LG
Life's Good

OWNER'S MANUAL

LCD TV / LED LCD TV / PLASMA TV

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

www.lg.com

LICENSES

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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 item.

Remote control and batteries (AAA) (See p. SS)

Nero MediaHome 4 Essentials CD

Owner's manual

Polishing cloth[1]
(This item is not included for all models.)

Cleansing Cloths (Mitt)[2]
(This item is not included for all models.)

Ferrite core
(This item is not included for all models.)

ENGLISH

1 Gently wipe the spots on the cabinet with the polishing cloth.

2 Wipe spots on the exterior only with the cleasing cloths.
Do not wipe roughly when removing stains. Excessive pressure may cause scratches or discolouration.
For cleaning front frame, please slowly wipe in one direction after spraying water 1-2 times on cleansing cloths. Please remove excessive moisture after cleaning. Excessive moisture may cause water stains on the frame.

Only 32/37/42/47/55LV55**, 42/47LW57**, 42/47/55LW65**, 47/55LW77**, 47/55LW95**

x 8

M4 x 16

(Only 42/47/55LW65**, 47/55LW95**)

x 8

M4 x 12

(Except for 42/47/55LW65**, 47/55LW95**)

Screw for assembly

Screw for fixing
(Only 32LV55**)

Cable holder

Component gender cable

Composite gender cable

3D Glasses (AG-P110)
(Only 42/47LW57**, 42/47/55LW65**)

x 2

3D Glasses (AG-S250)
(Only 47/55LW77**, 47/55LW95**)

Motion Remote Control,
Strap,
Batteries (AA)
(Only 47/55LW77**, 47/55LW95**)

Only 32/42/47LV37**

x 8

M4 x 12

Screw for assembly

Screw for fixing
(Only 32LV37**)

Cable holder

ENGLISH

Only 47/55LZ96**

Screw for assembly

Motion Remote Control, Strap, Batteries (AA)

3D Glasses (AG-S250)

Power Cord

Component gender cable

Composite gender cable

Cable holder

ENGLISH

Only 50/60PZ57**

x 8

M4 x 12

Screw for assembly

Cable holder

Protection cover

Power Cord

3D Glasses
(AG-S250)

Power Cord holder

Only 50/60PZ95**

x 4

x 3

M4 x 26 M5 x 14

(Only 50PZ95**)

x 4

x 4

M4 x 28 M5 x 14

(Only 60PZ95**)

Screw for assembly

Cable holder

Protection cover

Power Cord

Wireless LAN for Broad-band
/DLNA Adaptor
(AN-WF100)

3D Glasses
(AG-S250)

Motion Remote 3
(AN-MR200)

Power Cord holder

ENGLISH

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.
- How to use the ferrite core
  - White (Only Plasma TV)
    Use the ferrite core to reduce the electromagnetic interference in the LAN cable.
    Wind the LAN cable on the ferrite core once. Place the ferrite core far from the TV.

[to an External device] [to the TV]

  - Black (Only LED LCD TV / LCD TV)
    Use the ferrite core to reduce the electromagnetic waves that interfere with the TV. Place the ferrite core on the power cable close to the wall plug.

- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm thick and 18 mm width.

*A ≦ 10 mm
*B ≦ 18 mm

ENGLISH

Separate purchase

Separate purchase items can be changed or modified for quality improvement without any notification.
Contact your dealer for buying these items.
This device only works with compatible LG LED LCD TV, LCD TV or Plasma TV.

Wireless Media Box
(AN-WL100W)
(Except for 32/42/47LV37**)

3D Glasses
(AG-S230, AG-S250, AG-S270)
(Except for 32/42/47LV37**,
32/37/42/47/55LV55**)

Wireless LAN for Broadband
/DLNA Adaptor
(AN-WF100)
(Except for 47/55LW95**)

Motion Remote 3
(AN-MR200)
(Except for 47/55LW77**,
47/55LW95** , 47/55LZ96**)

Multi Mode Remote (MMR)
(TBD)

ENGLISH

Parts and buttons

- Image shown may differ from your TV.

NOTE

- TV can be placed in standby mode in order to reduce the power consumption. And TV should be switched off using the power switch on the TV if it will not be watched for some time, as this will reduce energy consumption.
- The energy consumed during use can be significantly reduced if the level of brightness of the picture is reduced, and this will reduce the overall running cost.

CAUTION

- Do not step on the glass stand or subject it to any impact. It may break, causing possible injury from fragments of glass, or the TV may fall.
- Do not drag the TV. The floor or the product may be damaged.

Only 47/55LW77**, 47/55LW95**

Touch button2	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
OK ◉	Selects the highlighted menu option or confirms an input.
- ◿ +	Adjusts the volume level.
v P ^	Scrolls through the saved programmes.

1 Intelligent sensor - Adjusts the image quality corresponding to the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.
3 It is the part equipped with the emitter exchanging signal with 3D glasses. Please be careful not to block the screen with objects or people while watching a 3D Video.

NOTE

- You can set the Power indicator to on or off by selecting **OPTION** in the Home menus - SETUP.

ENGLISH

Only 42/47/55LW65**

Touch button2	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
OK ◉	Selects the highlighted menu option or confirms an input.
- ◿ +	Adjusts the volume level.
v P ^	Scrolls through the saved programmes.

1 Intelligent sensor - Adjusts the image quality corresponding to the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.
3 It is the part equipped with the emitter exchanging signal with 3D glasses. Please be careful not to block the screen with objects or people while watching a 3D Video.

NOTE

- You can set the Power indicator to on or off by selecting **OPTION** in the Home menus - SETUP.

ENGLISH

Only 32/37/42/4755LV55**, 42/47LW57**, 32/42/47LV37**

Touch button2	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
OK ◉	Selects the highlighted menu option or confirms an input.
- ◿ +	Adjusts the volume level.
v P ^	Scrolls through the saved programmes.

1 Intelligent sensor - Adjusts the image quality corresponding to the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.
3 It is the part equipped with the emitter exchanging signal with 3D glasses. Please be careful not to block the screen with objects or people while watching a 3D Video.

NOTE

- You can set the Power indicator to on or off by selecting **OPTION** in the Home menus - SETUP.

ENGLISH

Only 47/55LZ96**

Touch button2	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
OK ◉	Selects the highlighted menu option or confirms an input.
- ◿ +	Adjusts the volume level.
v P ^	Scrolls through the saved programmes.

1 Intelligent sensor - Adjusts the image quality corresponding to the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.
3 It is the part equipped with the emitter exchanging signal with 3D glasses. Please be careful not to block the screen with objects or people while watching a 3D Video.

NOTE

- You can set the Power indicator to on or off by selecting **OPTION** in the Home menus - SETUP.

ENGLISH

Only 50/60PZ57**, 50/60PZ95**

Touch button[2]	Description
⏻ / I	Turns the power on or off.
INPUT	Changes the input source.
HOME	Accesses the Home menu, or saves your input and exits the menus.
OK ◉	Selects the highlighted menu option or confirms an input.
- ◿ +	Adjusts the volume level.
v P ^	Scrolls through the saved programmes.

1 Intelligent sensor - Adjusts the image quality corresponding to the surrounding environment.
2 All of the buttons are touch sensitive and can be operated through simple touch with your finger.
3 It is the part equipped with the emitter exchanging signal with 3D glasses. Please be careful not to block the screen with objects or people while watching a 3D Video.

NOTE

- You can set the Power indicator to on or off by selecting **OPTION** in the Home menus - SETUP.

ENGLISH

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 on the screen.

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

- Hold the top and bottom of the TV frame firmly. Make sure not to hold the transparent part, speaker, or speaker grill area.

- When transporting a large TV, there should be at least 2 people.
- When transporting the TV by hand, hold the TV as shown in the following illustration.

- 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

Put your TV on a pedestal stand and mount the TV on a table or wall.

Attaching the stand

Only 47/55LW77**, 47/55LW95**

1 Lay the TV with the screen side down on a flat surface.

CAUTION

- Lay a foam mat or soft protective cloth on the surface to protect the screen from damage. Make sure not objects press against the screen.

2 Assemble the parts of the **Stand Body** with the **Stand Base** of the TV.

Model	Screw for assembly	Number of screws
47/55LW77**		
47/55LW95**	M4 x 16	4

3 Assemble the parts of the **Stand Rear Cover** with the TV.

4 Secure the TV and the stand with the 4 screws.

Model	Screw for assembly	Number of screws
47/55LW77**		
47/55LW95**	M4 x 16	4

Only 32/42/47LV37**, 32/37/42/47/55LV55**, 42/47LW57**, 42/47/55LW65**

1 Lay the TV with the screen side down on a flat surface.

2 Assemble the parts of the **Stand Body** with the **Stand Base** of the TV.

Model	Screw for assembly	Number of screws
32/42/47LV37**	M4 x 12	4
32/37/42/47/55LV55**, 42/47LW57**		
42/47/55LW65**	M4 x 12	4

3 Secure the TV and the stand with the 4 screws.

Model	Screw for assembly	Number of screws
32/42/47LV37**	M4 x 12	4
32/37/42/47/55LV55**, 42/47LW57**		
42/47/55LW65**	M4 x 12	4

Only 50/60PZ57**, 50/60PZ95**

1 Lay the TV with the screen side down on a flat surface.

2 Assemble the parts of the **Stand Body** with the **Stand Base** of the TV.

Model	Screw for assembly	Number of screws
50PZ95**	M5 x 14	3
60PZ95**	M5 x 14	4

3 Secure the TV and the stand with the 4 screws.

Model	Screw for assembly	Number of screws
50PZ95**	M4 x 26	4
60PZ95**	M4 x 28	4

CAUTION

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

ENGLISH

Mounting on a table

1 Lift and tilt the TV into its upright position on a table.

- Leave a 10 cm (minimum) space from the wall for proper ventilation.

2 Connect the 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.

NOTE

- Swivel 20 degrees to the left or right and adjust the angle of the TV to suit your view.

Securing the TV to a table

(Only 32LV55**, 32LV37**)
Fix the TV to a table to prevent from tilting forward, damage, and potential injury.
Mount the TV on a table, and then insert and tighten the supplied screw on the rear of the stand.

WARNING

- To prevent TV from falling over, the TV should be securely attached to the floor/ wall per installation instructions. Tipping, shaking, or rocking the TV may cause injury.

ENGLISH

Securing the TV to a wall

(This feature is not available for all models.)

1 Insert and tighten the eye-bolts, or TV brackets and bolts on the back of the TV.
- If there are bolts inserted at the eye-bolts position, remove the bolts first.

2 Mount the wall brackets with the bolts to the wall.
Match the location of the wall bracket and the eye-bolts on the rear of the TV.

3 Connect the eye-bolts and wall brackets tightly with a sturdy rope.
Make sure to keep the rope horizontal with the flat surface.

CAUTION

- Make sure that children do not climb on or hang on the TV.

NOTE

- Use a platform or cabinet that is strong and large enough to support the TV securely.

Using the Kensington security system (optional)

(This feature is not available for all models.)
The Kensington security system connector is located at the rear of the TV. For more information of installation and using, refer to the manual provided with the Kensington security system or visit *http://www.kensington.com*.

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

ENGLISH

Mounting on a wall

Attach an wall mount at the rear of the TV carefully and install the wall mount on a solid wall perpendicular to the floor. When you attach the TV to other building materials, please contact qualified personnel.

Make sure to use screws and wall mounts that meet the VESA standard. Standard dimensions for the wall mount kits are described in the following table.

Separate purchase(Wall Mounting Bracket)

Model	32LV37** 32LV55**	37LV55**
VESA (A x B)	200 x 100	200 x 200
Standard screw	M4	M6
Number of screws	4	4
Wall mount bracket	LSW100B, LSW100BG	LSW200B, LSW200BG

Model	42LV37** 42/47/55LV55** 42/47/55LW65** 42/47LW57** 47/55LW77** 47/55LW95** 47/55LZ96**
VESA (A x B)	400 x 400
Standard screw	M6
Number of screws	4
Wall mount bracket	LSW400B, LSW400BG, DSW400BG

Model	50PZ57** 50PZ95**	60PZ57** 60PZ95**
VESA (A x B)	400 x 400	600 x 400
Standard screw	M6	M8
Number of screws	4	4
Wall mount bracket	PSW400B, PSW400BG, DSW400BG	PSW600B, PSW600BG,

CAUTION

- Disconnect the power 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 length of screws may differ depending on the wall mount. Make sure to use the proper length.
- For more information, refer to the manual supplied with the wall mount.

Tidying cables

Only 32/42/47LV37**

1 Gather and bind the cables with the cable holder.

Only 32/37/42/47/55LV55**, 42/47/55LW65**, 47/55LW95**

1 Gather and bind the cables with the cable holder.

Only 42/47LW57**, 47/55LW77**, 47/55LZ96**

1 Gather and bind the cables with the cable management clip.

2 Fix the cable management clip firmly to the TV.

1 Secure the power cord with the cable holder on the TV back cover. It will help prevent the power cable from being removed by accident.

2 Gather and bind the cables with the cable holder.

CAUTION

- Do not move the TV by holding the cable management clip, as the cable management clip may break, and injuries and damage to the TV may occur.

ENGLISH

Only 50/60PZ57**, 50/60PZ95**

1 Install the **Power Cord Holder** and **Power Cord**. It will help prevent the power cable from being removed by accident.

2 Gather and bind the cables with the **Cable Holder**.

CAUTION

- Do not move the TV by holding the **Cable Holder** & **Power Cord Holder**, as the Cable holders may break, and injuries and damage to the TV may occur.

ENGLISH

Not using the Dest-Type Stand

Only 50/60PZ57**, 50/60PZ95**

- When installing the wall mounting bracket, use the **Protection cover**.
- This will protect the opening from accumulating dust and dirt.

1 Push the supplied protection cover into the opening at the bottom of the TV until it locks in place.

REMOTE CONTROL

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 V AAA) matching ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. Be sure to point the remote control to the remote control sensor on the TV.

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.
- In Analogue TV and some countries, some remote control keys may not work.

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

⏻ (POWER)
Turns the TV on or off.
ENERGY SAVING (See p.93)
Adjusts the brightness of the screen to reduce energy consumption.
AV MODE (See p.41)
Selects an AV mode.
INPUT (See p.42)
Changes the input source; Turns the TV on.
TV/RAD
Selects Radio, TV and DTV programme.

Alphanumeric buttons
Enters letters and numbers.
LIST (See p.38)
Accesses the saved programme list.
Q.VIEW
Returns to the previously viewed programme.

ENGLISH

⊿ + -
Adjusts the volume level.
MARK
Selects a menu or option.
FAV (See p.39)
Accesses your favorite programme list.
CHAR/NUM
Switches between Letter and Number input modes.
3D(See p.86)
Uses for viewing 3D video.
RATIO (See p.40)
Resizes an image

DELETE
Deletes letters and numbers.
MUTE
Mutes all sounds.

P ∧ ∨
Scrolls through the saved programmess.
PAGE
Moves to the previous or next screen.

Premium
Accesses the Premium menus.
Home
Accesses the Home menus.
Q. MENU (See p.43)
Accesses the quick menus.
3D OPTION (Only 3D models)(See p.86)
Used for viewing 3D video.
Navigation buttons (up/down/left/right)
Scrolls through menus or options.
OK
Selects menus or options and confirms your input.
BACK
Returns to the previous level.
GUIDE
Shows programme guide.
EXIT
Clears all on-screen displays and return to TV viewing.

ENGLISH

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

TELETEXT BUTTONS (See p.122)
These buttons are used for teletext.
For further details, see the 'Teletext' section.

SUBTITLE
Recalls your preferred subtitle in digital mode.

Control buttons (■, ▶, ❚❚, ◀◀, ▶▶)
Controls the Timeshift or MY MEDIA menus or the SIMPLINK compatible devices (USB,SIMPLINK or Timeshift).

LIVE TV (See p.71)
Return to the LIVE TV.

REC
Uses to adjust Timeshift Mode.

INFO (See p.82)
Views the information of the currently programme and the screen.

RATIO (See p.40)
Resizes an image

SIMPLINK (See p.120)
Accesses the AV devices connected to the TV;
Opens the SIMPLINK menu.

ENGLISH

Magic Motion Remote Control Functions

This item is not included for all models.

The descriptions in this manual are based on the buttons of the remote control.
Please read this manual carefully and use the TV correctly.

When the message "Magic motion remote control battery is low. Change the battery." is displayed, replace the battery.

To replace batteries, open the battery cover, replace batteries (1.5 V AA) matching ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. Be sure to point the remote control to the remote control sensor on the TV.
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.
- In Analogue TV and some countries, some remote control keys may not work.

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

ENGLISH

Registrating Magic Motion Remote Control

The Magic Motion Remote Control operates by pairing with your TV.
Register the Magic Motion Remote Control after purchasing the TV.

How to register the Magic Motion Remote Control

To register the Remote Control, press the **OK** button on the Remote Control while aiming it at your TV.

How to Re-register the Magic Motion Remote Control after Registration Failure

Reset the remote control by pressing and holding both the **OK** and **MUTE** buttons for 5 seconds. (Once the reset is complete, the light on the Pointer RF Receiver blinks.) Then repeat the above procedure to register the remote control.

How to use Magic Motion Remote Control

1 Press **OK** button if there is no pointer on your TV screen. The pointer will then appear on the screen.
If the pointer has not been used for a certain period of time, it will disappear.

2 You can move the pointer by aiming the Pointer Receiver of the remote control at your TV then move it left, right, up or down.
If the pointer does not work properly after clicking the **OK** button, leave the remote control for 10 seconds then use it again.

Precautions to Take when Using the Magic Motion Remote Control

- Use the remote control within the maximum communication distance (10 m). Using the remote control beyond this distance, or with an object obstructing it, may cause a communication failure.
- A communication failure may occur due to nearby devices. Electrical devices such as a microwave oven or wireless LAN product may cause interference, as this will use the same bandwidth (2.4 GHz) as the Magic Motion Remote Control.
- The Magic Motion Remote Control may be damaged or may malfunction if it is dropped or receives a heavy impact.
- When playing a game using the Magic Motion Remote Control, hold it securely by wrapping its strap around your wrist and adjusting the length with the adjustable ring.
- Take care not to bump into nearby furniture or other people when using the Magic Motion Remote Control.
- Manufacturer and installer cannot provide service related to human safety as the applicable wireless device has possibility of electric wave interference.

WATCHING TV

Connecting to an antenna

Connect an antenna to watch TV referring to the following.
To prevent damage do not connect to the mains outlet until all connections are made between the devices.

Connecting an antenna

Connect the TV to a wall antenna socket with a RF cable (75 ohm).

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.
- An antenna cable and converter are not supplied.

Connecting with a satellite dish

(Only Satellite models)

Connect the TV to a satellite dish to a satellite socket with a satellite RF cable (75 ohm).

ENGLISH

Turning the TV on for the first time

When you turn the TV on 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 In Standby mode, press ⏻**(Power)** to turn the TV on.

The Initial setting screen appears if you turn the TV on for the first time.

NOTE

- You can also access **Factory Reset** by accessing **OPTION** in the Home menu - SETUP.

3 Follow the on-screen instructions to customize your TV settings according to your preferences.

Language	Selects a language to display. (Except for Australia, New Zealand, Singapore, South Africa),
⇩	
Mode Setting	Selects **Home Use** for the Home environment.
⇩	
Power Indicator	Sets the power indicator. (When you select Home Use from Mode Setting - only LED LCD TV)
⇩	
Country	Selects a country to display. (Only Australia, New Zealand)
⇩	
Time Zone	Selects the time zone and day-light saving.(Only Australia)
⇩	
Network Setting	Sets your network to enable network-related feature on the TV.(Only 47/55LW95**)
⇩	
Auto Tuning	Scans and saves available channels automatically.

NOTE

- DTV mode control buttons may not function based on country broadcasting circumstances. (Only DTV)
- For those countries without confirmed DTV broadcasting standards, some DTV features might not work, depending on the DTV broadcasting environment.(Only DTV)
- To display images in the best quality for your home environment, select **Home Use**.
- **Store Demo** is suitable for the retail environment.
- If you select **Store Demo**, the previously customized settings will switch to the default settings of **Store Demo** in 5 minutes.

4 When the basic settings are complete, press **OK**.

NOTE

- If you do not complete the Initial setting, it will appear whenever the TV turns on.
- Disconnect the power cord from the power outlet when you do not use the TV for a long period of time.

5 To turn the TV off, press ⏻**(Power)**.

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Watching TV

1 In Standby mode, press ⏻**(Power)** to turn the TV on.

2 Press **INPUT** and select **Antenna**.

3 To turn the TV off, press ⏻**(Power)**.
The TV switches to Standby mode.

Accessing Home menu

1 Press **HOME** to access the Home menu.

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**.

