

OWNER'S MANUAL

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

LT38** LT64** LT66**

www.lg.com

TABLE OF CONTENTS

3 LICENSES

- 3 OPEN SOURCE SOFTWARE NOTICE
- 4 INSTALLATION PROCEDURE

4 ASSEMBLING AND PREPARING

- 4 Unpacking
- 7 Parts and buttons
- 8 Lifting and moving the TV
- 9 Setting up the TV
- 9 Attaching the stand
- 11 Mounting on a table
- 12 Mounting on a wall
- 14 Tidying cables
- 14 How to use Dual Lock™

15 MAKING CONNECTIONS

- 15 Connection of TV
- 15 Antenna connection
- 16 HDMI connection
- 16 DVI to HDMI connection
- 17 RGB-PC connection
- 17 RS-232C Setup
- 17 Component connection
- 18 Audio connection
- 18 Digital optical audio connection
- 18 Speaker output SETUP
- 18 Headphone connection
- 19 USB connection
- 19 CI module connection
- 19 Euro Scart connection

20 REMOTE CONTROL

22 MAINTENANCE

- 22 Cleaning your TV
- 22 Screen, frame, cabinet and stand
- 22 Power cord

22 TROUBLESHOOTING

23 SPECIFICATIONS

26 IR CODES

27 EXTERNAL CONTROL DEVICE SETUP

- 27 RS-232C Setup
- 27 Type of connector; D-Sub 9-Pin Male
- 27 RS-232C Configurations
- 28 Communication Parameters
- 28 Command reference list
- 29 Transmission / Receiving Protocol

 If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.

 If you ignore the caution message, you may be slightly injured or the product may be damaged.

• The note helps you understand and use the product safely. Please read the note carefully before using the product.

LICENSES



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OPEN SOURCE SOFTWARE NOTICE

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In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping and handling) upon email request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.

NOTE

- Image shown may differ from your TV.
- Your TV's OSD (On Screen Display) may differ slightly from that shown in this manual.
- The available menus and options may differ from the input source or product model that you are using.
- New features may be added to this TV in the future.
- The TV can be placed in standby mode in order to reduce the power consumption. And the TV should be turned off 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.

INSTALLATION PROCEDURE

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

ASSEMBLING AND PREPARING

Unpacking

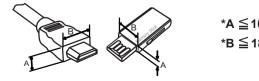
Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product. The illustrations in this manual may differ from the actual product and item.

CAUTION -

- Do not use any unapproved items to ensure the safety and product life span.
- Any damages or injuries by using unapproved items are not covered by the manufacturer's warranty.
- Some models have a thin film attached on to the screen and this must not be removed.

NOTE -

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



*A ≦10 mm $*B \leq 18 \text{ mm}$

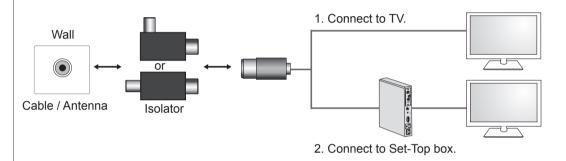


(Depending on model)

(See p.14)

Antenna Isolator Installation Guide

- Use this to install TV in a place where there is a voltage difference between TV Set and GND of antenna signal.
- » If there is a voltage difference between TV Set and GND of antenna signal, the antenna contact might be heated and excessive heat might cause an accident.
- You can improve the safety when watching TV by efficiently removing power voltage from TV antenna. It is recommended to mount the isolator to the wall. If it cannot be mounted to the wall, mount it on the TV. Avoid disconnecting the antenna Isolator after installation.
- Before starting, be sure that the TV antenna is connected.

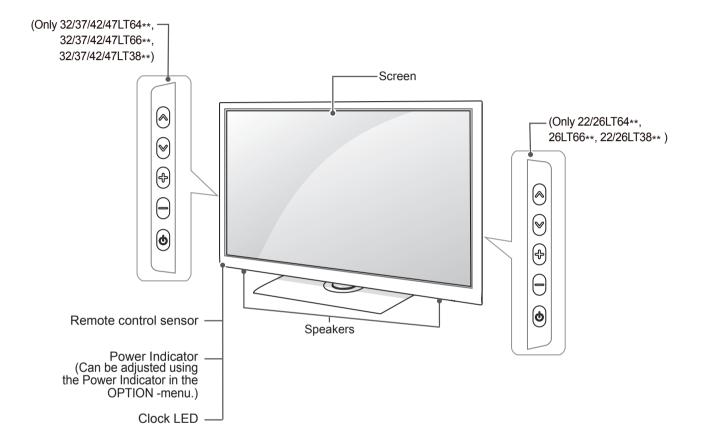


Connect one end of the isolator to cable/antenna jack and the other to TV set or set-top box.

"Equipment connected to the protective earthing of the building installation through the mains connection or through other equipment with a connection to protective earthing - and to a cable distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a cable distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)"

When applying the RF Isolator, a slight loss of signal sensitivity can occur.

