SANYO

INSTRUCTION MANUAL

LCE-24C100F(K)
LCE-24C100F(N)
LCE-24C100F(R)
LCE-24C100F(S)

LED LCD TV

IMPORTANT INFORMATION

If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the television.
- Only using furniture that can safely support the television.
- Ensuring the television is not overhanging the edge of the supporting furniture.
- Not placing the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support.
- Not standing the televisions on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television or its controls.

Warning:
To prevent the spread of fire, keep candles or other open flames away from this product at all times.

⚠ SAFETY INSTRUCTIONS

Before operating this LCD TV, read this manual thoroughly and operate the LCD TV properly. This LCD TV provides many convenient features and functions. Operating the LCD TV properly enables you to manage those features and maintains it in better condition for a considerable time. Improper operation may result in not only shortening the product-life, but also malfunctions, fire hazard, or other accidents. If your LCD seems to operate improperly, read this manual again, check operations and cable connections and try the solutions in the "Troubleshooting" section on page 17 of this booklet. If the problem still persists, contact the dealer where you purchased the LCD TV or the service center.

⚠ Safety Precaution

WARNING :　　TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

● Install the LCD TV in a proper position. If not, it may result in a fire hazard.
● Provide appropriate space on the top, sides and rear of the LCD TV cabinet for allowing air circulation and cooling the LCD TV. Minimum clearance must be maintained. If the LCD TV is to be built into a compartment or similarly enclosed, the minimum distances must be maintained. Do not cover the ventilation slot on the LCD TV. Heat build-up can reduce the service life of your LCD TV, and can also be dangerous.
● If the LCD TV is not to be used for an extended time, unplug the LCD TV from the power outlet.
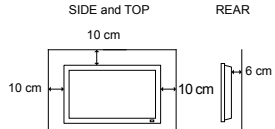
READ AND KEEP THIS OWNER'S MANUAL FOR LATER USE.

SIDE and TOP　　REAR
10 cm
10 cm　　10 cm　　6 cm

Caution In Installing

● Handle the LCD TV carefully when installing it and do not drop.
● Locate set away from heat, excessive dust, and direct sunlight.
● For correct installation and mounting it is strongly recommended to use a trained, authorized dealer. Failure to follow correct mounting procedures could result in damage to the equipment or injury to the installer.

NOTE :
When LCD TV is not used for a long period of time, unlighted dots may be observed. This is caused by characteristic of the LCD TV. If this occurs, turn the LCD TV on and leave it on about 1 hour. These dots will gradually disappear.

THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.

THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE OWNER'S MANUAL WITH THIS UNIT.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

DISPOSAL PRECAUTIONS

CONTAINS MERCURY LAMPS, DISPOSE OF PROPERLY

All the safety and operating instructions should be read before the product is operated.
Read all of the instructions given here and retain them for later use. Unplug this LCD TV from AC power supply before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning. Follow all warnings and instructions marked on the LCD TV. For added protection to the LCD TV during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power line surges.

Do not expose this unit to rain or use near water... for example, in a wet basement, near a swimming pool, etc...
Do not use attachments not recommended by the manufacturer as they may cause hazards.

Do not place this LCD TV on an unstable cart, stand, or table. The LCD TV may fall, causing serious injury to a child or adult, and serious damage to the LCD TV. Use only with a cart or stand recommended by the manufacturer, or sold with the LCD TV. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturers.
An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

Slots and openings in the back and bottom of the cabinet are provided for ventilation, to insure reliable operation of the equipment and to protect it from overheating. The openings should never be covered with cloth or other materials, and the bottom opening should not be blocked by placing the LCD TV on a rug, or other similar surface. This LCD TV should never be placed near or over a radiator or heat register. This LCD TV should not be placed in a built-in installation such as a book case unless proper ventilation is provided. Never push objects of any kind into this LCD TV through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the LCD TV. Do not place items such as vases containing liquid on top of the LCD TV.
Do not install the LCD TV near the ventilation duct of air-conditioning equipment.

This LCD TV should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized dealer or local power company.
Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this LCD TV where the cord may be damaged by persons walking on it.
Do not attempt to service this LCD TV yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
Unplug this LCD TV from wall outlet and refer servicing to qualified service personnel under the following conditions:

a. When the power cord or plug is damaged or frayed.
b. If liquid has been spilLCD into the LCD TV.
c. If the LCD TV has been exposed to rain or water.
d. If the LCD TV does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the LCD TV to normal operation.
e. If the LCD TV has been dropped or the cabinet has been damaged.
f. When the LCD TV exhibits a distinct change in performance-this indicates a need for service.

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or injury to persons.
Upon completion of any service or repairs to this LCD TV, ask the service technician to perform routine safety checks to determine that the LCD TV is in safe operating condition.

TABLE

HDMI is registered trademarks of HDMI Licensing, LLC.

TRADEMARKS
- Apple, Macintosh, and PowerBook are trademarks or registered trademarks of Apple Computer,Inc.
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- Each name of corporations or products in the owner's manual is a trademark or a registered trademark of its respective corporation.

Feature and Design

◆ Picture

- **High Definition LCD with LED Backlight Panel**
  1920 x 1080 pixel FHD LCD LED Backlight Panel with high contrast ratio and wide viewing angle.

- **VIZON Engine**
  VIZON Engine, SANYO High Quality Image Processing Technology reproduces clear, dynamic, natural and realistic picture along with FHD LCD Panel Technology.

- **Dynamic AI**
  The AI (Automatic Image Control) circuit compensates picture contrast and brightness level dynamically and reproduces bright and high-contrast picture.

◆ Sound

- **NICAM/A2 Stereo**
  It's the Stereo Sound PAL Color TV Broadcasting System upgrading mono-sound TV service to stereo or dual-language sound.

- **Bass Expander**
  Bass Expander reinforces bass effect to improve overall sound quality.

◆ Feature

- **Sports Mode**
  Just by pressing the button, sports mode optimizes picture and sound settings suitable for each sports program.
  - **OFF**
    Normal setting.
  - **Football**
    Use to watch football program, golf program or etc.
  - **Winter Sport**
    Suitable setting for skiing program or etc.
  - **Marine Sport**
    Suitable setting for swimming, diving program or etc.
  - **Indoor Sport**
    Suitable setting for basketball, badminton program or etc.

- **SHOP Mode**
  Picture mode will be Dynamic and ECO mode will be OFF in SHOP MODE.

◆ Compatibilty

- **Full Multi System**
  PAL, SECAM, NTSC, NTSC 4.43 system can be connected.

- **HD-Ready**
  1080p, 1080i, 720, Full High Definition signals are receivable.

- **HDMI**
  HDMI provides complete transmission of digital image and sound signals without any quality deterioration. DVI can be connected to HDMI.

- **PC Input**
  Personal Computer/Laptop can be connected with automatic resolution adjustment.

- **Terminals**
  HDMI for BluRay Player etc.
  D-SUB 15-pin for PC input etc.
  Component Video for DVD
  Video for VCR/DVD

◆ Others

- **Wall Mounting**
  It's designed for VESA Standard (200 x 200) wall hanging bracket.

- **Light Commercial Mode**
  By entering Dealer mode, Volume Lock, Tuning Lock, Start Mode, OSD, RC, AC Power Mode, Start Volume Level, Music Mode and Reset can be selected.
  Convenient for placing in Hotel, Hospital, School, Store, Bank etc.

