# **LCD TV**

# **Operating Instructions**

DT 4060(D) DT 4660(D)



# LCD TV

#### A Wide Array of Screen Settings

You can choose different screen settings depending on the type of program you are watching or the surrounding conditions (the lighting or the outside weather conditions). You can switch among the Sport, Natural, Mild and Standard options, or you can configure the screen settings yourself.

#### A Wide Array of Sound Settings

You can choose an optimal sound setting for the type of program you are watching. You can switch among the Music, Film, Speech and Standard options, or you can configure the settings yourself.

#### **Favorite Channel Memory**

You can store your favorite channels in the order of preference for easy channel selection.

#### **Teletext Function**

You can display teletext information at any time on your TV.



#### CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



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



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### **WARNING**

To reduce the risk of fire or shock hazard, do not expose the TV to rain or moisture.

#### NOTICE

- If the same pattern is continuously displayed on the Monitor/TV for a long period of time, it can be the situation when the image "Sticks" to screen.
- The apparatus shall not be exposed to dripping or splashing and no object filled with liquids, such as vases, shall be place on the apparatus.

# Important Safety Instruction

- The unit should not be placed in a built-in installation such as a book-case, limited space rack unless proper ventilation is provided.
  - This may cause fire by overheating or damage the unit by falling.
- ◆ Do not use the unit near water, oil or inflammables.
  - This may cause a fire.
- Do not use a damaged plug and do not let the power cord touch a heat source.
  - This may cause an electric shock or fire.
- Place the unit on a flat and stable surface.
  - The unit can cause injury or damage the unit by falling.
- ◆ Keep the your TV away from any heat source.
  - This may cause a fire.
- ◆ Do not use or store inflammable substances near the unit.
  - This may cause an explosion or fire.
- Place the antenna away from the electric wire, not to touch even though it falls down by wind.
  - This may cause an electric shock.
- Be sure to plug in tightly and hold the plug, not the cord when disconnecting the plug from the wall outlet.
  - This may cause a fire.
- Unplug the unit from the wall outlet before cleaning.
   Use a smooth cloth. Do not use industrial chemicals.
  - This may cause an electric shock or fire.
- Do not touch the antenna wire and disconnect the plug from the electrical outlet during storms or lightening.
  - This may cause an electric shock or fire.

- Do not use the unit in direct sunlight and keep it away from heaters, stoves, and other sources of heat.
  - This may cause a fire.
- During storm conditions (especially when there is lighting) unplug your TV set from the main electrical outlet and antenna.
- Do not connect too many extension cords or plugs to an outlet
  - This may cause a fire.
- Do not attempt to service the unit.
   Contact an authorized dealer or repair service.
  - Servicing the unit yourself may cause an electric shock or fire.
- If there are any unusual sounds or smells coming from the unit, unplug it immediately and contact an authorized dealer or repair service.
  - This may be caused by an electric shock or fire.
- ◆ Place the unit away from the wall for well ventilation.
  - This may cause a fire.
- Do not touch the plug with wet hands.
  - This may cause an electric shock.
- If an outside antenna is connected to the unit, do not let the rain water get into the unit by bending or antenna wire sealing.
  - This may cause an electric shock or fire.
- If the connector between the plug and the pin is dusty or dirty, clean it. Do not spray detergent directly on the unit.
  - This may cause an electric shock or fire.
- ◆ Disconnect the plug from the outlet if it is not used for a long period of time.
  - This may cause an electric shock or fire.

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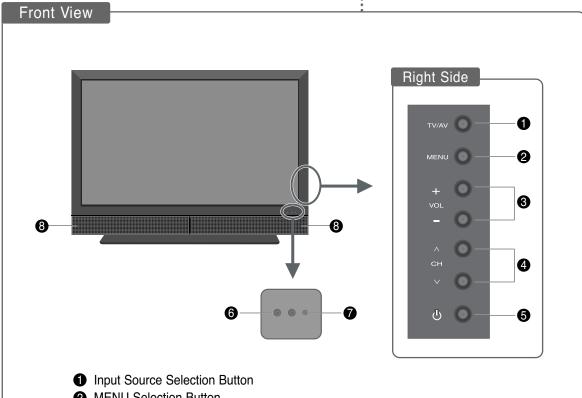
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# Unpacking your TV

Please make sure that the following items are included with your TV set. If any items are missing, contact your dealer.

# Accessories Remote Control & Batteries **Operating Instructions** Power Cord Antenna $(AAA \times 2)$ Loop Cable (Option)

# Viewing the Control Panels



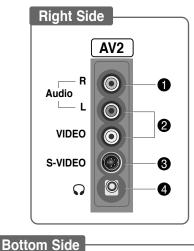
- MENU Selection Button
- 3 Volume Adjustment Button
- 4 Channel Selection Button
- 6 Power Button
- **6** Remote Control Sensor
- Power Indicator
- 8 Speaker

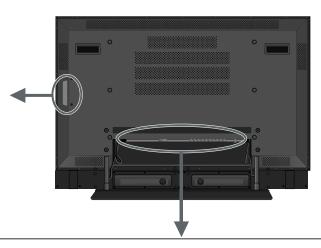
#### Power Indicator Status

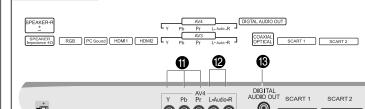
Indicator	Status
Red	Stand-by
Green	Power on
Green blinking	Remote control

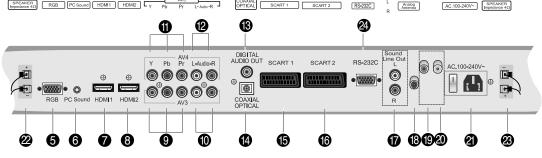
# **Viewing the Connection Panels**

#### **Rear View**





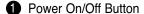




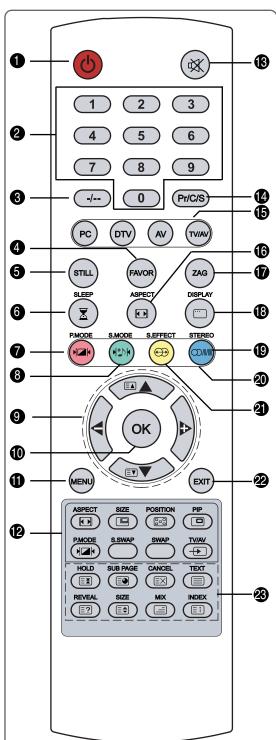
- Audio Input (AV2)
- Video Input (AV2)
- 3 S-Video Input (AV2)
- 4 Headphone Jack
- **6** Analog RGB Input (PC)
- Audio Input (PC)
- ↑ HDMI Input (HDMI1)
- 8 HDMI Input (HDMI2)
- DTV/DVD Video (Y/Pb/Pr) Input (AV3)
- DTV/DVD Audio Input (AV3)
- DTV/DVD Video (Y/Pb/Pr) Input (AV4)
- 12 DTV/DVD Audio Input (AV4)
- Digital Audio Out (Coaxial)
  - 5.1 channel sound output for Home-theater system through the coaxial cable

- Digital Audio Out (Optical)
  - 5.1 channel sound output for Home-theater system through the optical cable
- **1** Euro-Scart Jack(SCART 1)
- Euro-Scart Jack(SCART 2)
- **1** Sound Line Out (Option)
- Analog Antenna
- DTV Antenna (Option)
- ② DTV Loop Out (Option)
- 2 Power Input
- Speaker Out (Left)
- 23 Speaker Out (Right)
- **2** RS-232C (Right)

#### Remote Control



- 2 Numeric Buttons
- 3 One/Two-Digit Channel Selection
- 4 Favorite Channel Selection (See page 26)
- 5 Picture Still (See page 31)
- 6 Sleep Timer (See page 23)
- Picture Mode Selection ( ) (See page 15)
- 8 Sound Mode Selection ( ) (See page 17)
- 9 Control the Cursor in the OSD Menu
  - ▲(E▲) and ▼(E▼) (Channel Up / Down) (Teletext Page Up / Down, see page 33)
  - dand ⇒
    (Volume Up / Down)
- MENU Confirmation
- MENU Button
  -Display OSD Menu
- PIP Functions: (See page 28~29)
  - -PIP On/Off ( )
  - -Position Selection ( )
  - -Size Selection ( )
  - -Picture Mode Selection
  - -Swapping Main and Sub Picture ( Name )
  - -Selecting the Input Source ( )
  - -PIP Picture Size Selection
  - -Swapping Main and Sub Sound ( )



- Temporary Sound Mute
- TV Input Source Selection (See page 13)
- Selection
  (See page 11)
- (See page 30)
- Previous Channel
- TV Information Display
- Sound Selection:

  Mono/Stereo Dual Select
  ( ) (See page 20)
- Pastext Functions : (See page 32)
- Sound Effect Selection ( ) (See page 20)
  - \* The only model that has a SRS WOW function can select On or Off.
- EXIT Button
  - Exit from the OSD
  - Display the current time when the OSD is off. (See page 24)
- Teletext Functions: (See page 32~33)
  - Teletext On/Off ( )
  - Cancel ( )
  - Sub Page On ( )
  - Page Hold ( )
  - Index ( )
  - Mix ( 🗐 )
  - Size ( 🗐 )
  - Reveal ( REVEAL )
- - Make sure that there are no objects between the remote control and its sensor.
  - Do not place the remote control near a heater or in damp place.
  - A strong blow to the remote control may cause it not to operate.