Parts and buttons



Button	Description
\vee \wedge	Scrolls through the saved programmes.
+ -	Adjusts the volume level.
በ	Turns the power on or off.

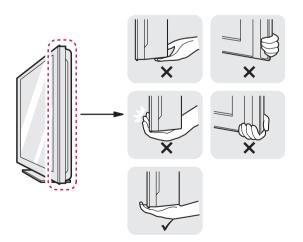
Lifting and moving the TV

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

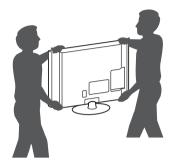
- Avoid touching the screen at all times, as this may result in damage to the screen.
- It is recommended to move the TV in the box or packing material that the TV originally came in.
- Before moving or lifting the TV, disconnect the power cord and all cables.
- When holding the TV, the screen should face away from you to avoid 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.



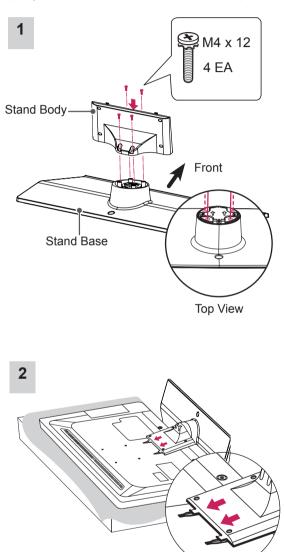
- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright, never turn the TV on its side or tilt towards the left or right.

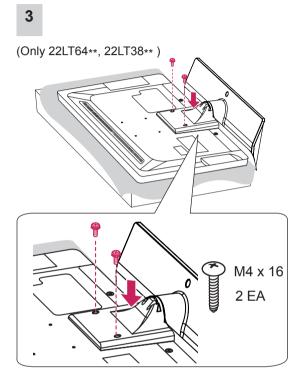
Setting up the TV

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

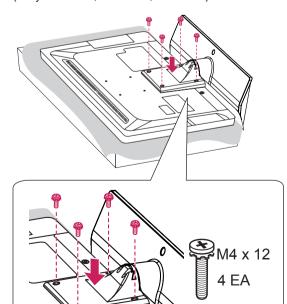
Attaching the stand

(Only 22/26LT64**, 26LT66**, 22/26LT38**)

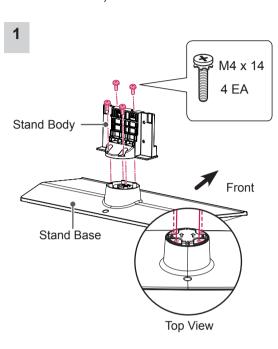


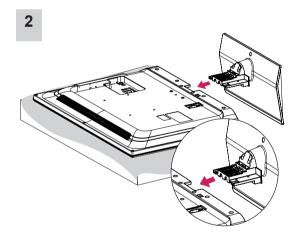


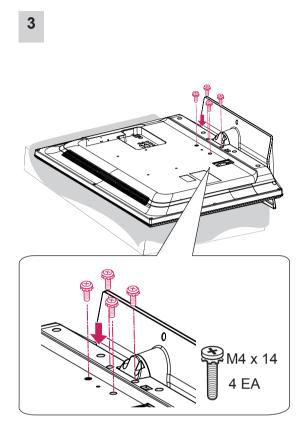
(Only 26LT64**, 26LT66**, 26LT38**)



(Only 32/37/42/47LT64**, 32/37/42/47LT66** 32/37/42/47LT38**)







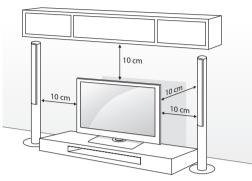
- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.
- Make sure that the screws are fastened completely. (If they are not fastened securely enough, the TV may tilt forward after being installed.)

Do not fasten the screws with too much force; otherwise they may be worn out and get loosened.

• Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

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.



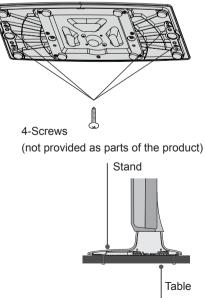
2 Connect the power cord to a wall outlet.

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

Attaching the TV to a table

Image shown may differ from your TV. The TV must be attached to desk so it cannot be pulled in a forward/backward direction, potentially causing injury or damaging the pro duct. (Only 32/37/42/47LT64**, 32/37/42/47LT66**,

32/37/42/47LT38**)

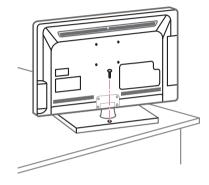


Screws: M4 x L (*L: Table depth + 8-10 mm) ex) Table depth: 15mm, Screw: M4 x 20

Securing the TV to a table

Fix the TV to a table to prevent from tilting forward, damage, and potential injury.

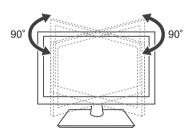
Mount the TV on a table, and then insert and tighten the supplied screw on the rear of the stand. (Only 32/37/42/47LT64**, 32/37/42/47LT66**, 32/37/42/47LT38**)



 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.