PREPARATION

PART NAMES AND FUNCTIONS

FRONT

Side Control

Panel

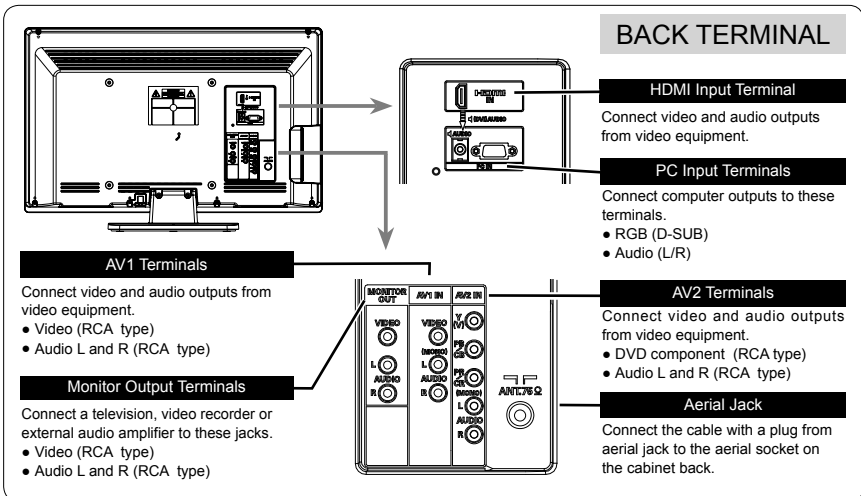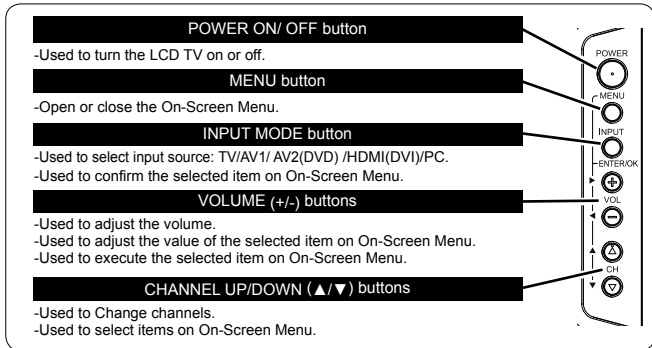Power/Timer Indicator

Infrared Remote Receiver

SANYO
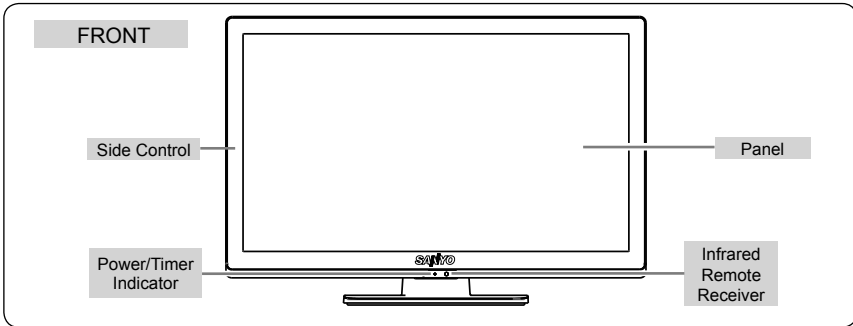
CARE FOR USING LCD TV

● Do not bump or scratch the panel surface as this causes flaws on the surface of the screen.

● There may be some tiny black points and/or bright points on the **SCREEN**. These points are normal.

SIDE CONTROL

Each button on the control panel has the same function with its counterpart on the remote control.

POWER ON/ OFF button

-Used to turn the LCD TV on or off.

MENU button

-Open or close the On-Screen Menu.

INPUT MODE button

-Used to select input source: TV/AV1/ AV2(DVD) /HDMI(DVI)/PC.
-Used to confirm the selected item on On-Screen Menu.

VOLUME (+/-) buttons

-Used to adjust the volume.
-Used to adjust the value of the selected item on On-Screen Menu.
-Used to execute the selected item on On-Screen Menu.

CHANNEL UP/DOWN (▲/▼) buttons

-Used to Change channels.
-Used to select items on On-Screen Menu.

POWER

MENU

INPUT

ENTER/OK

VOL

CH

BACK TERMINAL

HDMI Input Terminal

Connect video and audio outputs from video equipment.

PC Input Terminals

Connect computer outputs to these terminals.
● RGB (D-SUB)
● Audio (L/R)

AV1 Terminals

Connect video and audio outputs from video equipment.
● Video (RCA type)
● Audio L and R (RCA type)

AV2 Terminals

Connect video and audio outputs from video equipment.
● DVD component (RCA type)
● Audio L and R (RCA type)

Monitor Output Terminals

Connect a television, video recorder or external audio amplifier to these jacks.
● Video (RCA type)
● Audio L and R (RCA type)

Aerial Jack

Connect the cable with a plug from aerial jack to the aerial socket on the cabinet back.

MONITOR OUT   AV1 IN   AV2 IN

VIDEO   VIDEO

L   L
AUDIO   AUDIO
R   R

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CONNECTING LCD TV

INSTALLING & UNINSTALLING STAND BASE

Please according to the following procedure to install stand.

1   Be careful of the panel. Suggest to put down the panel side on the cushion or other soft material before installing the stand.
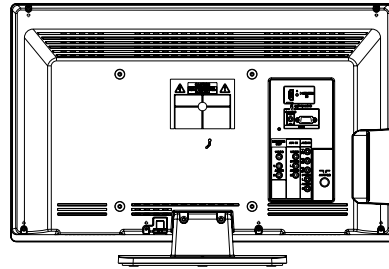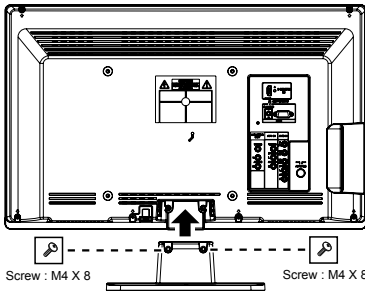
2   To align the corresponding pilot holes and fix the stand by screws.
Screws (M4x8) for LCE-24C100F(K)/(N)/(R)/(S): 2 pcs

Screw M4 X 8 :

3   Installing of stand is completed.

Model LCE-24C100F(K)/(N)/(R)/(S):

Screw : M4 X 8   Screw : M4 X 8

⚠ CAUTION IN INSTALLING & UNINSTALLING STAND BASE

- Through in installing or uninstalling work, handling with more than two people is recommended.
- When holding (moving or lifting) the LCD Display, hold the display's body. Do not handle the LCD TV by holding the attached accessory parts, otherwise it may result in damage.
- Before installing or uninstalling, provide a desk (or a part of it) which is strong enough to support the weight of the LCD TV and this stand. The desk must be larger than the LCD Display screen size. The desk's surface must be flat and maintained with soft material (such as a blanket) for protecting the screen surface.
- Before putting the LCD Display on the desk, make sure there is no object on it. Leaving any object under the screen may cause damage on the screen.
- The LCD TV with this stand should be installed or uninstalled on flat and level place. Do not place on such as a non flat, unlevel or unstable cart or stand. The display may fall, causing not only serious damage to the products but serious injury to a person.

⚠ SAFETY NOTE

For correct installing, mounting and uninstalling LCD TV Stand, it is strongly recommended to use a trained, authorized dealer. Failure to follow correct procedures could result in damage to the equipment or injury to the installer.
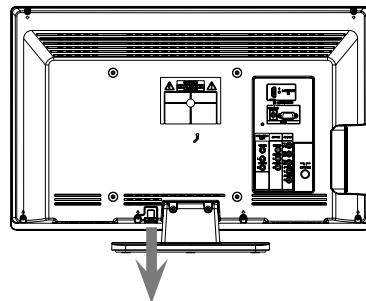
CONNECTING AC POWER CORD

This LCD TV uses nominal input voltages of 110-240V AC. This LCD TV automatically selects the correct input voltage. It is designed to work with single-phase power systems. To reduce risk of electrical shock, do not plug into any other type of power system. Consult your authorized dealer or service station if you are not sure of the type of power being supplied.
Connect the LCD TV with all peripheral equipment before turning the LCD TV on.

Note:
AC Power Cord types vary between countries.

⚠ **CAUTION**

For safety, unplug AC power cord when the LCD TV is not in use.

AC POWER CORD

To the AC Outlet (110 - 240V AC). Pulls the AC power cord out from the LCD TV. The AC outlet must be near this equipment and must be easily accessible.
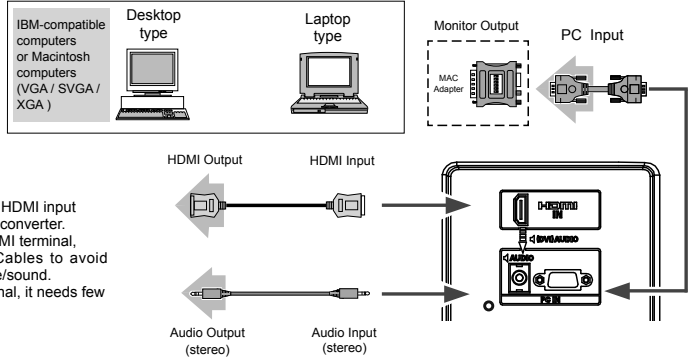
CONNECTING LCD TV

CONNECTING A COMPUTER

Cables used for connection (These cables are not supplied with this LCD TV.)
● PC/VGA Cable (D-SUB 15pin)
● HDMI Cable: HDMI Input
● MAC Adapter (in the case of connecting Macintosh computer)
● Audio Cable [Mini Plug (L/R)]

⚠ NOTE:
When connecting the cables, AC Power Cords of both LCD TV and external equipment should be disconnected from AC outlet. Turn LCD TV and peripheral equipment on before your computer is switched on.