ENGLISH

Managing programmes

Automatically setting up programme

Selecting Antenna,

Use this to automatically find and store all available programmes.
When you start auto programming, all previously stored service information will be deleted.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Auto Tuning** and press **OK**.

5 Select **Start** to start automatic tuning.
The TV scans and saves available programmes automatically.

6 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

- If the TV scans a blocked programme, you will be prompted to enter your password to keep the programme scanned.
- If you wish to keep on auto tuning select **Start** using the Navigation buttons. Then, press the **OK** button. Otherwise select **Close**.
- **Automatic Numbering**: Decide whether to use the programme numbers as sent by broadcasting stations for tuning. (Only DTV)

Selecting Satellite,
(Only Satellite models)

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Auto Tuning** and press **OK**.

5 Press the Navigation buttons to scroll to **Satellite** and press **OK**.

6 Press the Navigation buttons to scroll to **Satellite DTV Setting** and press **OK**.

7 Press the Navigation buttons or Number buttons to scroll make appropriate adjustments and press **OK**.

8 Press the Navigation buttons to scroll to **Close** and press **OK**.

9 Select **Start** to start automatic tuning.
The TV scans and saves available programmes automatically.

10 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

- **Programme Type** : You can select **All Programmes, FTA Programme** or **Paid Programme**.
- **Network Search** : You can search through both an existing **Transponder List** and the **Transponder List** that was transmitted via **NIT**.
- You can change the **Setting ID Info** from the **Setting** menu.
- You can **Add/Delete** the **Setting ID** from the **Satellite DTV Setting** menu.

ENGLISH

Satellite DTV Setting

(Only Satellite models)

You can add or delete a satellite setting ID.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Satellite DTV Setting** and press **OK**.

5 Select your desired Source.

6 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

- If you set **LNB Frequency** to **User** or **Satellite** to **Others** when adding a setting ID, you can add a transponder during **Manual Tuning**.
- You can add up to 16 setting IDs.
- All setting IDs can be deleted, except for **Setting ID 1**.
- When selecting **22KHz Tone** and **DiSEqc**, or **Tone Burst** and **DiSEqc**, you must connect them in the same position as displayed on the OSD.
- If a motor is connected, **22KHz Tone**, **Tone Burst** and **DiSEqc** are disabled on the TV OSD.

Manually setting up programme (In digital mode)(Only DTV)

Manual Tuning lets you manually add a programme to your programme list.

Selecting Antenna,

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.

5 Press the Navigation buttons to scroll to **DTV** and press **OK**.

6 Scroll through the programme types, and then add or delete programmes.

7 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

- If the TV scans a blocked programme, you will be prompted to enter your password to keep the programme scanned.

Selecting Satellite,

(Only Satellite models)

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.

5 Press the Navigation buttons to scroll to **Satellite DTV** and press **OK**.

6 Make appropriate adjustments.

7 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

- If the TV scans a blocked programme, you will be prompted to enter your password to keep the programme scanned.
- **Transponder** : If there is no transponder to use, you can add a transponder by logging in as **User**.
- If there is no transponder, you cannot use **Auto Tuning**. In this case, you must add a transponder using **Manual Tuning**.

Manually setting up programme (In analogue mode)

Manual Tuning lets you manually tune and arrange the stations in whatever order you desire.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.

5 Press the Navigation buttons to scroll to **TV** and press **OK**. (Only DTV)

6 Scroll through the programme types, and then add or delete programmes.

7 Press the Navigation buttons to scroll to TV System. (Except for Australia)

8 Press the Navigation buttons to scroll to **V/UHF or Cable**.

9 Press the Navigation buttons or Number buttons to scroll to the desired channel number.

10 Press the Navigation buttons to scroll to commence searching.

11 Press the Navigation buttons to scroll to **Store** and press **OK.**

12 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

- Use NUMBER buttons to input a 4-digit password in **Lock System** '**On**'.
- **BG** : PAL B/G (New Zealand / South Africa / Singapore / Indonesia / Israel / Malaysia / Vietnam / Asia)

  DK : PAL D/K (New Zealand / South Africa / Singapore / Indonesia / Israel / Malaysia / Vietnam / Asia)

  I : PAL I/II (New Zealand / South Africa / Singapore / Indonesia / Israel / Malaysia / Vietnam / Asia)

  B/B : Australia

  M : NTSC-M (South Africa / Indonesia / Israel / Malaysia / Vietnam / Asia)
- To store another channel, repeat steps 5 to 10.

ENGLISH

Assigning a station name

You can assign a station name with five characters to each programme number.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.

5 Press the Navigation buttons to scroll to **TV**. (Only DTV)

6 Press the Navigation buttons to scroll to **Name** and press **OK**.

7 Press the Navigation buttons to scroll Select the position and make your choice of the second character, and so on. You can use an the alphabet A to Z, the number 0 to 9, +/ -, and blank and press **OK**.

8 Press the Navigation buttons to scroll to **Close** and press **OK**.

9 Press the Navigation buttons to scroll to **Store** and press **OK**

10 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

Fine Tuning

Normally fine tuning is only necessary if reception is poor.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Manual Tuning** and press **OK**.

5 Press the Navigation buttons to scroll to **TV**. (Only DTV)

6 Press the Navigation buttons to scroll to **Fine**.

7 Fine tune for the best picture and sound.

8 Press the Navigation buttons to scroll to **Store** and press **OK**

9 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

Editing your programme list

When a programme number is skipped, it means that you will be unable to select it using **P** ∧ ∨ button during TV viewing.
If you wish to select the skipped programme, directly enter the programme number with the NUMBER buttons or select it in the Programme edit menu.
This function enables you to skip the stored programmes.
You can change the programme number using "**Move**"function, if "**Automatic Numbering**" is unchecked when you start Auto Tuning (Only DTV).

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to **Programme Edit** and press **OK**.

5 Edit channels using the following buttons.

Button	Description	
∧	Highlight the channel type (DTV, RADIO, TV).	
∧ ∨ < >	Scrolls through programme types or programmes.	
OK	Edits programmes.	
	Watch	Selects the highlighted programme to view.
	Set as Favourite	Registers or cancels the current programme in favourite programme list.
	Skip	Selects a programme number to be skipped.
	Programme Number Edit	Selects your desired programme number.
	Block	Blocks or unblocks a programme.
P ∧ ∨	Moves to the previous or next page.	
Red button	Selects your desired favourite programme group.	
Green button	Starts Satellite Programme Sort. (Only Satellite models)	

6 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

Selecting a programme on the programme list

1 Press **LIST** to access the programme list.

Button	Description
< >	Selects programme list or recent programme list.
∧ ∨	Scrolls through programme.
OK	Selects the highlighted programme to view.
P ∧ ∨	Moves to the previous or next page.
Red button	Edits Channel.
FAV	Sets up a favourite programme list.

2 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

NOTE

- If you select the blocked programme, you will be prompted to enter your password.

ENGLISH

Using favourite programmes

Add the programmes that you watch frequently to the favourite list.

1 Select a programme to add to the favourite list.

2 Press **FAV**.

NOTE

- You can also access the input favourite list by selecting **Favourite List** in the Home menu.

Button	Description
< >	Selects a desired programme group.
P ∧ ∨	Moves to the previous or next page.
Red button	Moves to the **Programme Edit**.
Green button	Register or cancel the current programme.
FAV	Moves to the **Programme List**.

3 When you are finished, press **EXIT**.

NOTE

- You can also setup Favourite List in the **SETUP** menu - **Programme Edit**.

Using additional options

Adjusting aspect ratio

Resize an image to view at its optimal size by pressing **RATIO** while you are watching TV.

NOTE

- You can also change the image size by pressing **Q. MENU** or accessing **Aspect Ratio** in the **PICTURE** menus.
- For **Zoom Setting**, select **14:9**, **Zoom** and **Cinema Zoom** in Ratio Menu.
  After completing **Zoom Setting**, the display goes back to **Q.Menu**.
  You can only select **4:3**, **16:9** (Wide), **14:9**, **Zoom**/**Cinema Zoom** in Component mode.
  You can only select **4:3**, **Original**, **16:9** (Wide), **14:9**, **Zoom**/**Cinema Zoom** in HDMI mode.
  You can only select **4:3**, **16:9** (Wide) in RGB-PC, HDMI-PC mode only.
- In DTV/HDMI/Component (over 720p) mode, **Just Scan** is available.
- In DTV(over 576p) mode, **Just Scan** is available in Austalia only.

- **16:9**: Resizes images to fit the screen width.

- **Just Scan**: Displays video images in the original size without disappearing parts at the edge of the image.

NOTE

- If you select **Just Scan**, you may see image noises at the edge of the original signal.

- **Original**: When your TV receives a wide screen signal it will automatically change to the picture format broadcast.

or

- **Full Wide(Only DTV)**: When TV receives the wide screen signal,it will lead you to adjust the picture horizontally or vertically, in a linear proportion,to fill the entire screen fully.

  4:3 and 14:9 video is supported in full screen without any video distortion through DTV input.

or

- **4:3**: Resizes images at the standard 4:3 without distortion.

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- **14:9** : You can view a picture format of 14:9 or a general TV programme in the 14:9 mode. The 14:9 screen is viewed in the same way as in 4:3, but is moved to the up and down.

- **Zoom**: Enlarges an image to fit the screen width. The top and bottom of the image may not appear.

NOTE

- If you access, **Aspect Ratio** in the quick menus,
  - Press the Navigation buttons to stretch an image vertically.
  - Press the Navigation buttons to move the zoom focus up or down.

- **Cinema Zoom**: Choose Cinema Zoom when you want to enlarge the picture in correct proportion.

- To change the ratio of the cinema zoom, press < > and its range is from 1 to 16.
- To move the zoom focus up or down, press ^ v .

NOTE

- If you enlarge or reduce an image, the image may be distorted.

Changing AV modes

Each AV mode has the optimized image and sound settings.
Press **AV MODE** repeatedly to select an appropriate mode.

Mode	Description
Off	Changes to the previously customized settings.
Cinema or **THX Cinema**	Use the optimized image and sound setting for the cinematic look.
Sport (Only Plasma TV)	Use the optimized image and sound setting for dynamic action sports.
Game	Use the optimized image and sound setting for fast gaming. When playing a video game using PlayStation or Xbox, it is recommended to use the **Game** mode. When in **Game** mode, functions related to picture quality will be optimized for playing games.

NOTE

- If you select **Off** in AV mode, the picture and image which you initially set will be selected.

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Using the input list

Selecting an input source

1 Press **INPUT** to access the input sources.
- The connected device displays on each input source.

NOTE

- You can also access the input source list by selecting **INPUT** in the Home menus.

2 Press the Navigation buttons to scroll to one of the input sources and press **OK**.

- Image shown may differ from your TV.

Input source	Description
Antenna or **Satellite**	Watch TV over the air and digital cable broadcast.
USB	Use the movie, photo or music file.
NETWORK	Use it for DLNA.
AV	Watch the contents in a VCR or other external devices.
Component	Watch the contents in a DVD or other external devices, or through a digital set-top box.
RGB	View a PC display on the screen.
HDMI	Watch contents in a HTS or other high definition devices.

The connected input sources display in black and the disconnected input sources in grey.
- To add an input label, press the Green button. You can easily identify a device connected to each input source.
- If you connect a new external device to the TV, a pop-up window appears. Select **Yes** on the pop-up window to select an input source.
- To access the SIMPLINK, press the Red button. If you select “**SIMPLINK** and **On**”, the pop-up window for the HDMI input will not display.

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Adding an Input label

Add a label to an input source so that you can easily identify a device connected to each input source.

- Image shown may differ from your TV.

1 Press **INPUT** to access the input sources.

2 Press the **Green** button.

3 Press the Navigation buttons to scroll to one of the input sources.

4 Press the Navigation buttons to scroll to one of the input labels.

5 When you are finished, press **EXIT**.

When you return to the previous menu, press **BACK**.

Using the quick menu

Customize the frequently using menus.

1 Press **Q. MENU** to access the quick menus.

2 Press Navigation buttons to scroll through the following menus and press **OK**.

Menu	Description (Depending on model)
Aspect Ratio	Changes the image size (16:9, Just Scan, Original, Full Wide, 4:3, 14:9, Cinema Zoom)
Picture Mode	Changes the image mode (Intelligent Sensor, Vivid, Standard, Cinema or THX Cinema or THX Bright Room, Game, Expert1, Expert2)
Sound Mode	Changes the sound mode (Standard, Music, Cinema, Sport, Game)
Sleep Timer	Sets the length of time until the TV to turns off
Subtitle Language	Recalls your preferred subtitle in digital mode.
Audio or **Audio Language**	Changes the sound output.
Energy Saving	Reduces the power consumption by adjusting the screen brightness. (Intelligent Sensor, Auto, Off, Minimum, Medium, Maximum, Screen Off)
AV Mode	Sets the optimized image and sound settings (Off, Cinema,Game)
Skip Off/On	Sets the Skip Off/On.
USB Device	Eject a USB device.

NOTE

- The available menus and options may differ from the input source that you are using.

3 Press Navigation buttons to scroll to the option you want.

4 When you are finished, press **Q. MENU.**

ENGLISH

ENTERTAINMENT

Connecting the TV to a network

Connecting the wired network

Connect the TV and a local area network (LAN) via the LAN port as shown on the following illustration and set up the network settings.
If wired and wireless networks are both available, wired is the preferred method.
After making a physical connection, a small number of home networks may require the TV network settings to be adjusted.
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.
- After connecting the LAN port, use the Premium or TV Apps menu. For more information about Premium or TV App setup and troubleshooting, visit http://lgknowledgebase.com. Search for NetCast.

To set up the network settings,

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **NETWORK** and press **OK**.

4 Press the Navigation buttons to select **Network Setting** and press **OK**.

5 If wired and wireless are simultaneously connected, press the Navigation buttons to select **Wired** and press **OK**.

6 If you already set Network Setting, select **Resetting**. The new connection settings resets the current network settings.

7 Select **IP Auto Setting** or **IP Manual Setting**.
- If selecting **IP Manual Setting**, press the Navigation and Number buttons. IP addresses will need to be input manually.
- **IP Auto Setting**: Selects if there is a DHCP server on the local area network (LAN) via wired connection, the TV will automatically be allocated an IP address. If you're using a broadband router or broadband modem that has a DHCP (Dynamic Host Configuration Protocol) server function. The IP address will automatically be determined.
- **IP Manual Setting**: Selects if there is no DHCP server on the network and you want to set the IP address manually.

8 When you are finished, press **EXIT**.

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NOTE

- If you want to access the Internet directly on your TV, the broadband internet connection should always be on.
- If you cannot access the Internet, check the network conditions.
- When you use **Network Setting**, check the LAN cable or check if the DHCP in the router turns on.
- If you do not complete the network settings, the network may not work properly.

Connecting the wireless network

(Unnecessary this setup for 47/55/60LW95**)

The LG Wireless LAN for Broadband/DLNA Adaptor, which is sold separately, allows the TV to connect to a wireless lan network.
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.
Setting up the AP (Access Point) or the wireless router is required before connecting the TV to the network.

NOTE

- For enjoying pictures, music, or video stored in the PC using the router, the use of wired port in the router is recommended.
- When the wireless port of the router is used, there may be restrictions for some functions.
- It is recommended that an Access Point (AP) is installed more than 1 m away from the TV. If the AP is installed closer than 1 m, the magic motion remote controller may not perform as expected due to frequency interference.

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To set up the network settings,

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **NETWORK** and press **OK**.

4 Press the Navigation buttons to select **Network Setting** and press **OK**.

5 Press the Navigation buttons to select **Wireless** and press **OK**.

6 If you already set Network Setting, select **Resetting** and press **OK**.
The new connection settings resets the current network settings.

7 Press the Navigation buttons to select **Setting from the AP list** and press **OK**.
- Scan the all available AP (Access Point) or wireless routers within range and display them as a list.

8 Press the Navigation buttons to select an AP (Access Point) or wireless router on the list. (If your AP is locked, insert the security key of AP) and press **OK**.

9 Press the Number buttons to Input the security key of AP and press **OK**.

10 Repeat step 6-7 on “Connecting the wired network”.

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When a security code is already set

PIN (Personal Identification Number)

If you want to connect the AP (Access Point) or router with PIN, use this feature.

1 Repeat step 1-7 on “Connecting the wireless network”.

2 Press the Red button to connect the access point with **PIN** mode.

3 You can see the Network ID and Security Key on your TV screen.
Enter the PIN number to your device.
PIN number is the unique 8 digit number of the dongle.

4 Press **OK** to select **Connect**.

5 Repeat step 6-7 on “Connecting the wired network”.

WPS (Wi-Fi Protected Setup)

If your access point or wireless router that supports PIN or WPS(Wi-Fi Protected Setup), 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.

1 Repeat step 1-7 on “Connecting the wireless network”.

2 Press the Navigation buttons to select the **Simple setting (WPS-button mode)**.

3 Press **OK** to select **Connect**.

4 Repeat step 6-7 on “Connecting the wired network”.

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Ad-hoc Mode

This is the method of communicating directly with the machine to communicate without AP.
This is the same as connecting two PCs with a cross cable.

1 Repeat step 1-5 on “Connecting the wireless network”.

2 Press the Navigation buttons to select **Setting Ad-hoc network** and press **OK**.

3 Press the Navigation buttons to select **OK** and press **OK**.

4 Press **OK** to select **Connect** to connect Ad-hoc network.
- You can see the Network ID and Security Key on your TV screen.
- Enter this Network ID and Security Key to your device.
- If a network may not operate, change the setting information using the Red button.

NOTE

Example of the PC setting that supports a wireless network
- Find a wireless network device in your PC.
- Select LGTV10 that appears in the list. (Select the same name as the network ID that appears on your TV screen.)
- Type 1111111111 in the Inserting the security key dialog. (Type the security key that appears on your TV screen.)

5 Press the Navigation buttons to insert the IP address and press **OK**.

Option	Description
PC Setting	• Internet Protocol(TCP/IP) of PC needs to be set manually. • IP address, Subnet Mask, and default Gateway can be set with your own discretion. • i.e) IP address: 192.168.0.1 / Subnet Mask: 255.255.255.0 / default Gateway: 192.168.0.10
TV Setting	• Verify IP address and gateway of PC. • Input Gateway address of PC to IP Address, and IP Address of PC to Gateway, and select **OK**. • i.e) IP address: 192.168.0.10 / Subnet Mask: 255.255.255.0 / default Gateway: 192.168.0.1

6 Press the Navigation buttons to select **Close** after Network setting is completed.

7 Press the **OK**.

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Tips for Network setting

- For more information about Premium or TV App setup and troubleshooting, visit http://lgknowledgebase.com. Search for NetCast.?
- 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 within 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 connection, you will not be able to connect the TV.
- A DSL modem is required to use D SL 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 operates at 2.4 GHz radio frequencies that are also used by other household devices such as cordless telephone, Bluetooth® devices, microwave oven, and can be affected by interference from them.It can be interrupted by the device using 5 Ghz radio frequencies. It is same device with LG wireless media box, cordless telephone, other Wi-Fi device.
- It may decrease the service speed using Wireless network by surrounding wireless condition.
- Turn off all unused network equipment in your local home network. Some devices may generate network traffic.
- In some instances, placing the access point or wireless router higher up away from the floor may improve the reception.
- The reception quality over wireless depends on many factors such as type of the access point, distance between the TV and access point, and the location of the TV.
- When connecting internet through the wired/wireless sharing machine, it may interrupt the connection because of the use limitation and confirmation of service company.
- To connect wireless AP, an AP that supports the wireless connection is necessary, and the wireless connection function of the AP needs to be activated. Please enquire to the AP supplier for the possibility of AP wireless connections.
- Please verify the security settings of AP SSID for wireless AP connection, and enquire to the AP supplier for the AP SSID security settings.
- The TV can become slower or malfunction with wrong settings of network equipments (wired/wireless router, hub, etc). Please install correctly by referring to the manual of the equipment, and set the network.
- When AP is set to include 802.11 n, and if Encryption is designated as WEP(64/128bit) or WPA(TKIP/AES), the connection may not be possible. There may be different connection methods according to the AP manufacturers.

Network Status

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **NETWORK** and press **OK**.

4 Press the Navigation buttons to select **Network Status**.

5 Press **OK** to check the network status.

Option	Description
Setting	Return to the network setting menu or wireless network setting type menu.
Test	Test the current network status after setting the network.
Close	Return to the previous menu.