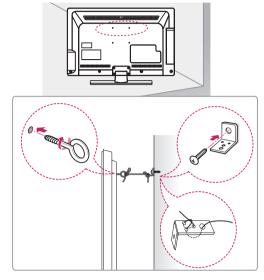
Adjusting the angle of the TV to suit view

Swivel 90 degrees to the left or right and adjust the angle of the TV to suit your view.



- When adjusting the angle of the product, watch out for your fingers.
 - » Personal injury may occur if hands or fingers are pinched. If the product is tilted too much, it may fall, causing damage or injury.

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.

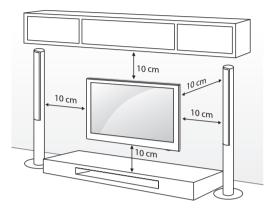
• Make sure that children do not climb on or hang on the TV.

- Use a platform or cabinet that is strong and large enough to support the TV securely.
- Brackets, bolts and ropes are not provided. You can obtain additional accessories from your local dealer.

Mounting on a wall

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

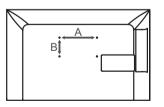
LG recommends that wall mounting be performed by a qualified professional installer.



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

Separate purchase (Wall Mounting Bracket)

Model	22/26LT64**, 22/26LT38**, 26LT66**	32LT64**, 32LT66** ² , 32LT38**
VESA	100 x 100	200 x 100
Standard screw	M4	M4
Number of screws	4	4
Wall mount	LSW100B(G)	
bracket))
Model	37/42LT64** 37/42LT66** 37/42LT38**	37/42LT64** 37/42LT66** 37/42LT38**
VESA	200 x 200	200 x 200
Standard screw	M6	M6
Number of screws	4	4
Wall mount bracket	LSW200BX(G)	LSW220BX(G)
Model	47LT64**, 47LT66**, 47LT38**	47LT64**, 47LT66**, 47LT38**,
VESA	400 x 400	400 x 400
Standard screw	M6	M6
Number of screws	4	4
Wall mount bracket	LSW400BX(G)	LSW420BX(G)



- 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 bracket 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 mount bracket that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.
- On the 47 inch models, use M6 x L45 screws.

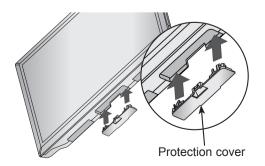
- Use the screws that are listed on the VESA standard screw specifications.
- The wall mount kit includes an installation manual and necessary parts.
- The wall mount bracket is not provided. You can obtain additional accessories from your local dealer.
- The length of screws may differ depending on the wall mount. Make sure to use the proper length.
- For more information, refer to the manual supplied with the wall mount.

Not using the DESK-TYPE STAND

(Only 32/37/42/47LT64**, 32/37/42/47LT66**, 32/37/42/47LT38**)

Image shown may differ from your TV. When installing the wall mounting bracket, use the Protection cover.

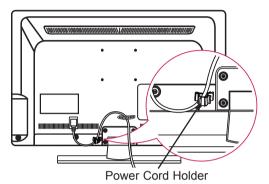
Insert the **Protection cover** into the TV until clicking sound.



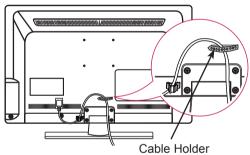
Tidying cables

(Only 32/37/42/47LT64**, 32/37/42/47LT66**, 32/37/42/47LT38**)

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

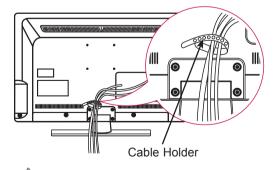


2 Gather and bind the cables with the Cable Holder.



(Only 22/26LT64**, 26LT66**, 22/26LT38**)

1 Gather and bind the cables with the Cable Holder.

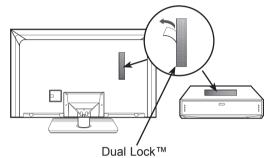


• Do not move the TV by holding the Cable Holder and Power Cord Holder, as the Cable holders may break, and injuries and damage to the TV may occur.

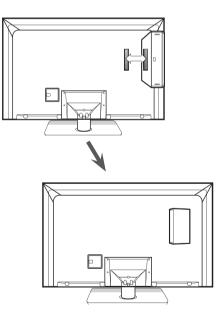
How to use Dual Lock™

(This feature is not available for all models.) Fix the set-top box to the TV and use it when you want to.

1 After removing the protection paper from the Dual Lock, stick it to the TV and the set-top box as shown.



2 Attach the set-top box to the TV by pressing the Velcro strips together.



- Please make sure no foreign substances exist on the surface of the product, and then firmly attach the Dual Lock.
- Before attaching the set-top box to the TV set, let the attached Dual Lock dry for at least three days.

MAKING CONNECTIONS

This section on **MAKING CONNECTIONS** mainly uses diagrams for the 32LT66** models.