IBM-compatible computers or Macintosh computers (VGA / SVGA / XGA)

Desktop type

Laptop type

Monitor Output

PC Input

MAC Adapter

HDMI Output   HDMI Input

Note:
1. You can connect the DVI source to HDMI input terminal by using the DVI to HDMI converter.
2. When inputting 1080p signal to HDMI terminal, please use High Speed HDMI Cables to avoid picture/ sound noise and no picture/sound.
3. When connect to HDMI Input terminal, it needs few seconds to display picture.

Audio Output   Audio Input
(stereo)   (stereo)

CONNECTING VIDEO EQUIPMENT & AERIAL

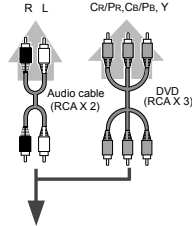Cables used for connection (These cables are not supplied with this LCD TV.)
● Video Cable(RCA X1), Audio Cable (RCA X2) : Video 1 or Video 2
● Video Cable(RCA X3), Audio Cable (RCA X2) : DVD (Component Video)
● Video Cable(RCA X1), Audio Cable (RCA X2) : Monitor Output
● HDMI Cable: HDMI Input

Video 1 signal is output from AV1 terminals;
Video 2 signal is output from Y/L/R terminals of AV2.

⚠ NOTE : When connecting the cable, AC Power Cords of both LCD TV and external equipment should be disconnected from AC outlet.
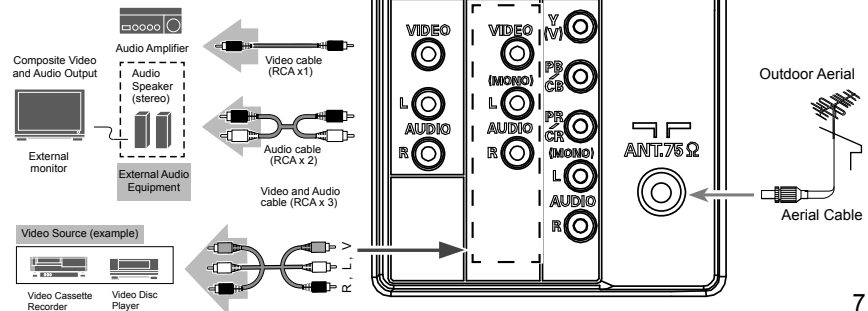
Component Video Source (example)

DVD video equipment.
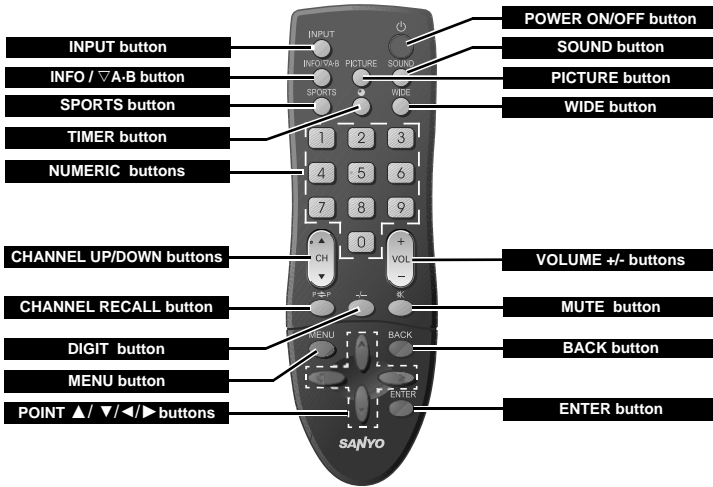(such as DVD player or high-definition TV source)

DVD Player

R L   CR/PR,CB/PB, Y

Audio cable (RCA X 2)   DVD (RCA X 3)

MONITOR OUT
Note:
Video (RCA) output is for TV, or AV only.

Composite Video and Audio Output

Audio Amplifier

Audio Speaker (stereo)

External monitor

External Audio Equipment

MONITOR OUT

AV1 IN

AV2 IN

VIDEO

VIDEO (MONO)

Y (V)

PB CB

L

L

PR CR (MONO)

AUDIO

AUDIO

L

R

R

AUDIO

R

Video cable (RCA x1)

Audio cable (RCA x 2)

Video and Audio cable (RCA x 3)

Video Source (example)

Video Cassette Recorder   Video Disc Player

R , L , V

ANT.75Ω

Outdoor Aerial

Aerial Cable

BASIC OPERATION

OPERATION OF REMOTE CONTROL

INPUT button	POWER ON/OFF button
INFO / ▽A·B button	SOUND button
SPORTS button	PICTURE button
TIMER button	WIDE button
NUMERIC buttons	
CHANNEL UP/DOWN buttons	VOLUME +/- buttons
CHANNEL RECALL button	MUTE button
DIGIT button	BACK button
MENU button	
POINT ▲/ ▼/◄/► buttons	ENTER button

REMOTE CONTROL BATTERIES INSTALLATION

1 Remove the battery compartment cover.

2 Insert two size AA batteries (1.5V) according to "+" and "-" polarity markings inside the battery compartment.

3 Close the battery compartment cover.

⚠ **Note:**
Do not expose batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire or the like.
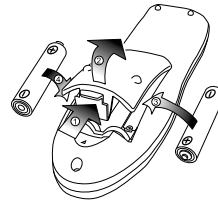
TURNING ON / OFF LCD TV

1 Complete the peripheral connections before turning on LCD TV. (Please refer to "CONNECTING LCD TV".)

2 Connect LCD TV's AC Power Cord into an AC outlet.

3 Press POWER ON/OFF button on Side Controls of LCD TV or on Remote Control to turn it ON. The POWER indicator will light up (green). Press POWER ON/OFF button again to shift it to stand-by status, the POWER indicator will become red.

SIDE CONTROL

POWER ON/ OFF button

REMOTE CONTROL

POWER ON/ OFF button
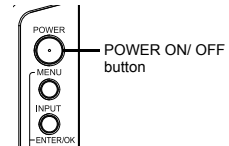
NO SIGNAL SHUT OFF
This TV set incorporates the NO SIGNAL SHUT OFF function.
If no signal is input in TV mode, "OFF 00:10" will display for about 10 minutes and TV will be turned off automatically.

8

PLUG & PLAY

By PLUG & PLAY, when the TV reset and powered on for the first time, it will automatically search and preset all the receivable TV programs.

1 Plug the power, connect the antenna, and press Main Power ON/OFF button, the TV set will automatically search the programs.

2 After programs searching, SHOP MODE menu will appear. Press POINT ◄► buttons to select and press ENTER button for SHOP MODE or HOME MODE. Then the pop up menu disappears.

3 Auto searching completed and message "AUTO SET-UP COMPLETED HAPPY VIEWING!" appears. About 5 seconds later, the TV set will automatically return to programme position "1".

Message "NO STATION PLEASE CONNECT ANTENNA PLUG!" will appear if there is no TV stations are searched after automatically programs searching.(see Figure A.) Then SHOP MODE menu appears, the same operations as step 2 above will be excuted and returns to normal TV picture. Press MENU button while searching programs, message "PLEASE SELECT AND PRESS ENTER BUTTON" appears (see Figure B), press POINT◄► buttons to select "TEMPORAL CANCEL" or "PERMANENT CANCEL".

TEMPORAL CANCEL to cancel temporary PLUG & PLAY function. The PLUG & PLAY function is actived only in TV mode while turning on the LCD TV.

