TV device application does not connect to the PC-on-TV device.

1. Verify all connections to power are properly secured.
2. If using a wired connection, make sure that all network connections are installed accordingly.
3. Verify encryption key settings for your wireless connection on your wireless router.
4. When running the Installation Wizard, ensure that the PC is connected on the same network.

What network settings do I need to connect to the PC-on-TV device?

The PC-on-TV device is designed to connect automatically with a wired Ethernet connection. An IP address will be assigned by your router's DHCP server. Ensure that your DHCP server is enabled in your router's settings. For wireless connections, verify your SSID information.

Video performance seems sluggish, what can be the cause?

Some laptops have settings that bring down CPU performance when operating on battery power. When this feature is enabled (mostly through default setting), the frame rate is likely reduced and you will see degradation in transitions between images. Check your computer documentation and disable these settings for higher quality.

Frequently Asked Questions

This section provides answers to some frequently asked questions about using the PC-on-TV device.

Can I use more than one computer to project to the same PC-on-TV device/projector combination at the same time?

The PC-on-TV device manages users on a first-come, first-served basis. This implies that if one user is projecting, others must wait until the first user closes their PC-on-TV device application or stops projection.

If more than one user wants to project to the same display, a window on their computer screen informs them that the PC-on-TV device is in use (wait mode). Click the Display button after the first user has stopped displaying.

The PC-on-TV device supports multiple connections to the same unit, but only one computer is able to project at a time.

What resolutions are supported?

The current release supports 640X480, 800X600 and 1024X768 for VGA/composite video outputs, and 720X480, 720X576, and 1280X720 for component video output.

Which video players are supported?

The PC-on-TV device supports players that use DirectDraw. It does not support players that use DirectShow. It is recommended to use PowerDVD 6 or Media Player Classic version 6.4.9.0. You can download this player at: http://www.divx-digest.com/software/media_player_classic.html

To obtain good quality video, the computer setup and DVD playback should have the following:

- For showing video playback, the computer must be connected to AC power.
- For Windows® XP, make sure Service Pack 2 is installed.
- For Windows XP, increase the RAM beyond 512 MB and configure the virtual memory to the maximum setting.

The recommended player is installed, but it still doesn't work?

Check to see if DirectDraw is enabled.

1. Open Windows® Start, Run, and type: dxdiag
2. Wait for the diagnostic to run.
3. Click on the Video 2 tab, which should correspond to the PC-on-TV device.

If DirectDraw is disabled, click on the Enable button. The DirectDraw players such as PowerDVD should now work.

Can the Internet be accessed while projecting through the PC-on-TV device?

The Internet can be accessed either through the computer, the PC-on-TV device, or a wireless access point (if one already exists while being projected onto the display).

If the Internet is accessed via the PC-on-TV device, it is advised that the Ethernet cable be connected to the PC-on-TV device before it is powered up.

Note the following special cases:

- The Ethernet port on the board can have DHCP enabled or STATIC addresses. This can be accomplished from within the PC-on-TV device application.
- Port 80 should be open on the LAN to allow access to the Internet.
- Port 21 should be open on the LAN to allow PC-on-TV device firmware updates.
- The DHCP allocation range is 10.0.0.2 through 10.0.0.254 (IP/subnet of PC-on-TV device Ethernet port should be different than 10.0.0.x).
- The PC-on-TV device Ethernet port has a 'dummy' MAC address by default. During the manufacturing process, each device is programmed with a unique MAC address. This is necessary to avoid MAC address conflict and improper operation of the device. Note that with a dummy MAC address, there may be some computers which may not be able to connect to the device.

How are firmware and applications updated?

To check for firmware/application updates:

1. Power on the PC-on-TV device and make sure it has an active Internet connection and FTP port open.
2. Start the PC-on-TV device application and select the Settings option.
3. Select Firmware update.

The application checks if a newer firmware version is available for download. If a new version is available, the PC-on-TV device application prompts you for download permission and starts downloading.

After the firmware update is complete, the PC-on-TV device must be power cycled.

The PC-on-TV device reboots on the new firmware, but the PC-on-TV device application on the computer must still be updated. This can be done by uninstalling the old version and executing the “auto-install” procedure.

Why is the PC-on-TV Device Name different when the firmware is upgraded?

On an upgrade of firmware, the Device Name is changed back to its original default. This is done to simplify the software for the upgrade process.

Does Power-Save mode interfere with PC-on-TV device operations?

Most laptops have a power management feature (power-save mode) that allows the management of power to its subsystems when the laptop is running on battery power.