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

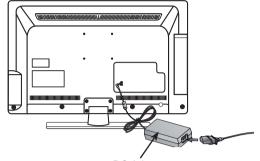
Available external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices.

NOTE -

- The external device connection may differ from the model.
- Connect external devices to the TV
 regardless of the order of the TV port.
- If you record a TV program on a DVD recorder or VCR, make sure to connect the TV signal input cable to the TV through a DVD recorder or VCR. For more information on recording, refer to the manual provided with the connected device.
- Refer to the external equipment's manual for operating instructions.
- If you connect a gaming device to the TV, use the cable supplied with the gaming device.
- In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the PICTURE menu until the picture is clear.
- In PC mode, some resolution settings may not work properly depending on the graphics card.

Connection of TV

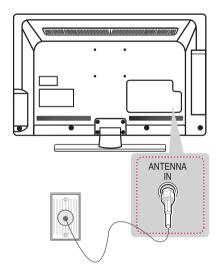
(Only 22/26LT64**, 26LT66**, 22/26LT38**)



- DC Adapter
- 1 Connect the antenna cable to the antenna input port on the TV.
- 2 Connect the DC adapter plug to the power input jack on the TV.
- 3 Connect the power cord to the DC adapter first, then plug the power cord into the wall power outlet.

Antenna connection

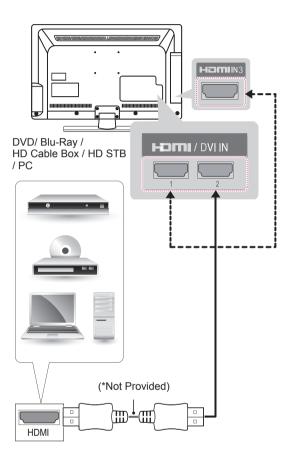
Connect the TV to a wall antenna socket with an RF cable (75 Ω).



- 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, try to realign the antenna in the correct direction.
- An antenna cable and converter are not supplied.

HDMI connection

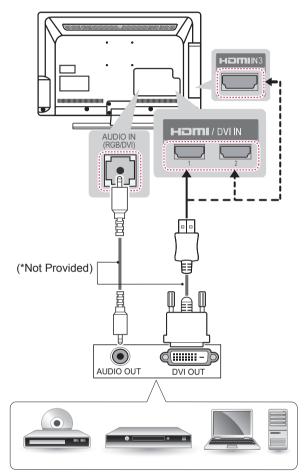
Transmits the digital video and audio signals from your PC to the TV. Connect the PC and the TV with the HDMI cable as shown in the following illustrations. Choose any HDMI input port to connect. It does not matter which port you use.



- It is recommended to use the TV with the HDMI connection for the best image quality.
- Use the latest High Speed HDMI[™] Cable with CEC (Customer Electronics Control) function.
- High Speed HDMI[™] Cables are tested to carry an HD signal up to 1080p and higher.
- Supported DTV Audio: MPEG, Dolby Digital, Dolby Digital Plus, HE-AAC
- Supported HDMI Audio format : Dolby Digital, PCM (Up to 192 KHz, 32k/44.1k/48k /88k/96k/176k/192k, DTS Not supported.)

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 illustrations. To transmit an audio signal, connect an audio cable. Choose any HDMI input port to connect. It does not matter which port you use.

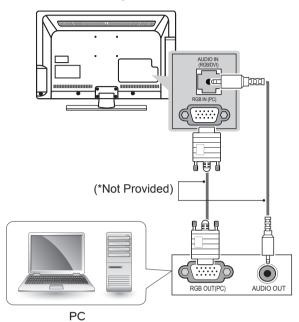


DVD/ Blu-Ray / HD Cable Box / PC

• Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.

RGB-PC connection

Transmits the video signal from PC to the TV. To transmit an audio signal, connect an audio cable.



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.

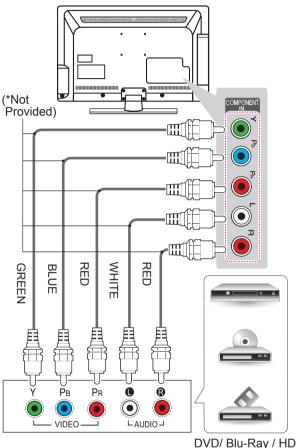
Connect the serial port of the control device to the RS-232C jack on the product back panel.

Note: RS-232C connection cables are not supplied with the product.

RS-232C IN CONTROL & SERVICE) (*Not Provided)

Component connection

Transmits the analogue 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 illustrations.



DVD/ Blu-Ray / HE Cable Box

• If cables are installed incorrectly, it could cause the image to display in black and white or with distorted colour.

Audio connection

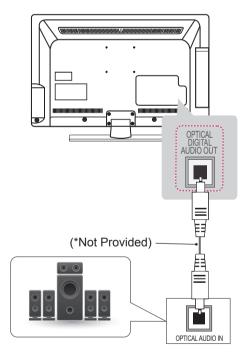
(Only 32/37/42/47LT64**, 32/37/42/47LT66**, 32/37/42/47LT38**)

You may use an optional external audio system instead of the built-in speaker.