PERMANENT CANCEL to cancel permanetly PLUG & PLAY function. When turn on television the PLUG & PLAY is not actived. Press ENTER button to enter SHOP MODE menu. the same operations as step 2 above will be excuted and returns to normal TV picture.
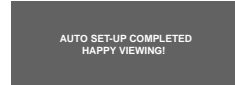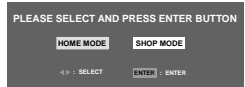
```
I AM SEARCHING ALL PROGRAMMES
        PLEASE WAIT!

                              1

           MENU : CANCEL
```

```
PLEASE SELECT AND PRESS ENTER BUTTON

   HOME MODE      SHOP MODE

   ◄ ► : SELECT    ENTER : ENTER
```

```
   AUTO SET-UP COMPLETED
      HAPPY VIEWING!
```

Figure A.

```
        NO STATION
PLEASE CONNECT ANTENNA PLUG!
```

Figure B.

```
PLEASE SELECT AND PRESS ENTER BUTTON

 TEMPORAL CANCEL   PERMANENT CANCEL

   ◄ ► : SELECT    ENTER : ENTER
```
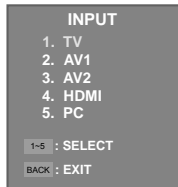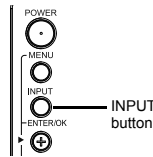
SELECTING INPUT SOURCE

Select mode "TV", "AV1", "AV2", "HDMI" or "PC" by pressing INPUT button on Remote Control or on Side Controls, you can also press POINT ▲▼ buttons to select different mode. To enter the selected mode, press ENTER button or POINT ◄► buttons.
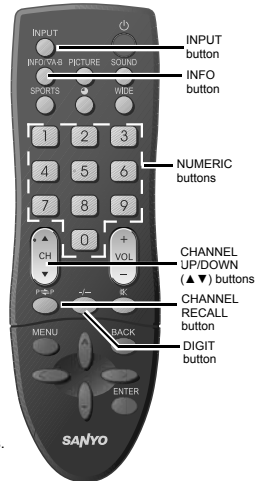
Note:
User can directly displayed selected input source by pressing NUMERIC buttons (1-5) on Remote Control.

```
       INPUT
   1. TV
   2. AV1
   3. AV2
   4. HDMI
   5. PC

 1~5 : SELECT
 BACK : EXIT
```

SIDE CONTROL

```
POWER

MENU

INPUT

ENTER/OK        INPUT
                button
```

REMOTE CONTROL

INPUT button
INFO button
NUMERIC buttons
CHANNEL UP/DOWN (▲▼) buttons
CHANNEL RECALL button
DIGIT button

CHANNEL RECALL

Press CHANNEL RECALL button to switch between the previous channel and the current channel. For example, now you are watching channel "4", but you watched channel "2" previously. If you press CHANNEL RECALL button, channel "2" will appear immediately.

CHANNEL SELECTION

There are 256 channels can be selected on the LCD TV.

DIRECT SELECTION

For direct access to programmes using the (0-9) numeric buttons.

1) For selection of channel position 0 - 9. Example: For channel position 8, press "8" button.

2) For selection of channel position 10 - 99. Example:
   For channel position 25, press the DIGIT button to display "- -", then press "2" and "5" buttons.

3) For selection of channel position 100 - 199. Example:
   For channel position 125, press the DIGIT button twice to display "1 - -", then press "2" and "5" buttons.

4) For selection of channel position 200 - 255. Example:
   For channel position 225, press the DIGIT button three times to display "2 - -", then press "2" and "5" buttons.

CHANNEL UP/ DOWN

Press CHANNEL UP/DOWN (▲▼) buttons on Side Control or on Remote Control to select programs.
● Press CHANNEL UP (▲) button to select next channel.
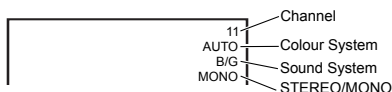● Press CHANNEL DOWN (▼) button to select previous channel.

Note:
CHANNEL RECALL and CHANNEL SELECTION function only use in TV mode.

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BASIC OPERATION

INFO

Press INFO button on Remote Control to display the status of LCD TV. Press again to remove the display.

```
            11 ————— Channel
          AUTO ————— Colour System
          B/G  ————— Sound System
          MONO ————— STEREO/MONO
```

VOLUME CONTROL

To adjust the volume value desired by pressing VOLUME(+/-) buttons on Remote Control or on Side Control. The volume dialogue box will appear on the screen for a short while. VOLUME(+) button to increase volume, and VOLUME(-) button to decrease volume.

MUTE

Should you wish to mute the sound, press MUTE button. To switch the sound back on, press MUTE button again or press VOLUME(+/-) buttons on Side Control or on Remote Control.

STEREO/MONO

Press the ▽A·B button on Remote Control to show the information display. And then press ▽A·B button to select the following audio signals: "STEREO", "MONO", "NICAM", "A", and "B".

SOUND MODE

Select sound level by pressing SOUND button on Remote Control.

STANDARD: Normal sound state preset on LCD TV.

NEWS: Select this mode for talk programs.

MUSIC: Select this mode for music programs.

PERSONAL: Select this mode for user to call out the preset sound adjustment in SOUND menu.

PICTURE MODE

Select image level by pressing PICTURE button on Remote Control.

STANDARD: Natural and splendid picture level preset on this LCD TV.

VIVID: Present colourful and lively picture level.

SOFT: Inhibit strong contrast and color, it is beneficial for eye protection.

PERSONAL: User presets picture adjustment in PICTURE MODE.

DYNAMIC: Bright and dynamic picture. It is suitable for nice playback, such as DVD program.

⚠️**Note:**
Select ECO in SETUP menu. Then press ◄► buttons to select "ON". While in ECO status, press PICTURE button to choose any of options of "ECO LOW/STANDARD", "ECO LOW/VIVID", "ECO LOW/SOFT", "ECO LOW/PERSONAL" and "ECO HIGH/DYNAMIC", or "ECO HIGH/STANDARD", "ECO HIGH/VIVID", "ECO HIGH/SOFT", "ECO HIGH/PERSONAL" and "ECO HIGH/DYNAMIC".

SPORTS MODE

Just by pressing the button, sports mode optimizes picture and sound settings suitable for each sports program.

- **OFF:** Normal setting.
- **Football:** Use to watch football program, golf program or etc.
- **Winter Sport:** Suitable setting for skiing program or etc.
- **Marine Sport:** Suitable setting for swimming, diving program or etc.
- **Indoor Sport:** Suitable setting for basketball, badminton program or etc.

⚠️**Note:**
Press SOUND button in SPORTS mode, only current SPORTS mode is displayed.

OFF TIMER

To set OFF TIMER by pressing TIMER button on Remote Control. The timer dialogue box will appear on the screen for a short while.
To select "OFF", "30 MIN", "60 MIN", "90 MIN" or "120 MIN" with TIMER buttons.

WIDE

Select screen size among "FULL", "ZOOM", "ZOOM[CAPTION-IN]", and "NORMAL" by pressing WIDE button on Remote Control.

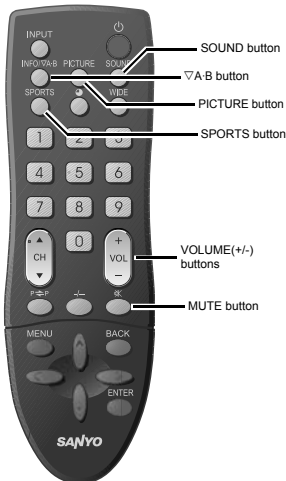* This function doesn't work in TV/ AV/ DVD/ HDMI/ PC modes when no signal is input.
* Only "FULL" mode can be selected when the input mode is "HDMI" or "DVD" and the input signal is 1080i, 720p or 1080p.
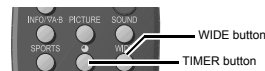* "FULL" and "NORMAL" can be selected in PC mode.

FULL: Provides image to fit width of screen by expanding image width uniformly. This function can be used for enjoying a squeezed video signal with wide video aspect ratio of 16 : 9 screen. When your video equipment (such as DVD) has 16 : 9 output mode, select 16 : 9 and select "Full" to provide better quality.

ZOOM: Provides image to fit screen size (16 : 9 aspect ratio) by expanding image width and height uniformly. This function can be used for enjoying a letter box mode picture (4 : 3 aspect picture with black bar on top and bottom edges) with wide video aspect of 16 : 9 screen.

