Life's Good

## OWNER'S MANUAL CINEMA 3D TV / LED LCD TV

Please read this manual carefully before operating the your TV and retain it for future reference.

CINEMA 3D TV MODEL DM2352D DM2752D

LED LCD TV MODEL
M2252D
M2352D
M2452D
M2752D
M2352T
M2452T

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## LICENSES

Supported licenses may differ by model. For more information of the licenses, visit www.lg.com.

DIGITAL PLUS
PULSE

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## INSTALLATION PROCEDURE

1 Open the package and make sure all the accessories are included.
2 Attach the stand to the TV.
3 Connect an external device to the TV.
NOTE

- Image shown may differ from your TV.
- Your TV's OSD (On Screen Display) may differ slightly from that shown in this manual.
- The available menus and options may differ from the input source or product model that you are using.
- New features may be added to this TV in the future.


## ASSEMBLING AND PREPARING

## Unpacking

Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product. The illustrations in this manual may differ from the actual product and accessories.

## ? NOTE

- The accessories supplied with your product may vary depending on the model.
- Product specifications or contents in this manual may be changed without prior notice due to upgrade of product functions.


## CAUTION

- Do not use any pirated items to ensure the safety and product life span.
- Any damages or injuries by using pirated items are not covered by the warranty.


## NOTE

- The items supplied with your product may vary depending on the model.
- Product specifications or contents of this manual may be changed without prior notice due to upgrade of product functions.
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm thick and 18 mm width. Use an extension cable that supports USB 2.0 if the USB cable or USB memory stick does not fit into your TV's USB port.


$$
\begin{aligned}
& \text { *A } \mathrm{A} \text { " } 10 \mathrm{~mm} \\
& \text { B } 18 \mathrm{~mm}
\end{aligned}
$$



Remote control.

## Batteries (AAA).

(See p.35, See p.36)


Power Cord.
(See p.14)


Stand Base.
(See p.10)


## Screws for Assembly. <br> 2 EA <br> (* Only M2752D)

(See p.11)


CD (Owner's Manual). Cards.
$\qquad$


AC-DC Adapter.
(See p.14)


Stand Body.
(See p.10)


RGB Cable.
(See p.34)


Cable Tie.
(See p.15)


Stand Body. (* Only M2752D)
(See p.10)


Remote control.
Batteries (AAA).
(See p.37, See p.38)


Power Cord.
(See p.12)


Stand Base.
(See p.10)


Screws for Assembly.
2 EA
(* Only DM2752D)
(See p.11)


CD (Owner's Manual). Cards.


AC-DC Adapter.
(See p.12)


Stand Body. (* Only DM2752D)
(See p.10)


TriDef 3D Game Software CD / Quick Installation Guide


3D Glasses(Normal type / Clip type)

- The number of 3D glasses may differ depending on the model or country.
- Image shown may differ from your TV.


## Parts and buttons

- 



| Touch button |  |
| :--- | :--- |
| $\mathbf{V} \boldsymbol{\wedge}$ | Scrolls through the saved programmes. |
| $\boldsymbol{-} \boldsymbol{+}$ | Adjusts the volume level. |
| OK | Selects the highlighted menu option or confirms an input. |
| SETTINGS | Accesses the main menus, or saves your input and exits the menus. |
| INPUT | Changes the input source. |
| し/I | Turns the power on or off. |

## NOTE

All of the buttons are touch sensitive and can be operated through simple touch with your finger.

## Lifting and moving the TV

When moving or lifting the TV, read the following to prevent the TV from being scratched or damaged and for save transportation regardless of its type and size.

## CAUTION

Avoid touching the screen at all times, as this may result in damage to the screen or some of the pixels used to create images.

- It is recommended to move the TV in the box or packing material that the TV originally came in.
- Before moving or lifting the TV, disconnect the power cord and all cables.
- Hold the top and bottom of the TV frame firmly. Make sure not to hold the transparent part, speaker, or speaker grill area.

- When holding the TV, the screen should face away from you to prevent the screen from scratches.

- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright, never turn the TV on its side, or tilt towards the left or right.


## Setting up the TV

| M2252D | M2352D | M2452D |
| :--- | :--- | :--- |
|  | M2352T | M2452T |
|  | DM2352D |  |

## Attaching the Stand

If you are not mounting the TV to a wall, use the following instructions to attach the stand.

1 Place the TV with the screen side down on a flat and cushioned surface.


## ! CAUTION

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage.
- When attaching the stand to the TV, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

2 Attach the Stand Body from the TV.


3 Attach the Stand Base from the Stand Body by turning the screw to the right with a Coin.


## CAUTION

Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

CAUTION


## M2752D DM2752D

If you are not mounting the TV to a wall, use the following instructions to attach the stand.

1 Place the TV with the screen side down on a flat and cushioned surface.


2 Attach the Stand Body from the TV. Insert the two Lockers of the Stand Body right into the groove of the TV head and secure them by pressing the left and right bottom sides.


3 Secure the TV and the Stand Body with the 2 screws.


## WARNING

If you don't fasten the screw tightly, TV will fall down and get damaged.

4 Attach the Stand Base from the Stand Body by turning the screw to the right with a Coin.


## CAUTION

Tighten the screws firmly to prevent the TV from tilting forward. Do not over tighten.

CAUTION


## Mounting on a table

1 Lift and tilt the TV into its upright position on a table.
Leave a 10 cm (4 inches) (minimum) space from the wall for proper ventilation.


2 Connect the AC-DC Adapter and Power Cord to a wall outlet.


## CAUTION

Do not place the TV near or on sources of heat, as this may result in fire or other damage.

## WARNING

When you adjust the angle, do not hold the buttom of the TV frame as shown on the following illustration, as may injure your fingers.


## CAUTION

Disconnect the power cord first, and then move or install the TV. Otherwise electric shock may occur.

## NOTE

Tilt from +20 to -5 degrees up or down to adjust the angle of the TV to suit your view.


## Front



## Tidying cables

Gather and bind the cables with the supplied cable tie.


## Using the Kensington security system

The Kensington security system connector is located at the back of the TV. For more information of installation and using, refer to the manual supplied with the Kensington security system or visit http://www.kensington.com.

Connect the Kensington security system cable between the TV and a table.