# Remote Control (For DTV Model)

- Power On/Off button
- 2 Numeric buttons
- 3 One/Two-Digit Channel Selection
- 4 Favorite Channel Selection (See page 26)
- 5 Picture Still (See page 31)
- 6 Sleep Timer (See page 23)
- Picture Mode Selection ( ) (See page 15)
- 8 Sound Mode Selection ( See page 17)
- Control the Cursor in the OSD Menu
  - ▲(E▲) and ▼(E▼) (Channel Up / Down) (Teletext Page Up / Down, Page 33)
  - **∢**and ▶

(Volume Up / Down)

- MENU Confirmation
- Display OSD Menu
- PIP Functions: (See page 28~29)
  - -PIP On/Off ( )
  - -Position Selection ( )
  - -Size Selection ( )
  - -Swapping main and sub picture ( ( )
  - -Selecting the Input Source ( TVIAN )
  - -Swapping main and sub Sound( sub )
  - -PIPChannel Selection ( )
- Temporary Sound Mute
- TV Input Source Selection (See page 13)
- 13 0 DEF ABC 2 3 GHI JKL MNO 2 4 5 6 PRS TUV WXY 7 8 9 8 Ø Pr/C/S ₲ TV/AV РС DTV 4 **1** Ø 6 STILL FAVOR ZAG ASPECT DISPLAY SLEEP 6 info B S.MODE S.EFFECT STEREO HZK (20/1/11) 1 a 20) 8 21 9 ◂ OK ❿ MENU EXIT 0 22 POSITION PIP ø 回  $\bigcirc$ 23 24)
- **(5)** External Source Input Selection (See page 11)
- (See page 30)
- Previous Channel
- 18 TV Information Display
- Fastext Functions : (See page 32)
- Sound Effect Selection ( ( See page 20)
- EXIT Button
  - Exit from the OSD
  - Display the current time when the OSD is off (See page 24)
- Teletext Functions : (See page 32~33)
  - Teletext On/Off ( )
  - Cancel (

    )
  - Sub Page On ( )
  - Page Hold ( )
  - Index ( )
  - Mix ( 💷 )
  - Size ( 🗊 )
  - Reveal ( )
- ② Digital Video Broadcast Functions:

(See page 36~42)

- SETUP : Set options in Digital TV menu.
- TV/RADIO : Select Digital TV or Radio function.
- CH.LIST: Display Digital TV channel list stored in TV.
- EPG : Display Program Guide of Digital TV.
- - CH + : DTV Channel Up /Down
- CC : Closed Caption On/Off
- TEXT : Display Teletext
- Makes sure there are no objects between the remote control and its sensor.
  - Don't place the remote control near a heater or in damp place.
  - A strong blow to the remote control may cause it not to operate.

# Inserting Batteries in the Remote Control

You must insert or replace the batteries in the remote control when you purchase the TV or when you find that the remote control is no longer operating correctly.



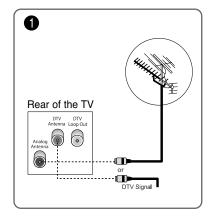
**1** Insert two AAA-size batteries (supplied) by matching the + and - on the batteries to the diagram inside the battery compartment.

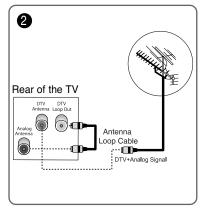
- Handle the remote control with care; avoid dropping it, getting it wet, placing it direct sunlight, near a heater, or where the humidity is high.
- Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.

# Connecting an Antenna or Cable

To view television channels correctly, a signal must be received by the set from one of the following sources: an outdoor antenna, a cable television system or a satellite dish.

- 1 Connect the antenna or input cable to the 75 ohm coaxial input on the rear of the TV.
  - If both analog and digital signals are available, connect each signal to the corresponding antenna jack.
    - ② If only one antenna signals is available connect the signal to DTV Antenna input jack and then connect the signal of the DTV Loop Out jack to the analog antenna jack with supplied antenna loop cable. (Option)
- **2** If you are using an indoor antenna, you may need to turn it when tuning your television until you receive a clear picture.





# Connecting to the Composite Video or S-Video Input

# Right side of the TV (A) For Composite Video Input AV Cable Camcorder OR (B) For S-Video Input Video game device

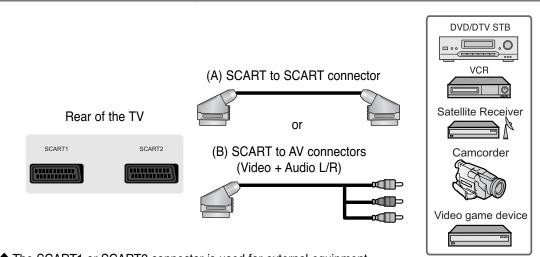
#### (A) For Composite Video Input

 Connect the AV cable to the input jacks (video+ audio L/R of AV2) on the TV and output jacks on the external equipment such as a VCR, camcorder and some video game devices.

#### (B) For S-Video Input

- Connect the S-Video/audio (audio L/R of AV2) cable to the input jacks on the TV and output jacks on the external equipment such as a VCR, camcorder and some video game devices.
- 2. If the external equipment has mono audio output, connect it only to left jack of the Audio Input/Output.

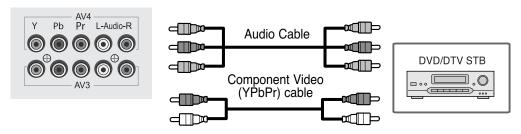
# Connecting to the SCART Input



- ◆ The SCART1 or SCART2 connector is used for external equipment with RGB output, such as a VCR, satellite receiver, camcorder, or video game devices.
  - SCART1: Full SCART (RGB & S-Video & CVBS Input/Output)
  - SCART2: Half SCART (S-Video & CVBS Input/Output)
- You can select and set one between the two types of cables (A, B) for the output jack of external device.

# Connecting to the Component Video(AV3 or AV4)

#### Rear of the TV



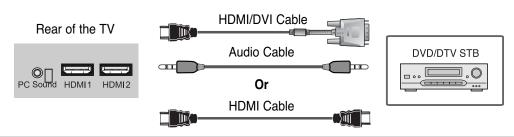
- 1. Connect the Component Video cables to the Y, Pb, Pr input jacks (AV3 or AV4) on the TV and the Y, Pb, Pr output jacks on the DVD or DTV Set-Top Box.
- 2. Connect the audio cables to the Audio L/R input jacks (AV3 or AV4) on the TV and the Audio output jacks on the DVD or DTV Set-Top Box.

#### Supported Signal for Component Ports

	480i / 60Hz	480p/ 60Hz	576i / 50Hz	576p / 50Hz	720p / 50Hz	720p / 60Hz	1080i / 50Hz	1080i / 60Hz
COMPONENT1	0	0	0	0	0	0	0	0
COMPONENT2	0	0	0	0	0	0	0	0

# Connecting to the HDMI Connection

This can be applied if there is the HDMI Output connector on the external device.



■ What is HDMI (High-Definition Multimedia Interface)?

A next generation interface that connects the digital audio and video signals using only one cable without compression. The sound signal also carries multi-channel (5.1 Channel) so that it is properly called a multimedia interface rather than a video terminal. The difference between HDMI and DVI is that the size is smaller, HDCP has an embedded cipher function and support multi channel audio.

#### For using HDMI/DVI cable

1. Connect the HDMI/DVI cable and audio cable from the output jacks on the DVD player or Set-top box to the HDMI 1 or HDMI 2 input jack and PC Sound input jacks on the TV.

#### For using HDMI cable

1. Connect the HDMI cable from the output jack on the DVD player or Set-top box to the HDMI 1 or HDMI 2 input jack on the TV.

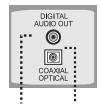
o

# Connecting the Digital Audio Output

Connect optical digital audio cable to "DIGITAL AUDIO OUT" on the rear of the TV and the other end to "DIGITAL AUDIO IN" of the equipment with a digital output to enjoy digital sound (Multi-Channel Surround Sound, Stereo, Dolby Sound).