Premium card function

LG's Premium technology allows you to access a variety of online services or contents directly on your TV. Your TV offers instant streaming of movies, TV shows, videos, and Widget-based services with Premium and the Internet connection.
Enjoy entertainment including not only entertainment content, but also up-to-the minute news, stock information, weather updates, photo management, and more by simply using the TV's remote control without a separate PC.

1 Press **Premium** to access the Premium option.

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

3 Enjoy Online service.

CAUTION

- These services are provided by separate Content Provider.
- Please visit the content providers web site for specific information on their service (But, some content manual maybe not provide depending on Content Provider).
- Premium menu can differ by country.
- If a service requires you to log in, you must first sign up to the service website on your computer and then log into the service on the TV.
- Note that content may be updated automatically depending on the service provider, so the content layout or operation method may change without notice. Please refer to the help menu on the screen.
- Content may be changed or deleted without prior notice depending on the Content Provider.
- All content furnished by the contents provider are subject to change at any time including, but not limited to the removal of content. Should you have any inquiry or problem related to the content, you may refer to the cervice provider's website for the most up-to-date information. Please note that LG is not responsible for any content provided by the content provider or any changes concerning such content.
- Some content may be harmful to minors depending on the service provider.

NOTE

- The videos list searched from the TV may different with the list searched from a web browser on PC.
- The playback of videos may be paused, stopped or buffering occurring often depending on your broadband speed.
- For service that requires log in, join the applicable service on the website using the PC and log in through the TV to enjoy various additional functionalities.

Legal Notice

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TV Apps. card function

You can download various applications from LG App Store and enjoy them on your TV.

	Option	Description
1	Sign In	Sign in the premiun service.
2	Exit	Returns to TV viewing.
3	TV Apps.	Moves to TV Apps.
4	Quick Apps.	Stores the most frequently used apps among all downloads. To change the list of Quick Apps, see the "Using My Apps" section.
5	My Apps.	Moves to My Apps.

Registration TV Apps.

1 Press **HOME** to access the Home menu.

2 Press **Red** button to register.
- You can only register as a free member from your TV.

3 Create your ID and password.
Press the Navigation buttons to select alphabet and number and select **OK**.

4 The registraion is completed.

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Sign in with your TV Apps. account

To enjoy your TV Apps with your account, you need sign in with your TV Apps account.

1 Press **HOME** to access the Home menu.

2 Press red button to sign in.
It displays the keyboard menu for entering ID and password.
- If you are not a member, press **Red** button again. You can only register as a free member from your TV.

3 Press the Navigation buttons to scroll to the alphabet or number and press **OK**.

4 Enjoy TV Apps.
You can enjoy Premium service, TV Apps, My Apps and much more.

NOTE

- If you wish to become a paid member or change your information, please use your PC and visit http://www.????.
- You can download a paid app on up to five TV sets.

ID Management

1 After sign in, press red button again.
A pop-up window will appears.

2 Press the Navigation buttons to scroll to the desired menu option and press **OK**.

3 Manage the ID by using following menu.

Option	Description
Account Setting	Check basic information, apps you purchased and apps installed on your TV.
Change User	Delete or change your account.
Sign Out	

ENGLISH

Using TV Apps.

1 Press **HOME** to access the Home menu.

2 Sign in your TV.

3 Press the Navigation buttons to scroll to the TV Apps and press **OK**.

4 Edit the Apps by using following menu.

	Option	Description
1	**Live TV**	Watches the current channel.
2	**Advertise-ment**	?
3		Available buttons on the remote control.
4	**Apps Cat-egory**	• All: ? • Game: ? • Entertainment: ? • Life: ? • Education: ? • News: ?
5	**Apps Sorting**	• Hot: Most downloaded apps in the past 7 days • New: Most recently re-leased apps • Top Paid: Most downloaded paid apps • ? • ABC: Alphabetical order

Purchasing and Installing Apps.

Log in first to purchase apps.

1 Press the Navigation buttons to select Apps you want and press **OK**.
You can see the information of the App.

2 Press **Purchase** to buy a App.

Using My Apps.

1 Enter the TV Apps after sign in.

2 Press the Navigation buttons to scroll to **My Apps.** and press **OK**.

3 Press **Green** button to edit **My Apps**.
A pop-up window will appears.

4 Edit the Apps by using following menu.

Option	Description
Move	
Delete	
Give Grades	

ENGLISH

My Media Card Function

Connecting USB storage devices

Connect USB storage devices such as a USB flash memory, external hard drive, or MP3 player to the TV and use multimedia features (See p.62). Connect a USB flash memory or USB memory card reader to the TV as shown on the following illustration. The My media screen appears.

To disconnect a USB storage device, make sure to end the connection properly to prevent damages to the TV or files.

1 Press **Q.MENU** to access the quick menus.

2 Press the Navigation buttons to scroll to **USB Device** and press **OK**.

3 Disconnect the USB storage device only when the message says that it is safe to remove.

CAUTION

- Do not turn the TV off or remove a USB storage device while the USB storage device is connected to the TV, as this could result in loss of files or damage to the USB storage device.
- Back up your files saved on a USB storage device frequently, as you may lose or damage the files and this may be not covered by the warranty.

Tips for using USB storage devices

- The TV recognizes only a USB storage device.
- If you connect a USB storage device to the TV through a USB hub, your TV may not recognize the USB storage device.
- The TV may not recognize a USB storage device that uses its own.
- The recognition speed of a USB storage device may differ depending on the device.
- Only use a USB storage device which has normal music or image files.
- Use only USB storage devices that are formatted as a FAT 32 or NTFS file system.
- If you format a USB storage device as a NTFS file system, you cannot delete the saved files.
- You may need to connect a USB storage device to an external power supply with a power adapter.
- If the TV does not recognize a connected USB storage device, replace the cable and try again. Do not use an excessively long cable.
- The TV does not support some USB storage devices properly.
- You can use a multi-partition (up to 4) USB storage device.
- You can use up to 4 USB storage devices at a time by using a USB multi-card reader.
- The file alignment method of a USB storage device is similar to the one of Window XP.
- You cannot create or delete a folder saved in a USB storage device directly on the TV.
- The number of characters for a file name is up to 100 English characters.
- The recommended capacity for a USB external hard disk is 1 TB or less and for a USB storage device is 32 GB or less.
- If a USB external hard disk with the Energy Saving feature does not work, turn the USB external hard disk off and on again to make it work properly. For more information, refer to the user manual of the USB external hard disk.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.

DLNA DMP (Digital Living Network Alliance, Digital Media Player)

This TV can display and play many types of movie, photo and music files from your DLNA server and has been certified by DLNA for photos.
The Digital Living Network Alliance (DLNA) is a cross-industry organization of consumer electronics, computing industry and mobile device companies. Digital Living provides consumers with easy sharing of digital media through a wired or wireless network in the home.
The DLNA certification logo makes it easy to find products that comply with the DLNA Interoperability Guidelines. This unit complies with DLNA Interoperability Guidelines v1.5. When a PC running DLNA server software or other DLNA compatible device is connected to this TV, some setting changes of software or other devices may be required. Please refer to the operating instructions for the software or device for more information.
Please refer to "Using integrated media features" for additional information on supported file types and other instructions.

NOTE

- The supplied Nero MediaHome 4 Essentials CD-ROM is a customized software edition only for sharing files and folders to this TV.
- The supplied Nero MediaHome 4 Essentials software does not support following functions: Transcoding, Remote UI, TV control, Internet services and Apple iTunes
- This manual explains operations with the English version of Nero MediaHome 4 Essentials as examples. Follow the explanation referring to the actual operations of your language version.
- If there are too many folders and files in one folder, it may not operate properly.
- For the DLNA option, use the Nero MediaHome programme that is provided with the TV. However, we cannot guarantee that third party programme will work perfectly.
- You can select a channel while viewing the small preview channel list on your TV screen.
- Check your network settings when the DLNA option does not work properly.
- If there is an abnormal operation or an error occurs in Nero Media Home, the DLNA option may not work properly. In this case, exit Nero Media Home and restart the programme. You can download the latest version of Nero Media Home by clicking the question mark at the bottom-left of the program.
- When the network is unstable, the device may be slower or may need to load during playback.
- When playing a video in DLNA mode, the Multi Audio and Closed Caption features are not supported.
- When selecting Full Screen in DLNA mode, the ratio of the outputted screen may differ from the original.
- When more than one TV is connected to a single server in DLNA mode, a file may not play properly, depending on the server performance.

NOTE

- If the play time information is not provided by the server, it is displayed as "--:--:--."
- When using Movie List, DRM files in the DLNA server cannot be played.
- DLNA operation may not work properly according to the AP manufacturers.

Installing Nero MediaHome 4 Essentials

Nero MediaHome 4 Essentials is easy to use DLNA server software for Windows.

Requirement PC system before you install Nero MediaHome 4 Essentials

- Windows® XP (Service Pack 2 or higher), Windows Vista® (no Service Pack required), Windows® XP Media Center Edition 2005 (Service Pack 2 or higher), Windows Server® 2003
- Windows Vista® 64-bit edition (application runs in 32-bit mode)
- Hard drive space: 200 MB hard drive space for a typical installation of Nero MediaHome stand-alone
- 1.2 GHz Intel® Pentium® III or AMD Sempron™ 2200+ processors
- Memory: 256 MB RAM
- Graphics card with at least 32 MB video memory, minimum resolution of 800 x 600 pixels, and 16-bit colour settings
- Windows® Internet Explorer® 6.0 or higher
- DirectX® 9.0c revision 30 (August 2006) or higher
- Network environment: 100 Mb Ethernet, WLAN (IEEE 802.11b/g/n)

1 Start up your computer.

2 Close all Microsoft Windows programmes and exit any anti-virus software that may be running.

3 Insert the Nero MediaHome 4 Essentials CD-ROM into your computer's CD-ROM drive.

4 Click **Nero MediaHome 4 Essentials**. The installation is prepared and the installation wizard appears.

5 Click the **Next** button to display the serial number input screen. Click **Next** to go to the next step.

6 If you accept all conditions, click **I accept the License Conditions** check box and click **Next**. Installation is not possible without this agreement.

7 Click **Typical** and click **Next**. The installation process is started.

8 If you want to take part in the anonymous collection of data, select the check box and click the **Next** button.

9 Click the **Exit** button to complete the installation.

Sharing files and folders

After installing Nero MediaHome, you must add folders you wish to share.

1 Double-click the Nero MediaHome 4 Essentials icon on the desktop.

2 Click Network icon on the left and define your network name in the Network name field. The Network name you enter will be recognized by your TV.

3 Click Shares icon on the left.

4 Click Local Folders tab on the Shared screen.

5 Click Add icon to open the Browse Folder window.

6 Select the folder containing the files you want to share. The selected folder is added to the list of shared folders.

7 Click Start Server icon to start the server.

NOTE

- If the shared folders or files are not displayed on the TV, click the folder on the Local Folders tab and click **Rescan Folder** at the **More** button.
- Visit *http://www.nero.com* for more information and software tools.

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Playing back shared contents

Display and play movie, photo and music content stored on your USB or other DLNA media servers.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **MY MEDIA** and press **OK**.

4 Press the Navigation buttons to select **Movie List**, **Photo List** or **Music List**. and press **OK**.

5 Press the Navigation buttons to select **DLNA**. Depending on the media server, this TV may need to get the permission from the server. If you want to re-scan available media server, press blue colour button.

NOTE

- To play the file on the media server, the TV and the media server must be connected to the same access point.
- Because the compatibility and available playback functions on the My Media menu are tested on the bundle DLNA server (Nero MediaHome 4 Essentials) environment, file requirements and playback functions on the My Media may differ depending on media servers.
- The file requirements on this page are not always compatible. There may have some restrictions by file features and media server's ability.
- Even the files that are not supported can be displayed in photo thumbnail or music thumbnail.
- Movie thumbnail is only supported when DLNA server supports a Movie thumbnail.
- If there is an unplayable music file in the My Media menu, the TV will skip the file and play next file.
- The file information indicated on the screen may not always correct for music and movie files in My Media menu
- This TV only supports movie subtitle files supplied by Nero MediaHome 4.
- The subtitle file name and movie file name have to be the same and located at the same folder.
- If subtitle files have been added after a directory has been indexed already, the user has to remove and re-add the folder to the list of shares.
- The playback and operating quality of the My Media function may be affected by your home network condition.
- The files from removable media such as USB drive, DVD-drive etc. on your media server may not share properly.
- When playing the Media through DLNA connection, it does not support the DivX file play which is protected by DRM.
- Up to 999 including folders and files can be recognized.
- If there are too many folders and files in one folder, it may not operate properly.
- Files in a folder can be played only when they are of the same type.

DLNA DMR (Digital Living Network Alliance, Digital Media Renderer)

If the PC uses Windows 7, or a device (e.g. mobile phone) with the DLNA DMC certificate is connected to a network, you can play music, videos or photos etc. on the TV.

The DMR function only works properly when the TV and PC are configured to use the same network.

1 To play a file, select the file by using the "Remote Play" feature in Windows 7. To do this, right-click on the file you want to play.

Refer to the mobile phone's user manual to find out how to use it to play a file.

You can change the name of a connected TV by double-clicking the item you want to change in Control Panel > Network and Internet > View network computers and devices.

You cannot change the name of a TV while DMR media is playing. Change it when playback is stopped.

2 To exit, press the Exit button on the remote control. During play, only the volume, mute, exit and backwards buttons are available.

NOTE

- The DMR function may not work properly in a wireless network.
- The seek function of the DMC only works on video files.
- The DMR is not available when another function is operating (recording, playback or my media work etc.).

Browsing files

Access the photo, music, or movie lists and browse files.

1 Connect a USB storage device.

2 Press **HOME** to access the Home menus.

3 Press the Navigation buttons to scroll to **My Media** and press **OK**.

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

4 Press Navigation buttons to scroll to **Movie List**, **Photo List**, or **Music List** and press **OK**.

5 Press Navigation buttons to scroll to **All Media, Movie List**, **Photo List**, or **Music List** and press **OK**.

- All Media: Shows all files in the file list.
- Movie List, Photo List, or Music List: Shows only one type of file in the file list.

6 Press Navigation buttons to select a folder or file you want.

No.	Description
1	Shows all media folder.
2	Current page number/total number of pages of folder.
3	Moves to the previous or next page.
4	Current page number/total number of pages of contents.
5	Files info or thumbnail.
6	Available buttons on the remote control.

Thumbnail information

Type	Abnormal files	Non-supported files
Movie		
Photo		
Music		

Tips for using USB storage devices

Type	Supported file format
Video	• MPG, MPEG, DAT, TS, TRP, TP, VOD, MP4, MOV, MKV, DivX, AVI, Motion JPEG (AVI, MP4, MKV), ASF, WMV, FLV • Resolution: under 1920 pixel (width) x 1080 pixel (height) • Frame Rate: under 30 frame/sec (1920 x 1080), under 60 frame/sec (1280 x 720) • Max bitrate of playable movie file: 20 Mbps (Mega bit per second) • Bit rate of audio format: within 32 kbps to 320 kbps (MP3) • Supported subtitle format: *.smi, *.srt, *.sub (MicroDVD, SubViewer 1.0/2.0), *.ass, *ssa, *txt (TMPlayer), *.psb (PowerDivX)
Photo	• JPG, MPO (Only 3D models) • Available size Baseline: 64 pixel (W) x 64 pixel (H) - 15360 pixel (W) x 8640 pixel (H) Progressive: 64 pixel (W) x 64 pixel (H) - 1920 pixel (W) x 1440 pixel (H) * The TV cannot display most of the JPG files saved in the progressive option.?? • It may take some time to view high-resolution images in full screen.

Only 3D models

	File Extensions	Item	Profile
2D	jpeg jpg jpe	Supproted file format	• SOF0: baseline • SOF1: Extend Sequential • SOF2: Progressive
		Photo size	• Min: 64 x 64 • Max - Normal Type: 15360 (W) x 8640 (H) • Progressive Type: 1920 (W) x 1440 (H)
3D	mpo	Supproted file format	• mpo
		Photo size	• 4:3 size: 3,648 x 2,736 2,592 x 1,944 2,048 x 1,536 • 3:2 size: 3,648 x 2,432

Music	• MP3 • Bit rate range 32 Kbps - 320 Kbps • Sampling rate (Sampling Frequency) MPEG1 layer 3: 32 kHz, 44.1 kHz, 48 kHz MPEG2 layer 3: 16 kHz, 22.05 kHz, 24 kHz MPEG2.5 layer 3: 8 kHz, 11.025 kHz, 12 kHz * A copy-protected file will not play.

Viewing videos

Play video files on the TV. Your TV can display video files from a USB storage device.

1 Press **HOME** to access the Home menu.

2 Press the Navigation buttons to scroll to **My Media** and press **OK**.

3 Press the Navigation buttons to scroll to **Movie List** and press **OK**.

4 Press Navigation buttons to select a folder or file you want and press **OK**.

5 Play a movie by using the following menus/buttons.

Button	Description
Navigation button	Scrolls the file.
OK	Plays the highlighted file.
P ∧ ∨	Moves to the previous or next page.
Red button	Change device: Changes to a different input.
Green button	Go to root folder.
Yellow button	Go to upper folder.

6 Control playback by using the following buttons.

Button	Description
■	Stops the playback.
▶	Plays a video.
❚❚	Pauses or resumes the playback
◀◀	Scans backward in a file
▶▶	Scans forward in a file
❚❚ and ▶▶	Plays videos in slow motion
Red button and **< >**	Selects the frame directly. The entire file is divided into 10 frames. Frames may not be displayed depending on the file.
ENERGY SAVING	Increases or deceases the brightness of your screen.
3D (Only 3D models)	Views the 3D imaging.
Q.MENU	Shows the Option menu (See p. 65).
AV MODE	Select the desired source
BACK	Hides the menu on screen. To see the menu again, press **OK** button to display.
EXIT	Moves to the previous menu screen.

ENGLISH

Tips for playing video files

- Some user-created subtitles may not work properly.
- Subtitles may not display some special characters or HTML tags.
- Subtitles in the non-supported languages are unavailable.
- The time information in an external subtitle file should be arranged in ascending order to play.
- The screen may suffer from temporary interruptions such as image stoppage or faster playback when you change the audio language.
- If you play a damaged video file, the video file may not be played correctly or some player functions may not be unavailable.
- The TV may not properly play the video files produced with certain encoders.
- If the recorded file does not have video or audio, either video or audio is not outputted
- If the TV plays the recorded file without video or audio, either video or audio is not outputted.
- The TV may not smoothly play the video files with a resolution higher than the supported resolution for each frame.
- The TV may not properly play the video files not included on the specified type and format.
- The TV may not play the files encoded with GMC (Global Motion Compensation) or quarter-pel motion estimation.
- The TV supports the only files saved in ASCII code in subtitles.
- The maximum number of characters displayed on each subtitle line is 500 (English), and 500 (Numbers).
- The TV supports the only 10,000 sync blocks within the subtitle file.
- The TV supports the H.264 codec up to the profile level 4.1.
- The TV does not support DTS audio codec.
- The TV cannot play a video file whose size is larger than 30 GB.
- If you play a video file through the USB connection that does not support the high speed, the video player may not work properly.
- The TV supports a USB storage device whose version is lower than 2.0. However, the USB storage device may not work properly in the movie list.
- The video file and its subtitle should be in the same folder and the name of the video file and subtitle should be identical.
- You can adjust the image by using E and A. But you cannot customize image options of each mode.
- The TV may not play the video files in the supported file format depending on the encoded condition.
- The TV will not play the video files that has a damaged index or no index.

Q.MENU options for movie list

1 Press **Q. MENU**.
A pop-up window will appears.

2 Press the Navigation buttons to scroll to movie list option and press **OK**.

3 Press the Navigation buttons to scroll to one of the following options and press **OK**.

Set Video Play.

Option	Description	
Picture Size	Selects your desired picture format for videos. • **Full Mode**: Files are played in full screen mode regardless of the aspect ratio of video. • **Original Mode**: Files are played according to the aspect ratio of video.	
Audio Language	Changes the Language Group of the audio for video files. Files with a single audio track cannot be selected.	
Subtitle Language	The subtitles can be turned on or off.	
Language	Activated for SMI subtitles and can select the language within the subtitle.	
Code Page	Subtitle font selection. When set to default, contents are displayed in the language set in "Option - Language - Menu Language."	
	Subtitle Language Group	Supported Language
	Latin1	English, French, Spanish, Portuguese, Malaysia, Indonesia
	Cyrillic	Russian
	Thai	Thai
	Hebrew	Hebrew
	Arabic	Arab, Parsi, Krudish
	Unicode (UTF-16)	Vietnamese language
Sync	When the video is not synchronized with the captions, it can be adjusted by 0.5 second.	
Position	Move the location of the subtitles.	
Size	Changes the subtitle font size.	
Repeat	Turn on/off repeat function of movie playback. When turned on, the file within the folder will be played back repeatedly. When turned off, if the next file name is similar to the previous file, it can be played sequentially.	