## I NOTE

The Kensington security system is optional. You can obtain additional accessories from most electronics stores.

## Detaching the Stand

3 Pull out the Stand Body from the TV.


1 Place the TV with the screen side down on a flat and cushioned surface.


## CAUTION

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage.
- When detaching the stand to the TV, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

2 Turn the screw to the left, and then pull out the Stand Base from the Stand Body.


## M2752D DM2752D

Place the TV with the screen side down on a flat and cushioned surface.


## ! CAUTION

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage.
- When detaching the stand to the TV, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.

2 Turn the screw to the left, and then pull out the Stand Base from the Stand Body.


3 Remove 2 screws and pull out the Stand Body from the TV.


## Mounting on a wall

For proper ventilation, allow a clearance of 10 cm on each side and from the wall. Detailed installation instructions are available from your dealer, see the optional Tilt Wall Mounting Bracket Installation and Setup Guide.


If you intend to mount the TV to a wall, attach Wall mounting interface (optional parts) to the back of the TV.
When you install the TV using the wall mounting interface (optional parts), attach it carefully so it will not drop.

1 Please, Use the screw and wall mount interface in accordance with VESA Standards.

2 If you use screw longer than standard, the TV might be damaged internally.

3 If you use improper screw, the product might be damaged and drop from mounted position. In this case, LG Electronics is not responsible for it.

4 VESA compatible only with respect to screw mounting interface dimensions and mounting screw specifications.

5 Please use VESA standard as below.

- 784.8 mm (30.9 inch) and under
* Wall Mount Pad Thickness : 2.6 mm
* Screw : $\Phi 4.0 \mathrm{~mm} \times$ Pitch $0.7 \mathrm{~mm} \times$ Length 10 mm
- 787.4 mm ( 31.0 inch ) and above
* Please use VESA standard wall mount pad and screws.

| VESA (A $\times$ B) | $100 \times 100$ |
| :--- | :--- |
| Standard screw | M 4 |
| Number of screws | 4 |
| Wall mount bracket <br> (optional) | RW120 |

- VESA (A x B)



## CAUTION

- Disconnect the power cord first, and then move or install the TV. Otherwise electric shock may occur.
- If you install the TV on a ceiling or slanted wall, it may fall and result in severe injury.
- Use an authorized LG wall mount and contact the local dealer or qualified personnel.
- Do not over tighten the screws as this may cause damage to the TV and void your warranty.
- Use the screws and wall mounts that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.


## ! NOTE

- Use the screws that are listed on the VESA standard screw specifications.
- The wall mount kit includes an installation manual and necessary parts.
- The wall mount bracket is optional. You can obtain additional accessories from your local dealer.
- The length of screws may differ depending on the wall mount. Be sure to use the proper length.
- For more information, refer to the instructions supplied with the wall mount.


## WATCHING TV

## Turning the TV on for the first time

When you access the TV for the first time, the initial setting screen appears. Select a language and customize the basic settings.
1 Connect the power cord to a power outlet.
2 Press $\boldsymbol{山} / I$ on the TV or power button on the remote control to turn the TV on. The Standby Light is turned off.

## NOTE

When the TV is in Power saving mode, the Standby Light turns amber.

3 The initial setting screen appears if you access the TV for the first time.

## (!) NOTE

If you do not operate the TV within 40 seconds when the setting menu screen appears, the setting menus will disappear.

4 Follow the on-screen instructions to customize your TV according to your preferences.
Language

ת
Mode Setting
$\sqrt{\Omega}$
Power Indicator
$\checkmark$
Country

ת
Time Zone
, $\sqrt{ }$

Set Password
$\sqrt{5}$

$\sqrt{8}$
Auto Tuning

Selects a language for the display.

Selects Home Use for the home environment.

Selects the Standby Light. If you select On, the TV turns on the Standby Light in the front panel when the TV is off.

Selects a country to display.

Selects the time zone and daylight saving. (When Russia is selected for Country)
(If there is LAN port) selects Network Setting to display.

Set the password.
(When France/Italy is selected for Country)

Set the 3D automatically mode. Turning on the TV, automatically converts 2D to 3D and prints images in 3D. (Only Cinema 3D TV)

Scans and saves available programmes automatically.

## (4) Nоте

- For those countries without confirmed DTV broadcasting standards, some DTV features might not work, depending on the DTV broadcasting environment.
- When France is selected for Country, the initial password is not ' 0 ', ' 0 ', ' 0 ', ' 0 ' but ' 1 ', ' 2 ', ' 3 ', ' 4 '.
- To display images in the best quality for your home environment, select Home Use mode.
- Store Demo mode is suitable for the retail environment.
- If you select Store Demo mode, the previously customized settings will switch to the default settings of Store Demo mode in 2 minutes.

5 When the basic settings are complete, press OK.

## NOTE

If you do not complete the initial setting, it will appear whenever you access the TV.

6 To turn the TV off, press $山 / I$ on the TV.
The Standby Light is turned on.

## CAUTION

Disconnect the power cord from the power outlet when you do not use the TV for a long period of time.

## ! NOTE

- You can also switch the TV from PC mode to TV mode, press TV/PC.
- You can also access Factory Reset by accessing OPTION in the main menus.


## MAKING CONNECTIONS

Connect various external devices to the TV and switch input modes to select an external device. For more information about an external device's connection, refer to the manual supplied with each device.
Available external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, camcorders or cameras, gaming devices, and other external devices.

## NOTE

- If you record a TV program on a DVD recorder or VCR, make sure to connect the TV signal input cable to the TV through a DVD recorder or VCR. For more information about recording, refer to the manual supplied with the connected device.
- The external device connection may differ from the model.
- Connect external devices to the TV regardless of the order of the TV port.


## Connecting an antenna

Connect an antenna, cable or cable box to watch TV referring to the following. The illustrations may differ from the actual accessories and an RF cable is optional.
Connect the TV to a wall antenna socket with an RF cable (75).

Wall Antenna Socket



Outdoor Antenna

- VHF Antenna
- UHF Antenna


## NOTE

- Use a signal splitter to use more than 2 TVs.
- If the image quality is poor, install a signal amplifier properly to improve the image quality.
- If the image quality is poor with an antenna connected, aim the antenna to the proper direction.
- Visit http://AntennaWeb.org for more information about the antenna and cable connection.


