

Unlimited instant access to movies and TV shows with Netflix subscription.

Yahoo! TV Widgets give you the TV WIDGEDSEST of the Internet in perfect harmony with the simplicity and reliability of your TV. TV Widgets deliver a Cinematic Internet<sup>TM</sup> experience by converting your favorite web services for viewing on the TV.

Stream movies, TV shows and **NETCASS** ideo, and get up to the minute news, stock information and weather updates directly to your TV using Yahoo!, Netflix, YouTube and Vudu.



ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX,Inc. This is an official DivX Certified device that plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX video.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play DivX Video-on-Demand (VOD) content. To generate the registration code, locate the DivX VOD section in the device setup menu. Go to vod.divx.com with this code to complete the registration process and learn more about DivX VOD.

"DivX Certified to play DivX video up to HD 1080p, including premium content"

"Pat. 7,295,673; 7,460,688;7,519,274"

## IMPORTANT INFORMATION TO PREVENT "IMAGE BURN / BURN-IN" ON YOUR TV SCREEN

- When a fixed image (e.g. logos, screen menus, video game, and computer display) is displayed on the TV for an extended period, it can become permanently imprinted on the screen. This phenomenon is known as "image burn" or "burn-in." Image burn is not covered under the manufacturer's warranty.
- In order to prevent image burn, avoid displaying a fixed image on your TV screen for a prolonged period (2 or more hours for LCD, 1 or more hours for Plasma).
- Image burn can also occur on the letterboxed areas of your TV if you use the 4:3 aspect ratio setting for an extended period.



#### **ON DISPOSAL**

#### (Only Hg lamp used LCD TV)

The fluorescent lamp used in this product contains a small amount of mercury. Do not dispose of this product with general household waste. Disposal of this product must be carried out in accordance to the regulations of your local authority.

## PREPARATION

## ACCESSORIES

Ensure that the following accessories are included with your TV. If an accessory is missing, please contact the dealer where you purchased the TV.

The accessories included may differ from the images below.



#### 1 LAN

Network connection for Netflix, Yahoo! TV Widgets, etc.

Also used for photo and music files on local network.

#### HDMI/DVI IN, HDMI IN

Digital Connection.

Supports HD video and Digital audio. Doesn't support 480i.

Accepts DVI video using an adapter or HDMI to DVI cable (not included).

#### 8 RGB IN (PC)

Analog PC Connection. Uses a D-sub 15 pin cable (VGA cable). AUDIO IN (RGB/DVI) 1/8" (0.32 cm) headphone jack for analog PC audio input.

#### A RS-232C IN (CONTROL & SERVICE) PORT

Used by third party devices. This port is used for service or Hotel mode.

#### OPTICAL DIGITAL AUDIO OUT

Digital optical audio output for use with amps and home theater systems.

Note: In standby mode, this port doesn't work.

#### AV (Audio/Video) IN

Analog composite connection. Supports standard definition video only (480i).

#### ANTENNA/CABLE IN

Connect over-the air signals to this jack. Connect cable signals to this jack.

#### COMPONENT IN

Analog Connection. Supports HD. Uses a red, green, and blue cable for video & red and white for audio.

#### WIRELESS CONTROL

Connect the Wireless Dongle to the TV to control the external input devices connected to Media Box wirelessly.

#### USB INPUT

Used for viewing photos and listening to MP3s.

#### HEADPHONE INPUT

Plug the headphone into the headphone socket.

#### Power Cord Socket

For operation with AC power. Caution: Never attempt to operate the TV on DC power.

#### REMOTE CONTROL IN PORT

For a wired remote control.

- To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.
- Image shown may differ from your TV.

## HD RECEIVER SETUP

This TV can receive digital over-the-air/digital cable signals without an external digital set-top box. However, if you do receive digital signals from a digital set-top box or other digital external device.

## **Component Connection**

### 1. How to connect

- Connect the video outputs (Y, PB, PR) of the digital set-top box to the **COMPONENT IN VIDEO 1** or **2** jacks on the TV. Match the jack colors (Y = green, PB = blue, and PR = red).
- 2

1

Connect the audio output of the digital set-top box to the **COMPONENT IN AUDIO 1** or **2** jacks on the TV.

### 2. How to use

- Turn on the digital set-top box.
   (Refer to the owner's manual for the digital set-top box operation.)
- Select the Component1 or Component2 input source on the TV using the INPUT button on the remote control.