REMOTE CONTROL

SOUND button
▽A·B button
PICTURE button
SPORTS button
VOLUME(+/-) buttons
MUTE button

REMOTE CONTROL

WIDE button
TIMER button

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MENU OPERATION

ZOOM[CAPTION-In]: Provides the image that is expanded as "ZOOM" mode and moved up to show more image to include captions. This function can be used for enjoying a letter box picture with captions.

NORMAL: Provides real 4 : 3 image on 16 : 9 screen.

CHANNEL

1 Press MENU button and the main menu will appear. Whenever MAIN MENU is accessed initially, CHANNEL will be the default selection.

2 Press POINT ▲▼ buttons or ENTER button to enter into CHANNEL menu.

3 Press POINT ▲▼ buttons to select the item desired.

4 Press POINT ◄► buttons to adjust the item.

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait for 5~60 seconds to exit menu operation.

⚠ **Note:**
● "CHANNEL" menu doesn't work in HDMI mode and PC mode.
● In AV mode, only "COLOUR SYSTEM" in "CHANNEL" menu can be selected.
● The settings for "SOUND SYSTEM", "COLOUR SYSTEM" or "SKIP" are automatically memorized in the programme position.
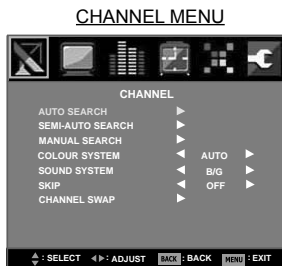
CHANNEL MENU

AUTO SEARCH

All receivable channels are automatically tuned in and memorized in consecutive programme position.
● The Automatic Tuning operation can be cancelled at any time by pressing BACK button or MENU button.
● After all receivable channels have been found and stored, the TV set will automatically return to programme position "1".

⚠ **Note:**
POINT ◄► buttons or ENTER button: Start or Restart AUTO SEARCH.

AUTO SEARCH MENU

SEMI-AUTO SEARCH

Use to preset a receivable channel in any desired programme position, e.g. the position with the same number as the channel.

1 Select channel "15".

2 Enter into CHANNEL menu, press POINT ▲▼ buttons to select "SEMI-AUTO SEARCH". Press POINT ◄► buttons to enter into the SEMI-AUTO SEARCH menu.

3 Press POINT ▲▼ buttons to select "SEARCH". Press POINT ◄► buttons to start the channel searching.

4 Press POINT ► button and the tuning will go to the higher frequencies. Press POINT ◄ button and the tuning will go to the lower frequencies. Use POINT ◄ button or POINT ► button to search for required TV station. Once a station is located, searching will automatically stop. Continue till desired channel is located.

■ Press BACK button to return to the previous menu.
■ Press MENU button to exit menu operation.
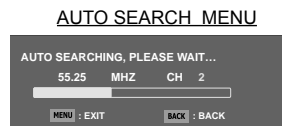
SEMI-AUTO SEARCH MENU
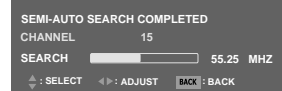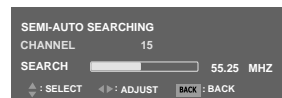
MANUAL SEARCH

Manual search a channel if it cannot be automatically tuned, such as when the signal is poor.

1 Select channel "15".

2 Enter into CHANNEL menu, press POINT ▲▼ buttons to select "MANUAL SEARCH". Press POINT ◄► buttons to enter into the MANUAL SEARCH menu.

3 Press POINT ▲▼ buttons to select "SEARCH". Press POINT ◄► buttons to start the channel searching.

4 Press and hold POINT ◄ or POINT ► button to search for required TV station. Press ENTER button to save desirable station.

■ Press BACK button to return to the previous menu.
■ Press MENU button to exit menu operation.

MANUAL SEARCH MENU

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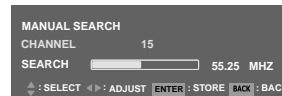
MENU OPERATION

COLOUR SYSTEM

The setting for colour system is only active in TV or AV mode. Usually, the colour system is set to the position of "AUTO". In case of abnormal colour, repeatedly press POINT ◄► buttons to select "AUTO", "PAL", "SECAM", "NTSC" or "NTSC4.43" until the best colour effect is reached.

SOUND SYSTEM

The setting for sound system is only active in TV mode. Usually, the sound system is set to the position of "B/G". In case of abnormal sound, repeatedly press POINT ◄► buttons to select "D/K", "I", "M" or "B/G" until the best sound effect is reached.

SKIP

This feature is used to remove unwanted channels from the channel scanning memory.
You can skip the unused or undesired channels when you are
selecting a channel using CHANNEL UP/DOWN (▲▼) buttons.
This function is only active in TV mode.

CHANNEL SWAP

To swap the channels between two stored programme positions.

1 Press MENU button to display the main menu.

2 Enter into "CHANNEL" menu, press POINT ▲▼ buttons to select CHANNEL SWAP.

3 Press POINT ◄► buttons or ENTER button to enter into the CHANNEL SWAP menu. Press POINT ▲▼ buttons to select the CURRENT CHANNEL or TARGET CHANNEL, then press POINT ◄► buttons to select the swap channel. And then press POINT ▲▼ buttons to select SWAPPING item, then press POINT ◄► buttons or ENTER button to select "OK".

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait for 5~60 seconds to exit menu operation.

⚠ **Note:**
When enter into CHANNEL SWAP menu again, TARGET CHANNEL will be turn to 0.

PICTURE

1 Press MENU button and the main menu will appear. Press POINT ◄► buttons to select "PICTURE", and will display PICTURE menu.

2 Press POINT ▲▼ buttons or ENTER button to enter into PICTURE menu.

3 Press POINT ▲▼ buttons to select the item desired.

4 Press POINT ◄► buttons to adjust the item.

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait for 5~60 seconds to exit menu operation.

PICTURE MODE: Used for selecting "STANDARD", "VIVID", "SOFT", "PERSONAL" or "DYNAMIC".
CONTRAST: Used to decrease and increase contrast.
BRIGHTNESS: Used to adjust darken and brighten image.
COLOUR: Used for lighten and darken colour. (Only in TV/AV/HDMI mode).
TINT: Used to obtain proper colour.
SHARPNESS: Used for soften and sharpen the image. (Only in TV/AV/HDMI mode).
COLOUR TONE: Used for selecting colour temperature. Select "NORMAL", "WARM" or "COOL".
GAMMA: This function is used for adjusting the gamma value to obtain a better balance of contrast. Select "LOW", "MIDDLE", or "HIGH".(Only in TV/AV/HDMI mode).
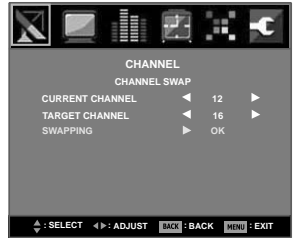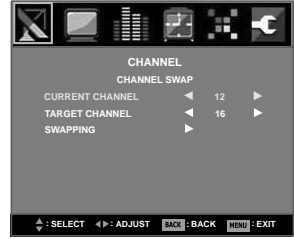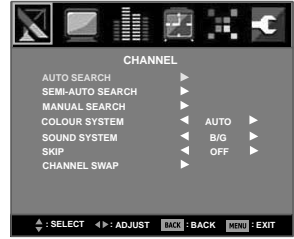**COLOUR-R:** Used to lighten and deepen red tone. (Only in PC mode).
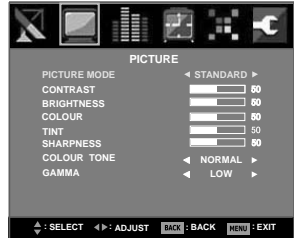**COLOUR-G:** Used to lighten and deepen green tone. (Only in PC mode).
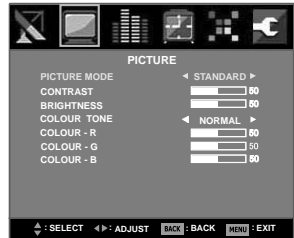**COLOUR-B:** Used to lighten and deepen blue tone. (Only in PC mode).

⚠ **Note:**
● "TINT" cannot be selected except for NTSC/ NTSC4.43 system.
● Only COLOUR TONE and GAMMA are available when SPORTS mode is ON.

