# USERS MANUAL 用户手册 用戶手冊



**LCD** Television

Model Name L26A01A L32A01A L37A01A



This is the image of the model L37A01A.





READ THE INSTRUCTIONS INSIDE CAREFULLY. KEEP THIS USER'S MANUAL FOR FUTURE REFERENCE For future reference, record the serial number of your television. SERIAL NO. \_\_\_\_\_

This serial number is located on the rear of the television.

# **USER MANUAL**

Thank you for purchasing the HITACHI LCD Television. Please read this user manual carefully before operating this product.

To ensure proper operation, please read and follow ALL the instructions, especially the "IMPORTANT SAFETY INSTRUCTIONS" and "SAFETY PRECAUTIONS". Please keep this user manual for future reference.

# CONTENTS

01
02
02
02
02
02
03
03
06
07
07
08
09
09
09
09
10
10 11
12
12 12
12 13
14
14

BASIC OPERATION	19
POWER On/Off	19
Volume UP/DOWN	20
Mute	20
Input Switching to TV, AV1~4, HDMI, and RGB	20
Input Signal Screen Display	21
TV SETUP OPERATION	22
How to use the On-Screen Display (OSD) system	22
Select Language	22
Main Menu List	23
Setup Menu (TV mode)	24
Channel Selections	26
Picture Setting	27
Audio Setting	29
Timer Menu	30
Audio Switching (TV)	31
PC Adjustment Setting	32
About Teletext	34
FUNCTION	36
Size Switching	36
Picture Freezing	37
Power Save Mode	38
TROUBLESHOOTING	39
When Following Messages Appear on the Screen	39
Symptom and Check List	39
PRODUCT SPECIFICATIONS	42
Signal Input	43
Recommended Signal List	44

# IMPORTANT SAFETY INSTRUCTIONS

- Read this instruction thoroughly.
- Retain this instruction for future reference.
- Heed all warnings and cautions to prevent possible danger.
- Follow all instructions. Improper handling could cause personal injury and/or serious damage to the unit that may shorten its service time.
- Do not block any ventilation openings.
- Install the product in accordance with the manufacture's instructions.
- Before calling for the technical support or service technician, read "TROUBLESHOOTING" (39~41) to determine the symptoms when problems occur during installation or operation of the product.
- If serious problems happen (such as smoke or an abnormal odor from the unit), turn off the Main Power, unplug the Power Cord, and then, contact your local dealer immediately.

# INSTRUCTIONS

Thank you for purchasing the HITACHI LCD Television. We hope that you will enjoy the great performance with this product. This LCD Television has been designed to meet the International standards. However, it could cause personal injuries and property damage if improperly handled. In order to prevent potential danger and obtain maximum benefit from your set, please observe the following instructions when installing, operating, and cleaning the product.

Keep this manual for future reference, and record the serial number of your set in the space provided on the front cover page of this manual.

# **About This Manual**

- The information in this manual is subject to change without notice.
- This manual has been created with extra care. In case that you have any comments or questions regarding this manual, please contact your local dealer or our Customer Service Center.
- Before operating this set, please fully understand the prerequisite such as specifications or constraints of the hardware and software. We are not responsible and have no liability for any loss, damage or injury as a result of misuse.
- Reproduction, copying, use, modification, and/or transmission in whole or in part of this manual are prohibited without any prior written permission.
- All other products and company names used in this manual are trademarks or registered trademarks of their respective owners.
- The information in the manual included following models, For 26 inch, L26A01A including L26A01A NA and L26A01A CO For 32 inch, L32A01A including L32A01A NA and L32A01A CO For 37 inch, L37A01A including L37A01A NA and L37A01A CO

# Trademark Credits

- VGA and XGA are trademarks of International Business Machines Corporation.
- VESA is a registered trademark of the Video Electronics Standard Association.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.

# **About Software**

You may not alter, decompile, disassemble, decrypt, or otherwise reverse- engineer the Software installed in this product, which are prohibited by law.

### Features

- Large-screen and high-definition LCD panel.
- Enjoy high resolution display with 1366 (H) x 768 (V) pixels.
- Improved Digital signal processor.
- High quality sound with deeper, richer and dynamic bass tones.
- Accept more digital input devices with HDMI terminal.
- Great diversity of connecting terminals to cover wide range of audio-visual equipment.
- Enjoy the image from PC with large, high-definition LCD screen.
- Easy-to-use On-Screen Display system operating with remote control.
- Low power consumption with power saving feature.
- Swivel feature. (For L32A01A, L37A01A)

# SAFETY PRECAUTIONS

For your safety, please read the following precautions carefully before using this product. Improper use would cause serious personal injuries and/or damage to your property or this product.

# About the Symbols

The following are the symbols used in this manual and affixed on the unit itself. Please fully understand the meanings of the symbols before reading the precautions in this section.

MARNING	Never ignore the instruction. There are risks of serious injuries or possible death to the user.
<b>CAUTION</b>	Do not ignore the instruction. There are possibilities of personal injuries and/or property damage.

Other Symbols				
	The triangle with illustration is intended to alert the users that there are possibilities of fire, explosion, or high temperature if the product is handled improperly. Each illustration within the triangle specifies the contents in detail. (The figure on the left is an example.)			
	The circle with diagonal line and illustration indicates a prohibited action. (the symbol at the left indicates that disassembly is prohibited.)			
	This symbol indicates a compulsory action. The contents will be clearly indicated in an illustration or nearby. (the symbol at the left indicates that the power plug should be disconnected from the power outlet).			

### There is a risk of fire, electric shock, or serious injury.

Unplug the power cord immediately when serious problems occur.

Serious problems such as

- Smoke, abnormal odor or sound comes out from the product.
- No picture, no sound or distorted picture on the display.
- Foreign objects (such as water, metals etc) get inside the unit.

Do not continue using the product under these abnormal conditions.

Unplug the power cord, and contact your dealer immediately.

For your safety, never try to repair the product by yourself.

Do not insert liquids or any foreign objects (such as metals or flammable items) inside the unit.

- In case it happens, unplug the power cord, and contact your dealer immediately.Use special caution when younger children are around the unit.
- Do not remove cover, or modify the product.
  - High-voltage components are installed inside of the unit. Removing covers can expose you to high voltage, electrical shock, and other dangerous conditions.

· Contact your local dealer to perform servicing such as inspection, adjustment, or repair work.

Disconnect the

plug from the

power outlet.

Do not disassemble

# **SAFETY PRECAUTIONS (continued)**

# **M**WARNING

There is a risk of fire, electric shock, or serious injury.

### Install the unit at a proper area where it does not expose anyone to any danger.

• If you hit against the edge of the unit, you may be injured.

### ■ Do not place any objects on top of the unit.

### Objects such as

- Liquid containers (vase, fish tank, flowerpot, cosmetics or liquid medicine).
- If water or any liquid spill onto the unit, it may cause short-circuit and result in fire or electrical shock.
- In case that it happens, unplug the power cord, and contact your dealer immediately.
- Do not place anything heavy on top of the unit.
- Do not climb on or hang from the unit.
- Do not let your pets get on top of the unit.

Unplug this unit during lightning storm.

### Do not install the unit in an unsuitable place.

It could cause a malfunction or in extreme cases danger of electric shock. Places where high
moisture is likely such as bathrooms or shower rooms, close to windows, or outside where rain,
snow or other inclement conditions could occur should be avoided. Please also avoid installing
the unit in a position where fumes from a Hot Spring could come into contact with it.

• To reduce the risk of electrical shock, do not touch the product when starts lightning.





Disconnect the plug from the

plug from the power outlet.

# Do not do anything that may damage the power cord. Do not damage, modify, twist, forcibly bend, heat, or pull excessively the power cord. Do not place heavy objects (including the unit itself) on top of the power cord. If the power cord is damaged, contact your dealer for repairs or exchange. Use only with designated power supply voltage. To prevent the risk of fire and electrical shock, operate this product only with the power supply voltage indicated on the unit. Beware not to drop or have any impact on the unit. Take extra care while moving the unit. The LCD panel is made of glass. In case that it breaks, you may be injured by the broken pieces. In case that you drop the unit or the cabinet is damaged, turn off the Main Power, unplug the power cord and contact your local dealer immediately. Continuing use of the product with above conditions may cause fire or electrical shock.

• Always unplug the power cord first, and clean the blade with dry cloth.

### ■ Do not place the unit on an unstable surface.

Unstable places such as

- Tilted place or shaky rack, table, stand or trolley.
- If the unit falls down, it could cause personal injury.

# SAFETY PRECAUTIONS (continued)

<b>A</b> CAUTION	
<ul> <li>Do not cover or block any ventilation holes on the product. The unit would overheat, and it could cause fire or damage the product which may shorten its service life.</li> <li>Install the product in accordance with the instructions in this manual.</li> <li>Do not place the unit with ventilation side down.</li> <li>Do not install the unit on the carpet or bedclothes.</li> <li>Do not cover the television with table cloth etc.</li> </ul>	
<ul> <li>Be sure to ground the earth cable correctly.</li> <li>Especially when you use power cord adapter, be sure to connect the earth cable to the ground terminal. Incorrect connection would cause fire or electrical shock.</li> <li>For your safety, always make sure to unplug the power cord before connect or disconnect the earth cable.</li> </ul>	Supply conne the ground wir
<ul> <li>Follow the Anti-tumble measures in this manual.</li> <li>If the television tumbles over, there is a risk of personal injury and possible death. Also, it would damage the product seriously.</li> </ul>	0
<ul> <li>Do not install the unit near the medical devices.</li> <li>To prevent malfunction of the medical devices, do not use this product and the medical devices in the same room.</li> </ul>	$\bigcirc$
<ul> <li>Do not place a CRT-based television near the speakers of the LCD Television.</li> <li>It could cause the partial discoloration or blurring of the image on the CRT-based television.</li> </ul>	$\bigcirc$
<ul> <li>Disconnect all of the external connection cables and detach the anti-tumble measures before moving the unit.</li> <li>It may cause fire, electrical shock, or personal injuries.</li> </ul>	0
<ul> <li>Connect the power plug securely.</li> <li>Improper connection will cause overheating and may result in fire.</li> <li>Do not touch the blades of the plug while connecting it to the wall socket. It could cause electrical shock.</li> <li>If the plug is not fitted for the wall socket, contact your dearly for replacement.</li> </ul>	
<ul> <li>Do not handle the power cord with wet hands.</li> <li>It could result in electrical shock.</li> </ul>	
<ul> <li>Do not pull the cord when you unplug the power cord.</li> <li>It may damage the cord and could result in fire or electrical shock.</li> <li>Hold the plug when disconnecting it.</li> </ul>	$\bigcirc$
Unplug the power cord when you do not intend to use the product for long periods of time.	0
<ul> <li>Handle the batteries properly.</li> <li>Improper or incorrect use of the batteries may cause corrosion or battery leakage, which could cause fire, personal injury or damage to the property.</li> <li>Use only the types of the batteries which are indicated in this manual.</li> <li>Do not install new batteries with used ones.</li> <li>Install the batteries correctly by following the polarity (+ and -) indications on the battery compartment.</li> <li>Do not dispose the used batteries as domestic waste. Dispose them in accordance with the local regulations.</li> </ul>	$\Diamond$
<ul> <li>Adjust the headphone volume properly.</li> <li>Excessive sound pressure from headphones might cause hearing loss.</li> </ul>	$\bigcirc$