NOTE

- Option values changed in Movie List does not affect Photo List and Music List.
- Option value changed in Photo List and Music List are changed likewise in Photo List and Music List excluding Movie List.
- When replaying a video file after stopping, you can play from where it stopped automatically.
- If you select “Yes” when playing the same file after the video file has been stopped, it will restart where it stopped previously.
- If continuous series files exist within the folder, the next file will automatically be played. But, this excludes cases when the **Repeat** function of Movie List Option is turned “On”.

Set Video.

Control the menu option (Refer to “PICTURE Settings” on page 92).

Set Audio.

Control the menu option (Refer to “AUDIO Settings” on page 99).

Set DivX PLUS HD

Option	Description
Title	
Edition	
Authorized Chapter	

ENGLISH

DivX registration code

Registering the DivX code

Check and register the DivX registration code of your TV so that you can rent or purchase the latest movies at www.divx.com/vod. To play a rented or purchased DivX file, the file's registration code should be same with your TV's DivX registration code.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **My Media Setting (DivX/DLNA)** and press **OK**.

4 Press the Navigation buttons to scroll to **DivX VOD Registration** and press **OK**.

5 View the registration code of your TV.

6 When you are finished, press **EXIT**.

NOTE

- While you are checking the registration code, some buttons may not work.
- If you use the DivX registration code of another device, you cannot play the rented or purchased DivX file. Make sure to use the DivX registration code assigned to your TV.
- The video or audio files that are not converted by the standard DivX codec may be corrupted or not be played.
- The DivX VOD code allows you to activate up to 6 devices under one account.

Deactivating the DivX feature

Deactivate all of the devices through the web server and block devices from activating.
Delete the existing authentication information to receive a new DivX user authentication for the TV. Once this function is executed, a DivX user authentication is required again to see DivX DRM files.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **My Media Setting (DivX/DLNA)** and press **OK**.

4 Press the Navigation buttons to scroll to **DivX Deactivation** and press **OK**.

5 Select **Yes** to confirm.

6 When you are finished, press **EXIT**.

ENGLISH

Viewing photos

View image files saved in a USB storage device. The displays on the screen may differ from the model.

1 Press **HOME** to access the Home menu.

2 Press the Navigation buttons to scroll to **MY MEDIA** and press **OK**.

3 Press the Navigation buttons to scroll to **Photo List** and press **OK**.

4 Press the Navigation buttons to scroll to a folder/file you want and press **OK**.

5 View photos by using the following menus/buttons.

Button	Description
Navigation button	Scrolls the file.
OK	Views the highlighted file.
P ∧ ∨	Moves to the previous or next page.
Red button	Change device: Changes to a different input.
Green button	Go to root folder.
Yellow button	Go to upper folder.

6 Use the following options while viewing photos.

Option	Description
Slideshow	Starts or stops a slideshow. All photos saved in the current folder display during a slideshow. To set a slideshow speed, select Option.
BGM (Background Music)	Turns the background music on or off. To set the background music folder, select Option. **NOTE** • You can't change or set-up the BGM while viewing the *.mpo file (3D camera file).
↻ (Rotate)	Rotates photos clockwise (90°, 180°, 270°, 360°). **NOTE** • The supported photo size is limited. You cannot rotate a photo if the resolution of the rotated width is larger than the supported resolution size.
	Views the photo in full mode or original mode.
(ENERGY SAVING)	Increases or decreases the brightness of your screen.
3D (Only 3D models)	Views the 3D imaging.
Option	Shows the Option menu (See p. 68).
Hide	Hides the option window. To display the options, press **OK**.
Exit	Moves to the previous menu screen.

ENGLISH

Q.MENU options for photo list

1 Press **Q. MENU**.
A pop-up window will appears.

2 Press the Navigation buttons to scroll to photo list option and press **OK**.

3 Press the Navigation buttons to scroll to one of the following options and press **OK**.

Set Photo View.

Option	Description
Slide Speed	Selects a slideshow speed (Fast, Medium, Slow).
BGM	Selects a music folder for the background music. Select Repeat or Random option. NOTE • You cannot change the music folder while the background music is playing.

NOTE

- Option values changed in Photo List do not affect Movie List and Music List.
- Option values changed in Photo List or Music List are changed likewise in Photo List and Music List, but not Movie List.
- You cannot select the Option in 3D imaging mode. (Only 3D models)

Set Video.

Control the menu option (Refer to “PICTURE Settings” on page 92).

Set Audio.

Control the menu option (Refer to “AUDIO Settings” on page 99).

Listening to music

1 Press **HOME** to access the Home menu.

2 Press the Navigation buttons to scroll to **My Media** and press **OK**.

3 Press the Navigation buttons to scroll to **Music List** and press **OK**.

4 Press the Navigation buttons to select a folder or file you want and press **OK**.

5 Play music by using the following menus/buttons.

Button	Description
Navigation button	Scrolls the file.
OK	Plays the highlighted file.
P ∧ ∨	Moves to the previous or next page.
Red button	Change device: Changes to a different input.
Green button	Go to root folder.
Yellow button	Go to upper folder.
Blue button	Open music player. It is enabled during palying a music.

6 Control playback by using the following buttons.

Button	Description
■	Stops playback.
▶	Plays a music file.
❚❚	Pauses or resumes playback.
◀◀	Skips to the next file.
▶▶	Skips to the previous file.
< >	Indicates a cursor.
(ENERGY SAVING)	Increases or deceases the brightness of your screen.
Q.MENU	Shows the Option menu (See p. 70).
BACK	Hides the option window. To display the options, press **OK**.
EXIT	Moves to the previous menu screen.

ENGLISH

Q.MENU options for music list

1 Press **Q. MENU**.
A pop-up window will appears.

2 Press the Navigation buttons to scroll to photo list option and press **OK**.

3 Press the Navigation buttons to scroll to one of the following options and press **OK**.

Set Audio Play.

Select Repeat or Random option.

Set Audio.

Control the menu option (Refer to “AUDIO Settings” on page 99).

NOTE

- Option values changed in Movie List does not affect Photo List and Music List.
- Option value changed in Photo List and Music List are changed likewise in Photo List and Music List excluding Movie List.
- You can listen to the music only within the device currently played.

NOTE

- A copy-protected file will not play.
- If the TV is not in use for some time during playback, the information box as a screen-saver will appear to prevent image burn. To return to the Music list screen, press **OK**.

File name

Time elapsed /Duration

ENGLISH

Timeshift Card Function

(This feature is not available for all models.)

Precautions when using the USB Device

NOTE

- Only a USB storage device is recognizable.
- If the USB storage device is connected through a USB hub, the device is not recognizable.
- A USB storage device using an automatic recognition programme may not be recognized.
- A USB storage device which uses its own driver may not be recognized.
- In case of several paritions or a card reader, up to four memory cards are concurrently recognizable.
- The recognition speed of a USB storage device may depend on each device.
- Please do not turn off the TV or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- Please connect power to a USB storage device which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with cable is offered by USB maker. If connected with cable is not offered by USB maker or an excessively long cable, the device may not be recognized.
- Some USB storage devices may not be supported or operate properly.
- The TV will display up to 128 characters of a files name.
- Please backup important files because data on USB device may be damaged. Data management is consumer's responsibility and as a result, the manufacturer does not cover data damage.
- The recommended capacity is 1TB or less for a USB HDD and 40GB or over for USB memory.
- Any device with more than the recommended capacity may not work properly.
- Playing a movie via a USB connection that doesn't support high speed may not work properly.
- USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- Please maintain the stability of external HDD by using the HDD benchmarking tool in order to guarantee smooth action of HDD.
- The HDD benchmarking tools is checking the performance of HDD that is read/write rate, access time, stability. It will be able to search at website and use easily it after download the HDD benchmarking tool.
- Timeshift USB hard disk supports only SSD or HDD disk types. (USB storage is not supported.)
- A SSD (Solid State Drive) has a limited number of write/delete cycles. A HDD (Hard Disk Drive) is recommended for this product.

TIMESHIFT (PAUSE & REPLAY OF LIVE TV)

This function allows the unit to automatically record live TV and make it available for viewing at any time.
With the Timeshift turned on, you may pause and rewind normal TV viewing at any time without missing any of the live broadcast.
Timeshift and Recording functions may not work if the signal strength is weak.
This function is only operated after initializing USB Device.

Connecting USB storage devices

1 Connect the USB device to the **USB IN 1** jacks on the side of TV.

2 To use the USB device (over 40 GB) for Timemachine, execute USB Device Initialization.

NOTE

- It initializes the HDD connected to the USB as disk mode for Timeshift.
- It is activated only when the USB HDD available for Timemachine is connected.
- When USB Device Initialization is executed, all the data stored in the USB device is deleted.
- While performing USB Device Initialization, do not remove the USB device. It may cause error on the TV and the storage device.

USB device Initialization

1 Connect an unformatted USB for DVR and press **REC** to initialize the USB device.

2 Press the Navigation buttons to scroll to **OK** and press **OK**.

3 Press Navigation buttons to scroll to **On** or **Off** and press **OK**.

NOTE

- When initialization is completed, a popup notice of completion is displayed and the connected USB HDD is available for Timemachine.
- Depending on the capacity of the USB device, the initialization time may vary.
- The initialized USB device is not recognized by the PC.
- When a USB device of less than 40 GB is connected, the USB Device Initialization is not activated.
- Supported maximum external HDD size for back-up is up to 1TB.

ENGLISH

Timeshift Mode change during using Timeshift

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Yellow button to show the Timeshift option menu and press **Q.MENU**.

3 Press the Navigation buttons to scroll to **Timeshift Mode** and press **OK**.

4 Press Navigation buttons to scroll to **On** or **Off** and press **OK**.

5 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

Menu	Description
Recorded List	Moves to the **Recorded List**.
Schedule List	Moves to the **Schedule List**.
Select schedule by date	Moves to the **Manual Timer**.
Select schedule by programme	Set up timer recording by going to the Programme Guide.

NOTE

- Timeshift Mode is available in DTV mode.
- Radio or satellite programmes cannot be recorded.

USB Device Reinitialization during using Timeshift

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Yellow button to show the Timeshift option menu and press **Q.MENU**.

3 Press the Navigation buttons to scroll to **USB device Initialization** and press **OK**.

4 When you are finished, press **EXIT**.

When you return to the previous menu, press **BACK**.

ENGLISH

Timeshift Progress

1 After selecting **Timeshift Mode-On**, press the **OK** button.

- As soon as Timeshift starts, a progress bar indicating the current recording status is displayed in the bottom of the screen.
- It Press the **BACK** button to hide the 'Progress Bar' or press the **OK** button to display the 'Progress Bar'.
- This function is preserved even change a programme on progressing the Timeshift.

The 'Progress Bar'?

This function indicates what Timeshift reviewing is possible, a current on-screen and live broadcasting position.

1. Preview
2. Current location and progress time in playback
3. Total progress time of the Timeshift

- Playback
- Fast forward
- Rewind
- Pause
- Direct view +
- Direct view -
- By one screen
- Slow playback

NOTE

- In order to save hard-disk space, nothing is saved when there is no signal.
- Timeshift can be used for maximum of 2 hours.
- You can't do the programme change or input conversion on recording.
- When turning power on, it may take up to a maximum of 3 minutes to initialize the HDD.
- Recording or playing the recorded programme may not initiate for a copy-protected programme.
- Instant recording time is set to 3 hours and supported maximum time is up to 5 hours.
- A thumbnail is created every 3 minutes for recordings longer than 18 minutes and every 1 to 3 minutes for recordings shorter than 18 minutes.
- Up to 6 thumbnails are created on one screen.

Playback during the Timeshift

During the Timeshift play, the following options are available.

Use of remote control

You can playback the temporarily saved part in various methods during the Timeshift.

Button	Description
◀◀ ▶▶	During playback, repeatedly, press the **REW** (◀◀) or **FF** (▶▶) button to speed up. - Every time you press the button, the search speed will increase by stage (up to 5 stages).
II ▶▶	During playback, press the Pause(**II**) button. - Pause screen is displayed. - Every time you press the Pause(**II**) button from the pause screen, it will move screen by screen (**II** ▶). - Press the Pause(**II**) button and then use the FF (▶▶) button for slow motion (I▶).
< >, OK	When you move the cursor using the Timeshift (**< >**) button during playback, and then press the **OK** button, the screen will directly play at the applicable screen where the cursor is located. (,)
LIVE TV	To view the current live broadcast, press the **LIVE TV** button during playback.

RECORDING

Use this function when you cannot watch the desired programme due to being out.

Start/Stop record

You can record the programme you are watching.

Start record

1 Press **REC** to start the recording.

Stop record

1 Press **REC** to stop the recording.

2 Press Navigation buttons to scroll to **Recording stop** and press **OK**.

NOTE

- You can also stop the recording by pressing **STOP**.

ENGLISH

Modify recording end time

1 Press **REC** to stop the recording.

2 Press Navigation buttons to scroll to **Recording end time modify** and press **OK**.

3 Press Navigation buttons to scroll to set the recording start/end time and press **OK**.

NOTE

- When recording, if the available storage space is not sufficient, the recording will automatically Stop.
- Recordings of less than 10 seconds will not be saved.
- To save disk space while recording broadcasts, no data will be saved if there is no signal.
- The recording function will not initiate for a copy-protected programme.
- The displayed time may differ slightly from the actual time.
- When there is no signal or a film source is being viewed, the displayed time may differ slightly from the actual time.

Manual Timer

This function is easy to register to reserved recording. Timer recording is set.

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Yellow button**.**

3 Press Navigation buttons to scroll to **Select schedule by date** and press **OK**.

4 Press Navigation buttons to scroll to select a date and press **OK**.

5 Press Navigation buttons to scroll to select repeat option and press **OK**.

6 Press Navigation buttons to scroll to set the schedule type, time and programme and press **OK**.

7 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

ENGLISH

NOTE

- Recording is not possible with copy-protected programmes.

- When a poor quality external source is recorded the quality of the recording will not be optimal.
- Manual Recording available time is maximum 5 hours and minimum 2 minutes.
- When broadcasting station send the wrong time information, reserved recording may be failed.
- If different programmes are set for the same time for on time and reserved recording, this TV is powered on to the reserved recording programme.
- If you turn off the power during the recording, the programme being recorded may not be saved. Therefore it is good to press the **STOP** (■) button and check the reserved/recorded list, and then turn off the power.
- Recording cannot be reserved for a period less than 10 seconds.
- Because the title and time of the programme for Record/Remind is based on the information transmitted from the broadcasting station, they may be different than the actual ones depending on the situation of the broadcasting station.
- Recording time may differ depending on resolution of input signal or USB HDD capacity.
- When it is time for the reserved recording to start and the power of the TV is turned off, the TV will turn on the power of the part required for the recording and proceed to the reservation.
- When it is time for the reserved recording to start and the Immediate recording is in progress, the recording of the programme currently being recorded will be stopped and saved, and then proceed to the reserved recording.
- If the TV is unplugged once or turn off, the reserved recording will not work.

SCHEDULE

Schedule List

This function is used to show scheduled recordings. You can store up to 30 programmes.

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Yellow button**.**

3 Press Navigation buttons to scroll to **Schedule List** and press **OK**.

4 Press Navigation buttons to select a desired programme and press **OK**.

5 When you are finished, press **EXIT**.

When you return to the previous menu, press **BACK**.

ENGLISH

Menu	Description
Modify	Edit the contents of **Start date/ Start time/End time/Title/Repeat**. You must press the **BACK** button to save the edited contents. This feature is disable in reserved reminding.
Delete	Delete the selected item in the list.
Delete All	Delete all items in the list.
Close	Close the pop-up menu.

Schedule List Initialzation

This function is to reset the schedule list.

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Yellow button to show the Timeshift option menu and press **Q.MENU**.

3 Press the Navigation buttons to scroll to **Schedule list Initialization** and press **OK**.

4 Press Navigation buttons to scroll to **OK** and press **OK**. Start the Schedule List Initialization.

5 When you are finished, press **EXIT**.
When you return to the previous menu, press **BACK**.

Programme Guide

This function is easy to register to reserved recording. Timer recording is set.

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Yellow button**.**

3 Press Navigation buttons to scroll to **Select schedule by programme** and press **OK**.

4 Press Navigation buttons to scroll to select a programme and press **OK**.

5 When you are finished, press **EXIT**.

When you return to the previous menu, press **BACK**.

ENGLISH

RECORDED TV

You can view the recorded programme list at a glance.
The recorded programme stored in the USB device can be played.

Recorded TV List

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Green button**.**

3 Press Navigation buttons to scroll to **Recorded List** and press **OK**.

4 Press Navigation buttons to recorded programme and press **OK**.

5 When you are finished, press **EXIT**.

When you return to the previous menu, press **BACK**.

NOTE

- If there is a bad sector in the disk, part or all of the items of the Recording list can be deleted.
- Maximum number of recordings within the Recording list is 200. When the number of recordings in the Recording list is 200, you cannot record any more.
- When the full duration of the recording is played back, the screen will stay in the stopped condition for 10 seconds and then automatically end the playback.
- The recording can be played back even during the recording/reserved recording.
- During the playback of the recording, the hard disk can generate a certain level of noise.
- This noise is irrelevant from the performance and reliability of the product and is normal
- for a hard drive to have a certain level of noise.

ENGLISH

Mark Mode

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Green button**.**

3 Press Navigation buttons to scroll to **Recorded List** and press **OK**.

4 Press Navigation buttons to select a desired recorded programme.

5 Press **FAV** to mark your desired recorded programme.

6 Press Yellow button to play the marked recorded programme.

Button	Description
Red button	**Unmark All**: Change marked recorded programmes to unmarked recorded programmes.
Green button	**Mark All**: Mark all recorded programmes in the list.
Yellow button	**Play Marked**: Play the first selected file. Once recorded programmes finishes playing, the next selected one will be played automatically.
Blue button	**Delete Marked**: Delete the marked recorded programmes.
FAV	Exit Mark Mode.

Playing Recorded programmes

You can play a selected programme from the recorded list.

1 After selecting **Timeshift Mode-On**, press the **OK** button.

2 Press Green button**.**

3 Press Navigation buttons to scroll to **Recorded List** and press **OK**.

4 Press Navigation buttons to recorded programme and press **OK**.

5 Press Navigation buttons to scroll to select play option and press **OK**.

6 When you are finished, press **EXIT**.

When you return to the previous menu, press **BACK**.

Menu	Description
Play on previous playtime.	Resumes playing at the previously stopped point.
Play from the start	Playback of selected recorded programmes.
Rename	Rename the programme.
Delete	Delete the programme.

ENGLISH

The ‘Progress Bar’?

This function indicates what Timeshift reviewing is possible, a current on-screen and live broadcasting position.

1. Preview
2. Current location and progress time in playback
3. Total progress time of the Timeshift

- Playback
- Fast forward
- Rewind
- Pause
- Direct view +
- Direct view -
- By one screen
- Slow playback
- (Blue) Start repeat interval
- (Yellow) Start clip-edit interval
- (Blue) End repeat interval
- (Yellow) End clip-edit interval
- Repeating interval

Use of remote control

You can adjust various method during the recorded programme play.

Button	Description
◀◀ ▶▶	During playback, repeatedly, press the REW (◀◀) or FF (▶▶) button to speed up. - Every time you press the button, the search speed will increase by stage (up to 5 stages).
Green button	**Option**: Press the **GREEN** button to switch between video/audio settings.
Yellow button	**Clip-Edit:** Press the **YELLOW** button at the starting point where you want to set the Interval clip-edit and press it again at the ending point. To save, select Yes. - The start of the Interval clip-edit is displayed as A and end of the Interval clip-edit as B in the recording progress bar at the bottom of the screen. Start and end of the Interval clip-edit can be set both in forward and reverse direction. - Interval shorter than 10 seconds cannot be save.
Blue button	**Repeat**: Press the **BLUE** button at the starting point where you want to set the Interval repeat and press it again at the ending point. To cancel the playback for the interval repeat, press the BLUE button one more time. - The start of the Interval repeat is displayed as A and end of the Interval repeat as B in the recording progress bar at the bottom of the screen. Start and end of the Interval repeat can be set both in forward and reverse direction. - Interval shorter than 10 seconds cannot be set. - When the Interval repeat is canceled, it will return to normal playback from the end point of the interval.
II ▶▶	During playback, press the Pause(**II**) button. - Pause screen is displayed. - Every time you press the Pause(**II**) button from the pause screen, it will move screen by screen (II▶). - Press the Pause(**II**) button and then use the FF (▶▶) button for slow motion (I▶). - If you don’t press any button 10 minutes after the pause, it will return to the playback.
< >, OK	When you move the cursor using the Timeshift (< >) button during playback, and then press the **OK** button, the screen will directly play at the applicable screen where the cursor is located. (↷,↶)
3D	Uses for viewing 3D video.