#### Using the Digital Audio Output (SPDIF)

#### Rear of the TV



Rear of the DVD Home Theater or AV Receiver Amplifier



**DVD Home Theater** 

Connect the OPTICAL port of the DIGITAL AUDIO OUT on the rear of the TV to the optical audio input of the DVD Home Theater System (or AV Receiver Amplifier) using the optical cable.

#### Or

Connect the COAXIAL port of the DIGITAL AUDIO OUT on the rear of the TV to the coaxial audio input of the DVD Home Theater System(or AV Receiver Amplifier)using the coaxial cable.

- Decrease the TV volume to enjoy the more clear and grand sound through separate speakers.
- SPDIF OUT (Optical) may have the signal compatibility problems with certain A/V receiver and this is known issues. Due to the problems, it may have difficulty in output sound.
- Refer to corresponding user's manual from the manufacturer for wiring the speaker to the DVD Home Theater System (or AV Receiver Amplifier).

# Connecting the Headphones

Right side of the TV





You can connect a set of headphones to your TV if you wish to watch a program without disturbing the other people.

- 1. Plug a set of headphones into the 3.5mm mini-jack socket on the right side of your TV. You can hear the sound through the headphones.
  - Note: •If you use headphones for long period of time at a high volume, you may damage your hearing.
    - Headphones are not included.

# Connecting the Power Cord and Switching the TV On / Off

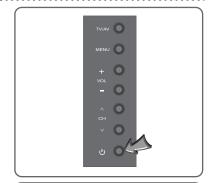
1 Connect the power cord for your TV to the power input on the back of your TV.

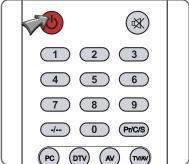
.....

.....

- **2** Plug the power cord for the TV into a nearby outlet.
- 3 Press the main switch on the back of the TV.
- 4 Press the power( ()), button on the right side of your TV or press the POWER (()), button on the remote control.

  The LED lamp will blink and your TV will be turned on.
- **5** To switch your TV off, press the POWER ( ), button again.





# Selecting a Picture from External Sources

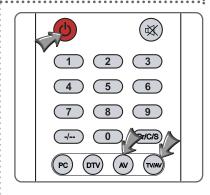
After your various systems (audio and video) have finished, you can view any of the sources by selecting the appropriate external input.

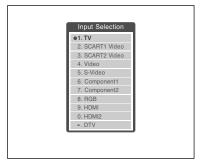
- 1 Make sure that all the necessary connections have been made.
- **2** Press the POWER ( button to switch the TV on.
- **3** Select the favourite source by pressing the TV/AV ( NAV ( NAV )) button one or more times.
  - The Input Source is displayed in the following order:

TV → SCART1 Video → SCART2 Video → Video → S-Video → Component1 → Component2 → RGB → HDMI → HDMI2 → DTV(option)

■ The Video is displayed in the following order:

SCART1 Video → SCART1 RGB → SCART1 S-Video → SCART2 Video → SCART2 RGB → SCART2 S-Video → Video → S-Video





# Storing Channels in Memory

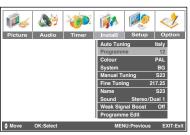
Use the this function during a broadcast after connecting the antenna.

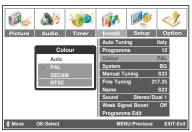












#### **Auto Storing**

- 1 Press the MENU button and press the (◀►) button to select **Install** group.
- Press the (▲ ▼) button to select Auto Tuning and press the OK button.
- Press the (▲ ▼) button to select your country then press the OK button.

The countries are displayed in the following order.

Austria → Belgium → Belgium-Dutch → Croatia → Czech →
Denmark → Finland → France → Germany → Greece →
Hungary → Italy → Luxembourg → Netherlands → Norway
Poland → Portugal → Spain → Sweden → Switzerland →
Switzerland-Fra → Switzerland-Ita → Turkey → United Kingdom
→ Australia → New Zealand → Others

When the warning dialogue box appear, select **Yes** by pressing  $(\blacktriangleleft \blacktriangleright)$  button and press the **OK** button.

The search will start automatically.

- You can stop the auto tuning by pressing the MENU button during the auto tuning.
  When you stop it, menus on the screen will be sorted and
  - changed to the **Programme Edit** screen automatically.
- When the auto tuning is finished, menus on the screen will be changed to the Programme Edit screen automatically.

#### Manual Storing

- 1 Press the (▲ ▼) button to select **Programme** and press the (◀►) button to change the programme number.
  - If a programme number is allocated, in programme menu the options adjusted in Colour, System, Manual Tuning, Name, Sound or Weak Signal Boost menu are stored in the programme number.
- Press the (▲ ▼) button to select Colour and press the OK button.
- **3** Press the (▲ ▼) button to select the required colour system and press the **OK** button.
  - The following options are available.

#### Auto, PAL, SECAM, NTSC

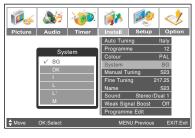
The automatic tuning function sets the unit automatically to the received signal. This is why the menu item AUTO cannot be selected.

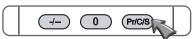
# Storing Channels in Memory

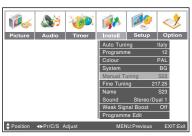
- Press the (▲ ▼) button to select System.
  Press the (▲ ▼) button to change the sound system and press the OK button if there is no sound.
  - The following options are available.

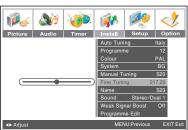
$$BG \rightarrow DK \rightarrow I \rightarrow L \rightarrow L' \rightarrow M$$

- Press the (▲▼) button to select Manual Tuning.
  Press the (◄►) button to increase or decrease the channel one by one.
  - Press the ( Procs ) button to select C (broadcast channels) or S (cable channels).
- **6** If you have picture noise press the (▲ ▼) button to select Fine Tuning and press the OK button.
  - Press the (◀▶) button to adjust the frequency manually.
- If you want to change the programme name, press the (▲ ▼) button to select Name and then press the OK button. You can then input a programme name up to 5 characters using the (▲ ▼) button and number (0~9) button. (A~Z, a~z, 0~9, space and 32 special characters)











# Storing Channels in Memory









- Press the (▲ ▼) button to select Sound and press the OK button. Press the (▲ ▼) button to select, the required option.
  - The following options are available.

Stereo/Dual 1 → Mono/Dual 1 → Stereo/Dual 2 → Mono/Dual 2

 You can select only available sound format depending on the source.

#### **Programme Edit**

Press the (▲ ▼) button to select Programme Edit and press the OK button.

You will see following menu.

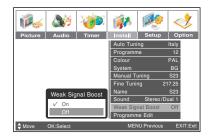
Pr, Ch., Frequency, Name, Lock, Skip.

- If you want to change the program order, press the (▲▼) button to move to the channel you want to edit and press the (♠▼) button. Press the (▲▼) button for the direction to move.
- If you want to swap channels, press the (▲ ▼) button to move to channel you want to edit and press the (♠) button.
  Then press the (♠ ▼) button to move to the other channel position and press the (♠) button again.
  The channels will be swapped each other.
- You can set the channel lock by pressing the (▲ ▼) button to move to the channel position you want to lock and pressing the (♣) button.
- You can set a channel skip by pressing the (▲ ▼) button to move to the channel you do not want to watch or do not need and pressing the ( ) button.
- You can delete a channel by pressing the (▲ ▼) button to move to the channel you do not want to watch or do not need and pressing the ( ( ) button.
- Delete ( ): Delete a program you do not want to watch.
- Move ( ): Move to the program you want to edit.
- Swap ( ): Swap programs you select with each other.
- Lock ( ): Lock the program you select.
- Skip ( ): Skip a channel you do not want to watch.

# Setting the Weak Signal Boost (Option)

If the set is operating in a weak-signal area, the Weak Signal Boost function can improve the reception.

- Press the MENU button and press the (◄►) button to select Install group.
- Press the (▲ ▼) button to select Weak Signal Boost and press the OK button.
- **3** Select On by pressing OK button.
  - You can select On or Off.
  - Amplify signals when antenna reception is poor.
     However, if incoming signals are interfering with each other, turn off Weak Signal Boost function as it may malfunction.



# Setting the Picture

#### **Selecting the Picture Mode**

- 1 Press the MENU button and press the (◀►) button to select Picture group.
- Press the (▲ ▼) button to select the Mode and press the OK button.
  - 5 pre-set picture mode option will be displayed
- Press the (▲ ▼) button to select the required option and press the OK button.
  - The following option are available.

Standard → Sport → Natural → Mild → Custom

Standard: Select when it is bright around the TV.