One of the settings is to put the onboard wireless adapter on “power save mode”. When this is enabled (default setting in most cases), it makes the wireless adapter go to sleep several times a second to reduce power consumption. This behavior is acceptable for data but for ‘real time’ applications, like graphics & video display, there is significant adverse impact on the link quality and performance required for this type of application.

When the PC-on-TV device application is launched, it disables the “power save” feature of the wireless adapter and enables it when the application is exited. This only applies if the feature is enabled at the time of PC-on-TV device launch.

Are there configuration parameters to be set for the Audio area?

The audio settings may need to be configured manually for non-English version of Windows®.

1. Open Volume Control and select Options -> Properties.
2. Select Adjust Volume for Recording.
3. Click OK and select Stereo Mixer in the Recording Control Panel to capture and play PC Laptop audio from the PC-on-TV device.
4. Select Mute All under the Volume Control in the Volume Control Panel.

If I have set but forgot my password setting, how do I reset it?

Factory default can be restored by pressing and holding the “Factory Reset Switch” (for the VGA units) or the “Component/Composite Video Switch” (for the component/composite units) for ten seconds. Once the default setting is restored, you can then reconfigure the settings.

Why does the background text resolution look unclear when video is playing in Windowed mode?

The software algorithm automatically detects video playing and optimizes for video rather than text/graphics. Quality text/graphics resume whenever the mouse is moved.

How can I play a DVD in extended mode?

To play a DVD in extended mode, enable DirectDraw:

1. Open Windows Start menu and select Run.
2. Enter the following command: dxdiag
3. Go to the Display tab and click the Enable button.

Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and, the absence of cabling and other fixed infrastructures have proven to be beneficial for many users.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

What is Wireless?

Wireless or WiFi technology is another way of connecting your computer to the network without using wires. WiFi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

Why D-Link Wireless?

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

How does wireless work?

Wireless works similar to how cordless phones work, through radio signals that transmit data from point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

Who uses wireless?

Wireless technology has become so popular in recent years that almost everyone is using it, whether it's for home, office, or business, D-Link has a wireless solution for it.

Home

- Gives everyone at home broadband access
- Surf the web, check email, instant message, and etc
- Gets rid of the cables around the house
- Simple and easy to use

Small Office and Home Office

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

Where is wireless used?

Wireless technology is expanding everywhere, not just at home or the office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. A wireless connection in a public place is usually called a "hotspot".

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to the Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

A wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

Tips

Here are a few things to keep in mind, when you install a wireless network.

Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on the same frequency.

Security

Don't let you next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to the product manual for detailed information on how to set security up.

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer.

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

Networking Basics

Check your IP Address

After you install your new D-Link PC-on-TV device, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

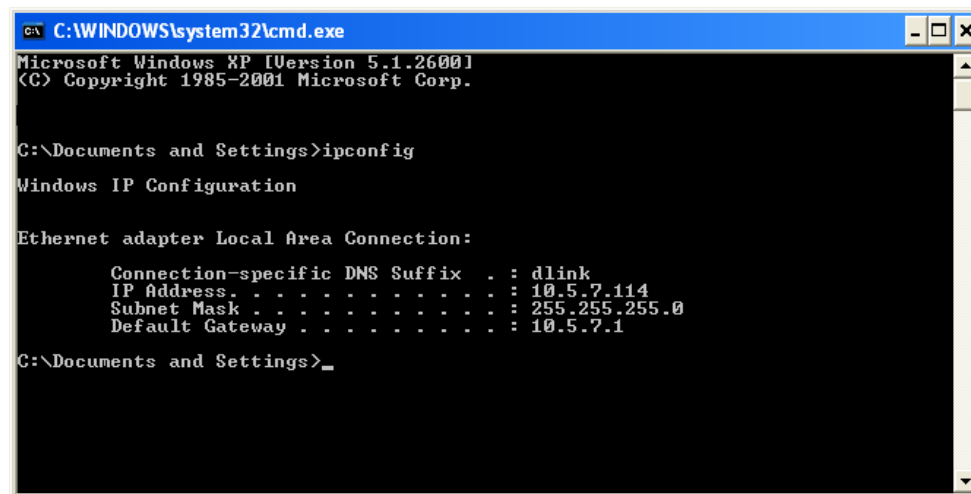
Click on **Start > Run**. In the run box type **cmd** and click **OK**.

At the prompt, type **ipconfig** and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.