ENGLISH

EPG (Electronic Programme Guide) Card Function (In digital mode)

This feature is disabled in New Zealand.

This system has an Electronic Programme Guide (EPG) to help your navigation through all the possible viewing options.
The EPG supplies information such as programme listings, start and end times for all available services. In addition, detailed information about the programme is often available in the EPG (the availability and amount of these programme details will vary, depending on the particular broadcaster).

This function can be used only when the EPG information is broadcast by broadcasting companies.
The EPG displays the programme details for next 8 days.
You must set the Clock in the **Time** menu, before using EPG function.

- Press **INFO** to show current programme information.

	Displayed with a TV or DTV Programme.
	Displayed with a Radio Programme.
MHEG	Displayed with a MHEG Programme.
HE-AAC	Displayed with a HE-AAC Programme.
4:3	Aspect ratio of broadcasting programme.
16:9	Aspect ratio of broadcasting programme.
	Displayed with a Teletext Programme.
	Displayed with a Subtitle Programme.
	Displayed with a Scramble Programme.
DD	Displayed with a Dolby Digital Programme.
DD+	Displayed with a Dolby Digital PLUS Programme.
576i/p, 720p, 1080i/p : Resolution of broadcasting programme	
>	Shows next programme information.
∧ ∨	Shows other programme information.

OK	A pop-up window for remind settings appear.
< >	Select Timer Remind setting mode.

Switch on/off EPG

1 Press **GUIDE** to switch on or off EPG.

Select a programme

1 Press Navigation buttons or **P** ∧ ∨ to select desired programme.

ENGLISH

NOW/NEXT Guide Mode

You can view a programme being broadcasted and one scheduled to follow.

Button	Description
Red button	Change EPG mode.
Yellow button	Enter **Manual Timer** mode. (See p. 76)
Blue button	Enter **Schedule List** mode. (See p. 77)
OK	When 'NOW' is selected, it is moved to selected programme and EPG disappears. When 'NEXT' is selected, a reservation pop-up window appears.
< >	Select NOW or NEXT Programme.
∧ ∨	Select the Broadcast Programme.
P ∧ ∨	Page Up/Down.
GUIDE	Switch off EPG.
BACK	
EXIT	
TV/RAD	Select DTV or RADIO Programme.
INFO	Detail information on or off.

8 Day Guide Mode

Button	Description
Red button	Change EPG mode.
Green button	Enter Date setting mode.
Yellow button	Enter **Manual Timer** mode.(See p. 76)
Blue button	Enter **Schedule List** mode.(See p. 77)
OK	When 'Currently broadcasting programme is selected, it is moved to selected programme and EPG disappears When 'Future broadcasting programme is selected, a reservation pop-up window appears.
< >	Select Programme.
∧ ∨	Select the Broadcast Programme.
P ∧ ∨	Page Up/Down.
GUIDE	Switch off EPG.
BACK	
EXIT	
TV/RAD	Select DTV or RADIO Programme.
INFO	Detail information on or off.

Date Change Mode

Button	Description
Green button	Switch off Date setting mode.
v	
BACK	
OK	Change to the selected date.
< >	Select a date.
GUIDE	Switch off EPG.
EXIT	

Extended Description Box

Button	Description
INFO	The detail information on or off.
∧ ∨	Text Up/Down.
GUIDE	Switch off EPG.
EXIT	

ENGLISH

MHEG (Multimedia and Hypermedia Information coding Expert Group) (In digital mode)

This feature is enabled only in South Africa and Malaysia.

The TV gives you access to digital teletext which is greatly improved in various aspects such as text, graphics etc.
This digital teletext can access special digital teletext services and specific services which broadcast digital teletext.

Teletext Within Digital Service

1 Press the numeric or **P** ∧ ∨ button to select a digital service which broadcasts digital teletext.

2 Follow the indications on digital teletext and move onto the next step by pressing **TEXT**, **OK**, Navigation buttons, Red buttons, Green buttons, Yellow buttons, Bluebuttons or NUMBER buttons and etc.

3 To change digital teletext service, select a different service by the numeric or **P** ∧ ∨ button.

Teletext in Digital Service

1 Press the numeric or **P** ∧ ∨ button to select a certain service which broadcasts digital teletext.

2 Press the **TEXT** or coloured button to switch on teletext.

3 Follow the indications on digital teletext and move onto the next step by pressing **OK**, Navigation buttons, Red buttons, Green buttons, Yellow buttons, Bluebuttons or NUMBER buttons and so on.

4 Press the **TEXT** or colour button to switch off digital teletext and return to TV viewing.

Some services may allow you to access text services by pressing the RED button.

ENGLISH

This feature is enabled only in New Zealand.

- In New Zealand, pressing the Guide key will display MHEG EPG provided by New Zealand on the screen.

This system has an MHEG(Multimedia and hypermedia information coding expert group) to help your navigation through all the possible viewing options.

- Press **INFO** to show current programme information.

	Displayed with a TV or DTV Programme.
	Displayed with a Radio Programme.
MHEG	Displayed with a MHEG Programme.
HE-AAC	Displayed with a HE-AAC Programme.
4:3	Aspect ratio of broadcasting programme.
16:9	Aspect ratio of broadcasting programme.
	Displayed with a Teletext Programme.
	Displayed with a Subtitle Programme.
	Displayed with a Scramble Programme.
DD	Displayed with a Dolby Digital Programme.
DD+	Displayed with a Dolby Digital PLUS Programme.
576i/p, 720p, 1080i/p : Resolution of broadcasting programme	
>	Shows next programme information.
∧ ∨	Shows other programme information.

Switch on/off MHEG

1 Press GUIDE to switch on or off MHEG.

Select a programme

1 Press Navigation buttons to preview the Broadcast Programme Information.

2 Press Navigation buttons to change to desired channel.

3 Press **OK** to disappear MHEG after moving to a selected channel.

Programme Listing Mode

Button	Description
∧ ∨	Select the Broadcast Programme Information.
< >	Select Channel.
Yellow button	Change to Next Week or Prev Day.
Blue button	Change to Next Day or Today.
OK	The MHEG will disappear after moving to a selected channel.
GUIDE	Change to Now/Next mode.
BACK	Switch off MHEG.
INFO	Detail information on or off.

NOW/NEXT Guide Mode

You can view a channel being broadcasted and one scheduled to follow.

Button	Description
∧ ∨	Select desired channel.
OK	The MHEG will disappear after moving to a selected channel.
GUIDE	Change to Listing mode.
BACK	Switch off MHEG.
INFO	Detail information on or off.

3D IMAGING

(Only 3D Models)

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. You need such a device to watch the TV in 3D. The 3D TV displays two separate pictures formatted for each eye. The viewer needs to wear 3D glasses in order to see these images in 3D format.

WARNING

- When viewing 3D imaging, watch the TV from an effective viewing angle and within the appropriate distance. The appropriate angel and distance are provided on the next page of this manual. If you exceed this viewing angle or distance, you may not be able to view the 3D imaging. Furthermore, the 3D imaging may not display if it is viewed while you are lying down.
- If you watch the 3D imaging too closely or for a long period of time, it may harm your eyesight.
- Watching the TV or playing video games that incorporate 3D imaging with the 3D glasses for a long period of time can cause drowsiness, headaches or fatigue to you and/or your eyes. If you have a headache, or otherwise feel fatigued or drowsy, stop watching the TV and take a rest.
- Pregnant woman, seniors, persons with heart problems or persons who experience frequent drowsiness should refrain from watching 3D TV.
- Some 3D imaging may cause you to duck or dodge the image displayed in the video. Therefore, it is best if you do not watch 3D TV near fragile objects or near any objects that can be knocked over easily.
- Please prevent children under the age of 5 from watching 3D TV. It may affect their vision development.
- Warning for photosensitization seizure: Some viewers may experience a seizure or epilepsy when exposed to certain factors, including flashing lights or images in TV or video games. If you or anybody from your family has a history of epilepsy or seizure, please consult with your doctor before watching 3D TV.
  Also certain symptoms can occur in unspecified conditions without any previous history. If you experience any of the following symptoms, immediately stop watching the 3D imaging and consult a doctor: dizziness or lightheadedness, visual transition or altered vision, visual or facial instability, such as eye or muscle twitching, unconscious action, convulsion, loss of conscience, confusion or disorientation, loss of directional sense, cramps, or nausea. Parents should monitor their children, including teenagers, for these symptoms as they may be more sensitive to the effects of watching 3D TV.
- Risk of photosensitization seizure can be reduced with the following actions.
  - » Take frequent breaks from watching 3D TV.
  - » For those who have vision that is different in each eye, they should watch the TV after taking vision correction measures.
  - » Watch the TV so that your eyes are on the same level as the 3D screen and refrain from sitting too closely to the TV.
  - » Do not watch the 3D imaging when tired or sick, and avoid watching the 3D imaging for a long period of time.
  - » Do not wear the 3D glasses for any other purpose than viewing 3D imaging on a 3D TV.
  - » Some viewers may feel disoriented after watching 3D TV. Therefore, after you watch 3D TV, take a moment to regain awareness of your situation before moving.

NOTE

- To watch the TV in 3D, you must put on your 3D glasses. For best results, you should wear LG Brand 3D glasses. The 3D imaging may not display properly when using another brand of 3D glasses. Please see the 3D glasses manual for instructions on how to use the 3D glasses.
- After powering on the TV, a few seconds may be needed for your TV to calibrate.
- It may take a moment for you to see the 3D imaging if you look away from the TV and then revert your eyes back to the 3D program.
- The TV may flicker slightly if the 3D imaging is displayed under 3 wavelength fluorescent light (50 Hz - 60 Hz) or magnetic fluorescent lamp (50Hz - 60 Hz). In such instances, it is recommended to turn the lights off.
- If there is an obstacle between the TV and the 3D glasses, the 3D imaging may not display properly.
- Do not use the TV in close proximity to other electronic equipments and IR or RF equipments.
- In Analog TV, 3D Imaging does not work.
- When watching 2D images, it is recommended to take off the 3D glasses. If you watch 2D images with the 3D glasses on, you may see distorted images.

When using 3D Glasses

CAUTION

- 3D glasses are sold separately. Refer to the 3D glasses manual for operating instructions.
- Do not use the 3D glasses to replace your corrective glasses, sunglasses or protective goggles.
- Do not store the 3D glasses in hot or cold locations.
- Do not drop objects onto the 3D glasses. Do not drop or bend the glasses.
- Since the lenses of the 3D glasses are easily scratched, make sure to clean only with a soft cloth. Shake off any dust before using the cloth since the glasses are easily scratched.

3D Imaging viewing range

TV size, viewing angle & other circumstances may change the viewing distance and the angle of view.

Viewing Distance	Viewing Angle
2 m - 15 m	120 ° (When the viewing distance is 2 m)

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Viewing 3D Imaging

1 Play the video produced in 3D.

2 Press **3D** to watch 3D imaging.

3 Wear the 3D glasses.

4 Press the Navigation buttons to scroll the **OK** and press **OK**.

5 Press the Navigation buttons to scroll the shape and press **OK**.

Mode	Description
2D » 3D	Changed from 2D imaging to 3D imaging.
Side by Side	
Top & Bottom	
Checker Board	
Frame Sequential	

6 Press **3D** button to **2D Off** or **3D Off**.

Setting 3D Imaging

1 Press the **3D SETTING** while viewing 3D imaging. A pop-up window will appears.

2 Press the Navigation buttons to scroll to one of the following options and press **OK**.

3D Mode Setting
(Only LED LCD TV/ LCD TV)

Button	Description
Image View Mode	
3D Image Type	Select **Left/Right**.
3D Effects	Adjusts the distance between the object and the background in the picture to enhance the 3D effect in 2D to 3D mode.
3D Viewpoint	Brings the picture (including both the object and background images) to the front or back to enhance the 3D effect in 3D mode.
3D Optimization	Adjusts the brightness and the contrast difference between the left and the right sides of the 3D image, which is caused during recording or due to certain features of the camera.

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(Only Plasma TV)

Button	Description
Image View Mode	
3D Picture Size	Cuts off the outer edges of the picture and stretch it to fit the full screen in 3D mode.
3D Effects	Adjusts the distance between the object and the background in the picture to enhance the 3D effect in 2D to 3D mode.
3D Viewpoint	Brings the picture (including both the object and background images) to the front or back to enhance the 3D effect in 3D mode.
3D Picture Balance	Adjusts the colour and brightness difference between the right and left sides of the picture in 3D mode.

Set Video.

Control the menu option (Refer to “PICTURE Settings” on page 92).

Set Audio.

Control the menu option (Refer to “AUDIO Settings” on page 99).

CAUTION

- Some menus may not work while viewing 3D imaging.
- The 3D imaging is disabled automatically when switching input source.
- The screen may not be displayed properly if you view 2D DTV images in 3D imaging mode.
- 3D effect can be seen when 3D Mode is selected appropriately for the 3D input signal supplied to the TV.
- For *mpo files (3D camera files), the 3D imaging mode is enabled automatically.
- To enable the 3D imaging mode, you can also press the **OK** button on the Magic Motion remote control.

NOTE

- If you select 3D mode, “Power indicator” is turned off automatically.
- You can only choose “**Standard** or **Cinema**” with the **AV MODE** button on the remote control. AV Mode is set as Standard while playing in 3D.
- Energy Saving is disabled while playing in 3D.

CUSTOMIZING TV SETTINGS

Accessing SETUP Menu

1 Press **HOME** to access the Home menu.

2 Press the Navigation buttons to select the **SETUP** menu and press **OK**.

3 Press the Navigation buttons to scroll to one of the following menus and press **OK**.

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

5 When you are finished, press **EXIT**.

Menu		Description
	SETUP	Sets up and edit programmes.
	PICTURE	Adjusts the image size, quality, or effect.
	AUDIO	Adjusts the sound quality, effect, or volume level.
	TIME	Sets the time, date, or timer feature.
	LOCK	Locks or unlocks channels and programmes.
	OPTON	Customizes the general settings.
	NETWORK	Sets up the network setting.
	SUPPORT	Checks the customer information.

Customizing settings

SETUP settings

- Image shown may differ from your TV.

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available programme settings are described in the following:

Setting	Description
Auto Tuning	Tunes and stores all available programmes through antennas or cable inputs (See p. 34).
Manual Tuning	Tunes and stores the programmes you want manually (See p.35).
Programme Edit	Adds or deletes pregrammes on the programmes (See p. 38).
Satellite DTV Setting (Only Satellite models)	Sets various options for viewing satellite DTV. (See p. 35).

ENGLISH

PICTURE settings

1 Press **HOME** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **PICTURE** and press **OK**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

- Image shown may differ from your TV.

The available picture settings are described in the following.

Setting	Description	
Aspect Ratio	Changes the image size to view images at its optimal size (See p.40).	
Picture Wizard (Only LED LCD TV / LCD TV)	Adjusts the image quality and calibrates the screen by following the on-screen instructions. The customized options will be saved as **Expert1** in the **Picture Mode**.	
	Standard	Mode to set standard picture quality. (Black Level, White Level, Tint, Colour, Horizontal Sharpness, Vertical Sharpness, **Backlight**(Only LCD TV/LED LCD TV))
	Preferred	Mode to set user preferred picture quality rather than standard picture. (Black Level, White Level, Tint, Colour, Sharpness, Dynamic Contrast, Colour Temperature, **Backlight**(Only LCD TV/LED LCD TV))
	NOTE • If you stop the setting before the final stage, the changes will not be applied. • If you use **Picture Wizard**, the Energy saving feature will turn off automatically. • To reset changes made by **Picture Wizard**, operate **Picture Reset** when Picture Mode is on **Expert1**. • In RGB-PC/HDMI-PC/DVI-PC mode, the changed **Colour, Tint** and **H/V Sharpness** values are not applied.	
Set 3D Video (Only 3D models)	Sets the 3D imaging option. (See p. 86)	

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Setting	Description	
Energy Saving	Reduces the power consumption by adjusting the screen brightness.	
	Option	
	Auto (Only LCD TV/LED LCD TV)	*This feature is not available for all models. The backlight is adjusted automatically corresponding to the surroundings when selecting **Auto** using the **Intelligent sensor** feature.
	Intelligent sensor (Only Plasma TV)	*This feature is not available for all models. The backlight is adjusted automatically corresponding to the surroundings.
	Off	The Energy Saving is off.
	Minimum/Medium/Maximum	Selects the brightness level.
	Screen off (Only LCD TV/LED LCD TV)	The screen turns off in 3 seconds.
	NOTE • When adjusting **Energy Saving** in MHEG mode, the **Energy Saving** setting is applied after MHEG is finished. • Selecting '**Screen Off**' while tuned to a radio station channel will reduce power consumption. • If you adjust "**Energy Saving**-**Auto, Maximum**", **Backlight** feature will not work. • If you adjust "**Energy Saving**-**Intelligent Sensor**", **Sharpness, Colour, Colour Temperature** feature will not work. • You can also adjust this feature by selecting **Energy Saving** button on the remote control.	

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Setting	Description	
Picture Mode	Selects one of the preset image or customizes options in each mode for the best TV screen performance. You are also able to customize advanced options of each mode. The available preset picture modes vary depending on the TV.	
	Mode	
	Intelligent sensor (Only LCD TV/ LED LCD TV)	*This feature is not available for all models. Adjusts picture according to the surrounding conditions.
	Vivid	Adjusts the video image for the retail environment by enhancing the contrast, brightness, colour, and sharpness.
	Standard	Adjusts the image for the normal environment.
	APS (Only Plasma TV)	Optimizes power consumption.
	Cinema (Only LED LCD TV/LCD TV)	Optimizes the video image for a cinematic look to enjoy movies as if you are in a movie theater.
	THX **Cinema** (Only Plasma TV)	Provides the experience of watching a movie at home. The user will be able enjoy the best level of satisfactory screen quality in any movie without any separate adjustments. THX Cinema express the optimal screen quality when it is darkest. When selecting it, **Aspect Ratio** changes to **Just Scan**.
	THX **Bright Room** (Only Plasma TV)	Optimizes TV viewing in Bright Room. When selecting it, As pect ratio changes to Just scan.
	Sport (Only Plasma TV)	Optimizes the video image for high and dynamic actions by emphasizing primary colours such as white, grass, or sky blue.
	Game	Optimizes the video image for a fast gaming screen such as PCs or games.
	Expert	Adjusts the detailed video image settings for video experts as well as general viewers.

NOTE

- **Picture Mode** adjusts the TV for the best picture appearance. Select the preset value in the **Picture Mode** menu based on the programme category.
- When the Intelligent sensor function is on, the most suitable picture is automatically adjusted according to the surrounding conditions.
- You can also adjust **Picture Mode** in the **Q. Menu**.
- **Intelligent Sensor** : Adjusts picture according to the surrounding conditions.
- APS (Auto Power Saving) : Maximize reducting the power consumption without hurting the picture quality. (Only Plasma TV)
- If you adjust "**Picture Mode**-THX **Cinema**, THX **Bright Room**", "**Energy Saving**-**Intelligent Sensor**, **Minimum**, **Medium**, **Maximum**" feature will not work. (Only Plasma TV)
- If you adjust "**Picture Mode**- APS ", "**Energy Saving**-**Off**, **Minimum**, **Medium**, **Maximum**" feature will not work. (Only Plasma TV)

» THX **Cinema** (Only Plasma TV) :This is cinema quality mode to provide you the experience of watching a movie at home.The user will be able enjoy the best level of satisfactory screen quality in any movie without any separate adjustments.Cinema expresses the optimal screen quality when it is darkest. When selecting THX **Cinema**, THX **Bright Room** Aspect ratio changes to Just scan.

» THX **Cinema**(Thomlinson Holman 's Experiment)is the audio and video certification standard of THX established by George Lucas,who directed the movie Star Wars,and Thomlinson. This is the product to be certified in THX display area and guarantees screen quality that exceeds the display standard specification in both hardware and software.