Sport : Select when you want to get a clearer picture

or watch sports.

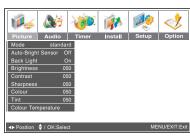
Natural : Select when viewing movies or live music.
Mild : Select when it is dark around the TV or at night.
Custom : Select if you want to adjust the settings manually.

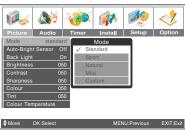
 You can also select the 5 pre-set picture mode by pressing the ( button on the remote control.

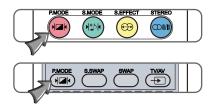
If you use the PIP function, you can change the picture mode as follows:

То	Press
Change the picture mode in the main picture	The ( button
Change the picture mode in the sub picture	The ( button

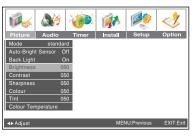
\* There is no the ( button in 2-tuner model. If you want to change the picture mode in the sub picture, first you select the sub picture by pressing the OK button, and change the picture mode using the ( button) button.

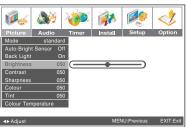


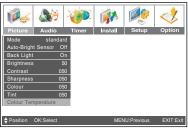


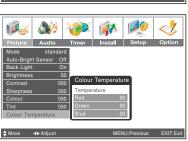


# Setting the Picture









#### **Customizing the Picture**

Press the MENU button and press the (◀►) button to select Picture group.

- Press the (▲ ▼) button to select the required option and press the OK button.
- **3** Press the (**◄►**) button to adjust the selected option.

Auto Bright Sensor: With a smart sensor that self-detects the (option) amount of light in the viewing environment and self-adjusts the brightness of the

screen.

Back Light (option) : Adjust the intensity of back light of the LCD Panel.

This feature is operated when the "Auto Bright Sensor" is set to "Off" Mode.

Brightness: Adjusts the brightness of the whole screen.

Contrast: Adjusts the clarity of the whole screen.

Sharpness: Corrects the contours of the image.

Colour: Adjusts the colour saturation of the image.

Tint: Adjusts the colours of the image. (NTSC-Only)

 If you adjust these settings in Standard, Sport, Natural or Mild mode, the mode will change to the custom mode and the adjusted values apply to the custom mode.

#### **Adjusting the Colour Temperature**

- **1** Press the MENU button and press the (◀►) button to select Picture group.
- Press the (▲ ▼) button to select the Colour Temperature and press the OK button.
- 3 Select the option (Red, Green or Blue) to be adjusted by pressing the (▲ ▼) button.
- **4** Press the (**◄►**) button until you reach the optional setting.
- **5** When you are satisfied with the settings, press the EXIT button repeatedly to return to normal viewing.

# Setting the Sound

- 1 Press the MENU button and press the (◀►) button to select Audio group.
- Press the (▲ ▼) button to select Balance and press the OK button. Adjust the sound balance with (◀►) button.
- Press the (▲ ▼) button to select Equalizer and press the OK button.
- Press the (▲ ▼) button to select a sound mode according to the type of image being watched.

The following option are available.

Standard → Music → Film → Speech → Custom

Standard: This is good for any picture.

Music : Select when you listen to music, videos or concerts.

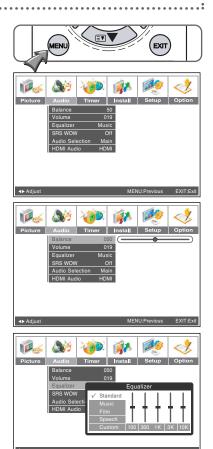
Film : Select when you watch the a movie.

Speech : Select when you listen to speeches or news. Custom : Select when you want to adjust the setting

manually.

 You can also select 5 pre-set sound mode by pressing the (
 (
 ) button on the remote control.

This feature is operated when the "SRS" is set to "Off" Mode.

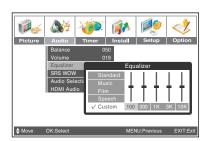


#### **Selecting the Sound Mode**

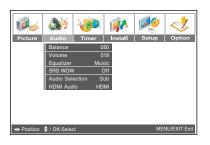
Press the (▲ ▼) button to select Custom and press the (◄►) button to select the frequency that you want to adjust. The following option are available.

 $100 \rightarrow 300 \rightarrow 1K \rightarrow 3K \rightarrow 10K$ 

- **2** Press the (▲ ▼) button to adjust.
  - If you adjust the frequency (100Hz, 300Hz, 1KHz, 3KHz, 10KHz) in Standard, Music, Film, or Speech mode, the mode will change to the custom mod and the adjusted values apply to the Custom mode.



# Adjusting the Speaker Volume

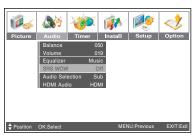




- **1** Press the MENU button and press the (◀▶) button to select Audio group.
- Press the (▲ ▼) button to select Volume and press the OK button.
- **3** Press the (**◄►**) button to adjust the speaker volume.
  - When you would like to have sound through the headphones, if you connect a set of headphones to your TV, the volume level will be decreased automatically without concerning the previous volume setting.

# Selecting the WOW Surround

Select the WOW Surround feature to amplify the mid-to low-range sounds or create a surround effect.





- 1 Press the MENU button.
- **2** Press the (**◄►**) button to select Audio group and press the OK button.
- Press the (▲ ▼) button to select SRS WOW and press the OK button.
  - The available options in the SRS WOW menu are displayed.
- 4 Press the (▲ ▼) button to select On or Off.
- **5** Press the OK button.



is a trademark of SRS Labs, Inc. WOW technology is incorporated under license from SRS labs, Inc.

# Listening to the Sound of the Sub Picture(PIP)

When the PIP features activated, you can listen to the sound of the sub(PIP) pictures.

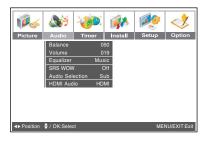
- **1** Press the MENU button and press the (**◄►**) button to select Audio group.
- Press the (▲ ▼) button to select Audio Selection and press the OK button.
- 3 Press the (▲ ▼)button to select the sound source of the speaker.

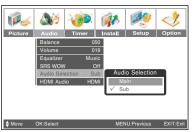
The following option are available.

Main → Sub

- Main: Used to listen to the Sound of the main picture.
- Sub : Used to listen to the Sound of the sub picture.
- You will have sound only through the headphones, not the speakers, if you connect headphones.
   You can adjust the headphones' volume by pressing the (◄►) button.
  - You can listen to the main picture's sound when the PIP is off even if you select PIP mode sound.

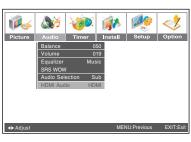






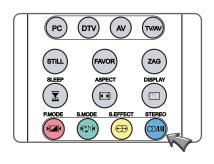
# Selecting the Audio Input (HDMI or PC)

- 1 Press the MENU button and press the (◀►) button to select Audio group.
- Press the (▲ ▼) button to select HDMI Audio and press the OK button.
- Select the required option (HDMI or PC) by pressing the (▲ ▼)button and press the OK button.
  - When connecting the PC to your TV, with the HDMI/DVI cable, you should select PC.





# Listening to Stereo Sound / Dual Sound



#### **Listening to Stereo Sound**

- 1 Press the ( ) button on the remote control to select Mono or Stereo.
  - Mono or Stereo will be selected in turn whenever you press the button.
  - Select Mono sound when you have difficulty with stereo sound.

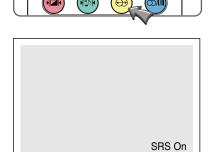
#### Listening to the Dual Sound

1 Press the ( ) button on the remote control to select Dual sound.

Dual 1: Your national language or Dual 2: Foreign language will be selected in turn whenever you press the button.

# Setting the Sound Effect

This function is available only with the remote control.



The following options are available depending on the model that has a SRS WOW function.

- Press the ( ) button on the remote control to select SRS WOW On or SRS WOW Off.
  - On or Off will be selected in turn whenever you press the ( ) button.

On: Switches on the SRS WOW function. Off: Switches off the SRS WOW function.

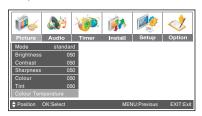
# Setting the Time

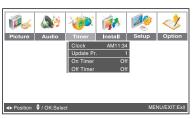
- Press the MENU button and press the (◄►) button to select Timer group.
- Press the (▲ ▼) button to select Clock and press the OK button.
- Press the (◄►) button to select AM/PM, hour or minute. Press the (▲▼) button or number buttons to set the AM/PM, hour or minute.
  - You can erase and reset the hour and minute by pressing the OK button.