# **SAFETY PRECAUTIONS (continued)**

PRECAUTIONS				
■ Do not install the unit at areas where it will be subjected to high temperatures.				
It could damage the cabinet or parts of the product.				
• Do not install near any heat sources such as radiator, heat registers, stoves, or other apparatus that produce heat.				
• Keep the unit out of direct sunlight. It could increase the temperature of the unit and cause malfunction.				
■ Viewing Advice				
<ul> <li>The lighting of the environment in which the product is used should be appropriate. Too bright / dark environments are not good for your eyes.</li> </ul>				
<ul> <li>Take time to relax your eyes occasionally.</li> </ul>				
• When you use this product, view from a distance equal to 3 to 7 times the height of the screen. This is the best viewing distance in order to protect your eyes against eyestrain.				
<ul> <li>Adjust the volume in appropriate level, especially during the night.</li> </ul>				
When transporting this product				
• When the product needs to be transported due to moving or repair, use the carton box and buffer material that come with this product.				
• Do not transport this product on its side. It could damage the panel glass or degrade the phosphors of the panel.				
Keep radio away from the unit while in use.				
The unit is designed to meet the international EMI standards due to prevent radio interference. However, the unit may generate noise in the radio.				
If the noise is heard on the radio, please try the following actions.				
Adjust the direction of the radio antenna in order not to receive the interference from the unit.				
<ul> <li>Keep the radio away from the unit.</li> </ul>				
<ul> <li>Use coaxial cable for the antenna.</li> </ul>				
About the infrared communication devices				
<ul> <li>The infrared communication devices such as cordless microphone or cordless headphone may not operate properly around the unit. It is because of the communication failure. Please note that this is not malfunction.</li> </ul>				

When you dispose this product at the end of its life, follow the regulations in your residential area.
 For more information, contact the local authority or the dealer where you purchased the product.

# **Cleaning and Maintenance**

### Please make sure to unplug the power cord before cleaning the unit.

### ■ How to clean the LCD panel of the unit.

- The panel surface is specially- coated to reduce the reflection and cut infrared radiation; thus, wipe the panel with a lint-free and dry cloth in order to prevent damage to the coating.
- Do not use a chemical cloth or cleaner. Depending on the ingredients, it may cause discoloration and damage on the coating.
  Do not wipe with a hard cloth or rub hard. It may damage the coating.
- In case of the greasy dirt such as fingerprint, wipe with a lint-free cloth moistened by a diluted neutral detergent solution, and then wipe with a soft and dry cloth.
- Do not use a spray cleaner. It could remove the coating or cause malfunction by entering inside of the unit.

### How to clean the cabinet of the unit.

- The following may cause crack, deformation, and paint peeling.
  - Do not wipe the cabinet with benzene, thinner, and other chemical products.
  - Do not spray volatile solutions such as insecticide over the cabinet.
  - Do not leave the cabinet in prolonged contact with plastic or rubber materials.
- Do not use a chemical cloth, cleaner or wax. Depending on the ingredients, it may cause crack and deformation.
- Use a lint-free cloth to clean the cabinet and control panel of the unit. In case of the heavy dirt, wipe with a soft cloth moistened by a diluted neutral detergent solution, and then wipe with a soft and dry cloth.
- Never use the following detergents. It could cause crack, discoloration, and scratch.
  - · Acid/ alkaline detergent, alcoholic detergent, abrasive cleaner, powder soap, OA cleaner, car wax, glass cleaner, etc.

# ABOUT LCD PANEL

# Other Common Characteristics of LCD Panel

The following are the common phenomena when operating LCD Panel due to its structural reason. Please note that they are not malfunctions.

### • Defective Spots on Panel

The LCD panel is manufactured with high-precision technology. However, there might be some spots that are not emitted, brighter than the others, or in different colors, etc.

### Surface on Panel

The LCD panel displays images by blinking the fluorescent lamps internally. This could raise the temperature of the display surface.

In addition, do not impact strongly on the surface of the panel because LCD panel is made with fine processing glass.

### Residual image

When a still image or menu is displayed on the screen for a short time (about a minute) and then switches to another image, it may leave an "after-image" on the screen. The residual image will disappear on its own.

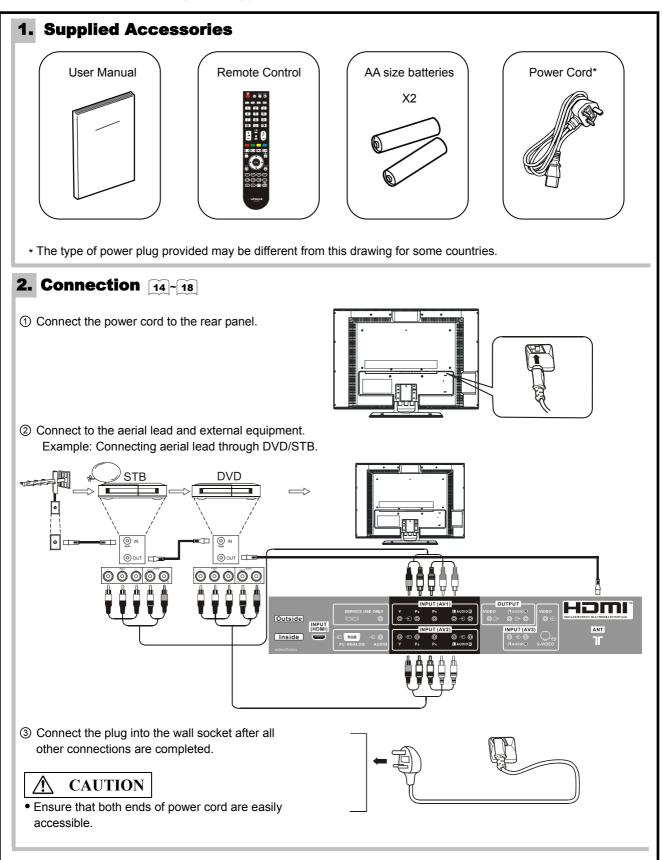
### • The Usage under the Low Temperature Environment

Because of the structural characteristics of the LCD panel, the response speed of the LCD panel becomes slower when the ambient temperature around the television becomes too low. In some cases, it may cause the residual image.

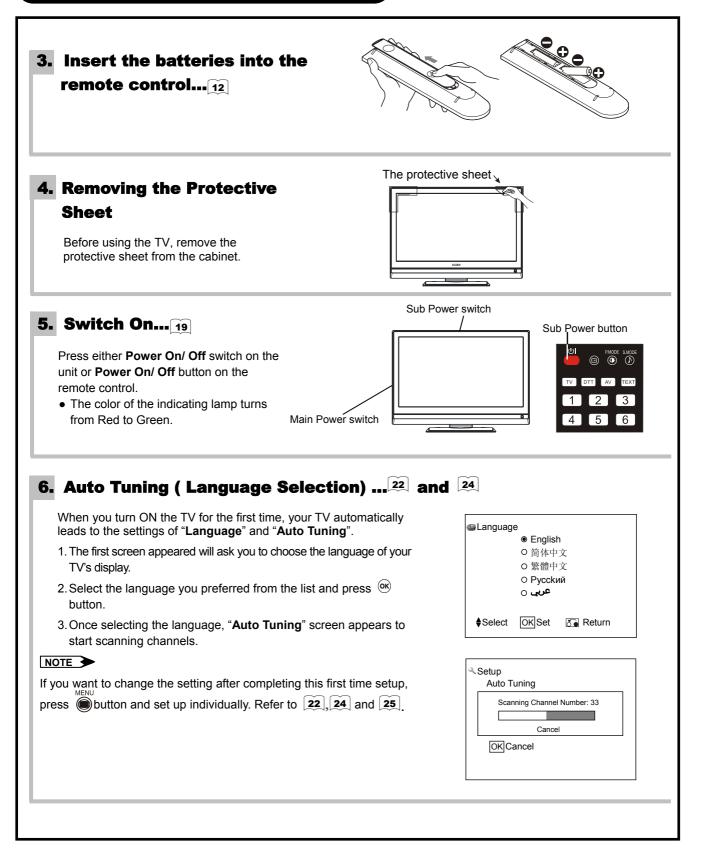
The residual image will disappear on its own as the temperature goes up and back to normal.

# QUICK START GUIDE

For more information on connecting and using your TV, please be sure to read all instructions in this user manual.



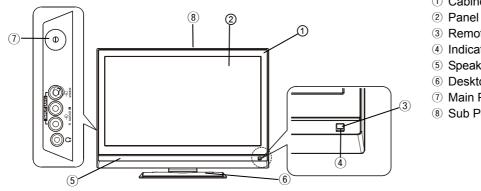
# **QUICK START GUIDE (continued)**



# **COMPONENT NAMES**

# Main Unit

### **Front Panel**



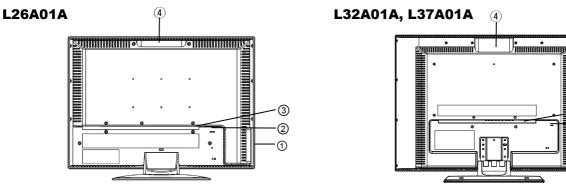
- 1 Cabinet
- ③ Remote Control Receiver
- ④ Indicating Lamp
- (5) Speaker
- 6 Desktop Stand
- Main Power Switch (on the left side)
- (8) Sub Power Switch (on the top side)

3

2

1

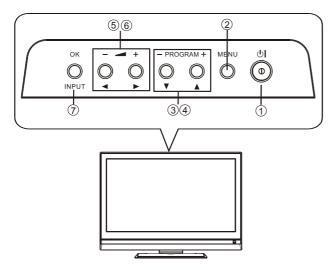
### **Rear Panel**



- 1 Side Input
- 2 Power Cord Socket
- ③ Terminal Board (External Device Connection)
- ④ Control Panel (see below for details)

Please refer to 14 ~ 18 for the detailed information for the connections.