ENGLISH

Setting	Description		
TruMotion (Only LCD TV/LED LCD TV)	*This feature is not available for all models. Advance video technology that provides clearer, smoother images, even during fast action scenes creating a more stable structure for a crisper picture. TruMotion works with all inputs except PC mode. **NOTE** • If you enable "**TruMotion**", noise may appear on the screen. If this occurs, set "**TruMotion**" to "**Off**". • If you select "**Picture Mode**-**Game** ", set "**TruMotion**" to "**Off**". • This feature is disable in RGB-PC, HDMI-PC and **MY MEDIA**-**Photo List** mode.		
	Mode		
	High	Provides smoother picture movement.	
	Low	Provides smooth picture movement. Use this setting for standard use.	
	Off	Turn off TruMotion operation.	
	User	User can adjust Judder and Blur level in TruMotion Operation, separately.	
		De-Judder	Adjusts noise of the screen.
		De-Blur	Adjusts after-image of the screen.
SCREEN	Customizes the PC display options.		
	Option		
	Resolution	Selects a proper resolution when your PC uses.	
	Auto Configure	Sets the TV to optimize the options automatically for the TV display.	
	Position	Locates the image at the proper position.	
	Size	Adjusts the image size.	
	Phase	Eliminates horizontal streaking.	
	Reset	Restores the options to the default setting.	
LED Local Dimming (Only LED LCD TV)	*This feature is not available for all models. After analyzing the signal of the input video by areas of the screen, it adjusts the backlight to improve the contrast ratio.		

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Basic image options

Setting	Description
Backlight (LCD TV/LED LCD TV only)	Adjusts the brightness of the screen by controlling the LCD backlight. If you decrease the brightness level, the screen becomes darker and the power consumption will be reduced without any video signal loss. **NOTE** • If you use the "**Energy saving** - Auto, **Minimum**, **Medium**", **Backlight** will be available. • Benefits of using Backlight » - The electricity consumption is reduced by up to 60 %. » - The black brightness is reduced. (As the black has greater depth, you can enjoy a better quality definition.) » - You can adjust brightness with maintaining original signal resolution.
Contrast	Increases or decreases the gradient of the video signal. You may use **Contrast** when the bright part of the picture is saturated.
Brightness	Adjusts the base level of the signal in the picture.
Sharpness	Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.
Colour	Adjusts intensity of all colours.
Tint	Adjusts the balance between red and green levels.
Colour Temp.	Set to warm to enhance hotter colours such as red, or set to cool to enhance cooler colours such as blue.
Advanced Control or Expert Control	Customizes the advanced options
Picture Reset	Restores the options of each mode to the factory default

Advanced image options (Depending on model)

Setting	Description
Dynamic Contrast	Adjusts the contrast to keep it at the best level according to the brightness of the screen. The picture is improved by making bright parts brighter and dark parts darker.
Dynamic Colour	Adjusts screen colours so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue and green white look more vivid.
Clear White	Make the white area of screen brighter and more white.
Skin Colour	It detects the skin area of video and adjusts it to express a natural skin colour.
Noise Reduction	Reduces screen noise without compromising video quality.
Digital Noise Reduction	Reduces noise regarding MPEG compressed video.
Super Resolution	This function provides a crystal-clear picture by improving the details in an area that has a blurry or unclear picture.
MPEG Noise Reduction	Reduces noise regarding MPEG compressed video.
Gamma	You can adjust brightness of dark area and middle gray level area of the picture. » Low: Make the dark and middle gray level areas brighter. » Medium: Express the original picture level. » High: Make the dark and middle gray level area darker.
Black Level	Sets black level of the screen to proper level. This function is available in the following modes: AV (NTSC-M), HDMI or Component. » Low: The reflection of the screen gets darker. » High: The reflection of the screen gets brighter.
Eye Care	Adjusts the brightness of the screen to prevent the screen from being too bright. Dims extremely bright pictures. This feature is disable in “Picture Mode-Vivid, Cinema, Expert1, Expert2, Intelligent Sensor”.
Film Mode or **Real Cinema**	Makes video clips recorded in film look more natural by eliminating judder effect. Uses this function when you watch film-originated movie contents. This function can also work when TruMotion is off.
Colour Gamut	**Advanced Control** Maximizess the utilization of colour to increase colour quality. » Standard: Displays standard set of colours. » Wide: Increase number of colours used.
	Expert Control Displays colour domain of the signal. » Standard: Displays standard set of colours. » Wide: Increase number of colours used. » EBU: Mode to display EBU standard colour area. » SMPTE: Mode to display SMPTE standard colour area. » BT709: Mode to display BT709 standard colour area.
Edge Enhancer	Shows clearer and distinctive yet natural edges of the video.
xvYCC	This is produces richer colours. This feature represents rich colours as much as a conventional video signal. This function is enabled in “Picture mode - Cinema, Expert” when xvYCC signal is inputted through HDMI.
Colour Filter	This is the function to filter the specific colours of the video. You can use the RGB filter to set colour saturation and hue accurately.
Expert Pattern	This is the pattern used for expert adjustment This function is enabled in “Picture Mode - Expert” when you watch DTV.

Advanced image options (Depending on model)

Setting	Description		
Colour Temperature	Adjusts the overall colour of the screen by changing the white baseline.		
	Plasma TV	a. Method : 2 Points • Pattern: Inner, Outer • Red/Green/Blue Contrast, Red/Green/Blue Brightness: The adjustment range is -50 to +50.	b. Method : 20 Point IRE • IRE (Institute of Radio Engineers) is the unit to display the size of the video signal and can be set among 5, 10, 15 - 100 Plasma TV. You can adjust Red, Green or Blue according to each setting. • Red/Green/Blue: The adjustment range is -50 - +50. c. Apply to all inputs
	LED LCD TV / LCD TV		b. Method : 10 Point IRE • Pattern: Inner, Outer • IRE (Institute of Radio Engineers) is the unit to display the size of the video signal and can be set among 10, 20, 30 - 100. You can adjust Red, Green or Blue according to each setting. • Luminance: This function displays calculated luminance value for 2.2 gamma. You can input luminance value you want at 100 IRE, than the target luminance value for 2.2 gamma is displayed at every 10 steps from 10 IRE to 90 IRE. • Red/Green/Blue: The adjustment range is -50 - +50. c. Apply to all inputs
Colour Manage System	As the tool used by the experts to make adjustments by using the test patterns, this does not affect other colours but can be used to selectively adjust the 6 colour areas (Red/Green/Blue/Yellow/Cyan/Magenta). Colour difference may not be distinctive even when you make the adjustments for the general video. Adjusts Red/Green/Blue/Yellow/Cyan, Magenta. • Red/Green/Blue/Yellow/Cyan, Magenta Colour: The adjustment range is -30 - +30. • Red/Green/Blue/Yellow/Cyan, Magenta Tint: The adjustment range is -30 - +30. This feature is disable in RGB-PC and HDMI-PC mode.		

- Image shown may differ from your TV.

AUDIO settings

1 Press **HOME** to access the Home menu.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **AUDIO** and press **OK**.

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

- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available audio settings are described in the following.

Setting	Description	
Auto Volume	Activates the Auto Volume feature to keep the volume level consistent whenever you change channels. The volume level may not be consistent due to different signal conditions of broadcasting stations.	
Clear Voice Ⅱ	Sets whether to enhance human voice clarity. You can adjust the level of clarity when you set this feature on. **NOTE** • If you select "**On**" for **Clear Voice II**, **Infinite 3D Sound** feature will not work. • Select levels from '-6' to '+6'.	
Balance	Adjust balance between the left and right speakers according to your room environment.	
Sound Mode	Selects one of the preset sound modes or customizes options in each mode.	
	Mode	
	Standard	Select when you want standard-quality sound.
	Music	Select when you listen to music.
	Cinema	Select when you watch movies.
	Sport	Select when you watch sports events.
	Game	Select when you play games.
	NOTE • You can also adjust **Sound Mode** in the **Q.Menu**.	
	Option	
	Infinite 3D Surround	Patents LG proprietary sound processing technology that strives immersive 5.1 surround sound with just two front speakers.
	Treble	Controls the dominant sounds in the output. When you turn up the treble, it will increase the output to the higher frequency range.
	Bass	Controls the softer sounds in the output. When you turn up the bass, it will increase the output to the lower frequency range.
	Sound Reset	Resets the sound mode to the default setting.

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Setting	Description		
Sound Optimizer	This function optimizes the sound depending on the environment in which the TV is installed.		
	Option		
	Normal	Normal sound mode.	
	Wall Mount Type	Optimized sound mode for a wall-mounted TV.	
	Stand Type	Optimized sound mode for a stand-type TV.	
Digital Audio Out	It is possible to use in DTV, HDMI, DivX mode. This function allows you to select your preferred Digital Audio Output. When Dolby Digital is available, selecting Auto in the Digital Audio Out menu will set SPDIF(Sony Philips Digital InterFace) output to Dolby Digital. If Auto is selected in the digital audio out menu when Dolby Digital is not available, SPDIF output will be PCM(Pulse-code modulation). Even if both Dolby Digital and Audio language have been set in a channel which broadcast Dolby Digital Audio, only Dolby Digital will be played.		
	Item	**Audio Input**	**Digital Audio output**
	Auto	MPEG Dolby Digital Dolby Digital Plus HE-AAC	PCM Dolby Digital Dolby Digital Dolby Digital
	PCM	All	PCM
TV Speaker	Turns on the internal speaker of the TV when using an external Hi-Fi system. You can use the TV speaker as an audio output device even if there is no video input. **NOTE** • When the **TV speaker** is turned off while the Simplink home theater is operating, the sound output automatically switches to the Home theater speaker, but when the **TV speaker** is turned on, the sound output the **TV speaker**. • Some menus in **AUDIO** are disabled when **TV speaker** is set to **Off**.		
ARC Mode (Audio Return Channel)	When using an external audio device with the Audio Return Channel (ARC) feature, optical SPDIF can be output using only a High Speed HDMI cable without an additional optical cable, and SIMPLINK can be enabled. **NOTE** • Some HDMI cables may not support this mode. (A High Speed HDMI cable is recommended.) • The **ARC** mode only works for HDMI 1.		
	Mode		
	On	If the device with the ARC feature is turned on, the device speaker is automatically used when SIMPLINK is enabled.	
	Off	Even if the device with the ARC feature is turned on and SIMPLINK is enabled, the device speaker is not automatically used.	

Setting	Description	
DTV Audio Setting (In digital mode only)	When different audio types exist in an input signal, this function allows you to select the audio type you want.	
	Mode	
	Auto	Automatically outputs in the order **HE-AAC** > **Dolby Digital+** > **Dolby Digital** > **MPEG**.
	HE-AAC, Dolby Digital+, Dolby Digital, MPEG	Allows users to select the audio type they want. ex) If **MPEG** is selected, **MPEG** is always outputted. If **MPEG** is not supported, another audio type is set in that order.
AV Sync	If the video and sound are not synced, you can adjust it manually. - : Make audio output faster than the default. +: Make audio output slower than the default.	
	Option	
	AV Sync.	Adjusts the sync between the TV speaker and SPDIF.
	TV Speaker	Adjusts the sync of the sound from the TV's internal speaker.
	SPDIF (Sony Philips Digital InterFace)	Adjusts the sync of the sound from an external speaker connected to the digital audio output port.

Stereo/Dual Reception (In Analogue Mode Only)

When a programme is selected, the sound information for the station appears with the programme number and station name.

1 Press **Q. MENU.**

2 Press the Navigation to access the **Audio** or **Audio Language** and press **OK**.

3 Press the Navigation button to scroll to sound output and press **OK**.

Broadcast	On Screen Display
Mono **Stereo** **Dual (Except for Singapore, New Zealand and Indonesia)**	MONO STEREO DUAL I , DUAL II , DUAL I + II (Except for Singapore, New Zealand and Indonesia)
NICAM (Only Singapore, New Zealand and Indonesia)	NICAM (Only Singapore, New Zealand and Indonesia)

- **Mono sound selection**
  If the stereo signal is weak in stereo reception, you can switch to mono. In mono reception, the clarityof sound is improved.

- **Language selection for dual language broadcast (Except for Singapore, New Zealand and Indonesia)**
  If a programme can be received in two languages (dual language), you can switch to DUAL I, DUAL II or DUAL I+II.

DUAL I Sends the primary broadcast language to the loudspeakers.
DUAL I I Sends the secondary broadcast language to the loudspeakers.
DUAL I+I I Sends a separate language to each loudspeaker.

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Nicam Reception (In Analogue Mode Only)

(Except for Singapore, New Zealand and Indonesia)
If the TV is equipped with a receiver for NICAM reception, high quality NICAM (Near Instantaneous Companding Audio Multiplex) digital sound can be received.
Sound output can be selected according to the type of broadcast received.

1 When **NICAM** mono is received, you can select **NICAM MONO** or **FM MONO**.

2 When **NICAM** stereo is received, you can select **NICAM STEREO** or **FM MONO**.
If the stereo signal is weak, switch to **FM MONO**.

3 When **NICAM** dual is received, you can select **NICAM DUAL I**, **NICAM DUAL II** or **NICAM DUAL I+II** or **FM MONO**.

Speaker Sound Output Selection

In AV, Component, RGB and HDMI mode, you can select output sound for the left and right loudspeakers.
Select the sound output.

L+R: Audio signal from audio L input is sent to the left loudspeaker and audio signal from audio R input is sent to the right loudspeaker.
L+L: Audio signal from audio L input is sent to left and right loudspeakers.
R+R: Audio signal from audio R input is sent to left and right loudspeakers.

TIME settings

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **TIME** and press **OK**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available time settings are described in the following

Setting	Description
Clock	Sets the time, date, time zone and daylight-saving time feature. The time will be set automatically according to a digital channel signal which includes time information provided by the broadcasting station. If not, set the time and date manually. **Time Zone** is enabled only in Australia, Indonesia and Israel only. **NOTE** • < Only Australia > When you select a **Time Zone** city, the TV time is set by the time offset information based on **Time Zone** and GMT (Greenwich Mean Time) which is received with the broadcast signal and the time is set automatically by a digital signal. • <Only Indonesia, Israel> GMT (Greenwich Mean Time) which is received with the broadcast signal and the time is set automatically by a digital signal. • When if the city name in **Time Zone** is changed into offset, you can change time by 1 hour. • **Time Zone** menu can be changed in Auto mode.
Off Time/On Time	Sets the time to turn on or off the TV automatically. To use this function, you should set the current time and date in advance. **NOTE** • If you do not press any button within 2 hours after the TV turns on by the On Time feature, the TV enters the Standby mode automatically. • If you set both Off time and On time features to the same time, the Off time feature overrides the On time feature.
Sleep Timer	Sets the length of time until the TV to turns off. When you turn the TV off and turn it on again, the Sleep timer faature will be set to off.

ENGLISH

LOCK settings

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **LOCK** and press **OK**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available lock settings are described in the following.

Setting	Description
Set Password	Changes the 4-digit password. The default PIN is ‘0’,‘0’,‘0’,‘0’. If you forget your password, press ‘0’, ‘3’,‘2’, ‘5’ on the remote control handset.
Lock System	Activates or deactivates the lock system.
Block Programme	Blocks the programmes that contain inappropriate contents for children. The programmes can be selected but the screen blank and the audio is muted. To watch a locked programme, enter the password. It is available to use this function in **Lock System** ”**On**”.
Parental Guidance	This function operates according to information from the broadcasting station. Therefore if the signal has incorrect information, this function does not operate. A password is required to gain access to this menu. This set is programmed to remember which option it was last set to even if you switch the set off. Prevents children from watching certain adult’s TV programmes, according to the ratings limit set. Enter a password to watch a blocked programme. Rating differs by country.
Input Block	Block the input sources. It is available to use this function in **Lock System** ”**On**”.

OPTION settings

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **OPTION** and press **OK**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available general settings are described in the following:

- Image shown may differ from your TV.

ENGLISH

Setting	Description		
Language	Selects a language for the display or audio.		
	Option		
	In Analogue mode only	**Menu Language**	Select your desired language.(Except for Australia, New Zealand, Singapore and South Africa.)
	In Digital mode only	**Audio Language**	The Audio function allows selection of a preferred language. If audio data in a selected language is not broadcast, the default language audio will be played. **Audio Language OSD Information** Display / Status N.A / Not Available MPEG / MPEG Audio D / Dolby Digital Audio Audio for “Visual Impaired” ABC / Audio for “Hearing Impaired” D+ / Dolby Digital Plus Audio HE-AAC / HE-AAC Audio
		Subtitle Language	Use the Subtitle function when two or more subtitle languages are broadcast. If subtitle data in a selected language is not broadcast, the default language subtitle will be displayed. **Subtitle Language OSD Information** Display / Status N.A / Not Available TXT / Teletext Subtitle ABC / Subtitle for “Hard of Hearing”
		Text Language	In Digital mode, use the Text language function when two or more Text languages are broadcast. If teletext data in a selected language is not broadcast, the default Text language will be displayed. If you select the wrong local country, teletext may not appear correctly on the screen and some problems may occur during teletext operation.
		NOTE • When the languages you selected as the primary for Audio Language and Subtitle Language and Text Language are not supported, you can select language in secondary category (Only New Zealand). • The audio/subtitles can be displayed in a simpler form with 1 to 3 characters broadcast by the service provider. • When you select supplementary Audio (Audio for “Visual/Hearing Impaired”) the TV may output a part of the Main audio.	

ENGLISH

Setting	Description	
Country (Only Australia & New Zealand)	Selects a desired country.	
**Hard of Hearing ( ) ** (In Digital mode only)	This function is for the blind, and provides explanatory audio describing the current situation in a TV programme in addition to the basic audio. - It is only available to use Hard of Hearing on some TV stations in New Zealand.	
Power Indicator (Only LED LCD TV)	Sets to turn on or off the indicator light on the TV. If you select 3D mode, **Power indicator** is turned off automatically.	
	Option	
	Standby Light	Set to turn on or off the indicator light in Standby mode.
	Power Light	Set to turn on or off the indicator light when you turn on the power.
ISM Methdo (Only Plasma TV)	A frozen or still picture displayed on the screen for prolonged periods will result in a ghost image remaining even when you change the image. Avoid allowing a fixed image to remain on the screen for prolonged periods.	
	Option	
	Normal	
	Orbiter	Orbiter may help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the screen will move every 2 minutes.
	Colour Wash	The colour block with the screen moved a little and the white pattern are alternately displayed. It is difficult to sense the afterimage occurred while the temporary afterimage is removed and the colour pattern is operating.
	White Wash	White wash removes permanent images from the screen. Note: An excessive permanent image may be impossible to clear entirely with White Wash.
Pointer (Depending on model)	Sets the pointer option of the Motion remote control.	
	Option	
	Speed	Changes the pointer speed.
	Shape	Selects the pointer shape.
	Size	Changes the pointer size.
	Alignment	Align the remote control's direction with the pointer on your TV screen by shaking the remote control left and right. Then, the pointer automatically moves to the center of the screen.
My Media Setting (DivX/DLNA)	Sets the DivX and DLNA option.	
	Option	
	DivX VOD Registra-tion	Registers your TV to play DivX protected videos. (See p. 66)
	DivX Deregistration	Deactivates your TV. (See p. 66)
	DMR	Requires you to download and play DRM-certified files using the DivX registration code. **NOTE** • What is DRM (Digital Rights Management)? • DRM refers to the technologies or processes that describe and identify digital content protected by intellectual property rights and which enforce usage rules set by copyright holders. You can only play licensed files using online authentication and other methods.

ENGLISH

Setting	Description	
Data Service (This menu is enabled only in South Africa, Malaysia.)	This function allow users to choose between MHEG (Digital Teletext) and Teletext if both exist at the same time. If only one of them exists, either MHEG or Teletext is enabled regardless of which option you selected.	
Factory Reset	Resets the TV to factory default and erases all stored programmes. Customizes the TV settings to suit your preference. The factory reset screen will appear when you turn on the TV for the first time. **NOTE** • In **Lock System "On"**, if you forget your password, press '0', '3', '2', '5' on the remote control handset.	
Set ID	Adds an ID to the connected devices	
Mode Setting	Default selection is "Home Use". We recommend setting the TV to "Home Use" mode for the best picture in your home environment.	
	Option	
	Home Use	Selects it for the home environment.
	Store Demo	Selects it for the retail environment.
	Demo Mode	Sets to show special features of the TV. You can cancel the demo mode by pressing any buttons except the Volume and Mute buttons. **NOTE** • It is not possible to use **Demo Mode** in **Home Use** mode. • In **Store Demo, Demo Mode** is automatically set to **On**. • Once **Demo Mode** is set to **Off** in **Store Demo**, **Demo Mode** does not run and only the screen is reset. • The screen is reset automatically after 5 minutes in **Demo Mode**.
IR Blaster (Depending on model)	Adjusts when connecting Wireless media box (sold seperate). For futher information, refer to the optional "Wireless media box" manual for operating inssturctions.	