## CAUTION

- Make sure not to bend the copper wire of the RF cable.

- Complete all connections instructions between devices, and then connect the power cord to the power outlet to prevent damages to your TV.


## Connecting to a HD receiver, DVD, VCR player or Gaming device

Connect a HD receiver, DVD, VCR player or Gaming device to the TV and select an appropriate input mode.

## HDMI connection

HDMI is the best way to connect a device.
Transmits the digital video and audio signals from an external device to the TV. Connect the external device and the TV with the HDMI cable as shown on the following illustration.

## ! NOTE

- Use a High Speed HDMI ${ }^{\text {™ }}$ Cable.
- High Speed HDMI ${ }^{T M}$ Cables are tested to carry an HD signal up to 1080p and higher.
- Supported DTV Audio: MPEG, Dolby Digital.
- Supported HDMI Audio format: Dolby Digital, PCM (Up to 192 KHz, 32k/44.1k/48k/88k/96k/176k/19 2k, DTS Not supported.)
- Choose any HDMI input port to connect.
- It does not matter which port you use.


DVD / Blu-Ray / HD Cable Box / HD STB / Gaming device

## HDMI to DVI connection

Transmits the digital video signal from an external device to the TV. Connect the external device and the TV with the HDMI to DVI cable as shown in the following illustration. To transmit an audio signal, connect an optional audio cable.

NOTE
If you do not use an optional external speaker, connect the external device to the TV with the optional audio cable.


DVD / Blu-Ray / HD Cable Box /
HD STB / Gaming device

## Component connection

Transmits the analog video and audio signals from an external device to the TV. Connect the external device and the TV with the component cable as shown on the following illustration. To display images by using progressive scan, make sure to use the component cable.

## NOTE

- If cables are installed incorrectly, it could case the image to display in black and white or with distorted color.
- Check to ensure the cable are matched with the corresponding color connection.



## Composite connection

Transmits the analog video and audio signals from an external device to the TV. Connect the external device and the TV with the composite cable as shown on the following illustration.

## I NOTE

Check to ensure the cable are matched with the corresponding color connection.


## Euro Scart connection

Transmits the video and audio signals from an external device to the TV. Connect the external device and the TV with the Euro Scart cable as shown on the following illustration. To display images by using progressive scan, make sure to use the Euro Scart cable.

| Output Type <br> Current input mode | AV1 (TV Out ${ }^{1}$ ) | AV1 (When DTV scheduled recording is in progress using recording equipment.) |
| :---: | :---: | :---: |
| Digital TV | Digital TV | O |
| Analogue TV, AV | Analogue TV | O (The input mode is converted to DTV.) |
| Component/ RGB |  |  |
| HDMI |  |  |

## NOTE

- Any Euro scart cable used must be signal shielded.
- When watching digital TV in 3D imaging mode, TV out signals cannot be output through the SCART cable.
- If you set the 3D mode to On while a scheduled recording is performed on digital TV, monitor out signals cannot be output through the SCART cable, and the recording cannot be performed.



## Connecting to an audio system

Use an optional external audio system instead of the built-in speaker.

## Headphone connection

Transmits the headphone signal from the TV to an external device. Connect the TV with the headphone as shown on the following illustration.

## ! NOTE

- AUDIO menu items are disabled when connecting a headphone.
- When changing AV MODE with a headphone connected, the change is applied to video but not to audio.
- Optical digital audio out is not available when connecting a headphone.
- Headphone impedance: $16 \Omega$
- Max audio output of headphone: 10 mW to 15 mW
- Headphone jack size: 0.35 cm


Headphone

## Connecting to a USB

Connect a USB storage device such as s USB flash memory, external hard drive, MP3 player or a USB memory card reader to the TV and access the USB menu to use various multimedia files.


## Connecting to a CI Module

View the encrypted (pay) services in digital TV mode. This feature is not available in all countries.

## ! NOTE

Check if the CI module is inserted into the PCMCIA card slot in the right direction. If the module is not inserted properly, this can cause damage to the TV and the PCMCIA card slot.


## Connecting to a wired network

## M*52T models(Only UK)

Connect the TV to a local area network (LAN) via the LAN port as shown on the following illustration and set up the network settings. After making a physical connection, a small number of home networks may require the TV network settings to be adjusted. For most home networks, the TV will connect to automatically without any adjustments.
For detail information, contact your internet provider or router manual.

## CAUTION

- 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.



## ! NOTE

## [M**52T Model]

- U.K: LAN port is available. (The LAN port is added to support HD MHEG.)
- Other areas: LAN port is not available.


## Connecting to a PC

Your TV supports the Plug \& Play* feature and has the built-in speakers with Infinite Surround that reproduces sound clearly with a rich bass.

* Plug \& Play: The function when a PC recognizes a connected device that users connect to a PC and turn on, without device configuration or user intervention.


## NOTE

- It is recommended to use the TV with the HDMI connection for the best image quality.
- If you do not use an optional external speaker, connect the PC to the TV with the optional audio cable.
- If you turn the TV on when the set becomes cold, the screen may flicker. This is normal.
- Use a shielded signal interface cable, such as D-sub 15 pin signal cable and HDMI to DVI cable, with a ferrite core to maintain standard compliance for the product.
- Some red, green, or blue spots may appear on the screen. This is normal.
- Connect the signal input cable and tighten it by turning the screws clockwise.
- Do not press the screen with your finger for a long time as this may result in temporary distortion on the screen.
- Avoid displaying a fixed image on the screen for a long period of time to prevent image burn. Use a screensaver if possible.



## NOTE

- If you want to use HDMI-PC mode, you must set the input label to PC mode.
- The OSD (On Screen Display) is displayed on the screen as shown below.
» When turning the product on in HDMI input.
» When switching to HDMI input.
» When connecting an HDMI cable with no signal.
A. Is the input connected to your PC?


Do not show message again.

- If you select "Yes" the size and image quality are optimised for your PC.
- If you select "No" the size and image quality are optimised for the AV device (DVD player, set-top box, gaming device).
- If you select "Do not show message again" this message does not appear until the TV is reset. You can change the set value in SETTINGS - INPUT $>$ Input Label.
- The values set for HDMIT/HDMI2 are saved independently.