#### **Update Programme**

- Set the Programme number if you want to update the time and date with the information carried by the broadcast signal.
- If you clear the Programme number, the auto update function does not work.
- Press the MENU button and press the (◄►) button to select Timer group.
- Press the (▲▼) button to select Update Pr. and press the (◄►) button to select the programme number or input the programme number by pressing the number button directly.
  - If you select Pr00, it applies to all programs.











# Setting the On Timer or Off Timer

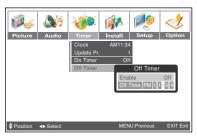












#### On Timer

- 1 Press the MENU button and press the (◀►) button to select Timer group.
- Press the (▲ ▼) button to select On Timer and press the OK button.
- 3 Press the (▲ ▼) button to select On Time and press the (◀►) button to select the AM/PM, hour or minute.
- **4** Press the (▲ ▼) buttons to set the AM/PM, hour or minute.
- After the setting completes, press the (▲ ▼) button to move to Pr. and press the (◄►) buttons to button to select the programme number.
- Press the (▲ ▼) button to select Volume and press the (◄►) button to adjust the volume.
- Press the (▲ ▼) button to select Enable and press the (◄►) button to select On or Off.

#### **Off Timer**

- 1 Press the MENU button and press the (◀►) button to select Timer group.
- Press the (▲ ▼) button to select Off Timer and press the OK button.
- 3 Press the (▲ ▼) button to select Off Time and press the (◀►) button to select the AM/PM, hour or minute.
- **4** Press the (▲ ▼) button to set the AM/PM, hour or minute.
- Press the (▲ ▼) button to select Enable and press the (◄►) button to select On or Off.
  - This function is available only when the current time is set. If the time is not set yet, set the current time.
  - When the time is not set, 12:00 is displayed.
  - If the power is out or you disconnect the power cord from power outlet, you have to set the time again referring to "Setting the Time" on page 21.

# Auto Power Off With No Signal

This function allows the TV to be turned off automatically if there is no broadcast signal for a period of 20minutes after turns the TV on.

- Press the MENU button and press the (◄►) button to select Option group.
- **2** Press the (▲ ▼) button to select No Operation Power Off and press the OK button.
- 3 Press the (◄►) button to adjust the auto power off time.
  - You can adjust it in 30-minute increments from 30 to 180 minutes.

$$(Off \rightarrow 30 \rightarrow 60 \rightarrow 90 \rightarrow 120 \rightarrow 150 \rightarrow 180)$$

If you set to Off, the TV will not use the auto power off function.



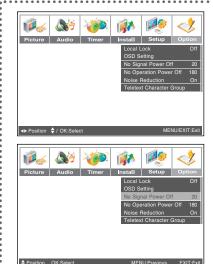
# Auto Power Off With No Key Operation

This function allows the TV to be turned off automatically if any button is not pressed for a period of 3hours after turns the TV on.

- **1** Press the MENU button and press the (**◄►**) button to select the Option group.
- Press the (▲ ▼) button to select No Signal power Off and press the OK button.
- **3** Press the (**◄►**) button to adjust the auto power off time.
  - You can adjust it in 1-minute increments from 0 to 20 minutes.

$$(Off \rightarrow 1 \rightarrow 2 \rightarrow ... \rightarrow 18 \rightarrow 19 \rightarrow 20)$$

If you set the Off, the TV will not use the auto power off function.

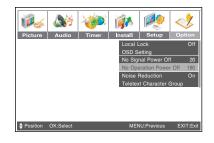


# Setting the Sleep Timer

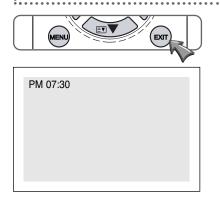
This function is available only with the remote control.

1 Press the (x) button. Whenever you press this button, sleep times will be displayed in the following order.

Sleep OFF  $\rightarrow$  Sleep 5  $\rightarrow$  Sleep 10  $\rightarrow$  Sleep 20  $\rightarrow$  Sleep 30  $\rightarrow$  Sleep 60  $\rightarrow$  Sleep 90  $\rightarrow$  Sleep 120  $\rightarrow$  Sleep 150  $\rightarrow$  Sleep 180.

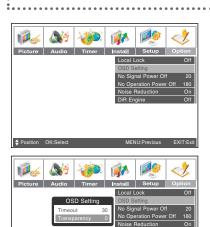


# Displaying the Current Time



1 Press the ( em) button on the remote control to display the current time.

# Setting the OSD(On Screen Display)





#### **Setting the OSD Display Time**

- 1 Press the MENU button.
- Press the (◄►) button to select the Option group and press the OK button.
- 3 Press the (▲ ▼) button to select OSD Setting and press the OK button.
- 4 Press the (▲ ▼) button to select Timeout.
- **5** Press the (**◄►**) button to adjust the OSD display time.
  - Whenever you press this button, you can adjust it in 5 second increments from 0 to 60 seconds.
- **b** If you finish setting the time, press the MENU button.
  - If you do not press the MENU button after adjusting the OSD timeout, the menu screen will disappear automatically after the set time.
    - If you set to "o", menu screen will not disappear automatically.

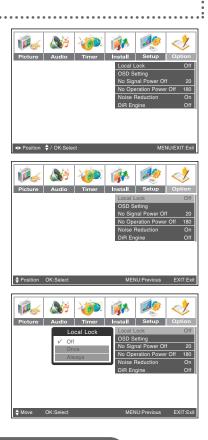
#### Adjusting the Transparency of the OSD

Adjust the transparency of the OSD menu. There are 20 steps from 0 (off) to 7.

- Press the (▲ ▼) button to select Transparency.
- **8** Press the (**◄►**) button to adjust the transparency of the OSD.

# Setting Restrictions on Button Input

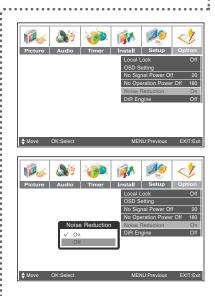
- 1 Press the MENU button.
- **2** Press the (**◄►**) button to select the Option group and press the OK button.
- Press the (▲ ▼) button to select Local lock and press the OK button.
- Press the (▲ ▼) button to select Off, Once or Always and press the MENU or EXIT button.
  - Off: With the lock function off, you can control the TV with both the remote control and the buttons on the TV.
  - Once : The lock function is active until the TV is turned on or off once using the remote control.
  - Always: With the lock function always on, you can control the TV only with the remote control, not with the buttons on the TV.
  - This function prevents children from controlling the TV when parents are not home.
     It is available after setting this function with the remote control.



# Reducing Picture Noise

Use this function when you have a bad image with the picture noise.

- 1 Press the MENU button.
- Press the (◄►) button to select the Option group and press the OK button.
- Press the (▲ ▼) button to select Noise Reduction and press the OK button.
- 4 Press the (▲ ▼) button to select On and press the OK button.

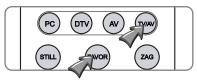


# **Watching your Favourite Channels**









- 1 Press the MENU button and press the (◀▶) button to select the Setup group.
- Press the (▲ ▼) button to select a Favourite Channel and press the OK button.
- Press the (▲ ▼) button to move the position and press the (◄►) button to select Program No., AV, etc.
  - You can select up to 5 Program No., AV, etc.
     You can direct select input sources by pressing the PC,
     DTV and Video button or select them by pressing the
     ◄ or ▶ button.

The input sources are changed in the following order.

Pr01  $\leftrightarrow$  Pr99  $\leftrightarrow$  SCART1 RGB  $\leftrightarrow$  SCART1 Video  $\leftrightarrow$  SCART1 S-Video  $\leftrightarrow$  SCART2 RGB  $\leftrightarrow$  SCART2 Video  $\leftrightarrow$  SCART2 S-Video  $\leftrightarrow$  AV Video  $\leftrightarrow$  AV S-Video  $\leftrightarrow$  COMPONENT1  $\leftrightarrow$  COMPONENT2  $\leftrightarrow$  RGB  $\leftrightarrow$  HDMI  $\leftrightarrow$  HDMI2 also, you can direct input program No. by pressing numeric button (0~9).

- You can delete the selection by pressing the **OK** button and pressing the number (0~9) button.
- The selection will switch whenever you press the **Favourite** ( FAVOURITE ) button on the remote control.

# Selecting your Language

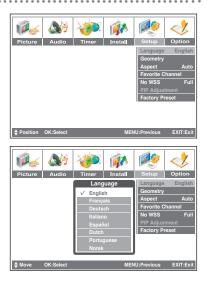
When you start using your TV for the first time, you must select the language in which to display all on-screen menus.