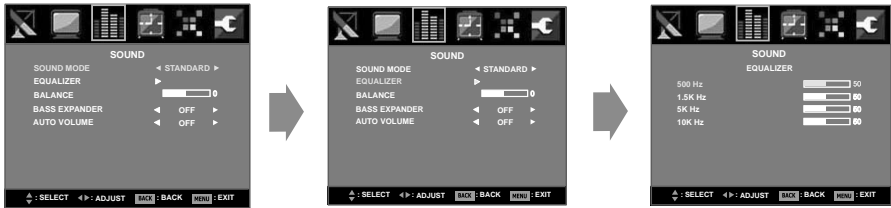

PICTURE MENU (TV/AV/HDMI MODE)

PICTURE MENU (PC MODE)

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MENU OPERATION

SOUND

1 Press MENU button and the main menu will appear. Press POINT ◄► buttons to select "SOUND", and will display SOUND menu.

2 Press POINT ▲▼ buttons or ENTER button to enter into SOUND menu.

3 Press POINT ▲▼ buttons to select the item desired.

4 Press POINT ◄► buttons to enter the item selected.

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait for 5~60 seconds to exit menu operation.

⚠ **Note:**
SOUND MODE, EQUALIZER and BASS EXPANDER is disabled when SPORTS mode is ON.

SOUND MODE: Press POINT ◄► buttons to select "STANDARD", "NEWS", "MUSIC" or "PERSONAL".

EQUALIZER: Select different frequency ranges of sound separately by pressing POINT ◄► buttons or ENTER button. Adjust values of "500 Hz", "1.5 K Hz", "5K Hz", "10K Hz" by pressing POINT ◄► buttons.

BALANCE: Adjust the balance of the left and right channels. (-15~15).

BASS EXPANDER: Switch Bass Expander ON or OFF.

AUTO VOLUME: Switch Auto Volume ON or OFF.

TIMER

1 Press MENU button and the main menu will appear. Press POINT ◄► buttons to select "TIMER", and will display TIMER menu.

2 Press POINT ▲▼ buttons or ENTER button to enter into TIMER menu.

3 Press POINT ▲▼ buttons to select the item desired.

4 Press POINT ◄► buttons to enter the item selected.

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait for 5~60 seconds to exit menu operation.

TIMER MENU

OFF TIMER: Once OFF TIMER has been set, when the set time is reached, the TV will shift to stand-by status. To select "OFF", "30 MIN", "60 MIN", "90 MIN" or "120 MIN" with POINT ◄► buttons or TIMER button. To cancel "OFF TIMER ", you can choose any option by the following ways.
- Setting "OFF" in OFF TIMER menu.
- Pressing POWER ON/OFF button on Side Control.
- Pressing POWER ON/OFF button on Remote Control.

ON TIMER: Once ON TIMER has been set, you won't miss any opportunity to watch the program you like. To set channel position, you can use NUMERIC buttons or DIGIT button. After ON TIMER has been set, ON TIMER INDICATOR will be light. To cancel "ON TIMER MODE", you can choose any option by the following ways.
- Setting "- - : - -" in ON TIMER.
- Disconnecting the AC power cord.

ON TIMER CH: This function is only active that ON TIMER has been set. When the set time in ON TIMER is reach, the TV will turn on and enter the channel position you set directly. To set channel position, you can use NUMERIC buttons or DIGIT button.

● When OFF TIMER countdown time reach 1 minute, OFF TIMER OSD always showed for user information about power off time remain.
● OFF TIMER will be cancel when press any button during the countdown time dsplay.
● If ON TIMER didn't set, ON TIMER CH function will not actived.
● OFF TIMER and ON TIMER will be automatically cancelled during searching channels.
● The settings for OFF TIMER and ON TIMER will be automatically cancelled after the settings has been operated for one time.
● In case you left TV without any operation for 2 hours after power on by ON Timer, TV will automatically power off itself.

OSD

1 Press MENU button and the main menu will appear. Press POINT ◄► buttons to select "OSD", and will display OSD menu.

2 Press POINT ▲▼ buttons or ENTER button to enter into OSD menu.

3 Press POINT ▲▼ buttons to select the item desired.

4 Press POINT ◄► buttons to enter the item selected.

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait for 5~60 seconds to exit menu operation.

MENU OPERATION

LANGUAGE: Press POINT ◄► buttons to choose ENGLISH, THAILAND, VIETNAM, or INDONESIA. For Middle East destination, it will be displayed: ENGLISH, ARABIC or PERSIAN.

H-POSITION: OSD moves to the left side when POINT ◄ button is pressed. OSD moves to the right side when POINT ► button is pressed. (0~100).

V-POSITION: OSD moves up when POINT ◄ button is pressed. OSD moves down when POINT ► button is pressed. (0~100).

DURATION: Use this function to set the display time of the MENU when there is no operation on the TV. Press POINT ◄ button to decrease time, press POINT► button to increase time. (5~60 seconds).

INPUT LABEL: Use this function to give input source tag name follows input source device (ex: DVD player, Blu-Ray player, etc). Press POINT ◄► buttons or ENTER button to enter into INPUT LABEL menu. Press POINT ▲▼ buttons to select INPUT source, press POINT ◄► buttons to select "OFF"(blank), VCR, DVD, AUX, STB or GAME.

⚠ **Note:**
User can switch off or fill INPUT LABEL names with blank, by choosing "OFF" at INPUT LABEL menu option.

SETUP

1 Press MENU button and the main menu will appear.
Press POINT ◄► buttons to select "SETUP", and will display SETUP menu.

2 Press POINT ▲▼ buttons or ENTER button to enter into SETUP menu.

3 Press POINT ▲▼ buttons to select the item desired.

4 Press POINT ◄► buttons to enter the item selected.

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait for 5~60 seconds to exit menu operation.

⚠ **Note:**
"PC ADJUST" can not be selected except for PC mode.

CHILD LOCK: When CHILD LOCK is set "ON", the Side Control buttons will be locked except for POWER ON/OFF button. When Press the Side Control buttons, TV will display "LOCKED".

ECO: This mode adjust panel backlight that can reduce the power consumption. Set it ECO "OFF", "LOW", or "HIGH".

DYNAMIC AI: Automatically adjust video quality by video scene. Used to adjust contrast and color parameters until the display looks good. Set it ON or OFF.

ACTIVE CONTRAST: Used to improve poor contrast level quality from source signal in certain condition. Set it "OFF", "LOW, or "HIGH".

SHOP MODE: Press POINT ◄► buttons to choose HOME MODE or SHOP MODE. Press ENTER button to enter into HOME MODE or SHOP MODE.

HOME MODE: In this mode, the adjustments you have set of "Picture mode" and "ECO" will be stored as the last memory automatically. The initial settings are "DYNAMIC" and "OFF".

SHOP MODE: In this mode, 30 minutes later after you made some adjustments of "Picture mode" and "ECO" and no other operation on the LCD TV, the initial setting will be recalled. (The initial settings are "DYNAMIC" and "OFF".) The message of "INITIAL SETTING RECALLED FOR DEMO" will appear on the screen for 3 seconds.

⚠ **Note:**
● When Active Contrast is select "HIGH" mode, the picture may be too darkness. In this case, select "OFF" or "LOW" mode.
● When in PC mode, "ACTIVE CONTRAST" can not be adjusted in the "SETUP" menu.
● Shop mode setting will be continued even after power off /on by Remote control, LCD TV or AC power plug.
● At the first power on and just after plug and play channel set-up, SHOP MODE menu will appear. Press POINT ◄► buttons to select and press ENTER button for SHOP MODE or HOME MODE. Then the pop up menu disappears.

SETUP (PC MODE)

1 Press MENU button and the main menu will appear. Press POINT ◄► buttons to select "SETUP", and will display SETUP menu.

2 Press POINT ▲▼ buttons or ENTER button to enter into SETUP menu.

3 Press POINT ▲▼ buttons to select the item desired.

4 Press POINT ◄► buttons to enter the item selected.

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait for 5~60 seconds to exit menu operation.

⚠ **Note:**
● "PC ADJUST" is only active in PC mode.