## HDMI connection

Transmits the digital video and audio signals from your PC to the TV. Connect the PC and the TV with the HDMI cable as shown in the following illustrations. You should set PC as an input label to connect the PC to the TV with an HDMI connection.

## (t) nоте

- Use a High Speed HDMI ${ }^{\text {M }}$ Cable.
- High Speed HDMI ${ }^{\text {TM }}$ Cables are tested to carry an HD signal up to 1080p and higher.
- If you want to use HDMI-PC mode, you must set the input label to PC or DVI mode.
- Supported DTV Audio: MPEG, Dolby Digital.
- Supported HDMI Audio format: Dolby Digital, PCM (Up to 192 KHz, 32k/44.1k/48k/88k/96k/176k/19 2k, DTS Not supported.)
- Choose any HDMI input port to connect.
- It does not matter which port you use.



## HDMI to DVI connection

Transmits the digital video signal from your PC to the TV. Connect the PC and the TV with the HDMI to DVI cable as shown the following illustrations. To transmit an audio signal, connect an optional audio cable.

## NOTE

- If you want to use HDMI-PC mode, you must set the input label to PC mode.
- If you do not use an optional external speaker, connect the PC to the TV with the optional audio cable.


PC

## RGB connection

Transmits the analog video signal from your PC to the TV. Connect the PC and the TV with the D-sub 15 pin cable as shown the following illustrations. To transmit an audio signal, connect an optional audio cable.

## (!) NOTE

If you do not use an optional external speaker, connect the PC to the TV with the optional audio cable.


## REMOTE CONTROL

M2252D M2352D M2452D M2752D M2352T M2452T

The descriptions in this manual are based on the buttons of the remote control. Please read this manual carefully and use the TV correctly.
To replace batteries, open the battery cover, replace batteries ( $1.5 \vee \mathrm{AAA}$ ) matching $\oplus$ and $\Theta$ ends to the label inside the compartment, and close the battery cover.
To remove the batteries, perform the installation actions in reverse.


## CAUTION

Do not mix old and new batteries, as this may damage the remote control.


Make sure to point the remote control to the remote control sensor on the TV.


FAV
Displays the selected favourite programme.


Switches the Audio Description On or Off. PIP Turns the PIP mode on or off. $\Delta$ (VOLUME) Adjusts the volume level.

Coloured buttons
These buttons are used for teletext (on TELETEXT models only), Programme edit.

USB Menu control buttons
USB menu(Photo List and Music List or Movie List).

Moves to the previous or next screen.

## MUTE

Mutes all sounds.

## Backlight

Adjusts the brightness of the screen by controlling the screen backlight.

## SUBTITLE

Recalls your preferred subtitle in digital mode.

## Teletext buttons

These buttons are used for teletext. For further details, see the 'Teletext' section.

## (b) note

On MHEG channel, you cannot adjust the backlight with the yellow or blue key.

Make sure to point the remote control to the remote control sensor on the TV.


Displays the selected favourite programme.


## CUSTOMIZING SETTINGS

## Accessing main menus

1 Press SETTINGS to access the main menus.
2 Press the Navigation buttons to scroll to one of the following menus and press OK.
3 Press the Navigation buttons to scroll to the setting or option you want and press OK.
4 When you are finished, press EXIT.
When you return to the previous menu, press $\boldsymbol{\leftrightharpoons}$ (BACK).

```
PICTURE Adjusts the image size, quality or effect.
    AUDIO Adjusts the sound quality, effect or volume level.
    SETUP Sets up and edit programmes.
    TIME Sets the time, date or Timer feature.
    LOCK Locks or unlocks channels and programs.
OPTION Customizes the general settings.
    INPUT Views the input sources with their labels. (Only M**52D / DM**52D model)
NETWORK Sets the network. (M**52T models (Only UK))
MY MEDIA Using integrated media feature.
```

- Press RED button to access the Customer Support menus.
- Press GREEN Button to access the FAQ menus.

- Sound Test
- Signal Test
- Product/Service Info.
- Network Test (M*552T models (Only UK))
- User Guide


## USING THE USER GUIDE

## Accessing User Guide menu.

## Using the TV menu

1 Press SETTINGS to access the main menus.
2 Press the RED button to access the Customer Support menus.

3 Press the Navigation button to scroll to User Guide and press OK.

4 Press the Navigation buttons to scroll to the option you want and press OK.

5 When you are finished, press EXIT. When you return to the previous menu, press $\leftrightarrows$ (BACK).

## Using the Remote Control

(* Except for the 3D model)


1 Press (? Guide.

2 Press the Navigation buttons to scroll to the option you want and press OK.

3 When you are finished, press EXIT.
When you return to the previous menu, press $\leftrightarrows$ (BACK).

- Image shown may differ from your TV.


1 Allows to select the category you want.

2 Allows to select the item you want. You can use $\wedge / \vee$ to move between pages.

3 Allows to browse the description of the function you want from the index.


Shows the description of the selected menu. You can use $\wedge / \vee$ to move between pages.

2 Zooms in or out the screen.

## 3D IMAGING(ONLY CINEMA 3D TV)

## 3D Technology

This TV can display in 3D via 3D broadcasting or when the TV is connected to a compatible device, such as a Blu-ray 3D Player. The viewer must wear compatible 3D glasses in order to see these images in 3D format.

## NOTE

- After powering on the TV, a few seconds may be needed for your TV to calibrate.
- When watching digital TV in 3D imaging mode, TV out signals cannot be output through the SCART cable.
- If you set the 3D mode to On while a scheduled recording is performed on digital TV, TV out signals cannot be output through the SCART cable, and the recording cannot be performed.
- If 3D TV broadcast standard changes in the future and it is not supported by this TV, you may need a separate device, such as a set-top box.


## MAINTENANCE

## Cleaning Your TV

Clean your TV regularly to keep the best performance and to extend the product lifespan.

## CAUTION

- Make sure to turn the power off and disconnect the power cord and all other cables first.
- When the TV is left unattended and unused for a long time, disconnect the power cord from the wall outlet to prevent possible damage from lightning or power surges.


## Screen and frame

To remove dust, wipe the surface with a dry and soft cloth.
To remove major dirt, wipe the surface with a soft cloth dampened in clean water or a diluted mild detergent. Then wipe immediately with a clean and dry cloth.