- Press the MENU button and press the (◄►) button to select to the Setup group.
- Press the (▲ ▼) button to select the Language and press the OK button.
- 3 Select a appropriate language by pressing the (▲ ▼)button and then press the **OK** button.
  - You can select the language in the following order.
    - (English → Français → Deutsch → Italiano → Español
      - → Dutch → Portuguese → Norsk→ Dansk → Svenska
    - → Suomi)

Press the **MENU** button to return to the previous menu.

Option

Option 1: Türkçe(Turkish) is added.



# Setting the Picture in Picture (PIP)

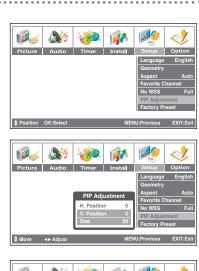
This function is available when **PIP** is set to **On** only with the remote control. (Refer to page 28 "Displaying the Picture in Picture(PIP)") If the input source was not selected, the PIP Adjustment function is not available.

#### **Setting the PIP Position**

- **1** Press the **MENU** button and press the (**◄►**) button to select the **Setup** group.
- Press the (▲ ▼) button to select PIP Adjustment and press the OK button.
- Press the (▲ ▼) button to select a PIP position (H.Position or V.Position)
- Press the (◄►) button to adjust PIP position (H.Position or V.Position) that you wish.
  - You can adjust it from "o" to "100".

#### Setting the PIP Size

- 1 Press the MENU button and press the (◀▶) button to select the **Setup** group.
- Press the (▲ ▼) button to select PIP Adjustment and press the OK button.
- 3 Press the (▲ ▼) button to select Size.
- 4 Press the (◄►) button to adjust PIP size.
  - You can adjust it from "o" to "100".

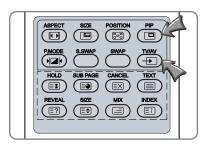




# **Displaying the Picture in Picture (PIP)**

- This function is available only with the remote control.
- You can watch another device's image in the PIP while watching the TV.





1 Press the **PIP**( ) button.

There are 2 modës of PIP window: PIP, POP(Twin Screen) Whenever you press this button, PIP window mode will be changed.

The PIP window are changed in the following order:

#### PIP → POP(Twin Screen) → Off





<POP(Twin Screen)>

- Press the TV/AV( ) button to select the external signal source for the PIP.
  - The external signal source will display whenever you press the **TV/AV**( → button.

( SCART S-Video → Video → V1 Video → V2 Video → V2 S-Video → COMPONENT1 → COMPONENT2 → RGB)

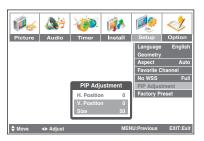
You can change the main picture channel by pressing the (▲ ▼) button.

PIP

	_ PIP	TUNER   SCART1 Input		SCART2 Input			AV2 Input		Component Input		PC	
Main	- ' "	SUB	VIDEO	S-VIDEO	VIDEO	S-VIDEO	RGB	VIDEO	S-VIDEO	Component1	Component2	RGB
TUNER	Main	△ *1	0	0	0	0	0	0	0	0	0	0
CCADT4	VIDEO	0	Х	Х	0	0	0	0	0	0	0	0
SCART1 Input	S-VIDEO	0	Х	Х	0	0	0	0	0	0	0	0
IIIput	RGB	0	Х	Х	0	0	0	0	0	0	0	0
SCART2	VIDEO	0	0	0	Χ	X	X	0	0	0	0	0
Input	S-VIDEO	0	0	0	Χ	Х	X	0	0	0	0	0
AV2	VIDEO	0	0	0	0	0	0	Х	0	0	0	0
Input	S-VIDEO	0	0	0	0	0	0	0	Х	0	0	0
Component	Component1	0	0	0	0	0	0	0	0	X	0	0
Input	Component2	0	0	0	0	0	0	0	0	0	Х	0
PC Input	RGB	0	0	0	0	0	0	0	0	0	0	Х
HDMI	HDMI	0	0	0	0	0	0	0	0	0	0	0
DTV	DTV	0	0	0	0	0	0	0	0	0	0	0

(\*1: 2 Tuner only)

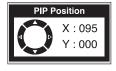




#### **Changing the PIP Position**

- 1 Press the **POSITION**( ) button on the remote control.
  - The PIP position will change free positions whenever you press (◄►) and/or (▲ ▼) button.



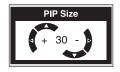


# **Displaying the Picture in Picture (PIP)**

#### **Changing the PIP Size**

- 1 Press the SIZE( ) button on the remote control.
  - The PIP will change free sizes whenever you press (◄►) and/or (▲▼) button.





#### Selecting the Image Size In the PIP

- 1 Press the **ASPECT**( ) button on the remote control.
  - When you are viewing the Sub-picture: The sub picture size will be changed in the following order whenever you press this button. Auto → 16:9 → 4:3
  - There are not the Dutton on the remote control in 2-tuner model. In this case, first select the PIP window by pressing the OK button, and then change the size of the PIP window using the Dutton.

#### **Changing the PIP Picture Mode**

- 1 Press the **P.MODE**( ) button on the remote control.
  - The PIP picture mode will change whenever you press this button.

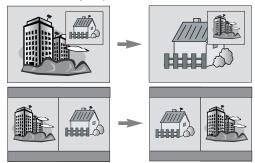
Standard → Sport → Natural → Mild → Custom

## Selecting the Channel of Sub Picture (2-Tuner Model Only)

- 1 Press the Pr() or Pr() button on the remote control.
  - The channel of sub picture will change whenever you press these button.

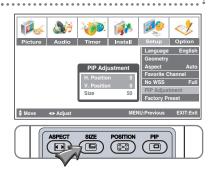
#### **Swapping the Main & Sub-Picture**

- 1 Press the SWAP( ) button on the remote control.
  - The Main image and PIP image will switch with each other whenever you press this button.



#### **Swapping the Main & Sub-Sound**

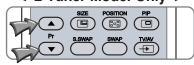
- 1 Press the SWAP( ) button on the remote control.
  - The Main sound and PIP sound will switch with each other whenever you press this button.







#### < 2-Tuner Model Only >

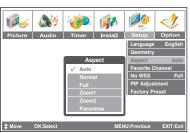


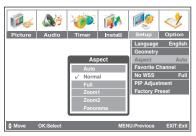


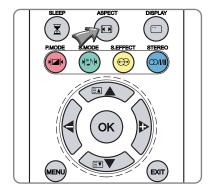


# **Changing the Picture Size**

# Picture Audio Timer Install Setup Option Language English Geometry Appet Audio Favorite Channel No WS Full PIP Adjustment Factory Preset P Position OX:Select MENU-Previous EXIT:Ext





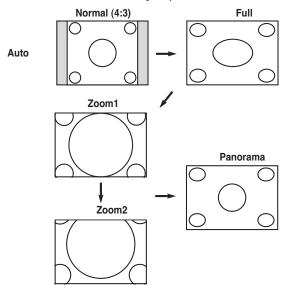


#### Selecting the Picture Size (Adjusting the OSD menu)

- 1 Press the MENU button and press the (◀►) button to select the **Setup** group.
- Press the (▲ ▼) button to select Aspect and press the OK button.
- **3** Press the (▲ ▼) button to select a picture size and press the **OK** button.
  - You can select a picture size in the following order.
     Auto → Normal → Full → Zoom1 → Zoom2 → Panorama

#### **Changing the Picture Size (Using the Remote Control)**

- 1 Press the (P) button on the remote control.
  - When you are viewing the main image:The image will change as shown below whenever you press this button.



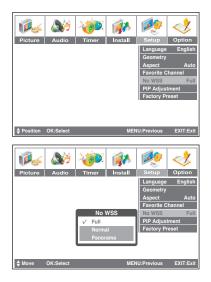
Auto	Set the picture to the same size that received from the broadcasting station.
Normal	<ul><li>16:9 video :The image is suppressed.</li><li>4:3 video :No expansion. There are gray areas besides the image.</li></ul>
Full	<ul><li>16:9 video :No change.</li><li>4:3 video :Expands 4:3 video signal horizontally to fit the 16:9 screen.</li></ul>
Zoom1	Expands 16:9 mode screen vertically.
Zoom2	Moves Zoom1 mode screen up sightly for the closed caption to be watched completely.
Panorama	16:9 video :No change. 4:3 video :Expands 4:3 video signal horizontally to fit the 16:9 screen and to minimize distortion, sides are expanded more than center.

# Setting the No WSS (Wide Screen Signal) Function

Each broadcasting station send out the signals that discriminate between 16:9 wide and 4:3 screen. No WSS function automatically adjusts picture size by detecting the signals received from broadcasting stations. This function is available when **Aspect** function is set to **Auto** mode.(refer to page 30)

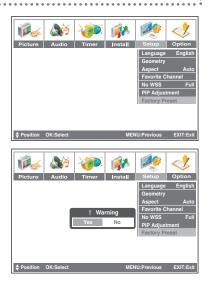
- Press the MENU button and press the (◄►) button to select the Setup group.
- 2 Press the (▲ ▼) button to select No WSS and press the OK button.
- Press the (▲ ▼) button to select the desired No WSS picture size and then press the OK button.
  - When the WSS (Wide Screen Signal) is not included in your broadcasting signal, the following options can be selected.