ENGLISH

NETWORK settings

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **NETWORK** and press **OK**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available network settings are described in the following.

Setting	Description
Network Setting	Configure the network settings (See p.44).
Network Status	Display the network status (See p.50).
Netcast	Stream movies, TV shows and video, or get up to the minute news, stock information or weather updates directly to your TV.
Legal Notice	Display the Legal notice.(See p.52).

SUPPORT settings

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SUPPORT** and press **OK**.

4 Press the Navigation buttons to scroll to the setting or option you want and press **OK**.
- To return to the previous level, press **BACK**.

5 When you are finished, press **EXIT**.

The available support settings are described in the following.

Setting	Description
Software Update	Update the TV with the latest firmware.
Picture Test	Executes picture or built-in melody sound tests. » If this test has an error, select Yes. You can see the product or service information. » If this test has no errors, check the connection status of external devices and refer to the manual of external devices.
Sound Test	
Signal Test	Views information on the Manufacturer, Model/Type, Serial Number and Software Version. **NOTE** • This displays the information and signal strength of the tuned *MUX. • This displays the signal information and service name of the selected MUX.(*MUX: A higher directory of channels in digital broadcasting (a single MUX contains multiple channels.)) • If you select **Satellite** as the auto tuning input source, a signal test is not displayed.
Product/Service Info.	Shows the product or service information. Customer Service Center can differ by country.

ENGLISH

MAKING CONNECTIONS

Connect various external devices to the TV and switch input modes to select an external device. For more information of external device's connection, refer to the manual provided 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 programme 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 of recording, refer to the manual provided 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.

Connect external devices to the TV by referring to the following table.

Connection type	Video		Audio	
	Digital	Analog	Digital	Analog
HDMI (highly recommended)	O	-	O	-
DVI	O	-	-	-
Component	-	O	-	-
Composite	-	O	-	-
RGB	-	O	-	-
Optical audio	-	-	O	-

Connection overview

Connect various external devices to the ports on the TV back panel.

1 Find an external device you want to connect to your TV as shown on the following illustration.

2 Check the connection type of the external device.

3 Go to the appropriate illustration and check the connection details.

ENGLISH

NOTE

- If you connect a gaming device to the TV, use the cable supplied with the gaming device.
- Refer to the external equipment's manual for operating instructions.

- This section on **MAKING CONNECTIONS** mainly uses diagrams for the 47/55LW95** models.
- Image shown may differ from your TV.

Connecting to a HD receiver, DVD, or VCR player

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

HDMI connection

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 in the following illustration.

NOTE

- The TV can receive video and audio signals simultaneously when using an HDMI cable.
- If the DVD does not support Auto HDMI, you must set the output resolution appropriately.
- Check that your HDMI cable is High Speed HDMI Cable. If the HDMI cables are not High Speed HDMI Cable, flickering or no screen display can result. Please use the High Speed HDMI Cable.

DVI to HDMI connection

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

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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 in the following illustration. To transmit an audio signal, connect an optional audio cable.

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 in the following illustration.

NOTE

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

NOTE

- If you have a mono VCR, connect the audio cable from the VCR to the AUDIO L/MONO jack of the TV.

ENGLISH

Connecting to a PC

This TV set supports the Plug & Play* feature.

* 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.

Connect the TV according to your PC by referring to the following table.

	HDMI (highly recommended)	RGB
Video	O (Digital)	O (Analog)
Audio	O (Digital)	X

NOTE

- It is recommended to use the TV set with the HDMI connection for the best image quality.

HDMI connection

Transmits the digital video and audio signals from your PC to the TV. Connect the PC and the TVwith the HDMI cable as shown in the following illustrations.

ENGLISH

DVI to HDMI connection

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

RGB Connection

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

ENGLISH

NOTE

- 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.
- We recommend using 1920x1080, 60 Hz for the PC mode, this should provide the best picture quality.
- Connect the signal cable from the monitor 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 IN (or 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 IN (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, there may beinterference on the screen. We recommend using under 5m of cable. This provides the best picture quality.
- You can connect the Gaming device and the TV with the supplied D-sub 15 pin signal cable. (Only Xbox 360)

Connecting to an audio system

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

NOTE

- If you use an external audio device instead of the built-in speaker, set the TV speaker feature to off (See p.100).

Digital optical audio connection

Transmits the digital audio signal from the TV to an external device. Connect the external device and the TV with the optical audio cable as shown in the following illustration.

CAUTION

- Do not look into the optical output port. Looking at the laser beam may damage your vision.

Headphone connection

Transmits the headphone signal from the TV to an external device. Connect the external device and 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 Ω
- Max audio output of headphone: 10 mW to 15 mW
- Headphone jack size: 0.32 cm

ENGLISH

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 My media menu to use various multimedia files. See “Connecting USB storage devices” on p.56 and see “Browsing files” on p.62

Connecting to an External Equipment Wireless

LG TVs with a Wireless Control port support the LG Wireless Media Box, which is sold separately. When you connect the Wireless Ready Dongle (included with the Wireless Media Box) to the TV, external devices can be connected to the LG Wireless Media Box and video and audio will be sent to the TV wirelessly.

NOTE

- When using the external device connected to the Wireless Media Box, some functions of the TV menu may not work.

SIMPLINK connection

Use the TV remote control to play and control the AV device connected with the HDMI cable through HDMI-CEC. Your TV only works with the devices that support HDMI-CEC.

Connect one end of the HDMI cable to the HDMI/DVI IN or HDMI IN terminal on the rear of the TV and the other end to the SIMPLINK device.

In wireless external output, SIMPLINK function is not supported.

NOTE

- If the connected device does not support HDMI-CEC, the SIMPLINK feature is unavailable.
- To operate SIMPLINK, an High Speed HDMI Cable with *CEC function should be used. (*CEC: Consumer Electronics Control).

ENGLISH

Activating and Using the SIMPLINK menus

1 Press **SIMPINK** to access the SIMPLINK menus.

2 Press the Navigation buttons to scroll to **On**.

3 Press the Navigation buttons to scroll to one of the devices and press **OK**.

No.	Description
1	Displays the previously viewed TV channel.
2	Plays discs. When multiple discs are available, the title of the disc appears at the bottom of the screen.
3	Controls the connected VCR.
4	HDD recordings playback: Controls the recording stored in HDD.
5	Audio out to home theater speaker or Audio out to TV: Changes the audio output between Home theater speaker and TV speaker.

- A check mark appears in front of the selected device.
- Available devices display in a bright colour.
- Unavailable devices display in grey.

3 Control the selected AV device.
- **Direct Play**: After connecting AV devices to the TV, you can directly control the devices and play media without additional settings.
- **Select AV device**: Enables you to select one of the AV devices connected to the TV.
- **Disc playback**: Control connected AV devices by pressing the Navigation buttons, **OK**, ▶, ■, I I, ◀◀ and ▶▶ buttons.
- **Power off all devices**: When you power off the TV, all connected devices are turned off.
- **Switch audio-out**: Offers an easy way to switch audio-out.
- **Sync Power on**: When the equipment with SIMPLINK function connected HDMI terminal starts to play, The TV will automatically turn on.

NOTE

- If you change the input source by pressing **INPUT**, the progressing function of the SIMPLINK device will stop.
- If you select a device that has the home theater feature, the sound output automatically switches to the home theater speaker and the TV speaker turns off.
- If a connected SIMPLINK home theater system does not play the audio from the TV, connect the DIGITAL AUDIO OUT terminal on the rear of the TV to the DIGITAL AUDIO IN terminal on the back of the SIMPLINK device with an optical cable.

ENGLISH

TELETEXT

- This feature is not available in all countries.

Teletext is a free service broadcast by most TV stations which gives up-to-the-minute information on news, weather, television programmes, share prices and many other topics.

The teletext decoder of this TV can support the SIMPLE, TOP and FASTEXT systems. SIMPLE (standard teletext) consists of a number of pages which are selected by directly entering the corresponding page number. TOP and FASTEXT are more modern methods allowing quick and easy selection of teletext information.

Switch On/Off

Press the **TEXT** button to switch to teletext. The initial page or last page viewed appears on the screen.
Two page numbers, TV station name, date and time are displayed on the screen headline. The first page number indicates your selection, while the second shows the current page displayed.
Press the **TEXT** button to switch off teletext. The previous mode reappears.

Simple Text

Page selection

1 Enter the desired page number as a three digit number with the NUMBER buttons. If during selection you press a wrong number, you must complete the three digit number and then re-enter the correct page number.

2 The **P** ∧ ∨ button can be used to select the preceding or following page.

Top Text

The user guide displays four fields-red, green, yellow and blue at the bottom of the screen. The yellow field denotes the next group and the blue field indicates the next block.

Block / Group / Page Selection

1 With the blue button you can progress from block to block.

2 Use the yellow button to proceed to the next group with automatic overflow to the next block.

3 With the green button you can proceed to the next existing page with automatic overflow to the next group.

4 Alternatively, the **P** ∧ button can be used. The red button returns to the previous selection. Alternatively the **P** ∨ button can be used.

Direct Page Selection

As with SIMPLE teletext mode, you can select a page by entering it as a three digit number using the NUMBER buttons in TOP mode.

Fastext

The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button.

Page selection

1 Press the **T.OPT** button and then use the Navigation button to select menu. Display the index page.

2 You can select the pages which are colour coded along the bottom line with corresponding coloured buttons.

3 AS with SIMPLE teletext mode, you can select a page by entering its three digit page number with the NUMBER buttons in FASTEXT mode.

4 The **P** ∧ ∨ button can be used to select the preceding or following page.

Special Teletext Function

Press the **T. OPT** button and then use the Navigation button to select the **Text Option** menu.

Index

Select the each index page.

Time

When viewing a TV programme, select this menu to display the time at the top right hand corner of the screen.
In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the RED/GREEN,< > or NUMBER buttons.

Hold

Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages. The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this menu is selected the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inactive.

Reveal

Select this menu to display concealed information, such as solutions to riddles or puzzles.

Update

Displays the TV picture on the screen while waiting for a new teletext page. The display will appear at the top left hand corner of the screen. When the updated page is available then display will change to the page number. Select this menu again to view the updated teletext page.

MAINTENANCE

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

Updating the TV firmware

Download and install the latest firmware by connecting to the firmware update server to enhance or change the product function, or add new features.
The firmware update may not work properly depending on the Internet environment. If so, you may obtain the latest firmware update from the authorized LG Electronics service center.

To check the current firmware version or update the firmware,

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **SUPPORT** and press **OK**.

4 Press the Navigation buttons to scroll to **Software Update** and press **OK**.
The current firmware version displays.

5 Select **Check Update Version** to check a new firmware version manually.

If selecting **Software Update** - **On**, the TV finds a new firmware through the NSU* and the update pop-up window will appear on the screen.
* NSU (Network Software Update): If the TV is connected to the internet, the TV finds a new firmware uploaded on the LG server.

NOTE

- While you are updating the firmware, disconnect the LAN cable, turn the TV off, or unplug the power cord.
- Premium service is disabled while the software is being updated through NSU.

6 When the update is complete, the TV will automatically restart in 5 seconds.
You may need to reset some **SETUP**, **PICTURE**, or **AUDIO** menus.

NOTE

- You cannot downgrade back to an older firmware version.
- The period of time for the firmware update may be different depending on the firmware size, network condition or DTV signal strength.

ENGLISH

Cleaning your TV

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 or light dirt, wipe the surface with a dry, clean, 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 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 as these may damage the screen's finish and cause discolorations.

Cabinet and stand

To remove dust or light dirt, wipe the cabinet with a dry, clean, 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. Then wipe immediately with a dry cloth.

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, 1 or more hours for the Plasma TV) to prevent image burn.

TROUBLESHOOTING

General

Problem	Resolution
Cannot control the TV with the remote control.	• Check the remote control sensor on the product and try again. • Check if there is any obstacle between the product and the remote control. • Check if the batteries are still working and properly installed (⊕ to ⊕, ⊖ to ⊖). • Check if the appropriate input mode such as TV or VCR is set for using the remote control.
No image display and no sound is produced.	• Check if the product is turned on. • Check if the power cord is connected to a wall outlet. • Check if there is a problem in the wall outlet by connecting other products.
Image appears slowly when the TV turns on.	• The image is muted during the product startup process. This is normal. If the image does not appear in a few minutes, unplug the TV for 30 seconds and try again. If the image still does not appear, contact the authorized service center in your local area.
Cannot connect external devices.	• Refer to the “Connection overview” (See p.112) and connect an external device.
The TV turns off suddenly.	• Check the power control settings. The power supply may be interrupted. • Check if the Auto sleep feature is activated in the Time settings. Refer to the “Sleep Timer” (See p.103). • If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.

ENGLISH

Audio

Problem	Resolution
No sound is produced while images are displaying.	• Press ◿ **+** or **-** button. • Check if the sound is muted by pressing **MUTE**. • Scroll to other channels. There may a problem with the broadcast. • Check if the audio cables are connected properly.
One of the speakers produce noises or does not produce sound.	• A change in ambient humidity or temperature may result in an unusual noise when the product turns on or off. • There is no problem with your product.

Video

Problem	Resolution
An image displays in black and white or the colour quality is poor.	• Adjust the colour setting in the Picture menu (See p.92). • Keep a sufficient distance between this product and other electronic products. • Scroll to other channels. There may a problem with the broadcast.
Horizontal or vertical bars appears or images blur	• Check if there are local interferences such as an electrical appliance or power tool.
Lines or streaks appear on images	• Check the antenna or aim the antenna to the proper direction.
Afterimages (ghosts) appear when the product turns off	• Pixels may have been damaged from a fixed image displayed for a long time (image burn). Use a screen saver to prevent the pixel damage on the screen.
The power is on but the screen appears extremely dark.	• Adjust the brightness and contrast in the Picture menu (See p.92).
“No Signal” appears on the screen.	• Check if the signal cable is connected between the TV and products properly. • Check the selected input source by pressing **INPUT**.
Black spots appear on the screen.	• Several pixels in red, green, white, or black may appear on the screen that can attribute to the characteristics of the LCD panel. This is normal.
The display offset is wrong.	• Adjust the position setting in the Picture menu (See p.92). • Check if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution using the display settings on the external device.
Thin lines appear in the background of the screen.	• Check the video cable connections.
Horizontal noises appear or characters blur.	• Adjust the Phase setting in the Picture menu. Refer to the “SCREEN” (See p.95).
The reception on some channels is poor	• Scroll to other channels. There may a problem with the broadcast. • The station signal may be weak. Aim the antenna to the proper direction. • Check if there are local interferences such as an electrical appliance or power tool.

SPECIFICATIONS

MODELS		32LV37**	42LV37**
		32LV3700-TB	42LV3700-TB
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.6 kg	29.6 kg
	Without stand	29.6 kg	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz
MODELS		32LV37**	42LV37**
		32LV370S-TC 32LV373S-TD	42LV370S-TC 42LV373S-TD
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.6 kg	29.6 kg
	Without stand	29.6 kg	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz

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

MODELS		32LV55**	37LV55**
		32LV5500-TA	37LV5500-TA
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.6 kg	29.6 kg
	Without stand	29.6 kg	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz
MODELS		42LV55**	47LV55**
		42LV5500-TA	47LV5500-TA
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.6 kg	29.6 kg
	Without stand	29.6 kg	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz
MODELS		55LV55**	
		55LV5500-TA	
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	
Weight	With stand	29.6 kg	
	Without stand	29.6 kg	
Power requirement		AC 100-240 V~ 50 / 60 Hz	

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

MODELS		42LW57**	47LW57**
		42LW5700-TA	47LW5700-TA
Dimensions (W x H x D)	With stand	999.1 mm x 681.2 mm x 255 mm	1109.2 mm x 743.7 mm x 255 mm
	Without stand	999.1 mm x 622.6 mm x 30.9 mm	1109.2 mm x 684.0 mm x 30.9 mm
Weight	With stand	17 kg	20.2 kg
	Without stand	14.4 kg	17.4 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz
MODELS		42LW65**	47LW65**
		42LW6500-TA 42LW6510-TB	47LW6500-TA 47LW6510-TB
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.6 kg	29.6 kg
	Without stand	29.6 kg	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz
MODELS		55LW65**	
		55LW6500-TA 55LW6510-TB	
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	
Weight	With stand	29.6 kg	
	Without stand	29.6 kg	
Power requirement		AC 100-240 V~ 50 / 60 Hz	

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

MODELS		42LW77**	47LW77**
		42LW7700-TA	47LW7700-TA
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.6 kg	29.6 kg
	Without stand	29.6 kg	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz

MODELS		55LW77**
		55LW7700-TA
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.6 kg
	Without stand	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz

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

MODELS		47LW95**	55LW95**
		47LW9500-TA	55LW9500-TA
Dimensions (W x H x D)	With stand	1095.2 mm x 734.9 mm x 235 mm	1265.0 mm x 831 mm x 284.5 mm
	Without stand	1095.2 mm x 664.7 mm x 26.4 mm	1265.0 mm x 760.25 mm x 26.4 mm
Weight	With stand	22.5 kg	28 kg
	Without stand	18.2 kg	22.8 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz

MODELS		60LW95**
		60LW9500-TA
Dimensions (W x H x D)	With stand	1422.8 mm x 943.7 mm x 289.5 mm
	Without stand	1422.8 mm x 880.5 mm x 41.5 mm
Weight	With stand	29.6 kg
	Without stand	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz

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

MODELS		47LZ96**	55LZ96**
		47LZ9600-TA	55LZ9600-TA
Dimensions (W x H x D)	With stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1171.2 mm x 767.7 mm x 289.7 mm	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.6 kg	29.6 kg
	Without stand	29.6 kg	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz

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

MODELS		50PZ95**	60PZ95**
		50PZ950-TA	60PZ950-TA
Dimensions (W x H x D)	With stand	1175.2 mm x 786.6 mm x 317.2 mm	1009.2 mm x 687.2 mm x 263.0 mm
	Without stand	1175.2 mm x 719.6 mm x 49.6 mm	1009.2 mm x 621.8 mm x 39.0 mm
Weight	With stand	31.8 kg	18.8 kg
	Without stand	28.2 kg	16.0 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz
MODELS		50PZ57**	60PZ57**
		50PZ570-TB	60PZ570-TB
Dimensions (W x H x D)	With stand	1172.3 mm x 770.9 mm x 289.8 mm	1171.2 mm x 767.7 mm x 289.7 mm
	Without stand	1172.3 mm x 712.2 mm x 52.5 mm	1171.2 mm x 767.7 mm x 289.7 mm
Weight	With stand	29.8 kg	29.6 kg
	Without stand	27.5 kg	29.6 kg
Power requirement		AC 100-240 V~ 50 / 60 Hz	AC 100-240 V~ 50 / 60 Hz
Environment condition	Operating Temperature	0 °C to 40 °C	
	Operating Humidity	Less than 80 %	
	Storage Temperature	-20 °C to 60 °C	
	Storage Humidity	Less than 85 %	

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Product specifications shown above may be changed without prior notice due to upgrade of product functions.
For the power supply and power consumption, refer to the label attached to the product.

		Digital TV	Analogue TV
New Zealand, Singapore	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I
	Programme Coverage	UHF 21 to 69	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47
Australia	Television System	DVB-T	PAL B/B
	Programme Coverage	VHF 06 to 12, UHF 27 to 69	B/B : VHF/UHF 0 to 75, CATV : 2 to 44
Indonesia, Israel	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	UHF 21 to 69	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
South Africa	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	VHF 4 to 11, 13 UHF 21 to 68	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
Veitnam, Malaysia	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	VHF 6 to 12, UHF 21 to 69	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
Iran	Television System	DVB-T	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	VHF 5 to 12, UHF 21 to 69	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
Analogue model	Television System	-	PAL/SECAM-B/G/D/K, PAL-I, NTSC-M
	Programme Coverage	-	BG : VHF/UHF 1 to 69, CATV 01 to 47 I : VHF/UHF 1 to 69, CATV 01 to 47 DK : VHF/UHF 1 to 69, CATV 01 to 47 M : VHF/UHF 2 to 78, CATV 01 to 71
	External Antenna Impedance	75 Ω	75 Ω

Product specifications shown above may be changed without prior notice due to upgrade of product functions.
For the power supply and power consumption, refer to the label attached to the product.