## CAUTION

- Do not push, rub, or hit the surface with your fingernail or a sharp object, as this may result in scratches on the screen and image distortions.
- Do not use any chemicals, such as waxes, benzene, alcohol, thinners, insecticides, air fresheners, lubricants, as these may damage the screen's finish and cause discolorations.


## Cabinet and stand

To remove dust, wipe the cabinet with a dry and soft cloth.
To remove major dirt, wipe the cabinet with a soft cloth dampened in a clean water or water containing a small amount of mild detergent.

## CAUTION

- Do not spray liquid onto the surface. If water enters the TV, it may result in fire, electric shock, or malfunction.
- Do not use any chemicals as this may deteriorate the surface.


## Power cord

Remove the accumulated dust or dirt on the power cord regularly.

## Preventing "Image burn" or "Burn-in" on your TV screen



- If a fixed image displays on the TV screen for a long period of time, it will be imprinted and become a permanent disfigurement on the screen. This is "image burn" or "burn-in" and not covered by the warranty.
- If the aspect ratio of the TV is set to $4: 3$ for a long period of time, image burn may occur on the letterboxed area of the screen.
- Avoid displaying a fixed image on the TV screen for a long period of time (2 or more hours for LCD) to prevent image burn.


## TROUBLESHOOTING

## General

| Problem | Resolution |
| :--- | :--- |
| Cannot control the TV with <br> the remote control. | - Check the remote control sensor on the product and try again. <br> - Check if there is any obstacle between the product and the remote control. <br> - Check if the batteries are still working and properly installed $(\oplus$ to $\oplus, \Theta$ to $\Theta)$. |
| No image display and no <br> sound is produced. | - Check if the product is turned on. <br> - Check if the power cord is connected to a wall outlet. <br> - Check if there is a problem in the wall outlet by connecting other products. |
| The TV turns off suddenly. | - Check the power control settings. The power supply may be interrupted. <br> - Check if the Auto sleep feature is activated in the Time settings. <br> - If there is no signal while the TV is on, the TV will turn off automatically after <br> 15 minutes of inactivity. |

## Using 3D mode

| Problem |  |
| :--- | :--- |
| If you can see a swirling oil-like <br> pattern on the TV when the TV is <br> turned off. | This is caused by the interference of external light in the air layer between the <br> LCD surface and 3D filter. The pattern becomes almost invisible when you turn <br> on the power again. |
| If you are not using the glasses <br> provided with the TV. | When you view 3D images with this TV, it is very important that you use the <br> glasses provided with the TV. The glasses are designed to compensate optically <br> for the 3D filter attached to the surface of the TV. If you wear third-party glasses, <br> you may not see 3D images properly on the TV. |
| If you view 3D images outside the <br> optimal viewing angle or distance. | The optimal viewing angle of this TV is between $12^{\circ}$ degrees; the optimal viewing <br> distance is between 50 cm to 150 cm from the TV. When you view 3D images <br> outside the optimal viewing angle or viewing distance, the images may look <br> overlapped or not be displayed properly in 3D. |

## Notes for Viewing 3D Image with 3D Digital Brodcating

*In Analogue Brodcating, 3D Imaging does not work.

| Problem |  |
| :--- | :--- |
| When switching the 2D image <br> display to the 3D image display <br> with the 3D button on the remote <br> control, the overlapped image may <br> be displayed. | • Disable the 3D imaging mode with the 3D button. <br> If the screen is divided into left/right <br> or top/bottom when you change the <br> channel <br> - This channel supports the 3D imaging mode is disabled automatically if you change the channel. <br> displayed on the screen by pressing the 3D button on the remote control. <br> If your eyes are sore or the screen <br> looks blurry while viewing 3D <br> images. |

## SPECIFICATIONS

M2252D

| Panel | Screen Type | 546.1 mm Wide (21.5 inch) <br> Visible diagonal size : 546.1 mm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.25 \mathrm{~mm}(\mathrm{H}) \times 0.25 \mathrm{~mm}(\mathrm{~V})$ |
| Video Signal | Max. Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Recommended Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Horizontal Frequency | 30 kHz to 83 kHz |
|  | Vertical Frequency | 56 Hz to 75 Hz |
|  | Synchronization Type | Separate Sync, Digital |
| Input Connector |  | TV, D-Sub Analog, SCART, PC Audio In, Component, CVBS, HDMI*2, USB, PCMCIA |
| Power | Rated Voltage | $19 \mathrm{~V}=-\mathrm{l} 2.0 \mathrm{~A}$ |
|  | Power Consumption | On Mode : 30 W (typ.) <br> Off Mode $\leq 0.4 \mathrm{~W}$ |
| AC/DC Adapter |  | Manufacturer: LITE-ON, Model PA-1650-64 <br> Manufacturer: LG Innotek, Model PSAB-L101A |
| Tilt | Tilt Range | -5 to 20 ${ }^{\circ}$ |
| Dimensions (Width $\times$ Depth $\times$ Height) Weight |  | With Stand |
|  |  | $\begin{aligned} & 508.6 \mathrm{~mm} \times 182.8 \mathrm{~mm} \times 386.5 \mathrm{~mm} \\ & 3.6 \mathrm{~kg} \end{aligned}$ |
|  |  | Without Stand |
|  |  | $\begin{aligned} & 508.6 \mathrm{~mm} \times 62.9 \mathrm{~mm} \times 314.8 \mathrm{~mm} \\ & 3.1 \mathrm{~kg} \end{aligned}$ |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 20 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $\begin{array}{r} -10^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \\ 5 \% \text { to } 90 \% \end{array}$ |