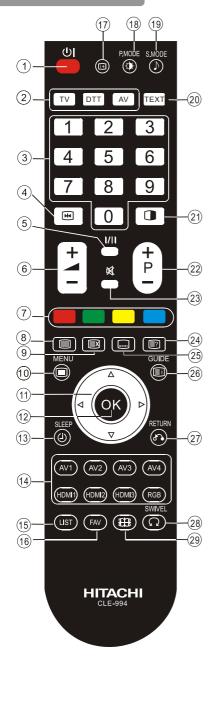
### **Control Panel**



- ① Sub Power button
- Menu button
- ③ Channel Up/ ▲ button
- ④ Channel Down/ ▼ button
- ⑤ Volume Up **1** /▶ button
- 6 Volume Down /◀ button
- ⑦ Input Select /OK button

# **COMPONENT NAMES (continued)**

# **Remote Control**



### (1) Sub Power

Press this button to switch TV On or Off standby.

- ② Function Select (TV /AV) Press this button to select function mode. Normally, select "TV". <u>DTT input is not available.</u>
- ③ Program Select [Page Select]
- Press these buttons to select a TV program directly. (4) Freeze [Hold]
  - Press this button to change the picture to freeze mode. Press it again to return to normal picture. (Also, it holds the page in teletext mode.)
- 5 CHI/II
- This is exclusively for TV audio A2/NICAM mode.
- 6 Volume Up/Down
- ⑦ [Color]
- ⑧ TV/Text [TV⇔Text]

This switches between the TV mode and the Teletext mode.

9 Time [Cancel]

Press this button to display the time when receiving a TV program. The time is not displayed if the received signal does not have any time information.

- 1 Menu [Back Light]
- (1) Cursor
- 12 OK
- 13 Off Timer

This automatically sets the power to standby mode when the selected time period has elapsed.  $(0\rightarrow 30\rightarrow 60\rightarrow 90\rightarrow 120min.)$ 

(14) Input Select

Press these buttons to change input mode. HDMI2, HDMI3 input are not available.

- 15 <u>Not Available</u>
- 16 Not Available
- (17) Recall

Press this button shows the input signal status.

18 Picture Mode

Picture mode can be changed each time pressed in the following sequence. Dynamic $\rightarrow$ Natural $\rightarrow$ Cinema

(19) Sound Mode

Sound mode can be changed each time pressed in the following sequence. Movie  $\rightarrow$  Music  $\rightarrow$  Speech  $\rightarrow$  Favorite.

- 20 Text
  - Press to activate and to exit from Teletext.
- 21 Not Available
- (22) Channel Up/Down[Page select]
- 23 Mute
- (24) [Reveal]
- 25 [Subtitle]
- (26) [Index]
- (27) Return

You can use this to return to the previous menu.

- 28 Not Available
- 29 Picture Size [Zoom]
  - Press this button to change picture size.

### NOTE

Some buttons are only for Teletext mode, and other buttons have different functions in Teletext mode from the use of TV mode. Those buttons are indicated by []. Refer to "About Teletext" on 34 and 35

# PREPARATION

### **Remote Control Batteries Installation**

This remote control operates on 2 "AA" batteries.

### **1.** Open the battery compartment cover

• Slide open the battery compartment cover on the backside in the direction of an arrow, and remove the cover.

### 2. Installing the batteries

• Install 2 "**AA**" batteries (included) making sure the polarities match the indication inside the compartment.

Projecting parts

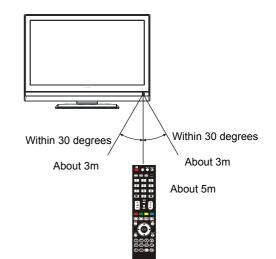
### 3. Close the battery compartment cover

• Make sure of the positions to fit the projecting parts in the holes, and slide the compartment cover in the direction of an arrow till it clicks shut.

	~			
$\sim$	Ľ		$\sim$	
		Ľ	>	
)	$\mathbb{Z}$	<i>b</i>	$\sim$	$\overline{}$
	'	C	$\sim$	$ \rightarrow $

# Handling the Remote Control

Use the remote control within about 5m from front of the unit's remote-control sensor and within 30 degrees on both sides.



# **CAUTION**

# It could cause corrosion or battery leakage and may result in physical injury and/or property damage including fire.

- Never mix used and new batteries in the device.
- Replace all the batteries in a device at the same time.
- Remove the batteries if the remote control is not going to be used for an extended period of time.

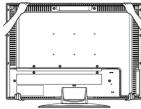
# To avoid possible failure, read the following instructions and handle the remote control properly.

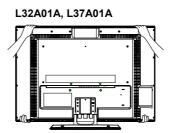
- Do not drop or have an impact on the remote control.
- Do not spill water or any liquid on the remote control.
- Do not place the remote control on the wet object.
- Do not place the remote control under the direct sunlight or near sources of excessive heat.

# **Caution When Moving the Main Unit**

As this product is heavy, whenever it is moved, two people are required to transport it safely. When moving the unit, hold it by the top and bottom frame of the LCD screen. (See the figures below for details.)

### L26A01A





# **PREPARATION** (continued)

# **Safety Precaution on Main Unit Installation**

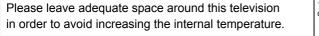
### Read SAFETY PRECAUTIONS (3 to 6) carefully besides this page.

The Desktop Stand has been used for the illustration in this manual.

When installing the main unit, be sure to use the specified mount units in order to obtain maximum performance and maintain the safety.

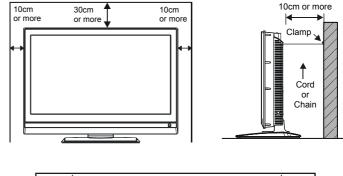
We assume no responsibility or liability for personal injuries or property damages caused by use of other mount units or improper installation.

As for the installation instruction, please read each user manual of the mount units: Wall Mounting, and Ceiling Mounting. In case of using Wall or Ceiling Mounting unit, contact your local dealer, ask the specified installation specialist to set up. Never attempt to install it by yourself. It could cause injuries or damages



Make sure not to block any ventilation holes. Do not install the television in the small space such as inside the rack, closet or the box.

Leave more than 10cm of clearance from each side of television and 30cm from the top of television to wall.



Without Swivel function: Leave at least 10cm of clearance behind rear unit.

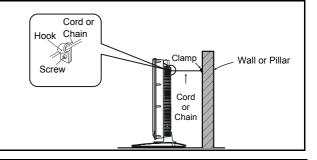
With Swivel functrion: Leave at least 35cm of clearance to obtain the maximum performance of Swivel Function. (for L32A01A, L37A01A)



Install in a stable place and implement safety measure against overturning.

### Securing to a wall or pillar

Using a commercially available cord, chain and clamp, secure the set to a firm wall or pillar.



### Securing to ceiling

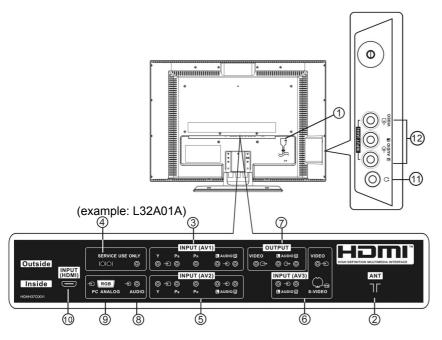
Using a commercially available cord, chain, and clamp secure the set to a ceiling.

### NOTE

- For more information regarding the mounting of the unit, please contact your dealer.
- Please install the unit at a proper area where it does not expose anyone to the danger of hitting themselves (for example their hands, head or face, etc) against the edge of the unit and cause personal injury.

# CONNECTION

# **Terminal Positions**



### Rear

- 1 Power Cord Socket
- 2 Aerial Socket
- 3 AV1
- (4) Service Use Only
- ⑤ AV2
- 6 AV3
- Monitor Out
- 8 PC(RGB)/HDMI Analog Audio Input
- 9 PC Connection Terminal (D-Sub 15 pin)
- 10 HDMI

### Side

(1) Headphone Terminal(12) AV4

# **Connecting Procedure**

This unit is ready for various kinds of connections. Make a connection in the following steps. Be sure to unplug the power cord from the wall socket first, when connecting external equipment.

- **1.** Connect Power Cord to the rear panel.
- 2. Connect Aerial Lead.
- 3. Connect your external equipment (if any) to the unit.
- **4.** Connect the power plug to the wall socket.

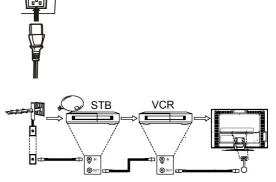
### **1.** Connecting Power Cord to Rear Panel.

Connect power cord to the television.

\* Make sure not to connect the power plug to the wall socket until all connections are completed.

### 2. Connecting Aerial Lead.

- There are two ways to connect aerial lead.
- ① When you do not have any other external equipment Connect the aerial lead directly into the socket at rear panel.
- When you have one or more external devices to connect:
   1. Use RF cable to connect between each equipment and aerial.
  - 2. Connect the Aerial Lead to an equipment "In" socket marked
  - Connect the RF cable from the equipment "Out" to the other equipment "In".
  - 4. Then, connect from the equipment "Out" to "ANT" on the LCD screen socket.



[Example: Connecting Antenna through STB and VCR.]

### Precautions when connecting the aerial

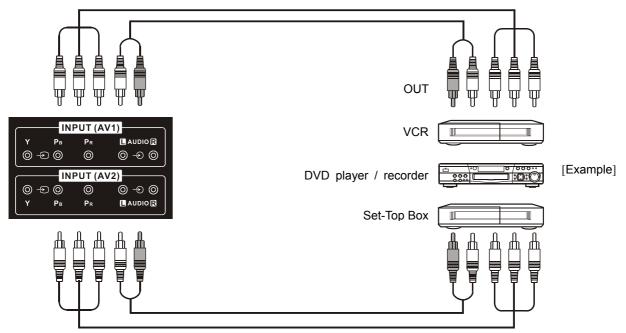
- Please use a coaxial cable which is free from interference to connect the aerial. Avoid using a parallel flat feeder wire as interference may occur, causing reception to be unstable and stripe noise to appear on the screen.
- Avoid using indoor aerial as this may be affected by interference. Please use CATV net or outdoor aerial.
- For safety, install an external aerial conforming to AS1417.1(Applicable for Australia only)
- If there are noise in the picture of VHF-Low band channel, please use the double-shielded cable (not provided) for RF LEADS to reduce the noise.

# **Connecting Procedure (continued)**

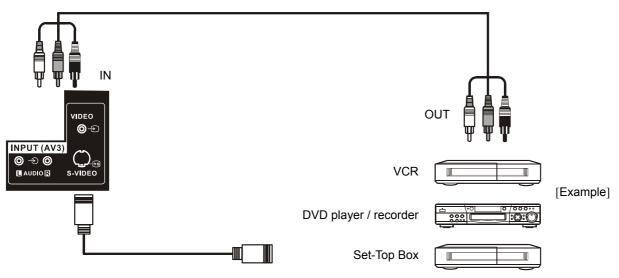
### **3. Connecting to External Equipment**

### • Terminals on Rear

AV1 and AV2 can be connected to the equipment with Component output.