### Y, Cв/Pв, Cr/Pr

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(KHz)	
720,490:	15.73	59.94	
120x4001	15.73	60.00	
720v480p	31.47	59.94	
120x400p	31.50	60.00	
1280v720p	44.96	59.94	
1200x720p	45.00	60.00	
1020-1080:	33.72	59.94	
1920810001	33.75	60.00	
	26.97	23.976	
	27.00	24.00	
1020-1080-	33.71	29.97	
1920210000	33.75	30.00	
	67.432	59.94	
	67.50	60.00	



Signal	Component	HDMI
480i	Yes	No
480p	Yes	Yes
720p	Yes	Yes
1080i	Yes	Yes
1080p	Yes	Yes



## **HDMI** Connection

### 1. How to connect



2

Connect the digital set-top box to **HDMI/DVI IN 1**, **2**, **3**, or **4** jack on the TV.

No separate audio connection is necessary. HDMI supports both audio and video.

### 2. How to use

- Turn on the digital set-top box.
   (Refer to the owner's manual for the digital settop box.)
- Select the HDMI1, HDMI2, HDMI3, or HDMI4 input source on the TV using the INPUT button on the remote control.

### 

Check HDMI cable over version 1.3. If the HDMI cables don't support HDMI version 1.3, it can cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.

HDMI Audio Supported Format: AC3 (32KHz, 44.1KHz,48KHz), Linear PCM (32KHz, 44.1KHz,48KHz)

#### HDMI-DTV

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(KHz)	
720v480p	31.47	59.94	
720x460p	31.50	60.00	
1280v720p	44.96	59.94	
1200x120p	45.00	60.00	
1020-1090:	33.72	59.94	
1920x10601	33.75	60.00	
	26.97	23.976	
	27.00	24.00	
1020v1080p	33.71	29.97	
1920x1060p	33.75	30.00	
	67.432	59.94	
	67.50	60.00	



## NOTE

1360x768

1280x1024

1600x1200

1920x1080

RGB-PC 1920x1080

HDMI-PC

- To get the best picture quality, adjust the PC graphics card to **1920x1080**.
- Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- ▶ In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the PICTURE menu until the picture is clear.
- Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- The synchronization input form for Horizontal and Vertical frequencies is separate.
- Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- ▶ If there are overscan in HDMI-PC 1920x1080, change aspect ratio to Just scan.
- ▶When selecting HDMI-PC, set the "Input Label PC" in the OPTION menu.

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(KHz)
640x350	31.468	70.09
720x400	31.469	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47776	59.87

47.712

63.981

75.00

66.587

67.50

## Supported Display Specifications (RGB-PC, HDMI-PC)

60.015

60.02

60.00

59.934

60.00

## NETWORK SETUP

## Wired Network Connection

This TV can be connected to a local area network (LAN) via the LAN port. After making the physical connection, the TV needs to be set up for network communication.



### 1. How to connect

Connect the LAN port of the Modem or Router to the LAN port on the TV.

### 2. How to use

1

- Select "Network Setting IP Auto Setting" in the NETWORK menu (▶ p.?).
- After connecting the **LAN** port, use the NetCast menu (Yahoo! TV Widgets, Netflix, Vudu, YouTube, My Media etc.) (▶ **p.70-127**).

## 

- Do not connect a modular phone cable to the LAN port.
- Since there are various connection methods, please follow the specifications of your telecommunication carrier or internet service provider.

## Wireless Network Connection

This connection is to use an Access Point or an wireless router.

The network configuration and connection method may vary depending on the equipment in use and the network environment. Refer to the setup instructions supplied with your access point or wireless router for detailed connection steps and network settings.



### 1. How to connect

Connect the "LG Wi-Fi Dongle (AN-WF100) (sold separately)" to the USB IN 1 or 2 port on the TV.

### 2. How to use

1

Select "Network Setting - IP Auto Setting" in the NETWORK menu (> p.?).