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

## M2352D

| Panel | Screen Type | 584.2 mm Wide (23 inch) <br> Visible diagonal size : 584.2 mm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.27 \mathrm{~mm}(\mathrm{H}) \times 0.27 \mathrm{~mm}(\mathrm{~V})$ |
| Video Signal | Max. Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Recommended Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Horizontal Frequency | 30 kHz to 83 kHz |
|  | Vertical Frequency | 56 Hz to 75 Hz |
|  | Synchronization Type | Separate Sync, Digital |
| Input Connector |  | TV, D-Sub Analog, SCART, PC Audio In, Component, CVBS, HDMI*2, USB, PCMCIA |
| Power | Rated Voltage | $19 \mathrm{~V}=-\mathrm{l} 2.0 \mathrm{~A}$ |
|  | Power Consumption | $\begin{aligned} & \text { On Mode : } 33 \mathrm{~W} \text { (typ.) } \\ & \text { Off Mode } \leq 0.4 \mathrm{~W} \end{aligned}$ |
| AC/DC Adapter |  | Manufacturer: LITE-ON, Model PA-1650-64 <br> Manufacturer: LG Innotek, Model PSAB-L101A |
| Tilt | Tilt Range | -5 to 20 ${ }^{\circ}$ |
| Dimensions (Width $\times$ Depth $\times$ Height) Weight |  | With Stand |
|  |  | $544.1 \mathrm{~mm} \times 182.8 \mathrm{~mm} \times 406.2 \mathrm{~mm}$ 3.9 kg |
|  |  | Without Stand |
|  |  | $544.1 \mathrm{~mm} \times 62.9 \mathrm{~mm} \times 334.6 \mathrm{~mm}$ 3.4 kg |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 20 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $\begin{gathered} -10{ }^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \\ 5 \% \text { to } 90 \% \end{gathered}$ |

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

## M2452D

| Panel | Screen Type | 609.6 mm Wide (24 inch) <br> Visible diagonal size : 609.6 mm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.28 \mathrm{~mm}(\mathrm{H}) \times 0.28 \mathrm{~mm}(\mathrm{~V})$ |
| Video Signal | Max. Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Recommended Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Horizontal Frequency | 30 kHz to 83 kHz |
|  | Vertical Frequency | 56 Hz to 75 Hz |
|  | Synchronization Type | Separate Sync, Digital |
| Input Connector |  | TV, D-Sub Analog, SCART, PC Audio In, Component, CVBS, HDMI*2, USB, PCMCIA |
| Power | Rated Voltage | $19 \mathrm{~V}=-2.0 \mathrm{~A}$ |
|  | Power Consumption | $\begin{aligned} & \text { On Mode : } 33 \mathrm{~W} \text { (typ.) } \\ & \text { Off Mode } \leq 0.4 \mathrm{~W} \end{aligned}$ |
| AC/DC Adapter |  | Manufacturer: LITE-ON, Model PA-1650-64 <br> Manufacturer: LG Innotek, Model PSAB-L1O1A |
| Tilt | Tilt Range | -5 to 20 ${ }^{\circ}$ |
| Dimensions (Width $\times$ Depth $\times$ Height) Weight |  | With Stand |
|  |  | $\begin{aligned} & 566.9 \mathrm{~mm} \times 182.8 \mathrm{~mm} \times 417.4 \mathrm{~mm} \\ & 3.4 \mathrm{~kg} \end{aligned}$ |
|  |  | Without Stand |
|  |  | $\begin{aligned} & 566.9 \mathrm{~mm} \times 62.9 \mathrm{~mm} \times 345.9 \mathrm{~mm} \\ & 2.9 \mathrm{~kg} \end{aligned}$ |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 20 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $\begin{array}{r} -10^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \\ 5 \% \text { to } 90 \% \end{array}$ |

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

M2752D

| Panel | Screen Type | 685.65 mm Wide ( 27 inch) <br> Visible diagonal size : 685.65 mm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.31 \mathrm{~mm} \mathrm{(H)} \times 0.31 \mathrm{~mm}(\mathrm{~V})$ |
| Video Signal | Max. Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Recommended Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Horizontal Frequency | 30 kHz to 83 kHz |
|  | Vertical Frequency | 56 Hz to 75 Hz |
|  | Synchronization Type | Separate Sync, Digital |
| Input Connector |  | TV, D-Sub Analog, SCART, PC Audio In, Component, CVBS, HDMI*2 |
| Power | Rated Voltage | $19 \mathrm{~V}=-2.0 \mathrm{~A}$ |
|  | Power Consumption | $\begin{aligned} & \text { On Mode : } 35 \mathrm{~W} \text { (typ.) } \\ & \text { Off Mode } \leq 0.4 \mathrm{~W} \end{aligned}$ |
| AC/DC Adapter |  | Manufacturer: LITE-ON, Model PA-1650-64 <br> Manufacturer: LG Innotek, Model PSAB-L101A |
| Tilt | Tilt Range | -5 to 20 ${ }^{\circ}$ |
| Dimensions (Width $\times$ Depth $\times$ Height) Weight |  | With Stand |
|  |  | $\begin{array}{\|l} 641.3 \mathrm{~mm} \times 199.4 \mathrm{~mm} \times 458.8 \mathrm{~mm} \\ 5.55 \mathrm{~kg} \end{array}$ |
|  |  | Without Stand |
|  |  | $641.3 \mathrm{~mm} \times 53 \mathrm{~mm} \times 391.1 \mathrm{~mm}$ 4.6 kg |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 20 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $\begin{array}{r} -10^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \\ 5 \% \text { to } 90 \% \end{array}$ |

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

M2352T

| Panel | Screen Type | 584.2 mm Wide (23 inch) <br> Visible diagonal size : 584.2 mm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.27 \mathrm{~mm}(\mathrm{H}) \times 0.27 \mathrm{~mm}(\mathrm{~V})$ |
| Video Signal | Max. Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Recommended Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Horizontal Frequency | 30 kHz to 83 kHz |
|  | Vertical Frequency | 56 Hz to 75 Hz |
|  | Synchronization Type | Separate Sync, Digital |
| Input Connector |  | TV, D-Sub Analog, SCART, PC Audio In, Component, CVBS, HDMI*2, USB, PCMCIA, LAN JACK (Only UK) |
| Power | Rated Voltage | $19 \mathrm{~V}=-2.0 \mathrm{~A}$ |
|  | Power Consumption | $\begin{aligned} & \text { On Mode : } 33 \mathrm{~W} \text { (typ.) } \\ & \text { Off Mode } \leq 0.4 \mathrm{~W} \end{aligned}$ |
| AC/DC Adapter |  | Manufacturer: LITE-ON, Model PA-1650-64 <br> Manufacturer: LG Innotek, Model PSAB-L1O1A |
| Tilt | Tilt Range | -5 to 20 ${ }^{\circ}$ |
| Dimensions (Width $\times$ Depth $\times$ Height) Weight |  | With Stand |
|  |  | $\begin{aligned} & 544.1 \mathrm{~mm} \times 182.8 \mathrm{~mm} \times 406.2 \mathrm{~mm} \\ & 3.9 \mathrm{~kg} \end{aligned}$ |
|  |  | Without Stand |
|  |  | $\begin{aligned} & 544.1 \mathrm{~mm} \times 62.9 \mathrm{~mm} \times 334.6 \mathrm{~mm} \\ & 3.4 \mathrm{~kg} \end{aligned}$ |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 20 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $\begin{array}{r} -10{ }^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \\ 5 \% \text { to } 90 \% \end{array}$ |