Full → Normal → Panorama



# **Factory Preset**

- **1** Press the **MENU** button and press the (**◄►**) button to select the **Setup** group.
- Press the (▲ ▼) button to select Factory Preset and press the OK button.
- **3** Press the (**◄►**) button to select **Yes** or **No**.
  - The "Picture" and "Audio" setting will be reset to the factory default settings.



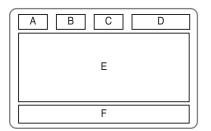
# Display a Still Image

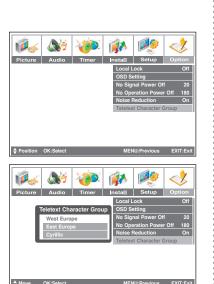
- 1 Press the Still ((still)) button on the remote control.
  - The picture does not move but the sound plays normally.
  - Press this button again if you want to go back to a normal picture.



## **Teletext Functions**

The Teletext page of most TV channels provide information such as TV programme times, News bulletins, Weather forecasts, Travel information, or Sports results.





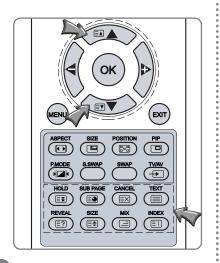
#### Functions of the teletext

Part	Display Contents
Α	Selected page number.
В	Broadcast Station identity.
С	Current page number or searching status.
D	Date and time.
Е	Text information.
F	FASTEXT information.
	Red, Green, Yellow, Cyan

#### **Setting the Teletext Character**

- 1 Press the MENU button and press the (◄►) button to select to the Option group.
- 2 Press the (▲ ▼) button to select the Teletext Character Group and press the OK button.
- 3 Select a appropriate language group by pressing the (▲ ▼) button and then press the **OK** button.
  - You can select the language group in the following order.
     ( West Europe → East Europe → Cyrillic)

# **Displaying the Teletext Information**



- Select the channel providing the teletext service using the (\(\exists\) or (\(\exists\)) button.
- Press the TEXT ( ) button to activate the teletext mode.
- To display the index page, press the INDEX ( ) button. The Index Page (Page 100) is displayed.
- To display the teletext page simultaneously with the actual broadcast, press the MIX ( ) button.
- **5** To exit from the teletext mode, press the **TEXT** ( ) button again.

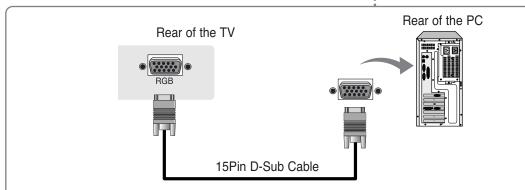
# **Selecting a Special Teletext Functions**

#### **Selecting a Special Teletext Functions**

ı	MENU	Functions
REVEAL.	REVEAL	Displays concealed text such as answer to quiz games. To return to normal viewing, press this button again.
SUB PAGE	SUB-PAGE	Displays a secondary page by entering its number.
≣▲	PAGE UP	Displays the next page.
■▼	PAGE DOWN	Displays the previous page.
HOLD	HOLD	When the secondary pages are displayed in sequence, press the <b>HOLD</b> button.  To freeze the current display page, press the <b>HOLD</b> button again to resume.
SIZE	SIZE	Whenever you press this button, the letter size of the page will be changed.
		Once press: The letter of the top half page enlarge to double size.  Twice press: The letter of the bottom half page enlarge to double size.  Three times press: Return to the normal viewing.



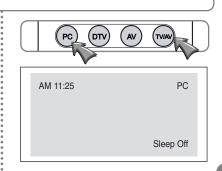
# **Connecting to the PC**



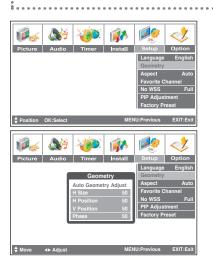
◆ Connect the 15Pin D-Sub Cable to the **RGB** input port on the TV and output port on the rear of the PC.

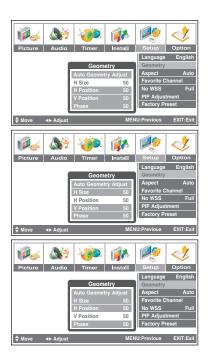
#### To Use the TV as a PC Display

- 1 Turn the PC on.
- **2** Press the **PC** or ( ) button on the remote control to select the PC.
- 3 Adjust the screen in PC Mode. (See page 34~35)



# Adjusting the PC Screen Geometry





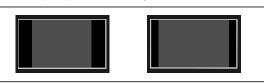


#### **Adjusting the PC Screen Geometry Automatically**

- 1 Press the MENU button and press the (◀►) button to select the **Setup** group.
- Press the (▲ ▼) button to select the **Geometry** group and press the **OK** button.
  - The Geometry menu screen will be displayed with Auto Geometry Adjust selected.
- Press the OK button to adjust PC screen automatically.

#### Adjusting the PC Screen Geometry Manually

- Press the (▲ ▼) button to select H.Size.
- **2** Press the (◀▶) button to adjust the horizontal size.



■ You can adjust other items (H.Position, V.Position and Phase) using the same way as above.



<Adjustment of the Horizontal Position>



<Adjustment of the Vertical Position>

#### **Adjusting the Phase**

- 1 Press the (▲ ▼) button to select **Phase**.
- **2** Press the (**◄►**) button to adjust the phase.

### **Adjusting the PC Screen**

#### Selecting the Mode

- 1 Press the MENU button and press the (◀►) button to select Picture group.
- Press the (▲ ▼) button to select the Mode and press the OK button.
  - 5 pre-set picture mode option will be displayed
- 3 Press the (▲ ▼) button to select the required option and press the OK button.
  - The following option are available.

#### Standard → Sport → Natural → Mild → Custom

Standard: Select when it is bright around the TV.

**Sport**: Select when you want to get a clearer picture

or watch sports.

Natural: Select when viewing movies or live music.

Mild : Select when it is dark around the TV or at night.Custom : Select if you want to adjust the settings manually.

#### **Customizing the Picture**

- 1 Press the **MENU** button and press the (**◄►**) button to select **Picture** group.
- Press the (▲ ▼) button to select the required option and press the OK button.
- **3** Press the (**◄►**) button to adjust the selected option.

Auto Bright Sensor: With a smart sensor that self-detects the (option) amount of light in the viewing environment and self-adjusts the brightness of the

screen.

**Back Light (option) :** Adjust the intensity of back light of the LCD Panel.

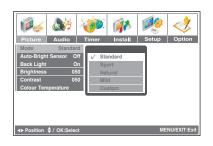
This feature is operated when the "Auto Bright Sensor" is set to "Off" Mode.

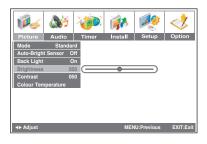
**Brightness**: Adjusts the brightness of the whole screen. **Contrast**: Adjusts the clarity of the whole screen.

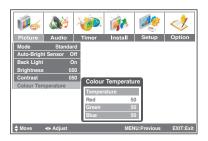
 If you adjust these settings in Standard, Sport, Natural or Mild mode, the mode will change to the custom mode and the adjusted values apply to the custom mode.

#### **Adjusting the Colour Temperature**

- 1 Press the (▲ ▼) button to select the Colour Temperature and press OK button.
- Select the option (Red, Green or Blue) to be adjusted by pressing the (▲ ▼) button.
- **3** Press the (◀ ▶) button to reach the required setting.

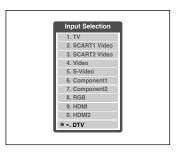






#### **Setting up Digital Television Tuner**

- This feature operates only in the model with a built-in digital broadcast tuner.
- Television is not pre tuned and "No Signal" will appear on screen until antenna is connected to DTV aerial input and Digital Tuner is setup. Please follow the simple setup instructions below.



DTV Initializing.....

#### Selecting the Digital Television Input

1 Press "DTV" button on remote control, button will toggle between DTV (built in digital Tuner) and component 1, Component 2. When television is first turned on or DTV is first selected after turning television on "DTV Initializing" will appear along with a green bar while television powers up the on board digital tuner.

or

Press the TV/AV ( ) button.

A menu of all available input sources are displayed.