PC ADJUST

This function is used to adjust the position of image displayed on screen. It can be selected when the LCD TV could be received PC signal and in PC mode. Press POINT ◄► buttons or ENTER button to enter PC ADJUST menu. It can be select "AUTO ADJUST", "H-POSITION", "V-POSITION", "PHASE", "CLOCK" or "AUTO SHUT DOWN" to adjust.
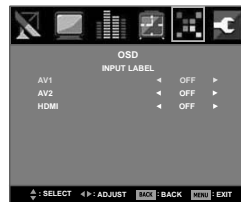
AUTO ADJUST: Press POINT ◄► buttons, and the TV automatically detects incoming signal, and adjust itself to optimize its performance. If the image is not displayed properly, a manual adjustment is required (Refer to following adjustments).

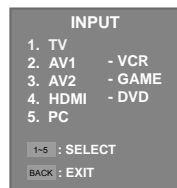**H-POSITION:** The horizontal picture position will be moved to the left side by pressing POINT ◄ button. And it will be moved to the right side by pressing POINT ► button. (0~100).

V-POSITION: The vertical picture position will be moved down side by pressing POINT ◄ button. And it will be moved up side by pressing POINT ► button. (0~100).

PHASE: Eliminate disorder from the image. Press POINT ◄► buttons to adjust PHASE. (0~100).

CLOCK: Eliminate flicker from the image. Press POINT ◄► buttons to adjust CLOCK. (0~100).

AUTO SHUT DOWN: Press POINT ◄► buttons to set AUTO SHUT DOWN ON or OFF. When PC is switched Off, "NO SIGNAL" appears for 30 seconds, TV will be automatically switched to Backlight off mode. During Backlight Off Mode within 10 minutes, TV will be switched to On Mode if PC is switched On. After Backlight Mode continues for 10 minutes, it will be switched to Standby Mode. During Standby mode, TV will not be switched to On mode even if PC is switched On. During Backlight Off mode, POWER indicator will become green.POWER ON/OFF button, NUMERIC (0-9) buttons and CHANNEL up/down buttons are enabled to switch On TV.

DEALER MODE

TO DISPLAY DEALER MODE:
Press INFO button on remote control while holding MENU button on Side control to display Dealer mode menu.
The Dealer Mode has 9 different modes: VOLUME LOCK, TUNING LOCK, START MODE, OSD, RC, AC POWER MODE, START VOLUME LEVEL, MUSIC MODE SETUP and RESET.
Take the way of setting VOLUME LOCK for example:

1 Press POINT ◄► buttons to select a maximal volume.

2 Press INFO button on remote control while holding MENU button on Side control to display Dealer mode menu.

3 VOLUME LOCK will be the default selection. (When you adjust others, press POINT ▲▼ buttons to select the item desired.)

4 Press POINT ◄► buttons to select "ON". (The maximal volume is the set value by step 1.)

5 Press menu button to exit menu operation.

VOLUME LOCK
This function is used to limit the maximal volume.

TUNING LOCK
The way to prevent user from executing the Tuning function.

START MODE
The LCD TV will automatically enter to the setting mode while being turned on. You can select OFF, TV(0-10), AV1, AV2(DVD), HDMI or PC in START MODE. When it is set "OFF", it will keep the mode before being turning off.

OSD
When it is set "OFF", Corresponding OSD cannot display on the screen while operating.

RC
You can set "ON" or "OFF" in RC MODE. Use this feature to set Remote Control Function including Power ON/OFF function.

● **ON**
  - Set Remote Control to normal function.

● **OFF**
  - Set buttons on the Remote Control to prohibit to use include Power button.

AC POWER MODE
You can set "STAND", "LAST" or "ON" in AC POWER MODE.Use this feature to set TV condition when AC cord plug-in.
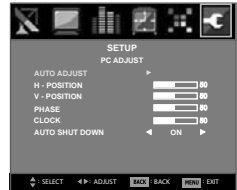
● **STAND**
  - When AC cord plug-in, LCD TV always STAND-BY.

● **LAST**
  - When AC cord plug-in, the LCD TV will depend on last TV condition. (ON or Stand-by)

● **ON**
  - When AC cord plug-in, LCD TV always ON.

START VOLUME LEVEL
You can select "OFF" or "1-100" in START VOLUME LEVEL.
Use this feature to set volume bar level position every time TV turned on.

⚠ **Note:**
Even Start Volume Level set to higher value then Volume Lock, the Start Volume Level value automatically set to Volume Lock value.

SETUP

CHILD LOCK	◄ ON ►	
ECO	◄ OFF ►	
DYNAMIC AI	◄ ON ►	
ACTIVE CONTRAST	◄ OFF ►	
PC ADJUST	►	
SHOP MODE	►	

◄ : SELECT   ◄ ► : ADJUST   BACK : BACK   MENU : EXIT

SETUP
PC ADJUST

AUTO ADJUST	►	
H - POSITION	80	
V - POSITION	80	
PHASE	80	
CLOCK	80	
AUTO SHUT DOWN	◄ ON ►	

◄ : SELECT   ◄ ► : ADJUST   BACK : BACK   MENU : EXIT

AUTO ADJUST

REMOTE CONTROL

INFO button

MENU

BACK

POINT
▲/▼/◄/►
buttons

ENTER

SIDE CONTROL

POWER

MENU button

INPUT

ENTER/OK
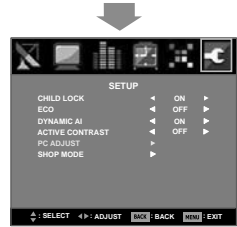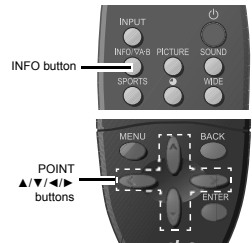
VOL
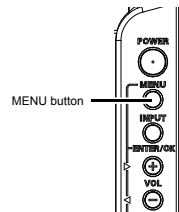
DEALER MODE MENU

DEALER MODE

VOLUME LOCK	◄ OFF ►	
TUNING LOCK	◄ OFF ►	
START MODE	◄ OFF ►	
OSD	◄ ON ►	
RC	◄ ON ►	
AC POWER MODE	◄ STAND ►	
START VOLUME LEVEL	◄ OFF ►	
MUSIC MODE SETUP	►	
RESET	►	

◄ : SELECT   ◄ ► : ADJUST   MENU : EXIT

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DEALER MODE

MUSIC MODE SETUP
MUSIC mode is used to block picture on channel program.Use this feature to set Music Mode condition in set 5 Position Channel.

1 Press and hold Menu button on Side Controls, and press INFO button on remote control to display Dealer mode menu. Press POINT ▲▼ buttons to select MUSIC MODE SETUP.

2 Press POINT ◄► buttons or ENTER button to enter into MUSIC MODE SETUP menu.

3 Press POINT ▲▼ buttons to select the item desired.

4 Press POINT ◄► buttons to enter the item selected.

■ Press BACK button to return to the previous menu.
■ Press MENU button or wait to exit menu operation.

⚠ **Note:**
When the channel set with Music mode is selected, Eco mode is ON.

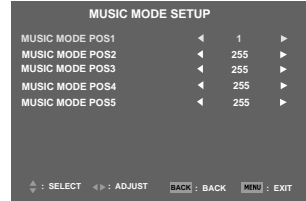**RESET**
This function returns all setting values to the factory default settings.

DEALER MODE			
VOLUME LOCK	◄	OFF	►
TUNING LOCK	◄	OFF	►
START MODE	◄	OFF	►
OSD	◄	ON	►
RC	◄	ON	►
AC POWER MODE	◄	STAND	►
START VOLUME LEVEL	◄	OFF	►
MUSIC MODE SETUP		►	
RESET		►	

$\updownarrow$: SELECT   ◄ ► : ADJUST   MENU : EXIT

MUSIC MODE SETUP			
MUSIC MODE POS1	◄	1	►
MUSIC MODE POS2	◄	255	►
MUSIC MODE POS3	◄	255	►
MUSIC MODE POS4	◄	255	►
MUSIC MODE POS5	◄	255	►

$\updownarrow$: SELECT   ◄ ► : ADJUST   BACK : BACK   MENU : EXIT

APPENDIX

CLEANING LCD TV

Be sure to disconnect the AC Power cord from AC outlet before cleaning the LCD TV.
Clean your LCD TV as follows:

● Gently wipe the screen and cabinet with dry soft cloth.
● The screen is likely to be damaged if it is not maintained properly. Do not use hard objects like a hard cloth or paper. Do not use solvents or abrasions.