Standard	IEEE 802.11a/b/g/n
Host interface	USB 2.0
Frequency	2.412GHz ~ 2.4835GHz
Range	5.15 GHz ~ 5.850 GHz
Sociurity	64/128bit WEP, WPA,
Security	TKIP, AES, WPS (PIN, PBC)
	802.11a/g: 54Mbps
Data rate	802.11b: 11Mbps
	802.11n: 300Mbps(40MHz)
Throughput	110Mbps @ 300Mbps

#### Wi-Fi Dongle (AN-WF100) SPEC

## NOTE

- ▶ Use a standard LAN cable with this TV. Cat5 or better with a RJ45 connector.
- Many network connection problems during set up can often be fixed by re-setting the router or modem. After connecting the player to the home network, quickly power off and/ or disconnect the power cable of the home network router or cable modem. Then power on and/or connect the power cable again.
- Depending on the internet service provider (ISP), the number of devices that can receive internet service may be limited by the applicable terms of service. For details, contact your ISP.
- LG is not responsible for any malfunction of the TV and/or the internet connection feature due to communication errors/malfunctions associated with your broadband internet connection, or other connected equipment.
- LG is not responsible for problems with in your internet connection.
- Some content available through the network connection may not be compatible with the TV. If you have questions about such content, please contact the producer of the content.
- You may experience undesired results if the network connection speed does not meet the requirements of the content being accessed.
- Some internet connection operations may not be possible due to certain restrictions set by the Internet service provider (ISP) supplying your broadband Internet connection.
- Any fees charged by an ISP including, without limitation, connection charges are your responsibility.
- ► A 10 Base-T or 100 Base-TX LAN port is required for connection to this TV. If your internet service does not allow for such a connec-

tion, you will not be able to connect the TV.

- ► A DSL modem is required to use DSL service and a cable modem is required to use cable modem service. Depending on the access method of and subscriber agreement with your ISP, you may not be able to use the internet connection feature contained in this TV or you may be limited to the number of devices you can connect at the same time. (If your ISP limits sub-scription to one device, this TV may not be allowed to connect when a PC is already connected.)
- The use of a "Router" may not be allowed or its usage may be limited depending on the policies and restrictions of your ISP. For details, contact your ISP directly.
- The wireless network operate at 2.4GHz radio frequencies that are also used by other household devices such as cordless telephone, Bluetooth<sup>®</sup> devices, microwave oven, and can be affected by interference from them.
- Turn off all unused network equipment in your local home network. Some devices may generate network traffic
- ► For the purpose of the better transmission, placing the player from the access point as close as possible.
- In some instances, placing the access point or wireless router at least 1.5 ft (0.45m) above the floor may improve the reception.
- Move closer to the access point if possible or re-orient the player so there is nothing between it and the access point.
- The reception quality over wireless depends on many factors such as type of the access point, distance between the player and access point, and the location of the player.

## Wired Network Setup

If wired and wireless networks are both available, use Wired. Because the connected devices connect directly to the network and are not subject to radio frequency interference.

After making the physical connection, a small number of home networks may require the TV network setting to be adjusted.

For detail information, contact your internet provider or router manual.



## Wireless Network Setup

Setting up the AP (Access Point) or the wireless router is required before connecting the TV to the network.

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• Network Type       : Wirri         • Network Setting       • Network Status         • Legal Notice       • ESN         • So       • So	Ured	<ul> <li>Network Type : Wired</li> <li>Network Setting</li> <li>Network Status</li> <li>Legal Notice</li> <li>ESN</li> </ul>
Network Setting Direct Input Network1 A Network2 A Ad-hoc Network4 PI Ad-boc	Access Point Search	Network Setting       Access Point Searching       PIN       PIN       Ad-hoc



- **Setting**: Return to the IP setting menu.
- **Test**: Test the current network status after setting the network.
- **Close**: Return to the previous menu.

## Direct Input Connection: When a security code is not set



1 2.400 300 4.544 5.46 6.46 79085 8114 940 ENTER 0 Identifier). ENTER security. ENTER

When selecting **Direct Input**, Input the SSID (Service Set

Select the wireless network

Input the password.

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- If you have security on your AP (Access Point) or wireless router, verify that the WEP (Wired Equivalent Privacy) or WPA (Wi-Fi Protected Access) key that was entered into the TV matches the router's information exactly. You need to input the security code as necessary.
- WEP security mode generally have 4 keys available on an access point or wireless router's setting. If your access point or wireless router use WEP security, enter the security code of the key "No.1" to connect on your home network.
- An Access Point is a device that allows you to connect to your home network wirelessly.

# WPS (Wi-Fi Protected Setup) Connection: When a security code is already set)

If your access point or wireless router that supports WPS, it's available to use your access point or wireless router within 120 counts. You do not need to know the access point name (SSID: Service Set Identifier) and security code of your access point or wireless router.

### PIN (Personal Identification Number)





Connect the acccess point as **PIN**.

 PIN Number 는 Dongle 이 가지고 있는 고유의 8자리 숫자임

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### PBC (Push Button Configuration)





Connect the acccess point as **PBC**.