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

## M2452T

| Panel | Screen Type | 609.6 mm Wide (24 inch) <br> Visible diagonal size : 609.6 mm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.28 \mathrm{~mm}(\mathrm{H}) \times 0.28 \mathrm{~mm}(\mathrm{~V})$ |
| Video Signal | Max. Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Recommended Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Horizontal Frequency | 30 kHz to 83 kHz |
|  | Vertical Frequency | 56 Hz to 75 Hz |
|  | Synchronization Type | Separate Sync, Digital |
| Input Connector |  | TV, D-Sub Analog, SCART, PC Audio In, Component, CVBS, HDMI*2, USB, PCMCIA, LAN JACK (Only UK) |
| Power | Rated Voltage | $19 \mathrm{~V}=-\mathrm{l} 2.0 \mathrm{~A}$ |
|  | Power Consumption | On Mode : 33 W (typ.) Off Mode $\leq 0.4 \mathrm{~W}$ |
| AC/DC Adapter |  | Manufacturer: LITE-ON, Model PA-1650-64 <br> Manufacturer: LG Innotek, Model PSAB-L101A |
| Tilt | Tilt Range | -5 to 20 ${ }^{\circ}$ |
| Dimensions (Width $\times$ Depth $\times$ Height) Weight |  | With Stand |
|  |  | $\begin{aligned} & 566.9 \mathrm{~mm} \times 182.8 \mathrm{~mm} \times 417.4 \mathrm{~mm} \\ & 3.4 \mathrm{~kg} \end{aligned}$ |
|  |  | Without Stand |
|  |  | $566.9 \mathrm{~mm} \times 62.9 \mathrm{~mm} \times 345.9 \mathrm{~mm}$ 2.9 kg |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10{ }^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 20 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $-10^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ 5 \% to 90 \% |

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

## DM2352D

| Panel | Screen Type | 584.2 mm Wide (23 inch) <br> Visible diagonal size : 584.2 mm |
| :---: | :---: | :---: |
|  | Pixel Pitch | $0.27 \mathrm{~mm}(\mathrm{H}) \times 0.27 \mathrm{~mm}(\mathrm{~V})$ |
| Video Signal | Max. Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Recommended Resolution | $1920 \times 1080$ @ 60 Hz |
|  | Horizontal Frequency | 30 kHz to 83 kHz |
|  | Vertical Frequency | 56 Hz to 75 Hz |
|  | Synchronization Type | Separate Sync, Digital |
| Input Connector |  | TV, D-Sub Analog, SCART, PC Audio In, Component, CVBS, HDMI*2, USB, PCMCIA |
| Power | Rated Voltage | $19 \mathrm{~V}=-2.0 \mathrm{~A}$ |
|  | Power Consumption | On Mode: 33 W (typ.) Off Mode $\leq 0.4 \mathrm{~W}$ |
| AC/DC Adapter |  | Manufacturer: LITE-ON, Model PA-1650-64 Manufacturer: LG Innotek, Model PSAB-L101A |
| Tilt | Tilt Range | -5 to $20^{\circ}$ |
| Dimensions (Width $\times$ Depth $\times$ Height) Weight |  | With Stand |
|  |  | $544.1 \mathrm{~mm} \times 182.8 \mathrm{~mm} \times 406.2 \mathrm{~mm}$ 3.9 kg |
|  |  | Without Stand |
|  |  | $544.1 \mathrm{~mm} \times 62.9 \mathrm{~mm} \times 334.6 \mathrm{~mm}$ 3.4 kg |
| Environmental conditions | Operating Temperature Operating Humidity | $\begin{aligned} & 10^{\circ} \mathrm{C} \text { to } 35^{\circ} \mathrm{C} \\ & 20 \% \text { to } 80 \% \end{aligned}$ |
|  | Storage Temperature Storage Humidity | $\begin{gathered} -10^{\circ} \mathrm{C} \text { to } 60^{\circ} \mathrm{C} \\ 5 \% \text { to } 90 \% \end{gathered}$ |

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

## DM2752D

| Panel | Screen Type | 685.65 mm Wide (27 inch) <br> Visible diagonal size : 685.65 mm |
| :--- | :--- | :--- |
|  | Pixel Pitch | O.31 mm (H) $\times 0.31 \mathrm{~mm} \mathrm{(V)}$ |

Product specifications shown above may be changed without prior notice due to upgrade of product functions.

RGB (PC) / HDMI (PC) supported mode

| Resolution | Horizontal <br> Frequency(kHz) | Vertical <br> Frequency(Hz) |
| :--- | :--- | :--- |
| $720 \times 400$ | 31.468 | 70.080 |
| $640 \times 480$ | 31.469 | 59.940 |
| $640 \times 480$ | 37.500 | 75.000 |
| $800 \times 600$ | 37.879 | 60.317 |
| $800 \times 600$ | 46.875 | 75.000 |
| $1024 \times 768$ | 48.363 | 60.004 |
| $1024 \times 768$ | 60.023 | 75.029 |
| $1152 \times 864$ | 67.500 | 75.000 |
| $1280 \times 720$ | 45.000 | 60.000 |
| $1280 \times 800$ | 49.702 | 59.810 |
| $1280 \times 1024$ | 63.981 | 60.020 |
| $1280 \times 1024$ | 79.976 | 75.025 |
| $1400 \times 1050$ | 65.317 | 59.978 |
| $1440 \times 900$ | 55.935 | 59.887 |
| $1600 \times 900$ | 60.000 | 60.000 |
| $1680 \times 1050$ | 64.674 | 59.883 |
| $1680 \times 1050$ | 65.290 | 59.954 |
| $1920 \times 1080$ | 67.500 | 60.000 |