- If your external device has a Component terminal, COMPONENT / AUDIO connection is recommended for higher quality picture.
- AV3 can be connected to the equipment with S-Video output and Composite output.



P If your external device has a S-Video terminal, S-Video connection is recommended for higher quality picture.

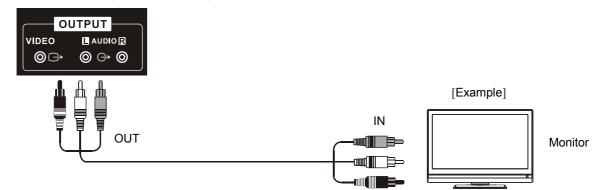
### NOTE

If both S-Video and Composite Video input terminals of AV3 are connected at the same time, S-Video will have its priority.

### **Connecting Procedure (continued)**

Monitor Out can be used to display same image and sound as main unit on another television.

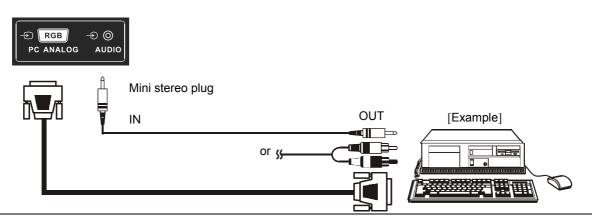
When this output terminal is connected to an external television with a 75 Ohm terminal, the same image and sound from composite (AV3, AV4), or TV signal can be displayed to the external television.



### NOTE

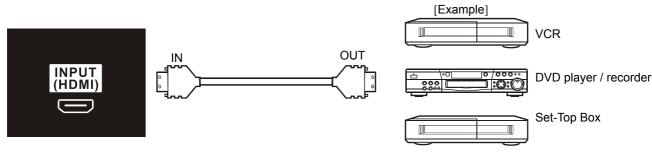
• Video output is not available from component, RGB, or HDMI input.

PC connection terminal (D-sub 15 pin) +PC(RGB)/HDMI Analog Audio Input terminal connected to PC, which allows Analog RGB signal.



HDMI terminals can be connected to the devices with HDMI output .

If the external device has DVI output, this can be available with HDMI-DVI cable. In case of using the HDMI-DVI cable, connect analog audio signal to **PC (RGB)/HDMI Analog Audio Input** terminal.



# 

HDMI (High Definition Multimedia Interface) is next-generation multimedia I/O interface. Only one cable is used to transmit all video/audio/control signals, which creates easy connection.

Moreover, those digital signals can produce high quality data without any degradation. You are provided with one HDMI terminals, one of the most remarkable features.

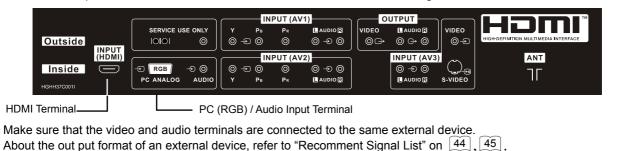
P If your external device has a HDMI terminal, HDMI connection is recommended for higher quality picture and sound.

### **Connecting Procedure (continued)**

### NOTE

• About PC (RGB)/HDMI analog audio input terminal

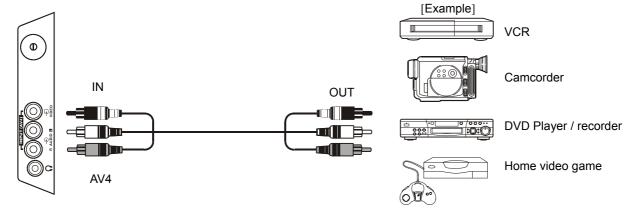
- This terminal can be used in one of the following cases only.
- ① The external device is connected to the PC (RGB) terminal of the TV.
- ② The DVI output of an external device is connected to the HDMI terminal using the HDMI-DVI cable.



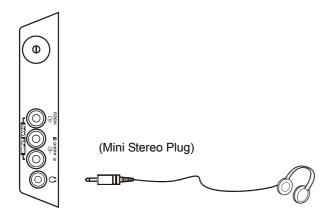
### • Terminals on Side

Since the following terminals are located on the side, it is very convenient to use the extra device on a temporary basis after done the connections on the rear panel.

AV4 can be connected to the equipment with a composite output.



Headphone

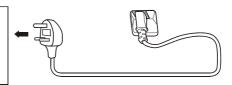


 $\bigcirc$  The audio from the speaker will be muted when connecting the headphone to this terminal.

# **Connecting Procedure (continued)**

### 4. Connecting the plug into the wall socket

Connect the power cord after completing all other connections. (The type of plug is different from this drawing for some countries.)



# **CAUTION**

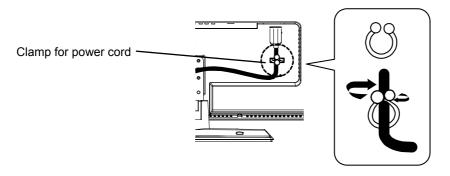
- Use only the power cord provided.
- Do not use a power supply voltage other than that indicated (AC110-240V, 50/60Hz). It may cause fire or electric shock.
- For the LCD panel, a three-core power cord with a ground terminal is used for efficiency protection. Always be sure to connect the power cord to a three-pronged grounded outlet and make sure that the cord is properly grounded. If you use a power source converter plug, use an outlet with a ground terminal and screw down the ground line.
- Ensure that both ends of power cord are easily accessible.
- If you have to change the power cord, please use the certified power cord that meets your region's safety standard.

# D Information

### • How to secure the power cord and cables

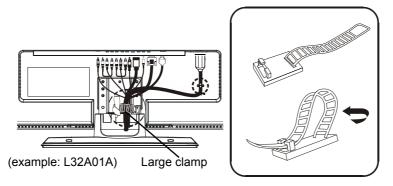
### Step 1. Secure the power cord

After connecting power cord to the rear panel, secure the power cord with the clamp.



### Step 2. Secure all cables

Secure all cables together with power cord by using large clamp.



### NOTE

• When you secure the cables, please be careful not to tighten too much.

# **BASIC OPERATION**

# **POWER On/Off**

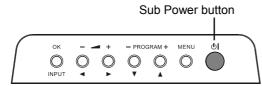
Now, turn On the main power of the unit.

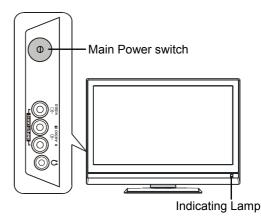
### • To turn On the power of the television

- Press the Main Power switch on the television.
   The Indicating Lamp will illuminate in Red (Standby mode).
- 2. Press either Sub Power button on the control panel or Sub Power button on the remote control.
  - The color of the Indicating Lamp turns into **Green**, and the image will display on the screen.

### • To turn Off the power of the television

- 1. Press either Sub Power button on the control panel or Sub Power button on the remote control.
  - The image disappears from the screen and the Indicating Lamp turns into **Red** (Standby mode).
- 2. Press Main Power switch to completely turn Off the power of the unit.





Sub Power button



### **The Indicating Lamp Status**

Indicating Lamp Status	Power Status	Power Switch Status
Off	Off	Main power $\rightarrow$ Off
Red	Standby mode	Main power $\rightarrow$ On Sub Power button $\rightarrow$ Off
Green	On	Main power $\rightarrow$ On Sub Power button $\rightarrow$ On
Orange	Power Save mode	Main power $\rightarrow$ On Sub Power button $\rightarrow$ On

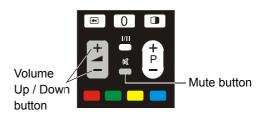
### NOTE

- If the image does not appear on the screen at all, or have any problem, see TROUBLESHOOTING on 39~41. It may help you to solve the problems.
- You can turn ON the power only by pressing the Sub Power button during the Standby mode.
- Do not switch the power On/Off repeatedly in a short period of time. It could cause malfunction.
- To avoid sudden surges of electricity when the power comes back on, unplug the power cord before you leave if there is a power cut during use of the unit.

# **BASIC OPERATION (continued)**

# Volume UP/DOWN

- To increase the sound volume, press button on the remote control, or Volume Up button on the control panel.
   The Volume Indicator value on the screen will shift right.
- To decrease the sound volume, press button on the remote control or Volume Down button on the control panel.
   The Volume ladicate volume on the corresp will shift left
  - The Volume Indicator value on the screen will shift left.







# Mute

- 1. To mute the sound, press 🗰 button on the remote control.
  - The sound of the unit is temporarily turned Off.
  - The color of the Volume indicator will turn into **magenta** while muting the volume.
- 2. To turn the sound back, press 🗰 button again, or Volume Up button on either remote control or the control panel.

### NOTE

• You can decrease the volume by pressing *button* while the sound is muted.

# Mute 26

The Volume indicator

# Input Switching to TV, AV1~4, HDMI, and RGB

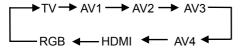
By pressing Input Select button, you can switch the input.

- To watch actual broadcast, press Input Select button on the control panel, the numeric buttons or Channel Up / Down button on the remote control.
- To display the image outputting from the external equipment connected to each terminal (TV, AV1~4, HDMI and RGB), select corresponding mode.
- 1. Press Input Select buttons on the remote control.

(Use " AV "button to switch between AV1~AV4 mode.)

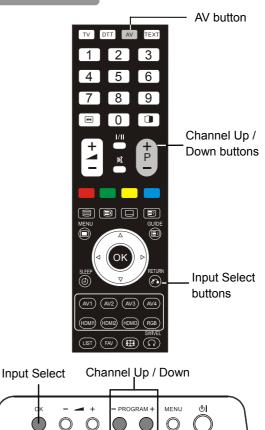
**2.** The Input modes can be also switched by using **Input Select** button on the control panel.

Each time this button is pressed, the screen displays corresponding mode by following order.



**3.** To go to **TV** mode, press **Channel Up/Down** buttons on remote control or **Program UP/Down** on the control panel.

Also, you can use the numeric buttons or **TV** button on the remote control.



۸

INPUT

< >

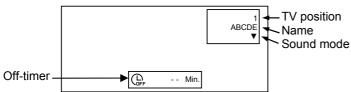
# **BASIC OPERATION** (continued)

# **Input Signal Screen Display**

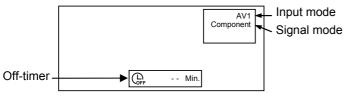
The input signal status can be displayed on the screen by pressing the  $\ensuremath{\textcircled{}}$  button of the remote control.