 If you use an optional external audio device instead of the built-in speaker, set the TV speaker feature to off.

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 illustrations.

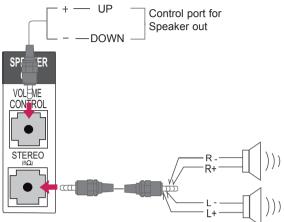


Digital Audio System

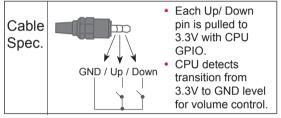
- Do not look into the optical output port. Looking at the laser beam may damage your vision.
- Audio with ACP (Audio Copy Protection) function may block digital audio output.

Speaker output SETUP

Connect the external speaker to the Speaker output(STEREO) jack on the TV.

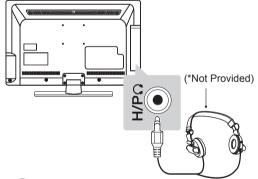


Method of Volume control port



Headphone connection

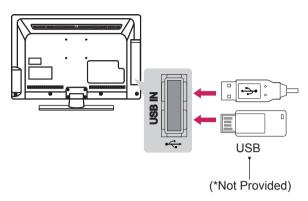
Transmits the headphone signal from the TV to an external device. Connect the external device and the TV with the headphone as shown in the following illustrations.



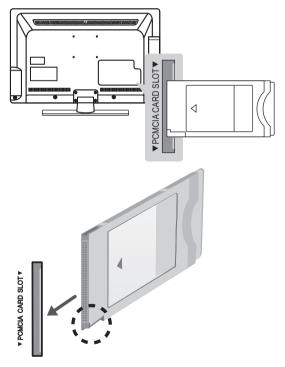
- AUDIO menu items are disabled when connecting a headphone.
- When changing AV MODE with a headphone connected, the change is applied to video but not to audio.
- Optical Digital Audio Out is not available when connecting a headphone.
- Headphone impedance: 16 Ω
- Max audio output of headphone: 10 mW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

USB connection

Connect a USB storage device such as a USB flash memory, external hard drive, or a USB memory card reader to the TV.



CI module connection



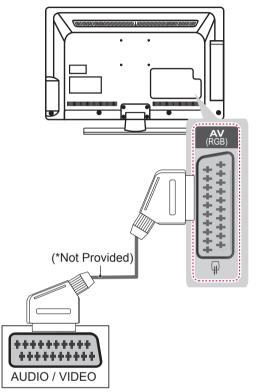
View the encrypted (pay) services in digital TV mode. This feature is not available in all countries.

🚺 NOTE -

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

Euro Scart connection

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



Output Type Current input model	AV (TV Out ¹)
Digital TV	Digital TV
Analogue TV, AV	Analogue TV
Component / RGB	Analogue TV
HDMI	Analogue TV

1 TV Out : Outputs Analogue TV or Digital TV signals.

• Any Euro scart cable used must be signal shielded.

REMOTE CONTROL

The descriptions in this manual are based on the buttons on 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 the \oplus and \bigcirc ends to the label inside the compartment, and close the battery cover. To remove the batteries, perform the installation actions in reverse.



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

Make sure to point the remote control toward the remote control sensor on the TV. LT64**, LT66**

ひ POWER Turns the TV on or off.		Number buttons Enters numbers.
eØ ENERGY SAVING Adjusts the brightness of the screen to reduce energy consumption.		LIST Accesses the saved programme list.
AV MODE Selects an AV mode.	SAMG 000	Returns to the previously viewed programme. $+ \bigtriangleup -$
- INPUT Changes the input source.	4 5 6	Adjusts the volume level.
■/E TV/RAD Selects Radio, TV and DTV programme.	789	Accesses your favourite programme list.
GUIDE Shows programme guide.		Resizes an image. MUTE ⊯t
PORTAL Displays and removes hotel interactive		Mutes all sounds.
menu. INFO Φ		Scrolls through the saved programmes.
Views the information of the current programme and screen.		← PAGE → Moves to the previous or next screen.
Navigation buttons (up/down/left/right) Scrolls through menus or options.		Colour buttons These access special functions in some
• OK Selects menus or options and confirms your input.	(< OK	menus. (• : Red, •• : Green, • : Yellow, • : Blue)
Generation Selects a menu. Clears all on-screen displays and returns		1 TELETEXT BUTTONS These buttons are used for teletext. For further details, see the 'Teletext' section.
to TV viewing from any menu.		SUBTITLE Recalls your preferred subtitle in digital
Returns to the previous level.		mode.
EXIT Clears on-screen displays and return to TV viewing.		Control buttons (■, ▶, II, ∢, ▶) Controls the MY MEDIA menus, or the SIMPLINK compatible devices
Q. MENU Accesses the quick menus.	Q.MENU AD ALARM	(USB,SIMPLINK).
AD Switches the Audio Description On or Off.		Accesses the AV devices connected with the HDMI cable through HDMI-CEC.
ALARM Sets the alarm function.		Opens the SIMPLINK menu.