HDMI (DTV) supported mode

| Resolution | Horizontal <br> Frequency(kHz) | Vertical <br> Frequency(Hz) |
| :--- | :--- | :--- |
| $720 \times 480$ | 31.469 | 59.940 |
| 31.500 | 60.000 |  |
| $720 \times 576$ | 31.250 | 50.000 |
| $1280 \times 720$ | 37.500 | 50.000 |
| $1280 \times 720$ | 44.960 | 59.940 |
|  | 45.000 | 60.000 |
| $1920 \times 1080$ | 33.720 <br> 33.750 | 59.940 |
|  | 28.125 | 50.000 |
| $1920 \times 1080$ | 27.000 | 24.000 |
| $1920 \times 1080$ | 33.750 | 30.000 |
| $1920 \times 1080$ | 56.250 | 50.000 |
| $1920 \times 1080$ | 67.430 | 59.940 |
| $1920 \times 1080$ | 67.500 | 60.000 |

Component supported mode

| Resolution | Horizontal <br> Frequency(kHz) | Vertical <br> Frequency(Hz) |
| :--- | :--- | :--- |
| $720 \times 480$ | 15.730 | 59.940 |
| $720 \times 480$ | 15.750 | 60.000 |
| $720 \times 576$ | 15.625 | 50.000 |
| $720 \times 480$ | 31.470 | 59.940 |
| $720 \times 480$ | 31.500 | 60.000 |
| $720 \times 576$ | 31.250 | 50.000 |
| $1280 \times 720$ | 44.960 | 59.940 |
| $1280 \times 720$ | 45.000 | 60.000 |
| $1280 \times 720$ | 37.500 | 50.000 |
| $1920 \times 1080$ | 33.720 | 59.940 |
| $1920 \times 1080$ | 33.750 | 60.000 |
| $1920 \times 1080$ | 28.125 | 50.000 |
| $1920 \times 1080$ | 56.250 | 50.000 |
| $1920 \times 1080$ | 67.432 | 59.940 |
| $1920 \times 1080$ | 67.500 | 60.000 |

Component port connecting information

| Component ports on the <br> TV | $Y$ | $P_{B}$ | $P_{R}$ |
| :--- | :---: | :---: | :---: |


| Video output ports <br> on DVD player | Y | $\mathrm{P}_{\mathrm{B}}$ | $\mathrm{P}_{\mathrm{R}}$ |
| :--- | :---: | :---: | :---: |
|  | Y | $\mathrm{B}-\mathrm{Y}$ | $\mathrm{R}-\mathrm{Y}$ |
|  | Y | Cb | Cr |
|  | Y | Pb | Pr |

## (!) note

- Avoid keeping a fixed image on the set's screen for prolonged periods of time. The fixed image may become permanently imprinted on the screen. Use a screen saver when possible.
- There may be interference relating to resolution, vertical pattern, contrast or brightness in PC mode. Change the PC mode to another resolution or change the refresh rate to another rate or adjust the brightness and contrast on the menu until the picture is clear. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.
- The synchronization input waveform for Horizontal and Vertical frequencies are separate.
- Connect the signal cable from the TV output port of the PC to the RGB (PC) port of the TV or the signal cable from the HDMI output port of the PC to the HDMI/DVI IN port on the TV.
- Connect the audio cable from the PC to the Audio input on the TV. (Audio cables are not included with the TV).
- If using a sound card, adjust PC sound as required.
- If the graphic card on the PC does not output analogue and digital RGB simultaneously, connect only one of either RGB or HDMI/DVI IN to display the PC output on the TV.
- If the graphic card on the PC does output analogue and digital RGB simultaneously, set the TV to either RGB or HDMI. (The other mode is set to Plug and Play automatically by the TV.)
- DOS mode may not work depending on the video card if you use an HDMI to DVI cable.
- If you use too long an RGB-PC cable that is too long, there may be interference on the screen. We recommend using under 5 m of cable. This provides the best picture quality.

3D video input format supported. (Only CINEMA 3D TV)

|  | Signal | Resolution | Horizontal <br> Frequency <br> (kHz) | Vertical <br> Frequency $(\mathrm{Hz})$ | Playable 3D video format |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HDMI | 720p | $1280 \times 720$ | $\begin{aligned} & 89.9 \\ & 90 \end{aligned}$ | $\begin{aligned} & 59.94 \\ & 60 \end{aligned}$ | Frame Packing |
|  |  |  | 45 | 60 | Side by Side(half), Top \& Bottom |
|  | 1080i | $1920 \times 1080$ | 33.7 | 60 | Side by Side(half), Top \& Bottom |
|  | 1080p | $1920 \times 1080$ | $\begin{aligned} & 53.95 \\ & 54 \end{aligned}$ | $\begin{aligned} & 23.98 \\ & 24 \end{aligned}$ | Frame packing |
|  |  |  | 67.5 | 60 | Side by Side, Top \& Bottom, Single Frame Sequential |
|  |  |  | 27 | 24 | Side by Side(half), Top \& Bottom |
|  |  |  | 33.7 | 30 | Side by Side(half), Top \&Bottom |
| RGB | 1080p | $1920 \times 1080$ | 67.5 | 60 | Side by Side, Top \& Bottom |
| USB | 1080p | $1920 \times 1080$ | 33.75 | 30 | Side by Side, Top \& Bottom, MPO(Photo) |
|  | Signal |  |  |  | Playable 3D video format |
| DTV | 720p, 1080i |  |  |  | Side by Side, Top \& Bottom |

## (!) note

- If HDMI input is received in HDMI 3D format, images are automatically converted into 3D.
- 2D $\rightarrow$ 3D mode is available to watch for all signals.
- If you change $2 \mathrm{D} \rightarrow$ 3D mode, the left and right edges of the screen are clipped.
- If you select HDMI 3D, 3D mode is automatically enabled, which may cause the delay of screen turning on.
- For some 3D content files, if a 3D file is converted into 2D, the left and right edges of the screen may appear truncated.

Make sure to read the Safety Precautions before using the product.
Keep the Owner's Manual (CD) in an accessible place for future reference. The model and serial number of the TV is located on the back and one side of the TV. Record it below should you ever need service.

MODEL
SERIAL

To obtain the source code under GPL, LGPL, MPL and other open source licenses, that is contained in this product, please visit http:// opensource.lge.com.
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