- The display in TV mode will appear when changing the channels.
- The display will go out in approximately 5 seconds.

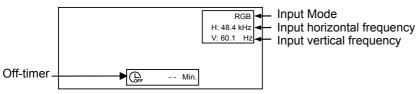
### тν



VIDEO



RGB





Recall button

# TV SETUP OPERATION

# How to use the On-Screen Display (OSD) system

With the On-Screen Display system, you can access the various kinds of the features and functions in this product.

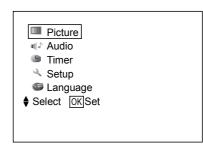
### Basic Operation

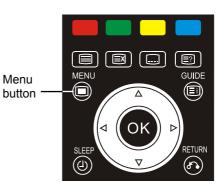
MENU

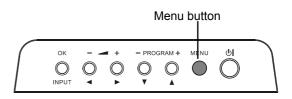
- Press () button on the remote control or Menu button on the control panel of the unit. The Main Menu is displayed on the screen as shown on the right.
- To select the item, press (\*) buttons.
   The selected item will be highlighted in Yellow.
- Press <sup>™</sup> button to set your selection. The selected menu page will be displayed on the screen.
- 5. Use (\*) buttons to adjust the item values or choose options.
  Press (\*) button to set your selection.
- **6.** To exit from the menu, press 🖲 button.

### NOTE

- The OSD menu screen will be closed automatically when no operation has been made for about 30 seconds.
- If the item in menu is shown in gray, it means that it cannot be selected or adjusted.







# Select Language

Select the language from the list so that you can display the OSD menu in the selected language.

# How to set Language

- 1. Enter the "Language" menu from the Main Menu.
- Select the appropriate language with (\*) button from the list. The selected item will be highlighted in Yellow.
- 3. Press 🞯 button to set your selection. The white dot is marked inside of the circle when the selection is fixed.
- 4. Press 🖲 button to exit from the entire OSD menu.

@Language					
	English				
	O 简体中文				
	○ 繁體中文				
	О Русский				
	عربي ⊖				
<b>♦</b> Select	OK Set 👔 Return				

<Main Menu>

# Main Menu List

	Menu	Page		Menu		Page
	Picture Mode	27	Audio	Perfect Volume		29
	Contrast	27		TV Speakers		29
	Brightness	27		Reset		29
	Color	27	Timer	Off Timer		30
	Sharpness	27		Auto Tuning	Mode	24
	Tint	27		Auto Tuning	Search	24
	Color Temperature	27			Position	24
Picture(TV/AV)	Back Light	27			Frequency	24
	Reset	27			Name	24
	Black Enhancement	28	Sotup(T)	Manual Tuning	Sound System	24
	DNR	28	Setup(TV)		Color System	25
	MPEG NR	28			Skip	25
	Film Mode	28			Antenna Att*	25
	3D Comb Filter	28		Fine Tuning		25
	Picture Size	28		Sort		25
	Reset	28		Teletext Language		34
	Contrast	33	Setup(AV)	Video Power Save		38
	Brightness	33		Reset		_
Picture(RGB)	Color Temperature	33		Auto Adjust		32
	Back Light	33		Image Position		32
	Reset	33		Horizontal Clock		32
	Audio Mode	29	Setup(RGB)	Clock Phase		32
	Treble	29		Reset		32
	Bass	29		Frequency Display		32
Audio	Balance	29		WXGA		32
	Matrix Surround	29	Language	-		22
	Dynamic Bass	29		* This function	is not available (gr	ay out).

# Setup Menu (TV mode)

You can install channels and make the various settings related channels.

- **1.** Press button.
- 2. Select " Setup" menu and press or button.
- **3.** Select the preferred menu item and press  $\bigcirc$  button.

🔍 Setup		
Auto T	uning	
Manua	I Tuning	
Fine T	uning	
Sort		
Teletex	kt Languag	е
♦Select	OKSet	🔊 Return

Selected Items			Setup hint
		Position	Searches every channel. Store the channels in order of tuning.(1~125)
Auto Tuning	Mode	Direct	Searches available channel. Store the channels in fixed number according to broadcasting standard. The channel number $1\sim12$ and $21\sim69$ are displayed as C* *, and the channel number $101\sim146$ are displayed as S* *.
	Search		Tune the local channels automatically. Press $\stackrel{\scriptsize (M)}{\twoheadrightarrow}$ button to start searching.
	Position		Press channel up (+) down (-) buttons to input position number $(1\sim125)$ or channel number (C <sup>**</sup> or S <sup>**</sup> ).
			Search the frequency by using $$ button when Auto Tuning Mode is set to [position].
			When Auto Tuning Mode is set to [Direct], this function is not available (grayed out).
Manual Tuning			<ol> <li>Move the cursor to the first digit and select the letters with (*) buttons.</li> <li>Move to the next digit with (*) button.</li> <li>Press (*) button again when you finish inputting all the</li> </ol>
			<ul> <li>letters.</li> <li>The selectable letters are as follows: "0"~"9", "A"~"Z", " " (blank), "+", "- ", "." (Period) and "?".</li> </ul>
		Auto	
	Sound System	М	Select [Auto] normally.
		D/K	In case that sound is not output correctly, select the other modes depending on the received signal.
	I B/G		modes depending on the received signal.

### NOTE

When you turn ON the television for the first time, your television is at "the original factory setting" and may not be able to display the image normally on the TV screen. Please select **Auto Tuning** to set the TV channel.

# Setup Menu (TV mode) (continued)

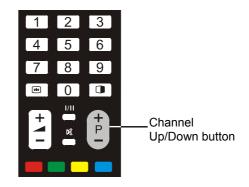
With this menu, you can access various kinds of features relating to TV channel settings.

Setup				
Auto T	uning	]		
Manua	l Tuning			
Fine T	uning			
Sort				
Teletex	t Languag	е		
♦Select	OK Set	🔊 Return		

Selected Items			Setup hint
		Auto	
		NTSC4.43	Select [Auto] normally.
	Color System	SECAM	In case that color is not displayed correctly, select the other modes depending on the received signal.
		PAL	
Manual Tuning		NTSC3.58	
	Skip	Off	It allows you to skip unregistered channels automatically when you use channel up (P+) down (P-) buttons to select channels.
	Зкір	On	This function will automatically skip unavailable channels when set to on.
Antenna Att.			This function is not available (gray out).
Fine Tuning	-56~+	-56	<ul> <li>Increase the frequency data for the main tuner.</li> <li>Decrease the frequency data for the main tuner.</li> </ul>
Sort			<ul> <li>You can change the order of channels as follows.</li> <li>1. Move the cursor to the channel row you want to change order and then, press <sup>(K)</sup> button.</li> <li>2. The color of the letters on the designated line will be turned into yellow bracket and with [].</li> <li>3. Move the designated row by using <sup>(1)</sup>/<sub>(1)</sub> buttons.</li> <li>4. Press <sup>(N)</sup>/<sub>(N)</sub> button to fix the position.</li> </ul>
			<ul> <li>This function is not available (grayed out) when the Auto Tuning Mode is set to [Direct].</li> </ul>

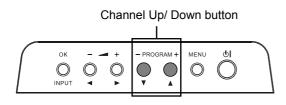
# **Channel Selections**

There are 2 ways to select the channels: stepping through the channel, and selecting by number.



### **Stepping through the Channel**

Press Channel Up/Down button to switch the next or previous channel on the list.



### **Selecting by Number**

Enter the number of acquired channel by using numeric buttons on the remote control. The selectable channel number and method differ depending on the modes ("**Position**" or "**Direct**") of **Auto-tuning**. See  $\boxed{24}$  for the details.

### • If you have tuned channels with "Position" mode:

The position number of  $0\sim125$ , of which you have tuned with "**Position**" mode, can be selected by using numeric buttons on the remote control.

### • If you have tuned channels with "Direct" mode:

Input the number "001~012 (displayed as C1~C12), 021~069 (displayed as C21~C69) or 101~146 (displayed as S1~S46)" by using numeric button on the remote control.

# **Picture Setting**

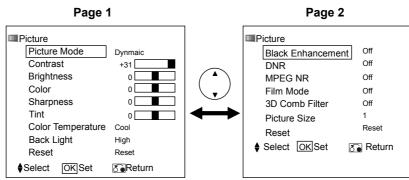
You can make specific adjustments for the picture based on your preference.

- **1.** Press button.
- 2. Select "Picture" menu and press 🞯 button.
- **3.** Select the preferred menu item and press  $\bigcirc$  button.

(By pressing ▼ button at the bottom of each menu page, the next Picture menu will appear on the screen.)

NOTE

Please see 33 about picture setting of PC



Selected Items		Setup hint
	Dynamic	You can make the better selection from 3 modes Depending on the lighting condition and intended use.
Picture Mode	Natural	Dynamic : Suitable for the brighter conditions.
	Cinema	Natural : Suitable for the normal lighting condition. Cinema : Suitable for watching movie.
Contrast*	-31~+31	This adjusts the contrast to meet the lighting environment by using $\textcircled{\bullet}$ . button.
Brightness*	-31~+31	With this function, black is adjusted to change the overall brightness by using
Color*	-31~+31	It can adjust color density based on your preference by using ④. button
Sharmaaa*	15.115	Preferred sharpness can be adjusted by pressing ④
Sharpness*	-15~+15	button for softer image or $igodot$ button for sharper image.
T: 4*	04 + 04	Pressing $\textcircled{\begin{subarray}{c} \bullet \\ \bullet \end{subarray}}$ button enhances red and weakens Yellow, while pressing $\textcircled{\begin{subarray}{c} \bullet \\ \bullet \end{subarray}}$ button weakens red and enhances Yellow.
Tint*	-31~+31	The setup hint is adjusting for the realistic skin color.
		This is not available by PC mode when receiving RGB signal.
	Cool	You can select from 3 settings (default): Cool, Normal, Warm depending on the
Color	Normal	color condition with $$ buttons.
Tomporaturo*	You can adjust the setting in "User" item.	
	User	······································
	High	
Back Light	Middle	Adjust the brightness of the Back Light for the maximum visibility.
-	Low	
Reset		Each item on this menu screen can be restored to the original factory settings by pressing $\widehat{\mbox{\tiny ON}}$ button.

### ▲ Information

The setting of the items indicated by " 🖈 " can be stored for each of inputs and picture modes (Dynamic/Natural/Cinema). You can enjoy different setting depending on the selected input such as VCR in AV3.