LT38**

		Number both and
O POWER Turns the TV on or off.		Number buttons Enters numbers.
Adjusts the brightness of the screen to	ENERGY AV MODE INPUT MAKED	LIST Accesses the saved programme list.
reduce energy consumption.		
		Q.VIEW
AV MODE Selects an AV mode.		Returns to the previously viewed programme.
		+⊿-
		Adjusts the volume level.
Changes the input source.	4 5 6	FAV
ĭ≡/⊡ TV/RAD		Accesses your favourite programme list.
Selects Radio, TV and DTV programme.	7 8 9	RATIO
GUIDE		Resizes an image.
Shows programme guide.		MUTE 🕱
ALARM		Mutes all sounds.
Sets the alarm function.		VPA
INFO ①		Scrolls through the saved programmes.
Views the information of the current		\rightarrow PAGE \rightarrow
programme and screen.		Moves to the previous or next screen.
Navigation buttons (up/down/left/right)		· · · · · · · · · · · · · · · · · · ·
Scrolls through menus or options.	GUIDE ALARM INFO	Colour buttons
⊚ 0K		These access special functions in some menus.
Selects menus or options and confirms		(•: Red, ••: Green, •: Yellow, •:: Blue)
your input.		
☆ Home	Cok Solution	1 TELETEXT BUTTONS
Selects a menu.		These buttons are used for teletext.
Clears all on-screen displays and returns		For further details, see the 'Teletext' section.
to TV viewing from any menu.	Home S EXIT	
5	Home	SUBTITLE
Returns to the previous level.	•••••••••••••••••••••••••••••••••••••••	Recalls your preferred subtitle in digital mode.
EXIT	(r====]]	mode.
Clears on-screen displays and return to TV		Control buttons (■, ▶, Ⅱ, ◀, ▶)
viewing.		Controls the MY MEDIA menus, or
Q. MENU		the SIMPLINK compatible devices
Accesses the quick menus.		(USB,SIMPLINK).
AD	Q.MENU AD	SIMPLINK
Switches the Audio Description On or Off.		Accesses the AV devices connected with the
omitines the Audio Description on of Oll.		HDMI cable through HDMI-CEC.
		Opens the SIMPLINK menu.

MAINTENANCE

Cleaning your TV

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

- 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, frame, cabinet and stand

- 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.

- Avoid touching the screen at all times, as this may result in damage to the screen.
- Do not push, rub, or hit the screen surface with your fingernail or a sharp object, as this may result in scratches and image distortions.
- Do not use any chemicals as this may damage the product.
- Do not spray liquid onto the surface. If water enters the TV, it may result in fire, electric shock, or malfunction.

Power cord

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

TROUBLESHOOTING

Problem	Solution
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 ○).
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.
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. If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.
When connecting to the PC (RGB/HDMI DVI), 'No signal' or 'Invalid Format' is displayed.	 Turn the TV off/on using the remote control. Reconnect the RGB/HDMI cable. Restart the PC with the TV on.

SPECIFICATIONS

Product specifications 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.

MODELS		22LT64**		22LT38**		
		22LT640H-ZA		22LT380C-ZA		
Dimensions	With stand(mm)	517.0 x 386.0 x 192.0		517.0 x 386.0 x 192.0		
(W x H x D)	Without stand(mm)	517.0 x 332.0 x 4	41.6	517.0 x 332.0 x 41.6		
Weight	With stand(kg)	3.7			3.7	
	Without stand(kg)	3.1			3.1	
Power requ	irement	DC 24 V, 1.4 A AC-DC adaptor : 24 V , 2.5 A / AC 100-240 V~ 50 / 60 Hz			V~ 50 / 60 Hz	
Power cons	umption		50	W		
٨	/ODELS -	26LT64**	26LT	66**	26LT38**	
I.	IODEEO	26LT640H-ZA	26LT66	0H-ZA	26LT380C-ZA	
Dimensions	With stand(mm)	626.0 x 454.0 x 192.0	626.0 x 454	4.0 x 192.0	626.0 x 454.0 x 192.0	
(W x H x D)	Without stand(mm)	626.0 x 393.0 x 46.6	626.0 x 39	3.0 x 46.6	626.0 x 393.0 x 46.6	
Weight	With stand(kg)	4.7	4.	7	4.7	
	Without stand(kg)	4.1	4.	1	4.1	
Power requ	irement	DC 24 V, 1.8 A AC-DC adaptor : 24 V				
Power cons	umption	50 W				
MODELS		32LT64**	32LT	66**	32LT38**	
		32LT640H-ZA	32LT66	0H-ZA	32LT38C-ZA	
Dimensions	With stand(mm)	766.0 x 536.0 x 232.0	766.0 x 53	6.0 x 232.0	766.0 x 536.0 x 232.0	
(W x H x D)	Without stand(mm)	766.0 x 476.0 x 68.5	766.0 x 47	6.0 x 68.5	766.0 x 476.0 x 68.5	
Weight	With stand(kg)	9.2	9.	2	9.2	
	Without stand(kg)	8.0	8.	0	8.0	
Power requ	irement	AC 100-240 V~ 50 / 60 Hz				
Power cons	umption	60W				
		37LT64**	37LT	66**	37LT38**	
Ν	AODELS -	37LT640H-ZA	37LT66	60H-ZA	37LT38C-ZA	
Dimensions	With stand(mm)	867.0 x 593.0 x 232.0	x 232.0 867.0 x 593.0 x 232.0		867.0 x 593.0 x 232.0	
(W x H x D)	Without stand(mm)	867.0 x 533.0 x 68.6	867.0 x 53	3.0 x 68.6	867.0 x 533.0 x 68.6	
Weight	With stand(kg)	11.2	11	.2	11.2	
	Without stand(kg)	10.0	10	.0	10.0	
Power requ	irement	AC 100-240 V~ 50 / 60 Hz				
Power cons	umption	90W				
	· · · ·					