CAUTION :
Do not use benzene, thinner, or any volatile substances to clean the LCD TV. These chemicals may damage the cabinet finish.

FUNCTION OF PRODUCT SAFETY FEATURE

For protecting product safety, protection feature provided inside LCD TV. Refer to the following please.

AUTO POWER OFF

When a trouble is detected in the LCD TV, the protection function works and turn the LCD TV OFF automatically. When the LCD TV is turned OFF with this function, the POWER indicator becomes red and LCD TV's power cannot be turned ON.
Disconnect Power cord and contact sales dealer where you purchased the LCD TV or the service center.

To turn on LCD TV again for checking:
1) Disconnect Power cord from AC outlet and plug it on again.
2) Refer to "TURNING ON/OFF LCD TV" to attempt to turn on LCD TV.
   If LCD TV is not turned on, disconnect Power cord and contact to service center.

TROUBLESHOOTING

Before calling your dealer or service center for assistance, check the matters below once again.
1. Make sure you have connected LCD TV to your equipment as described in the section "CONNECTING LCD TV".
2. Check cable connection. Verify that all external equipment and power cords are properly connected.
3. Verify that all power is switched on.
4. If LCD TV still does not produce an image, re-start the external equipment.
5. If the image still does not appear, unplug LCD TV from the external equipment and check the external
   equipment. The problem may be with your graphics controller rather than with LCD TV. (When you reconnect
   LCD TV, remember to turn the external equipment and TV off before you power up LCD TV. Power
   the equipment back on in order of : LCD TV and external equipment.)
6. If the problem still exists, check the following chart.

Problem:	Try these Solutions
NO POWER	● Plug this LCD TV into the AC outlet. ● Press ON/STAND-BY button on SIDE Control or on Remote Control to open this LCD TV. ● Check POWER Indicator. If this indicator flashes, LCD TV has any trouble.
Remote Control does not work	● Check the batteries. ● Make sure nothing is between the Remote Receiver and the Remote Control. ● Make sure you are not too far from LCD TV when using Remote Control. Maximum operating range is 16.4' (5m). ● Is direct sunlight or strong artificial light shining on LCD TV's Infrared Remote Receiver? Eliminate the light by closing curtains, pointing the light in a different direction, etc.
No image	● Check the connection between the external equipment and LCD TV. ● When turning LCD TV on, it takes a few seconds to display the image. ● Check the system that you select is corresponding with the external equipment or the video equipment. ● Make sure the temperature is not out of the Operating Temperature (0°C ~ 40°C). ● Turn off power, then turn on again, re-start LCD TV.
No sound	● Check Audio cable connection from Audio input source. ● Adjust the Audio source. ● Press VOLUME (+) button. ● Press MUTE button.
There are tiny black points and/or bright point on the TV	● Dark or bright points of light (red, green, or blue) may appear on the screen. This is a characteristic of the LCD panels, not a malfunction of the LCD TV.
Abnormal colour of image	● Adjust the value of colour. ● Select different colour system.

WARNING :
High voltages are used to operate this LCD TV. Do not attempt to open the cabinet.

If the problem still persists after following all operating instructions, contact the sales dealer where you purchased LCD TV or the service center. Give the model number and explain the difficulty. We will advise you how to obtain service.

APPENDIX

TECHNICAL SPECIFICATIONS

Model	LCE-24C100F(K)/(N)/(R)/(S)
Maximum Visible Range	61cm (Screen Diagonal Size)
Picture Resolution	1920(H) x 1080(V)
Voltage	AC110-240V 50/60Hz
Power Consumption	LCE-24C100F(K)/(N)/(R)/(S): 44W
Power Management	VESA DPMS
Colour System	PAL/SECAM/NTSC/NTSC4.43
Sound System	D/K, I, M, B/G
Channel Coverage	- VHF: E2-E12, R1-R12, K1-K9, J1-J12, A2-A13
	- UHF: 21-69, A14-A69, J13-J62
	- CATV: S1-S41, X, Y, Z, Z+1, Z+2
Aerial input impedance	75Ω
Speaker Size	Mains: 80mm x 20mm x 2pcs
Sound speciality	Maximum Output Power is 3W+3W
	Total Harmonic Distortion(THD)≤10%
Input and Output terminals	
AV1 Input	Video Input: Composite video Input (RCA Jack) x1
	Audio Input: L/R Stereo Input (RCA Jack) x 1 set
AV2 Input	Video Input: Component Y (combined with composite video input),
	CB, CR Input (RCA Jack) x1 set
	Audio: L/R Stereo Input (RCA Jack) x 1 set
HDMI Input	HDMI Terminal 19 pin x1
PC Input	Video Input: D-SUB 15 pin x1
	Audio Input: Mini stereo jack x 1
Output Terminals	Video Monitor Output: RCA jack x 1
	Audio Monitor Output: L/R Stereo Output (RCA jack) x 1 set
Dimensions	
(Width x Height x Depth)	LCE-24C100F(K)/(N)/(R)/(S): 580 x 396 x 156 mm (Including Stand)
Net Weight	
(Including Stand)	LCE-24C100F(K)/(N)/(R)/(S): 4.25 kg
Wall Mounting	VESA Standard (200 x 200) wall hanging bracket.
Operating Environment	
Operating Temperature	0ºC~40ºC（32ºF~104ºF）
Operating Humidity	20~80%
Storage Temperature	-10ºC~50ºC（14ºF~122ºF）
Storage Humidity	20~80%

SIGNAL MODE COLUMN (Recommended)

This LCD TV can correspond to the signals below. After connecting with the computer, LCD TV can automatically recognize the signal from the connected PC(computer)/ HDMI.

PC SIGNAL MODE COLUMN (recommended)

SYSTEM MODE	PIXELS	V-Freq.(HZ)	H-Freq.(KHz)	STANDARD
VGA	640*480	60	31.5	VESA
SVGA	800*600	60	37.9	VESA
XGA	1024*768	60	48.4	VESA
WXGA	1280*768	60	47.7	VESA-GTF
SXGA	1280*960	60	60	VESA
SXGA	1280*1024	60	64	VESA
UXGA	1600*1200	60	75	VESA

⚠ **Note:**
- In case LCD TV can not display properly due to the connecting cable or the graphic hardware, please make adjustments about phase, clock and so on.
- In principle, LCD TV can not display the signal mode which not described in the above column. But sometimes it can display a signal very similar with one of the signal described.
- If you want to change the definition and colour of PC, please select one from the column.
- It is not the trouble of LCD TV if interference appears on the picture while switching the signal mode.
- It is different from CRT Monitor that it is no blink of the picture when the V-Freq. of the signal s 60Hz. It is recommended to select 60Hz V-Freq. of your computer to display better pictures.
- The Dot Clock of the computer's signal must be less than 100 MHz.
- Specifications are subject to change without notice.

In case of the following things, some messages will display on the screen.
- When the input signal from PC is out of the display range, "OUT OF RANGE" will display.

When input signal is digital from DVD terminal, refer to the chart below.

SYSTEM MODE	PIXELS	V-Freq. (HZ)	H-Freq. (KHz)
480I	720*480	60	15.75
576I	720*576	50	15.6
480P	720*480	60	31.5
576P	720*576	50	31.2
720P	1280*720	60	45
720P	1280*720	50	37.5
1080I	1920*1080	60	33.7
1080I	1920*1080	50	28.1
1080P	1920*1080	50	56.2
1080P	1920*1080	60	67.5

When input signal is digital from HDMI terminal, refer to the chart below.

NO.	Resolution	H-Freq. (KHz)	Frame Frequency
1	EIA1920×1080i@60	33.750	60.00Hz
2	EIA1920×1080p@60	67.500	60.00Hz
3	EIA1920×1080i@50	28.125	50.00Hz
4	EIA1920×1080p@50	56.250	50.00Hz
5	EIA1280×720p@60	45.000	60.00Hz
6	EIA1280×720p@50	37.500	50.00Hz
7	EIA720x480p(w)@60	31.500	60.00Hz
8	EIA720x576p(w)@50	31.250	50.00Hz
Audio Freq. Format : 16bit/20bit/24bit			
HDMI™(V.1.3 with Deep Color)			