# **Picture Setting (continued)**

Selected I	tems	Setup hint
	Off	
Black Enhancement	Low	Adjusts the black level compensation.
Black Emancement	Middle	
	High	
	Off	
DNR	Low	The noise on the screen or interference could be reduced, especially at the area of weak electric field.
DIK	Middle	
	High	
	Off	
MPEG NR*	Low	This is a noise reduction system for MPEG picture signal. (ex. against mosquito noise and block noise)
	High	(ex. against mosquite noise and block holse)
	Off	This helps to make the moving image smooth.
Film Mode	On	<ul><li>On: Automatically identify if it is the movie film and faithfully reproduces the original film images.</li><li>Off: Set to Off if the image does not look natural.</li></ul>
3D Comb Filter	Off	This is available only when receiving PAL/ NTSC 3.58 composite signal. This reduces the dot and color blurring in minute scales so that it can
	On	reproduce purer color.
Picture Size	1	Select [1] it will display the original picture completely. If the images from TV signal (especially CATV) has blacken gap in Panoramic mode,
	2	and select [2], it will make up for the gap. But when display is no available in "Cinema" size. This function only works for TV, Composite, Component and HDMI input.
Reset		Each item on this menu screen can be restored to the original factory settings by pressing <sup>(M)</sup> button.

### Information

The settings of the item indicated by " 🖈 " can be automatically stored depending on the signal mode.

NOTE About "Film Mode"

• The image might not look natural depending on the image contents.

Phenomena such as

- ① When switching the subtitles of a film or images, the image displays fine horizontal streak lines.
- ② When switching the scenes such as commercial and animation, the image displays fine horizontal streak line.
- ③ When displaying a ticker or subtitle, the text on the image becomes rough ( aliasing).
- ④ When watching the image form AV input which is connected to any external equipment, the OSD of external equipment displays fine horizontal streak lines.

These phenomena occur due to the method of converting the image.

Please note that this is not malfunction.

In case that it is disturbing, please set to Off.

In addition, the effect of this menu might vary depending on the size setting (See 36)

Also, this might not be ineffective depending on the scene of image.

# Audio Setting

You can adjust and customize the audio conditin as you like.

- **1.** Press button.
- **2.** Select " **Audio**" menu and press **(**) button.
- **3.** Select the preferred menu item and press  $\bigcirc$  button.

<b>⊪</b> ⊈^Audio	
Audio Mode	Favorite
Treble	0
Bass	0
Balance	0L R
Matrix Surround	Off
Dynamic Bass	Off
Perfect Volume	Off
TV Speakers	On
Reset	Reset
♦Select OKSet	🔊 Return

Selected I	tems	Setup hint
	Movie	
Audio Mode	Music	You can select the most suitable sound condition from these 4 items.
Audio Mode	Speech	You can adjust any value you preferred in "Favorite" item.
	Favorite	
Treble	-15~+15	Adjust the Treble of the sound.
Bass	-15~+15	Adjust the Bass of the sound.
Balance	-10~10	Adjust the balance of the sound comes out from right and left side of the speakers. (Notice: When Matrix Surround is enabled, adjusting the Balance will not completely mute any one speaker.)
	Off	The surround sound is mixed to left and right in order to create the illusion of virtual surround speakers.
Matrix Surround	On	(Recommendation: when the Matrix Surround is on, ensure the Balance is set to "0" for optimum surround sound effect.)
Dynamia basa	Off	Dynamic Bass gives you the enhanced bass sound. Low frequency
Dynamic bass	On	signals can be boosted while the output signal amplitude is measured.
Perfect Volume	Off	Automatically adjusts audio input levels to stay within a safe volume range. For example, when the input sound is too loud, the volume is
	On	automatically decreased.
TV Speakers	Off	This needs to be switched to Off when you want to listen to audio from external equipment.
i v Opeaners	On	It is normally set to On when you operate the set using the built in speakers.
Reset		Each item on this menu screen can be restored to the original factory settings by pressing $\textcircled{\mbox{\scriptsize est}}$ button.

# Timer Menu

This allows your television to turn Off (Standby mode) at set time automatically, which you may find useful.

,,		
Timer Off Timer	Min.	
▲► Adjust	🔊 Return	

Selected Items		Setup hint
	Min.	
	30Min.	
Off Timer	60Min.	This function automatically sets the power to Standby mode when the selected time period has elapsed.
	90Min.	
	120Min.	

# ▲ Information

One minute before the time you set, the screen will display "Time off within one minute".

# Audio Switching (TV

### NICAM / Sound Multiplex (including A2) (TV mode)

You can make optimum use of available audio by pressing I/II button of remote control. Audio can be switched only if receiving NICAM and sound multiplex signals; otherwise, pressing this button will have no effect, such as when only mono sound is received.

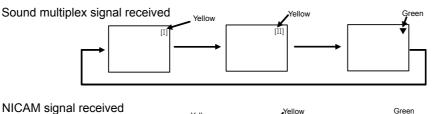
These can be divided into two main categories: Bilingual/Dual Sound broadcast and Stereo broadcast.

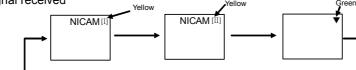
### **Bilingual/Dual Sound broadcast**

Bilingual broadcast is the broadcast available on the main and sub languages, while dual sound broadcast is available on the primary and secondary sounds; for example, some sports programs contain broadcast commentary on a game as primary sound, and a commentary about a team as the secondary.

When bilingual program is received, sound mode display appears in yellow as shown. Also, when receiving NICAM signals, NICAM display will appear.

Each time I/II button is pressed, the display is switched in the sequence of following.





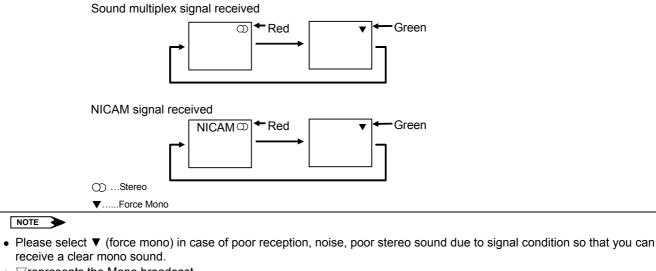
[I]...Main language/Primary Sound

III...Sub language/Secondary Sound
 ▼...force mono: This selects main language or primary sound.

### Stereo broadcast

With stereo broadcast, you can enjoy different sound from either side. When a stereo program is received, sound mode display will appear in red as shown. Also, when receiving NICAM signals, NICAM display will appear.

Press I/II button to switch between stereo and mono sound.

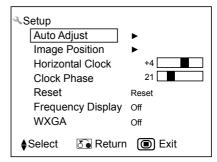


# **PC Adjustment Setting**

You can adjust the display condition such as position adjustment and color setting while connecting to the PC and being RGB mode. See 16 for the PC connection.

### From Setup Menu (RGB)

- **1.** Press button.
- 2. Select " Setup" menu and press or button.
- **3.** Select the preferred menu item and press  $\bigcirc$  button.



Selected Items		Setup hint
Auto Adjust		<ul> <li>Adjust Horizontal Position, Vertical Position, Horizontal Clock, and Clock Phase automatically.</li> <li>Press  or  button to start auto adjustment as needed. The message "Auto Adjust" is displayed.</li> <li>Depending on the type of the signal, there is a possibility that the display may not be adjusted in its optimum condition with this function. In that case, please adjust each item manually.</li> </ul>
Image Position*		<ul> <li>Press  button and  button to adjust the horizontal and vertical display positions.</li> <li>(For example: When user connect PC terminal to LCD TV set. PC Display card provide timing is 1024X768 60Hz that Horizontal range: -100~+100 and Vertical range: -22~+22.)</li> </ul>
Horizontal Clock*	-31~+31	Minimize the vertical stripes on the screen.
Clock Phase*	0~+63	<ul> <li>Minimize the blurring of the letters and stripes on horizontal row.</li> <li>Make sure to adjust <u>Horizontal Clock first</u> before adjusting Clock Phase.</li> </ul>
Reset		Each item on this menu screen can be restored to the original factory settings by pressing $\bigcirc$ button.
	Off	Select whether indicating the PC signal frequency information
Frequency Display	On	on Input Signal Screen Display or not.
	Off	
WXGA	1280x768	<ul> <li>This function is available only for WXGA signal.</li> <li>Refer to "Recommended Signal List" on [45].</li> </ul>
	1360x768	

# ▲ Information

The setting of the items indicated by " 🖈 " can be automatically stored depending on the signal mode.

# **PC Adjustment Setting (continued)**

### From Picture Menu (RGB)

- **1.** Press button.
- 2. Select " Picture" menu and press 🔍 button.
- **3.** Select the preferred menu item and press is button.

Picture		
Contrast		+31
Brightnes	s	0
Color Ter	mperature	Cool
Back Ligi	ht	High
Reset	Reset	
♦Select	OKSet	🔊 Return

Selected I	tems	Setup hint
Contrast	-31~+31	This adjusts the contrast to meet the lighting environment by using
Brightness	-31~+31	With this function, black is adjusted to change the overall brightness by using 📀 button
	Cool	
Color Tomporaturo	Normal	You can select from 3 settings (default): Cool, Normal, Warm depending on the color condition with ( buttons.
Color Temperature	Warm	You can adjust the setting in "User" item.
	User	
	High	
Back Light	Middle	Adjust the brightness of the Back Light for the maximum visibility.
	Low	
Reset		Each item on this menu screen can be restored to the original factory settings by pressing $\overset{\mbox{\scriptsize ow}}{\mbox{\scriptsize w}}$ button.

### Information

There is a useful function to automatically store the setting on menu in almost every item so that you do not have to reset every time.

# About Teletext

### What is " Teletext"

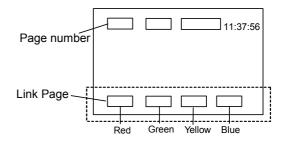
Teletext is the written information services provided by each TV channel.

Most TV channels provide information via Teletext such as:

- TV program schedule
- Weather forecasts
- Sports results
- Newsflash

### Select Teletext Language

- 1. Press button.
- 2. Select "Setup" menu and press or button.
- 3. Select "Teletext Language" and press  $\odot$  button.



✓ Setup		
Auto Tuning		
Manual Tuning		
Fine Tuning		
Sort		
Teletext Language		
♦Select OKSet 🔊 Retur	'n	

Selected Items	Setup hint
Teletext Language	Select Teletext Language from 5 different categories (West Europe, East Europe, Russian, Arabic and Farsi) According to the area. West Europe : Asian countries where the Teletext is broadcasting in English such as Singapore, Australia, and Malaysia East Europe : Poland, Sweden, Hungary Russian : Russia Arabic : Arab countries Farsi : Iran

## **TV SETUP OPERATION (continued)**

### About Teletext (continued)

### How to Operate the Teletext

You can display the Teletext simply by pressing the remote control buttons.