MODELS		42LT64**	42LT66**	42LT38**	
		42LT640H-ZA 42LT660H-ZA		42LT380C-ZA	
Dimensions	With stand(mm)	992.0 x 667.0 x 273.0	992.0 x 667.0 x 273.0	992.0 x 667.0 x 273.0	
(W x H x D)	Without stand(mm)	992.0 x 604.0 x 55.0	992.0 x 604.0 x 55.0	992.0 x 604.0 x 55.0	
Weight	With stand(kg)	15.5	15.5	15.5	
	Without stand(kg)	13.5	13.5	13.5	
Power requi	irement	AC 100-240 V~ 50 / 60 Hz			
Power cons	umption	100W			
		47LT64**	47LT66**	47LT38**	
N N	IODELS	47LT640H-ZA	47LT660H-ZA	47LT380C-ZA	
Dimensions	With stand(mm)	1101.0 x 729.0 x 273.0	1101.0 x 729.0 x 273.0	1101.0 x 729.0 x 273.0	
(W x H x D)	Without stand(mm)	1101.0 x 665.0 x 54.5	1101.0 x 665.0 x 54.5	1101.0 x 665.0 x 54.5	
Weight With stand(kg)		17.3	17.3	17.3	
Without stand(kg)		15.3	15.3	15.3	
Power requirement		AC 100-240 V~ 50 / 60 Hz			
Power consumption		120W			

CI Module Size (W x H x D)		100.0 mm x 55.0 mm x 5.0 mm			
	Operating Temperature		0 °C to 40 °C		
Environment condition	Operating H	umidity	Less than 80 %		
condition	Storage Tem	perature		-20 °C to 60 °C	
	Storage Hun	nidity	Less than 85 %		
			Digital TV	Analogue TV	
Television system		DVB-T		PAL/SECAM B/G/D/K/I/I',	
		DVB-C		SECAM L/L'	
Programme coverage		VHF, UHF		VHF: E2 to E12, UHF: E21 to E69,	
				CATV: S1 to S20, HYPER: S21 to S47	
Maximum number of				1,086	
storable programmes					
External antenna impedance			75 Ω		

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

HDMI/DVI-DTV supported mode

Component port connecting information

Component ports on the TV	Y	P _B	P _R
	Y	P _B	P _R
Video output ports on DVD player	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

Signal	Component
480i/576i	0
480p/576p	0
720p/1080i	0
1080p	O (50 Hz / 60 Hz only)

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
1280x720	45	60
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

Except for 22/26/32LT64**, 26/32LT66**, 22/26/32LT38**)

IR CODES

• This feature is not available for all models.

Code (Hexa)	Function	Note			
08	ပံ (POWER)	Remote control Button (Power On/Off)			
95	ENERGY SAVING	Remote control Button			
30	AV MODE	Remote control Button			
0B	INPUT	Remote control Button			
F0	TV/RAD	Remote control Button			
10-19	Number Key 0-9	Remote control Button			
53	LIST	Remote control Button			
1A	Q.VIEW	Remote control Button			
02	⊿+	Remote control Button			
03	⊿-	Remote control Button			
79	RATIO	Remote control Button			
1E	FAV	Remote control Button			
09	MUTE	Remote control Button			
00	P^	Remote control Button			
01	Pv	Remote control Button			
AB	GUIDE	Remote control Button			
0C	PORTAL	Remote control Button			
AA	INFO	Remote control Button			
43	Home	Remote control Button			
28	D	Remote control Button			
5B	EXIT	Remote control Button			
44	ОК	Remote control Button			
40	^	Remote control Button			
41	v	Remote control Button			
07	<	Remote control Button			
06	>	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			
B1		Remote control Button			
B0		Remote control Button			
BA	11	Remote control Button			
8E		Remote control Button			
8F	••	Remote control Button			
7E	SIMPLINK	Remote control Button			
45	Q.MENU	Remote control Button			
91	AD	Remote control Button			
E8	ALARM	Remote control Button			

EXTERNAL CONTROL DEVICE SETUP

RS-232C Setup

RS-232C IN (CONTROL & SERVICE)

•••••

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.