If you are connecting to a wireless network at a hotspot (e.g. hotel, coffee shop, airport), please contact an employee or administrator to verify their wireless network settings.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : dlink
    IP Address. . . . .               : 10.5.7.114
    Subnet Mask . . . . .             : 255.255.255.0
    Default Gateway . . . . .         : 10.5.7.1

C:\Documents and Settings>_
```

Statically Assign an IP Address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

Step 1

Windows® XP - Click on **Start > Control Panel > Network Connections**.

Windows 2000 - From the desktop, right-click **My Network Places > Properties**.

Step 2

Right-click on the **Local Area Connection** which represents your network adapter and select **Properties**.

Step 3

Highlight **Internet Protocol (TCP/IP)** and click **Properties**.

Step 4

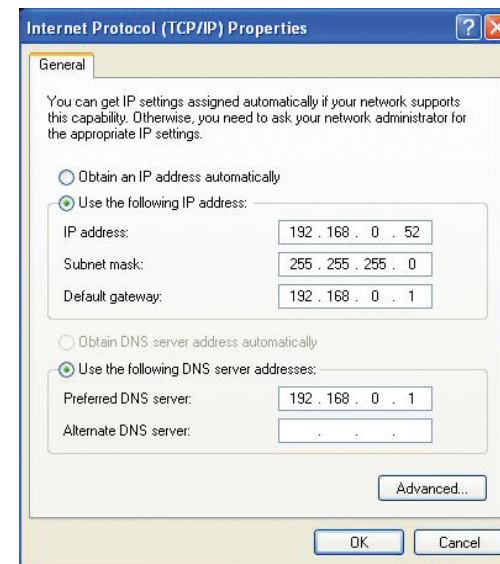
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (Typically 192.168.0.1 for D-Link Routers).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5

Click **OK** twice to save your settings.



Technical Specifications

Standards

- 802.11g
- 802.3u
- TCP/IP

Outputs

- VGA Video
- Component Video
- Composite Audio and Video

Antenna

- Type: 2.4GHz Swivel-type
- Frequency: 2.4GHz to 2.5GHz
- Impedance: 50 Ohms
- Gain: 2dBi Supported

Supported Video, Photo, and Audio Formats

- Device Independent -
If it Plays on your PC, it can Play on your TV.

Max Video Resolution

- Up to 720 x 576 for Video
- Up to 1280 x 720 for Photos

Network

- Wireless: 802.11g
- Wired LAN: 10/100Mbps Ethernet

Wireless Security

- WPA™ and WPA2™
- Hardware-based WEP (Wired Equivalent Privacy)

Power

- Power Source: 5V 2.5A

Humidity

- 5% - 95% (Non-Condensing)

Temperature

- Operating: 32°F to 104°F (0°C to 40°C)
- Storage: 32°F to 149°F (0°C to 65°C)

Certifications

-

Dimensions

- Item (WxDxH): 4.8" x 7.9" x 1.2"
- Packaging (WxDxH): 8.2" x 10.8" x 3.7"

Weight

- Item: 19lbs

Warranty

- 1-Year Limited

Contacting Technical Support

U.S. and Canadian customers can contact D-Link technical support through our web site or by phone.

Before you contact technical support, please have the following ready:

- Model number of the product (e.g. DPG-1200)
- Hardware Revision (located on the label on the bottom of the router (e.g. rev A1))
- Serial Number (s/n number located on the label on the bottom of the router).

You can find software updates and user documentation on the D-Link website as well as frequently asked questions and answers to technical issues.

For customers within the United States:

Phone Support:
(877) 453-5465

Internet Support:
<http://support.dlink.com>

For customers within Canada:

Phone Support:
(800) 361-5265

Internet Support:
<http://support.dlink.ca>

Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. (“D-Link”) provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

Limited Warranty:

D-Link warrants that the hardware portion of the D-Link product described below (“Hardware”) will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below (“Warranty Period”), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty:

D-Link warrants that the software portion of the product (“Software”) will substantially conform to D-Link’s then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days (“Software Warranty Period”), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer’s sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link’s option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link’s functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by DLink in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

Non-Applicability of Warranty:

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link’s products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold “As-Is” without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

Submitting A Claim:

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow DLink to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization (“RMA”) number by completing the RMA form and entering the assigned Case ID Number at <https://rma.dlink.com/>.

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. DLink will only replace the defective portion of the product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc., 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link’s judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

Disclaimer of Other Warranties:

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED “AS-IS” WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability:

TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

Governing Law:

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

Trademarks:

D-Link is a registered trademark of D-Link Systems, Inc. Other trademarks or registered trademarks are the property of their respective owners.

Copyright Statement:

No part of this publication or documentation accompanying this product may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from D-Link Corporation/D-Link Systems, Inc., as stipulated by the United States Copyright Act of 1976 and any amendments thereto. Contents are subject to change without prior notice.

Copyright 2005 by D-Link Corporation/D-Link Systems, Inc. All rights reserved.

CE Mark Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:

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 communication. 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.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

Registration



Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.

Version 1.0
February 14, 2008