Operation	Press
To activate Teletext mode. To exit from the Teletext mode.	or   TEXT   [TV $ $ Text]
To move to the next or previous page.	(+ P - [Page Select]
To jump to the indicated page. (Enter 3 digits.)	0 ~ 9 [Page Select]
To change Teletext picture size.	Ecom]
To display Index page.	Ei [Index]
To adjust Back Light of the image.	Back Light]
To access Subtitle service directly (if the channel has the Subtitle service broadcasting).*	[Subtitle]
To display Hidden text. Ex. The answers of the Quiz or the Game page. Press again to close the revealed answer.	E? [Reveal]
To return to actual broadcast temporarily while searching for the Teletext page you request. When the search is done, the designated page # will be displayed on the upper left of the screen. Press again to return to Teletext page.	[Cancel]
To access the link pages which are displayed at the bottom of the page. (Select the buttons corresponding to the colors of the letters on screen.)	Color]
To hold the text picture.	(Hold)

TEXT ΤV DTT AV 3 1 2 5 6 4 9 8 7 M 0 1/11 t Ρ 阈 2 MENU GUIDE OK  $\triangleleft$ RETURN SI FFF () $(\mathcal{F})$ (AV1) (AV2) (AV3) (AV4) (HDMI1) (HDMI2) (HDMI3) (RGB) SWIVEL (LIST) (FAV) ()

★ This is not available in the following conditions.

- Color system : NTSC 3.58, NTSC 4.43, PAL60, PAL-M
- · No input signal

### Information

• Some Teletext pages do not display Link Pages at the bottom of the screen. Press 🗊 button to display them.

GUIDE

# FUNCTION

### **Size Switching**

Each time H button of the remote control is pressed, the screen display size is switched in sequence, and the status will be displayed at the bottom of the screen.

### TV/AV signal input

### • Display Size

Watching standard Definition Picture(480i,480p,576i,576p) TV/AV1/AV2/AV3/AV4 /HDMI

→ 4:3 → Panoramic → Cinema → Full →



16(or 21)

9

Picture Size

You can display the image at optimum condition by selecting display size depending on the current output image as shown below.

Input Signal	Display Screen	Display Size	To display suitable screen as follows.			
When Watching	When Watching Standard Definition Picture (TV, 480i, 480p, 576i, 576p)					
709		4:3	Play a 4:3 image on screen faithfully. Blanking occurs on both sides.			
(4:3 Signal)		Panoramic	Play a 4:3 image which enlarges horizontal and vertical size of the middle in equal scales, and displays both sides appearing much wider.			
) (Cinema)	$\bigcirc$	Cinema	Play a 21:9 image in 4:3 frame (Cinema size) expanding vertically. *In some case, slight blanking may remain at the top and bottom.			
(Squeeze)		Full	Play a 4:3 image faithfully in the standard vertical size and horizontally squeezed.			
1	•	•				

### D Information

Aspect ratio represents horizontal: vertical ratio on screen.

#### Watching High Definition Picture (720p, 1080i, 1080p (HDMI only))

AV1,2/HDMI: Only Full mode signal output.



- The size will fix as Full mode and not change when receiving High Definition Picture (720p, 1080i, 1080p (HDMI only)).
- If the images from High Difinition Picture has blacken gap and select Picture Size [2], it will make up for the gap. Refer to 28

### **A** CAUTION

#### Using a wide-screen television

- This television has a screen mode selection feature. If an incompatible screen mode is selected to play certain software, such as a TV program, the image would appear different form the original. Take this into consideration when making screen mode choices.
- Use of the wide feature displaying enlarged pictures in coffee shops, hotel and other establishments for commercial or public viewing purposes could infringe on the copyright holder's right protected by Copyright Law.
- When a normal 4:3 image (not wide screen) is displayed over the entire screen in the Panoramic mode, the peripheral image may disappear partly and/or appear distorted in some cases. Use 4:3 mode to view the image reflecting original intention.

# **FUNCTION** (continued)

### Size Switching (continued)

### **RGB** signal input

You can select a suitable size depending on the resolution.

Display Area Selection Diagram

Resolution	Full	4:3
640×400 (VGA)		
640×480 (VGA)		
800×600 (SVGA)		
1024x768 (XGA)	$((\bigcirc))$	$\left \left(\left(\left(\bigcirc\right)\right)\right)\right $
1280×768 (WXGA)		
1280 x 1024 (SXGA)		
1360×768 (WXGA)		

### **Picture Freezing**

By pressing 🛞 button, you can change to freeze mode easily anytime you like. Press it again to return to normal picture.



FREEZE button

# FUNCTION (continued)

### Power Save Mode

### When the AV input is selected

You are provided the function to save power consumption when no signal is detected in AV input. Set to On in "**Video Power Save**" from Function Menu, which leads to the power save mode in AV1 /AV2 /AV3 /AV4 /HDMI and the Standby mode in other AV input. Please see the table below for details.

Off

On

- **1.** Press button.
- **2.** Select "**Setup**" menu and press or button.
- **3.** Select "Video Power Save" and press **(b)** button.

Video Power Save

Vetup Video Power Save Reset ♦Select ◀► On/Off 🖾 Return

	When no s	ignal is detected	When signal is input during
	Condition	Indicating Lamp	on in "Video Power Save"
AV1~AV2 AV3~AV4 HDMI	Power Save*	Orange	Turns On automatically

\*Power Save that only control Back Light On/Off.

#### Returning to operating status

• Press the Input Select button of the control panel or the remote control to restart the television.

### When the RGB input is selected

When this unit is connected to a VESA DPMS computer, the Power Save mode (Operation mode: Off) can be set to be activated automatically when the computer is not being used to reduce power consumption by this unit.

RGB	Horizontal	Yes	No	Yes	No
sync signal	Vertical	Yes	Yes	No	No
PC signal		Active (normal display)	Blank (no display)		
Operation mode		On	Off		
Indicating lamp		Lights green	Lights orange		

#### Returning to operating status

 Operate the personal computer, then input computer's H. sync, V. sync or press the Sub Power button of the control panel or the remote control to restart the television.

## TROUBLESHOOTING

Before calling service technician, check the following tables first. If the problem is not be solved with the suggested procedures, contact your local dealer. For your safety, NEVER try to repair the product by yourself.

### When Following Messages Appear on the Screen

Message	Condition / Action	Page
Power Save	This indicates it is in Power Save mode. (in RGB mode) The indicating lamp lights in orange.	38
No Sync. Signal	<ul> <li>The unit cannot detect any signals from any input terminals.</li> <li>Check if the cable is connected correctly and firmly.</li> <li>Check if the power of the external equipment is ON.</li> <li>Check if the input selection matches the connection terminal.</li> <li>Check if the PC is in Power Save mode or not.</li> </ul>	14~19
Auto Adjust	This indicates that it is in the process of auto adjusting. (in PC input mode)	32
Invalid Mode	<ul> <li>The unit receives unsupported signals.</li> <li>Check if the cable is connected correctly and firmly.</li> <li>Check if the input signal is compatible with the specification of the television.</li> </ul>	(42),(44) (45)
Not Available	This shows when the selected operation is not available.	

# Symptom and Check List

Symptoms		Check list	Page
No picture – no sound		<ul> <li>Check the Indicating lamp status (Off, Red, Green, or Orange).</li> <li>Check the connection of the Power Cord and/or other cables.</li> <li>Check if the Main Power of the unit or external equipment is ON.</li> <li>Check if the TV mode is selected.</li> <li>Check if the TV is in "Standby mode" or "Power Save mode".</li> <li>Adjust the values in "Picture menu" and "Audio menu".</li> </ul>	14,19 20,38
Snowy picture-poor sound		<ul> <li>Check the aerial connection and direction.</li> <li>The TV station may have broadcast difficulties.</li> <li>Try another channel.</li> </ul>	14
Multiple images-normal sound		<ul> <li>Check the aerial connection and direction.</li> <li>Fine tuning the TV.</li> <li>Check the connection of the external equipment.</li> <li>The TV station may have broadcast difficulties. Try another channel.</li> </ul>	14,25
Intermittent interference		<ul> <li>Check if the source of interference is shielded well.</li> <li>Remove those kinds of electrical devices away from the TV.</li> </ul>	
Normal picture, but no sound	d	<ul> <li>Check the volume level.</li> <li>Check if the K button has been press or not.</li> <li>Make sure that the headphone is NOT connected.</li> <li>Check the connection of the external equipment.</li> </ul>	15~17 20

# TROUBLESHOOTING (continued)

# Symptom and Check List (continued)

Symptoms	Check list	Page
No picture – normal sound	<ul> <li>Check the value level of "Brightness" and "Contrast" in "Picture Menu".</li> </ul>	27
<ul> <li>The remote control does not work.</li> </ul>	<ul> <li>Check if the batteries are installed correctly.</li> <li>The batteries might be exhausted. Replace them with new ones.</li> <li>Remove all the obstructions in front of the sensor window on the unit.</li> <li>Check if the buttons of the control panel can work.</li> </ul>	11,12
<ul> <li>Normal picture but no color-normal sound</li> </ul>	<ul> <li>Check the connection of the external equipment.</li> <li>Check the "Color" in "Picture Menu".</li> </ul>	14~19 27,28
• Image is paused.	• Check if the TV is in freeze mode by pressing 📟 button.	38
<ul> <li>No picture The Indicating lamp → Off</li> </ul>	<ul><li>Check if the Power Cord is plugged into the socket firmly.</li><li>Check if the Main Power is ON.</li></ul>	
<ul> <li>No picture The Indicating lamp → Orange It means that the unit is in "Power Save Mode".</li> </ul>	<ul> <li>Check if all the cables of the external equipment are connected correctly and firmly.</li> <li>Check if the power of the external equipment is ON.</li> <li>Check if the TV/AV mode has been selected correctly.</li> <li>Check if the PC is in Power Save mode or not.</li> <li>Refer to "Power Save mode" and "When following messages appears on the screen"</li> </ul>	38
<ul> <li>No picture The indicating lamp → Green</li> </ul>	<ul><li>Check if the signal cable is connected correctly and firmly.</li><li>Adjust the level of Brightness and Contrast lower.</li></ul>	14~18
• The top of the television and surface of the panel heat up.	<ul> <li>It may happen when you use the unit for long hours. Turn off the Main Power of the unit for a while. Please note that this is not all function.</li> </ul>	19
<ul> <li>Image cannot be displayed in the correct position.</li> </ul>	<ul> <li>Press Recall button (b) to check if the input signal of the displayed image is compatible with the specification of the television.</li> </ul>	21,42
• When the VCR is in special playback features (Fast forward or Rewind), the screen gets dark and cannot see the image at all.	<ul> <li>It could happen when the VCR is connected to Component output, such as 480i. This is not malfunction.</li> <li>Try Composite output or S-Video output and check the picture again.</li> </ul>	
<ul> <li>Some screen display size cannot be switched.</li> </ul>	<ul> <li>Check the signal status by pressing the  button on the remote control. The available screen display size is different depending on the current signal status.</li> </ul>	21 36,37
Cannot be displayed the image from HDMI	<ul> <li>Check if the cables are connected correctly.</li> <li>Check the output format of the equipment.</li> <li>(Please refer to "Connecting Procedure" and "Recommended Signal List".)</li> </ul>	16 44~45
<ul> <li>The image and audio are mismatched when in RGB or HDMI mode.</li> </ul>	<ul> <li>Check if the PC (RGB)/HDMI analog audio input terminal is connected to the same external device.</li> </ul>	<u>16</u> , <u>17</u>