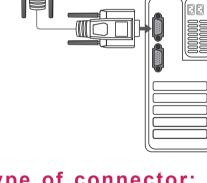
Note: RS-232C connection cables are not supplied with the product.

RS-232C Configurations

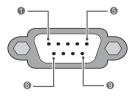
Set ID

Set ID number. "Real Data Mapping".

- 1 Press **Home** to access the main menus.
- 2 Press the Navigation buttons to scroll to **OPTION** and press **OK**.
- 3 Press the Navigation buttons to scroll to SET ID and press OK.
- 4 Scroll left or right to select a set ID number and select **CLOSE**. The adjustment range is 1-99.
- 5 When you are finished, press EXIT.



Type of connector; D-Sub 9-Pin Male



No.	Pin name			
1	3.5V			
2	RXD (Receive data)			
3	TXD (Transmit data)			
4	IR OUT from TV			
5	GND			
6	No Connection			
7	+5V Power out			
8	No Connection			
9	+12V Power out			

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

(Depending on model)

	COMMAND1	COMMAND2	DATA (Hexadeci- mal)		COMMAND1	COMMAND2	DATA (Hexadeci- mal)
01. Power	k	а	00 to 01	13. Treble	k	r	00 to 64
02. Aspect Ratio	k	С	(See p.30)	14. Bass	k	s	00 to 64
03. Screen Mute	k	d	(See p.30)	15. Balance	k	t	00 to 64
04. Volume Mute	k	е	00 to 01	16. Colour Temperature	x	u	00 to 64
05. Volume Control	k	f	00 to 64	17. Energy Saving	j	q	00 to 05
06. Contrast	k	g	00 to 64	18. Auto Configu- ration	j	u	01
07. Brightness	k	h	00 to 64	19. Tune Command	m	а	(See p.32)
08. Colour	k	i	00 to 64	20. Programme Add/Skip	m	b	00 to 01
09. Tint	k	j	00 to 64	21. Key	m	с	Key Code
10. Sharpness	k	k	00 to 64	22. Control Back Light	m	g	00 to 64
11. OSD Select	k	1	00 to 01	23. Input select (Main Picture Input)	x	b	(See p.33)
12. Remote Control Lock Mode	k	m	00 to 01				

 * 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] [Command 2]	First command to control the TV.(j, k, m or x)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] [Cr]	 To transmit command data. Transmit 'FF' data to read status of command. 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
- 09 : Just Scan 0B : Full Wide
- 10 to 1F : Cinema Zoom 1 to 16

07 : 14:9

- (16:9)04 : Zoom
- 06 : Original

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 DTV.

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 p.33.

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 p.33.

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 p.33.

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 p.33

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.

You can also adjust sharpness in the PICTURE menu.

To select OSD (On Screen Display) on/off when controlling

01 : OSD on

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

* Refer to 'Real data mapping'. See p.33.

Ack [k][][Set ID][][OK/NG][Data][x]

11. OSD Select (Command: k I)

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

Data Red : 00 to Green : 64 * Refer to 'Real data mapping'. See p.33.

Ack [j][][Set ID][][OK/NG][Data][x]

10. Sharpness (Command: k k)

To adjust the screen sharpness.

Data Min: 00 to Max: 64

remotely.

Data 00 : OSD off

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 p.33.

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 p.33.

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 p.33.

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 p.33.

Ack [u][][Set ID][][OK/NG][Data][x]

12. Remote control lock mode (Command: k m)

Ack [I][][Set ID][][OK/NG][Data][x]

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

 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.

17. 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			ng		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

Ack [q][][Set ID][][OK/NG][Data][x]

- 18. 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]

- 19. 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 : [Antena]	
0x00 : Analog Main	
0x10 : DTV Main	
0x20 : Radio	
[Cable] 0x80 : Analog Main 0x90 : DTV Main 0xA0 : Radio Channel data range	
Analog - 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

- 20. 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]

21. Key(Command: m c)

► To send IR remote key code.

Transmission [m][c][][Set ID][][Data][Cr]

Data Key code - See p.26.

Ack [c][][Set ID][][OK/NG][Data][x]

22. Control Back Light(Command: m g)

► 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]

23. 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
LE	Externa	l Input		Lı	nput Ni	umber .	

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	
1	0	0	0	HDMI
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]

* Rea	 Real data mapping 					
00 :	Step 0					
:						
A :	Step 10 (Set ID 10)					
:						
F :	Step 15 (Set ID 15)					
10 :	Step 16 (Set ID 16)					
:						
63 :	Step 99 (SET ID 99)					
64 :	Step 100					
:						
6E :	Step 110					
:						
73 :	Step 115					
74 :	Step 116					
:						
CF :	Step 199					
:						
FE :	Step 254					
FF :	Step 255					



The model and serial numbers of the TV is located on the back of the TV Record it below should you ever need service.



Model

Serial