RGB-PC, HDMI/DVI-PC supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x400	31.468	70.08
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.78	59.87
1360x768	47.72	59.80
1280x1024	63.981	60.02
1920x1080 (RGB-PC)	66.587	59.93
1920x1080 (HDMI-PC)	67.5	60.00

HDMI/DVI-DTV supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x480	31.469 31.5	59.94 60
720x576	31.25	50
1280x720	37.5 44.96 45	50 59.94 60
1920x1080	33.72 33.75 28.125 26.97 27 33.716 33.75 56.25 67.43 67.5	59.94 60 50 23.97 24 29.976 30.00 50 59.94 60

Component port connecting information

Component ports on the TV	Y	P_B	P_R

Video output ports on DVD player	Y	P_B	P_R
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

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Video supported mode

File Extensions	Audio/Video	Codec	Profile/Level Support	Explanation
.asf .wmv	Video	VC-1 Advanced Profile	Advanced Profile@Level 3 (e.g. 720p60, 1080i60, 1080p30)	Only streams compliant to SMPTE 421M VC-1 standard are supported.
		VC-1 Simple and Main Profiles	Simple Profile@Medium Level (e.g. CIF, QVGA) Main Profile@High Level (e.g. 1080p30)	
	Audio	WMA Standard		
		WMA 9 Professional		
.divx .avi	Video	DivX3.11		Global motion compensation or quarterpel motion estimation does not supported. Streams using this syntax are not supported.
		DivX4 DivX5 DivX6	Advanced Simple Profile (e.g. 720p/1080i)	
		XViD		
		H.264 / AVC	Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	
	Audio	MPEG-1 Layer I, II MPEG-1 Layer III (MP3) Dolby Digital		
.mp4 .m4v	Video	H.264 / AVC	Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	Global motion compensation or quarterpel motion estimation does not supported. Streams using this syntax are not supported.
		MPEG-4 Part 2	Advanced Simple Profile (e.g. 720p/1080i)	
	Audio	AAC	AAC-LC and HE-AAC	
.mkv	Video	H.264 / AVC	Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	Most of the MKV content available is encoded by the open source x264 codec.
	Audio	AAC	AAC-LC and HE-AAC	
		Dolby Digital		
.ts .trp .tp	Video	H.264 / AVC	Main Profile@ Level 4.1 High Profile@ Level 4.1 (e.g. 720p60, 1080i60, 1080p30)	
		MPEG-2	Main Profile@High Level (e.g. 720p60, 1080i60)	
		VC-1	Simple Profile@Medium Level (e.g. CIF, QVGA) Main Profile@High Level (e.g. 1080p30) Advanced Profile@Level3 (e.g. 720p60, 1080i60, 1080p30)	Only streams compliant to SMPTE 421M VC-1 standard are supported.
	Audio	MPEG-1 Layer I, II MPEG-1 Layer III (MP3) Dolby Digital		
		AAC	AAC-LC and HE-AAC	
.vob	Video	MPEG-1		
		MPEG-2	Main Profile@High Level (e.g. 720p60, 1080i60)	
	Audio	Dolby Digital MPEG-1 Layer I, II DVD-LPCM		
.mpg	Video	MPEG-1	Main Profile@High Level (e.g. 720p60, 1080i60)	Only streams compliant configured properly for TS, PS or ES
	Audio	MPEG-1 Layer I, II		

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3D supported mode

	Signal	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Playable 3D video format
HDMI Input	720p	1280x720	45	60	Top & Bottom, Side by Side
			89.9/90	59.94/60	HDMI (V. 1.4 with 3D), Frame Packing
			37.5	50	Top & Bottom, Side by Side
			75		HDMI (V. 1.4 with 3D), Frame Packing
	1080i	1920X1080	33.75	60	Top & Bottom, Side by Side
			28.125	50	
	1080p	1920X1080	67.50	60	Top & Bottom, Side by Side, Checker Board, Single Frame Sequential
			56.250	50	Top & Bottom, Side by Side
			27	24	Top & Bottom, Side by Side, Checker Board
			53.95/54	23.98/24	HDMI (V. 1.4 with 3D), Frame Packing
			33.75	30	Top & Bottom, Side by Side, Checker Board
USB Input	1080p	1920X1080	33.75	30	Top & Bottom, Side by Side, Checker Board, MPO(Photo)

	Signal	Playable 3D video format
DTV	720p, 1080i	Top & Bottom, Side by Side

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Wireless LAN for Broadband/DLNA Adaptor module(WN8522D1) specification

This device only works with compatible 47/55/60LW95**.

Standard	IEEE802.11a/b/g/n
Frequency Range	2402 to 2483 MHz 5150 to 5250 MHz 5725 to 5850 MHz
Modulation	CCK / OFDM / MIMO
Output Power (Typical)	802.11a: 14 dBm 802.11b: 17 dBm 802.11g: 14 dBm 802.11n: 13 dBm
Data rate	802.11a/g: 54 Mbps 802.11b: 11 Mbps 802.11n: 300 Mbps
Antenna Gain (Typical)	2402 to 2483 MHz: 1.17 dBi 5150 to 5250 MHz: 4.67 dBi 5725 to 5850 MHz: 3.30 dBi
Occupied bandwidth	802.11a/b/g: HT20 802.11n: HT20/40

- Because band channel used by the country could be different, the user can not change or adjust the operating frequency and this product is set for the regional frequency table.
- FCC ID of Wi-Fi module inside TV.
  FCC ID : BEJWN8522D1

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RF module(BM-LDS201) specification

For TV by using a 2.4 GHz bandwidth radio frequency (RF).

- Output: 1 dBm or lower
- Maximum Communication Distance: 10 m (30 ft) in an open space
- Bandwidth: 2.4 GHz (2.4035 GHz - 2.4783 GHz)
- Transfer Rate: 250 kbps
- FCC ID of RF module inside TV.
  FCC ID : BEJLDS201

IR CODES

Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
08	POWER	Remote control Button (Power On/Off)	B1	/LIVE TV	Remote control Button
95	ENERGY SAVING	Remote control Button	B0	▶	Remote control Button
30	AV MODE	Remote control Button	BA		Remote control Button
0B	INPUT	Remote control Button	8E	▶▶	Remote control Button
F0	TV/RAD	Remote control Button	8F	◀◀	Remote control Button
10-19	Alphanumeric buttons 0-9	Remote control Button	7E	SIMPLINK	Remote control Button
53	LIST	Remote control Button	79	RATIO	Remote control Button
1A	Q.VIEW	Remote control Button		REC	Remote control Button
02	VOL +	Remote control Button	91	AD	Remote control Button
03	VOL -	Remote control Button	AA	INFO	Remote control Button
1E	FAV/MARK/ CHAR/NUM	Remote control Button	9F	APP/*	Remote control Button
DC	3D	Remote control Button			
09	MUTE/DELETE	Remote control Button			
00	P∧	Remote control Button			
01	P ∨	Remote control Button			
59	PREMIUM	Remote control Button			
43	HOME	Remote control Button			
45	Q.MENU	Remote control Button			
58	@	Remote control Button			
40	∧	Remote control Button			
41	∨	Remote control Button			
07	<	Remote control Button			
06	>	Remote control Button			
44	OK	Remote control Button			
28	BACK	Remote control Button			
AB	GUIDE	Remote control Button			
5B	EXIT	Remote control Button			
72	RED	Remote control Button			
71	GREEN	Remote control Button			
63	YELLOW	Remote control Button			
61	BLUE	Remote control Button			
20	TEXT	Remote control Button			
21	T.OPT(T.Option)	Remote control Button			
39	SUBTITLE	Remote control Button			

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EXTERNAL CONTROL DEVICE SETUP

RS-232C Setup

Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.
Connect the serial port of the control device to the RS-232C jack on the product back panel.

NOTE

- RS-232C connection cables are not supplied with the product.
- RS-232C on this TV is intended to be used with third party RS-232C control hardware and software. The instructions below are provided to help with programming software or to test functionality using telenet software. RS-232C connection cables are not supplied with the product.

Type of connector; D-Sub 9-Pin Male

No.	Pin name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection

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RS-232C Configurations

7-Wire Configurations (Standard RS-232C cable)

PC		TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DSR
DSR	6	4	DTR
RTS	7	8	CTS
CTS	8	7	RTS
D-Sub 9		D-Sub 9	

3-Wire Configurations(Not standard)

PC		TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	7	RTS
CTS	8	8	CTS
D-Sub 9		D-Sub 9	

Set ID

Set ID number. "**Real Data Mapping**" on See p.148

1 Press **HOME** to access the Home menus.

2 Press the Navigation buttons to scroll to **SETUP** and press **OK**.

3 Press the Navigation buttons to scroll to **OPTION** and press **OK**.

4 Press the Navigation buttons to scroll to **Set ID** and press **OK**.

5 Scroll left or right to select a set ID number and select **Close**. The adjustment range is 1 to 99.

6 When you are finished, press **EXIT**.

Communication Parameters

- Baud rate: 9600 bps (UART)
- Data length: 8 bits
- Parity : None
- Stop bit: 1 bit
- Communication code: ASCII code
- Use a crossed (reverse) cable.

Command reference list

	COMMAND1	COMMAND2	DATA (Hexadecimal)		COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	a	00 to 01	13. Treble	k	r	00 to 64
02. Aspect Ratio	k	c	(See p.145)	14. Bass	k	s	00 to 64
03. Screen Mute	k	d	(See p.145)	15. Balance	k	t	00 to 64
04. Volume Mute	k	e	00 to 01	16. Colour Temperature	x	u	00 to 64
05. Volume Control	k	f	00 to 64	17. ISM Method	j	q	00 to 05
06. Contrast	k	g	00 to 64	18. Energy Saving	j	q	00 to 05
07. Brightness	k	h	00 to 64	19. Auto Configuration	j	u	01
08. Colour	k	i	00 to 64	20. Tune Command	m	a	(See p.147)
09. Tint	k	j	00 to 64	21. Programme Add/Skip	m	b	00 to 01
10. Sharpness	k	k	00 to 64	22. Key	m	c	Key Code
11. OSD Select	k	l	00 to 01	23. Control Back Light	m	g	00 to 64
12. Remote Control Lock Mode	k	m	00 to 01	24. Input select (Main)	x	b	(See p.148)

- Note : During USB operations such as DivX or EMF, all commands except Power(ka) and Key(mc) are not executed and treated as NG.

Transmission / Receiving Protocol

Transmission

[Command1][Command2][ ][Set ID][ ][Data][Cr]

[Command 1]	:	First command to control the TV.(j, k, m or x)
[Command 2]	:	Second command to control the TV.
[Set ID]	:	You can adjust the set ID to choose desired monitor ID number in option menu. Adjustment range is 1 to 99. When selecting Set ID '0', every connected set is controlled. Set ID is indicated as decimal (1 to 99) on menu and as Hexa decimal (0x0 to 0x63) on transmission/receiving protocol.
[DATA]	:	To transmit command data. Transmit 'FF' data to read status of command.
[Cr]	:	Carriage Return ASCII code '0x0D'
[ ]	:	ASCII code 'space (0x20)'

OK Acknowledgement

[Command2][ ][Set ID][ ][OK][Data][x]

* The set transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Command2][ ][Set ID][ ][NG][Data][x]

* The set transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data 00: Illegal Code

01. Power (Command: k a)

► To control Power On/Off of the set.

Transmission[k][a][ ][Set ID][ ][Data][Cr]

Data 00 : Power Off 01 : Power On

Ack [a][ ][Set ID][ ][OK/NG][Data][x]

► To show Power On/Off.

Transmission [k][a][ ][Set ID][ ][FF][Cr]

Ack [a][ ][Set ID][ ][OK/NG][Data][x]

* Similarly, if other functions transmit '0xFF' data based on this format, Acknowledgement data feed back presents status about each function.
* OK Ack., Error Ack. and other message may display on the screen when TV is power On.

02. Aspect Ratio (Command: k c) (Main Picture Size)

► To adjust the screen format. (Main picture format)
You can also adjust the screen format using the Aspect Ratio in the Q.MENU. or PICTURE menu.

Transmission [k][c][ ][Set ID][ ][Data][Cr]

Data 01 : Normal screen (4:3)
02 : Wide screen (16:9)
06 : Original
07 : 14:9
09 : Just Scan
0B : Full Wide
10 to 1F : Cinema Zoom 1 to 16

Ack [c][ ][Set ID][ ][OK/NG][Data][x]

* Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.
* In DTV/HDMI (1080i 50 Hz / 60 Hz, 720p 50Hz / 60 Hz, 1080p 24 Hz / 30 Hz / 50 Hz / 60 Hz), Component(720p, 1080i, 1080p 50 Hz / 60 Hz) mode, Just Scan is available.
* Full Wide is supported only for Digital, Analogue, AV.

03. Screen Mute (Command: k d)

► To select screen mute on/off.

Transmission [k][d][ ][Set ID][ ][Data][Cr]

Data 00 : Screen mute off (Picture on)
Video mute off
01 : Screen mute on (Picture off)
10 : Video mute on

Ack [d][ ][Set ID][ ][OK/NG][Data][x]

* In case of video mute on only, TV will display On Screen Display(OSD). But, in case of Screen mute on, TV will not display OSD.

04. Volume Mute (Command: k e)

► To control volume mute on/off.
You can also adjust mute using the MUTE button on remote control.

Transmission [k][e][ ][Set ID][ ][Data][Cr]

Data 00 : Volume mute on (Volume off)
01 : Volume mute off (Volume on)

Ack [e][ ][Set ID][ ][OK/NG][Data][x]

05. Volume Control (Command: k f)

► To adjust volume.
You can also adjust volume with the VOLUME buttons on remote control.

Transmission [k][f][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64
* Refer to 'Real data mapping'. See page 148.

Ack [f][ ][Set ID][ ][OK/NG][Data][x]

06. Contrast (Command: k g)

► To adjust screen contrast.
You can also adjust contrast in the PICTURE menu.

Transmission [k][g][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64
* Refer to 'Real data mapping'. See page 148.

Ack [g][ ][Set ID][ ][OK/NG][Data][x]

07. Brightness (Command: k h)

► To adjust screen brightness.
You can also adjust brightness in the PICTURE menu.

Transmission [k][h][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64
* Refer to 'Real data mapping'. See page 148.

Ack [h][ ][Set ID][ ][OK/NG][Data][x]

08. Colour (Command: k i)

► To adjust the screen colour.
You can also adjust colour in the PICTURE menu.

Transmission [k][i][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64
* Refer to 'Real data mapping'. See page 148.

Ack [i][ ][Set ID][ ][OK/NG][Data][x]

09. Tint (Command: k j)

► To adjust the screen tint.
You can also adjust tint in the PICTURE menu.

Transmission [k][j][ ][Set ID][ ][Data][Cr]

Data Red : 00 to Green : 64

* Refer to 'Real data mapping'. See page 148.

Ack [j][ ][Set ID][ ][OK/NG][Data][x]

10. Sharpness (Command: k k)

► To adjust the screen sharpness.
You can also adjust sharpness in the PICTURE menu.

Transmission [k][k][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64

* Refer to 'Real data mapping'. See page 148.

Ack [k][ ][Set ID][ ][OK/NG][Data][x]

11. OSD Select (Command: k l)

► To select OSD (On Screen Display) on/off when controlling remotely.

Transmission [k][l][ ][Set ID][ ][Data][Cr]

Data 00 : OSD off 01 : OSD on

Ack [l][ ][Set ID][ ][OK/NG][Data][x]

12. Remote control lock mode (Command: k m)

► To lock the front panel controls on the monitor and remote control.

Transmission [k][m][ ][Set ID][ ][Data][Cr]

Data 00 : Lock off 01 : Lock on

Ack [m][ ][Set ID][ ][OK/NG][Data][x]

* If you are not using the remote control, use this mode. When main power is on/off, external control lock is released.
* In the standby mode, if key lock is on, TV will not turn on by power on key of IR & Local Key.

13. Treble (Command: k r)

► To adjust treble.
You can also adjust treble in the AUDIO menu.

Transmission [k][r][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64

* Refer to 'Real data mapping'. See page 148.

Ack [r][ ][Set ID][ ][OK/NG][Data][x]

14. Bass (Command: k s)

► To adjust bass.
You can also adjust bass in the AUDIO menu.

Transmission [k][s][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64

* Refer to 'Real data mapping'. See page 148.

Ack [s][ ][Set ID][ ][OK/NG][Data][x]

15. Balance (Command: k t)

► To adjust balance.
You can also adjust balance in the AUDIO menu.

Transmission [k][t][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64

* Refer to 'Real data mapping'. See page 148.

Ack [t][ ][Set ID][ ][OK/NG][Data][x]

16. Colour Temperature (Command: x u)

► To adjust colour temperature. You can also adjust Colour Temperature in the PICTURE menu.

Transmission [x][u][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64

* Refer to 'Real data mapping'. See page 148.

Ack [u][ ][Set ID][ ][OK/NG][Data][x]

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17. ISM Method (Command: j p) (Only Plasma TV)

► To control the ISM method. You can also adjust ISM Method in OPTION menu.

Transmission [j][p][ ][Set ID][ ][Data][Cr]

Data 02: Orbiter
04: White wash
08: Normal
20: Colour Wash

Ack [p][ ][Set ID][ ][OK/NG][Data][x]

18. Energy Saving (Command: j q)

► To reduce the power consumption of the TV. You can also adjust Energy Saving in PICTURE menu.

Transmission [j][q][ ][Set ID][ ][Data][Cr]

Power Saving Function					Level				Description
7	6	5	4		3	2	1	0	
0	0	0	0	Low Power	0	0	0	0	Off
0	0	0	0	Low Power	0	0	0	1	Minimum
0	0	0	0	Low Power	0	0	1	0	Medium
0	0	0	0	Low Power	0	0	1	1	Maximum
0	0	0	0	Low Power	0	1	0	1	Screen Off
0	0	0	0	Low Power	0	1	0	0	Auto (LCD TV only)
0	0	0	0	Low Power	0	1	0	0	Intelligent Sensor (Plasma TV only)

Ack [q][ ][Set ID][ ][OK/NG][Data][x]

19. Auto Configure(Command: j u)

► To adjust picture position and minimize image shaking automatically. It works only in RGB (PC) mode.

Transmission [j][u][ ][Set ID][ ][Data][Cr]

Data 01: To set

Ack [u][ ][Set ID][ ][OK/NG][Data][x]

20. Tune Command (Command: m a)

► Select channel to following physical number.

Transmission [m][a][ ][Set ID][ ][Data0][ ][Data1][ ][Data2][Cr]

Data00 : High channel data
Data01 : Low channel data
ex. No. 47 -> 00 2F (2FH)
No. 394 -> 01 8A (18AH),
DTV No. 0 -> Don't care
Data02 : 0x00 : Analogue Main
0x10 : DTV Main
0x20 : Radio

Channel data range
Analogue - Min: 00 to Max: 63 (0 to 99)
Digital - Min: 00 to Max: 3E7 (0 to 999)

Ack [a][ ][Set ID][ ][OK/NG][Data][x]

Data Min: 00 to Max: 7DH

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21. Programme Add/Skip(Command: m b)

► To set skip status for the current Programme.

Transmission [m][b][ ][Set ID][ ][Data][Cr]

Data 00 : Skip 01 : Add

Ack [b][ ][Set ID][ ][OK/NG][Data][x]

22. Key(Command: m c)

► To send IR remote key code.

Transmission [m][c][ ][Set ID][ ][Data][Cr]

Data Key code - Refer to page 140.

Ack [c][ ][Set ID][ ][OK/NG][Data][x]

23. Control Back Light(Command: m g) (Only LCD TV/LED LCd TV))

► To Control the back light.

Transmission [m][g][ ][Set ID][ ][Data][Cr]

Data Min : 00 to Max : 64

Ack [g][ ][Set ID][ ][OK/NG][Data][x]

24. Input select (Command: x b) (Main Picture Input)

► To select input source for main picture.

Transmission [x][b][ ][Set ID][ ][Data][Cr]

Data Structure

MSB							LSB
0	0	0	0	0	0	0	0
External Input				Input Number			

External Input				Data
0	0	0	0	DTV
0	0	0	1	Analogue
0	0	1	0	AV
0	1	0	0	Component
0	1	1	0	RGB
0	1	1	1	HDMI
1	0	0	0	
1	0	0	1	
1	0	1	0	

Input Number				Data
0	0	0	0	Input1
0	0	0	1	Input2
0	0	1	0	Input3
0	0	1	1	Input4

Ack [b][ ][Set ID][ ][OK/NG][Data][x]

*** Real data mapping**

00 : Step 0
⋮
A : Step 10 (Set ID 10)
⋮
F : Step 15 (Set ID 15)
10 : Step 16 (Set ID 16)
⋮
64 : Step 100
⋮
6E : Step 110
⋮
73 : Step 115
74 : Step 116
⋮
CF : Step 199
⋮
FE : Step 254
FF : Step 255

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The model and serial numbers of the TV is
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Record it below should you ever need service.

MODEL _____

SERIAL _____

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