# TROUBLESHOOTING (continued)

# Symptom and Check List (continued)

Symptoms		Check list	Page
<ul> <li>The image on the screen is moving in an oblique direction.</li> <li>(PC input mode only)</li> </ul>		<ul> <li>Adjust "Horizontal Clock" and "Clock Phase".</li> </ul>	32
<ul> <li>The coarse horizontal stripes could be seen in full-display mode. (PC input mode only)</li> </ul>		<ul> <li>Adjust "Horizontal clock".</li> </ul>	32
• The part of the image is lacking. (PC input mode only)	AAAAA	<ul> <li>Try "Auto Adjust".</li> </ul>	32
<ul> <li>The horizontal stripes are moving vertically with flickering screen. (PC input mode only)</li> </ul>		<ul> <li>Check the Signal status of the PC by pressing Recall button (iii) on the remote control.</li> </ul>	32
<ul> <li>When the characters are displayed on the whole screen, <u>the vertical stripes</u> <u>appear and some of the characters are</u> <u>blurred</u>. (PC input mode only)</li> </ul>	ABCDEFGHIJ abceldpa8DDEFGabcd ABCDEFGGHiJ abceldpA8DDEFGabcd	<ul> <li>Try "Auto Adjust".</li> <li>If the display condition is not improved with Auto Adjust, adjust "Horizontal Clock".</li> </ul>	32
<ul> <li>When the letter string is displayed in full-screen, <u>all of the characters</u> on the screen is blurred. (PC input mode only)</li> </ul>	ABCDEFGHIJ abcdefgABCDEFGabcd ABCDEFGHIJ abcdefgABCDEFGabcd	<ul> <li>Try "Auto Adjust".</li> <li>If the condition is not improved with Auto Adjust, adjust "Clock Phase" till you get clearest image.</li> </ul>	32
<ul> <li>When the small patterns are displayed on the screen, the entire screen is flickering. (PC input mode only)</li> </ul>	***	<ul> <li>Try "Auto Adjust".</li> <li>If the condition is not improved with Auto Adjust, adjust "Clock Phase" till you get flicker-free display.</li> </ul>	32
<ul> <li>Image cannot be displayed in the correct position. (PC input mode only)</li> </ul>		<ul> <li>Press (i+) button to check if input signal of the displayed image is compatible with the specification of the television.</li> </ul>	42,45

# PRODUCT SPECIFICATIONS

SPECIFICATION		L26A01A	L32A01A	L37A01A		
Display dimensions Panel		Approx. 26inches: (576 (H) × 324 (V)mm diagonal 660.5mm)	Approx. 32inches: (698 (H) × 392 (V)mm diagonal 801mm)	Approx. 37inches: (820 (H) × 461 (V)mm diagonal 941mm)		
	Resolution	1366(H) x 768 (V) pixels				
Net dimens	sions	including Stand: 663(W)x509(H)x262(D)mm excluding Stand: 663(W)x470(H)x124(D)mm	Including Stand: 790(W)x602(H)x365(D)mm Excluding Stand: 790(W)x550(H)x122(D)mm	including Stand: 910(W)x680(H)x365(D)mm excluding Stand: 910(W)x627(H)x125(D)mm		
Net weight		including Stand:12.8 kg excluding Stand:12.2 kg	including Stand: 19.9 kg excluding Stand:15.8 kg	including Stand: 24.2 kg excluding Stand:19.9 kg		
Ambient	Temperature	Operating: 5°C to 35°C, Stor	age: 0°C to 40°C			
conditions	Relative Humidity	Operating: 20% to 80%, Stor	age: 20% to 90% (non-conde	nsing)		
Power sup	ply	AC110 - 240V, 50/60Hz				
Power cons	sumption/at standby	95W/< 2W	134W/< 2W	167W/< 2W		
Audio outp	ut	speaker total 20W				
(VIDEO inp	put)					
Input terminals		L/R audio input terminal (RCA)         AV3       : composite video input terminal (RCA)         S video input terminal         L/R audio input terminal (RCA)         AV4       : composite video input terminal (RCA)         L/R audio input terminal (RCA)         L/R audio input terminal (RCA)         L/R audio input terminal (RCA)         HDMI       : HDMI input terminal         Composite video       : PAL, SECAM, NTSC3.58, NTSC4.43, PAL60         Component video       : 480i, 576i, 480p, 576p, 720p/50, 720p/60, 1080i/50, 1080i/60				
Input signa		HDMI: 480i, 576i, 480p, 576p, 720p/50, 720p/60, 1080i/50, 1080i/60, 1080p/50, 1080p/60, 1080p/24				
Output sigr	nals	OUTPUT (MONITOR): composite video monitor-output terminal (RCA) OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) OUTPUT (HEADPHONE): L/R audio monitor- output terminal (Mini-pin)				
(RF input)						
Input termi	nal / Receiving range	ANT: 75Ω Unbalanced / 44~870MHz				
RF Video System		PAL B/G, H , I ,D/K SECAM B/G , D/K , K1 NTSC-M				
(RGB inpu	it)					
Input termi	nals	Analog RGB input terminal (D-sub 15-pin) Audio input terminal (3.5mm Stereo Mini Jack) <sup>*1</sup>				
Input signa	ls	0.7 V, analog RGB (Recommended Signal)				
Sync signa	ls	H/V separate, TTL level [2kΩ]				

• The unit takes at least 30 minutes to attain the status of optimal picture quality.

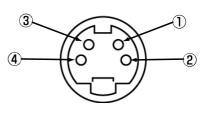
\*1 This analog audio input terminal can be used for PC (RGB) or HDMI only.

## **PRODUCT SPECIFICATIONS (continued)**

# Signal Input

#### S-input connector pin specifications

Pin	Input signal		
1	Y		
2	Y-GND		
3	С		
4	C-GND		
Frame	GND		



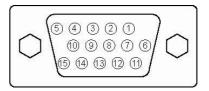
#### **HDMI** connector Input pin specifications

Pin	Input signal	Pin	Input signal
1	T.M.D.S. Data2+	11	TMDS Clock Shield
2	T.M.D.S. Data2	12	TMDS Clock -
3	T.M.D.S. Data2-	13	CEC
4	T.M.D.S. Data1+	14	Reserved (N.C.)
5	T.M.D.S. Data1	15	SCL
6	T.M.D.S. Data1-	16	SDA
7	T.M.D.S. Data0+	17	DDC/CEC Ground
8	T.M.D.S. Data0	18	+5V Power
9	T.M.D.S. Data0-	19	Hot Plug Detect
10	T.M.D.S. Clock+		

### **RGB terminal (D-sub 15-pin connector)**

Pin	Input signal			
1	R			
2	G			
3	В			
4	No connection			
5	No connection			
6	R.GND			
7	G.GND			
8	B.GND			
9	No connection			
10	GND			
11	No connection			
12	[SDA]			
13	H. sync			
14	V.sync.			
15	[SCL]			





When different kinds of input signals are simultaneously input to the television via a graphics board or the like, the television only support H/V separate sync signal.

# PRODUCT SPECIFICATIONS (continued)

# Recommended Signal List

### With Component Video INPUT

	Signal mode			Horizontal	Dot clock	
No	Signal name	Resolution	Vertical frequency (Hz)	frequency (kHz)	frequency (MHz)	Remarks
1	576i	720(1440) x 576	50.00	15.63	27.00	EIA-861D
2	480i	720(1440) x 480	59.94	15.73	27.00	EIA-861D
3	576p	720 x 576	50.00	31.25	27.00	EIA-861D
4	480p	720 x 480	59.94	31.47	27.00	EIA-861D
5	1080i/50	1920 x 1080	50.00	28.13	74.25	EIA-861D
6	1080i/60	1920 x 1080	60.00	33.75	74.25	EIA-861D
7	720p/50	1280 x 720	50.00	37.50	74.25	EIA-861D
8	720p/60	1280 x 720	60.00	45.00	74.25	EIA-861D

### With HDMI INPUT

	Signal mode			Horizontal	Dot clock	
No	Signal name	Resolution	Vertical frequency (Hz)	frequency (kHz)	frequency (MHz)	Remarks
1	VGA	640x480	59.94	31.47	25.18	EIA-861D
2	576i	720(1440)x576	50.00	15.63	27.00	EIA-861D
3	480i	720(1440)x480	59.94	15.73	27.00	EIA-861D
4	576p	720x576	50.00	31.25	27.00	EIA-861D
5	480p	720x480	59.94	31.47	27.00	EIA-861D
6	1080i/50	1920x1080	50.00	28.13	74.25	EIA-861D
7	1080i/60	1920x1080	60.00	33.75	74.25	EIA-861D
8	720p/50	1280x720	50.00	37.50	74.25	EIA-861D
9	720p/60	1280x720	60.00	45.00	74.25	EIA-861D
10	1080p/50	1920x1080	50.00	56.25	148.50	EIA-861D
11	1080p/60	1920x1080	60.00	67.50	148.50	EIA-861D
12	1080p/24	1920x1080	24.00	27.00	74.25	EIA-861D

# **PRODUCT SPECIFICATIONS (continued)**

# **Recommended Signal List (continued)**

#### With RGB input

Na	Signal mode			Horizontal	Dot clock	
No	Signal name	Resolution	Vertical frequency (Hz)	frequency (kHz)	frequency (MHz)	Remarks
1	VGA	640 x 400	70.09	31.47	25.18	
2		640 x 480	59.90	31.47	25.18	
3	VESA	800 x 600	60.32	37.88	40.00	
4		1024 x 768	60.00	48.36	65.00	
5		1280 x 1024	60.02	63.98	108.00	
6	VESA	1280 x 768	59.89	47.78	79.50	
7		1360 x 768	60.02	47.71	85.50	

• The type of video board or connecting cable used may not allow for correct displays adjustment of Horizontal Position, Vertical Position, Horizontal Clock and Clock Phase.

- The unit differentiates the signal modes according to the horizontal and vertical frequencies and the horizontal and vertical sync signal polarities. Note that different signals having all these elements alike may be handled as the same signal.
- Displaying images with more than 768 lines of vertical resolution a Full display (compressed display) can result in the interpolation of stripes.

Printed in China