TV - SCART1 Video - SCART2 Video - Video - S-Video

- Component1 Component2 RGB HDMI HDMI2 DTV
- Press the (▲ ▼) button to select DTV and press the OK button.
- **3** To return to the previous menu, press the **EXIT** button.

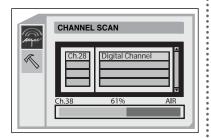
### **Automatic Channel Scan**

This function will tune and save all available Digital Television channels to the television memory.

Digital Tuner setup is done through a submenu available by pressing the "setup" button on the bottom left corner of the remote control. Do not press the "menu" key located in the centre of the remote control as this does not lead to the Digital Tuner setup function





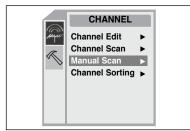


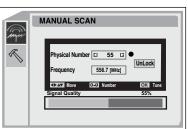
- 1 Press the **SETUP** button on the bottom row of the remote control, the Digital Setup menu will appear.
- 2 Use the (▲ ▼) buttons to highlight the antenna icon (located in the right column of screen menu).
- **3** Press the **OK** button on the remote control, "channel edit" will be highlighted.
- Press the (▲ ▼) buttons to highlight "Channel Scan" then press the OK button.
- **5** Channel scanning automatically begins and will take a few minutes to complete.
  - For each Television network the same channel will appear more than once in a numeric ordered group on the channel list, these usually include a Standard Definition (SD) channel, High Definition (HD) channel and other channels used by each network for multi casting. "For ease of use it is recommended that channel edit function is used to remove any unwanted or repetitious channels".
  - When tuning Digital television stations in built up areas (cities) often more than one television transmitter is present. In this situation the complete list of channels will appear twice on the channel list. One of the lists will be from the closest transmitter and will represent the strongest signal for your area. For ease of use it is recommended that "channel edit" function is used to remove any unwanted or repetitious channels.

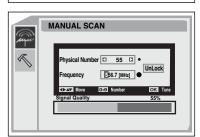
### **Manual Channel Scanning**

You can specify each channel manually by either physical number or frequency to program TV channels.

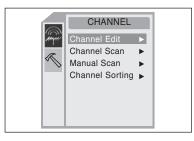
- Physical channel refers to the channels UHF or VHF number, the familiar channel numbers of 2, 7, 9 and 10 are not the physical channel numbers required for this type of tuning.
- 1 Press the **SETUP** button on the bottom row of the remote control, the Digital Setup menu will appear.
- 2 Use the (▲ ▼) button to highlight the antenna icon if not already highlighted. Once highlighted press the **OK** button on the remote control.
- Press the (▲ ▼) button to highlight Manual Scan then press the OK button.
- Press the (◄►) button to select the Physical Number/Frequency box. Use the (▲▼) to activate either the Physical number or Frequency setting mode (the active mode is indicated by a black dot on the right of the box). Enter the appropriate number in the active box.
- Once the appropriate Number is entered press the **OK** button to assign the channel. The word "Lock" will appear if the assignment is successful, otherwise "Unlock" will be displayed if unsuccessful.
- **6** Repeat the same procedure for all channels. Once **OK** is pressed and "Lock" appears the channel has been automatically saved and the next Physical number or Frequency can be entered.
- **7** Press the **EXIT** button to return to the previous menu or Press the **SETUP** button to exit the menu completely.
  - For each Physical number or Frequency "locked" multiple versions of the same channel will appear in the channel list, these usually include a Standard Definition (SD) channel, High Definition (HD) channel and other channels used by that network for multi casting. For ease of use it is recommended that channel edit function is used to remove any unwanted or repetitious channels.







# Channel Editing

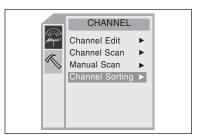


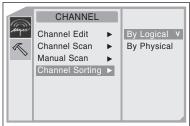


- 1 Press the SETUP button on the bottom row of the remote control, the Digital Setup menu will appear
- 2 Use the (▲ ▼) button to highlight the antenna icon if not already highlighted. Once highlighted press the OK button on the remote control.
- 3 Channel edit will be highlighted
- Press the (▲ ▼) button to highlight a channel you wish to disable.
- **5** Press the (◄) button to disable the highlighted channel, the channel will then turn grey showing it has been disabled.
- Alternatively press the (►) button on an already disabled channel to enable it, the selected channel then turns Green showing it has been enabled.
- **7** Press the EXIT button to return to the previous menu or Press the SETUP button to exit the menu completely.

### Sorting the Stored Channels

This operation allows you to change the programme numbers of stored channels. This operation may be necessary after using automatic channels scan.



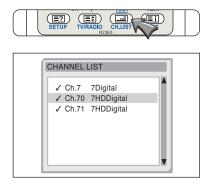


- 1 Press the SETUP button.
- 2 Press the OK button.
- 3 Press the (▲ ▼) button to select Channel Sorting and press the OK button.
- Select the channel sorting option by pressing the (▲ ▼) button, and press the OK button to change the setting. You can select channel sorting option By Logical or By Physical.
  - BY Logical : Channel list is sorted by logical channel number.
  - BY Physical: Channel list is sorted by physical channel number.
- **5** Press the EXIT button to return to the previous menu or press the SETUP button to return normal viewing.

## Selecting the Channel

You can change the current channel to any other channel you want.

- Press the CH.LIST button.
   The CHANNEL LIST is displayed.
- **2** Press the (▲ ▼) button to select the channel that you want.
- **3** When the scroll bar is positioned on the channel you want to view press OK .



## **Editing Your Favorite Channels**

- 1 Press the CH.LIST button.
- Press the (▲ ▼) button to select a channel and Press the FAVOR ( → ) button to add a channel to the favorite channel, and press again to delete the channel from the favorite channel.

If a channel is added to favorite channel, the colour of the channel number is changed to white and a check is marked in front of the channel number.

If a channel is deleted from favorite channel, the check mark as a favorite channel indicator is removed.

You can check the your favorite channel with (▲ ▼)
button on the remote control.

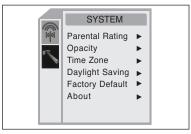




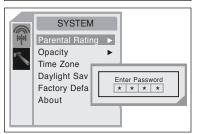


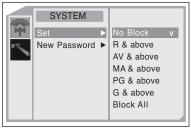
### Setting up the Parental Lock

This sub-menu allows you to set the age for parental locking and protect children from viewing programs unsuitable for their age.

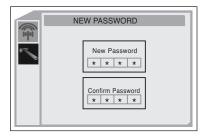












#### **Setting the Parental Ratings**

- 1 Press the SETUP button.
- Press the (▲ ▼) button to select SYSTEM and press the OK button. The SYSTEM menu is displayed with Parental Rating is selected.
- 3 Press the OK button.
- ▲ Enter 4-digit password.
  - The default password is '0000'.
- 5 Press the OK button to select Set.
- Press the (▲ ▼) button to select restrictions level and press the OK button.

The following options are available.

No Block - R & Above - AV & Above - MA & Above - M & Above - PG & Above - G & Above - Block All

- **7** Press the EXIT button to return to the previous menu or press the SETUP button to return normal viewing.
  - Age limit can be applicable only for the signal which carries age limit information

#### **Changing the Password**

- 1 Press the SETUP button.
- Press the (▲ ▼) button to select SYSTEM and press the OK button. The SYSTEM menu is displayed with Parental Rating is selected.
- 3 Enter 4-digit password.
  - The default password is '0000'.
- Press the (▲ ▼) button to select New Password and press the OK button.
- Fress the numeric button (0~9) to enter new password. Press the numeric button (0~9) again to verify the new password.
  - When you forget your new password please consult the shop where you bought the TV or the nearest dealer.

### Adjusting the Translucency Level

You can set the translucency level of menus screen, teletext or closed captions.

- 1 Press the SETUP button.
- Press the (▲ ▼) button to select SYSTEM and press the OK button.
- 3 Press the (▲ ▼) button to select Opacity and press the OK button.

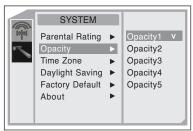
The options of the selected menu available are displayed.

Select the required option by pressing the (▲ ▼) button, and press the OK button to change the setting. The following options are available.

Opacity1 - Opacity2 - Opacity3 - Opacity4

Press the EXIT button to return to the previous menu or press the SETUP button to return normal viewing.





## Displaying the Teletext

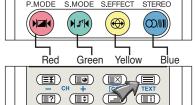
- 1 Press the TEXT button.
- Press the (▲ ▼) button to turn pages up or down.

  Press number 100 to 899 to turn the direct number page.

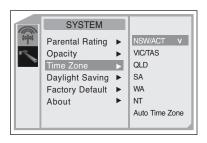
To... Then...

- Teletext page down
- Press the Red ( ) button.
- Teletext page up
- Press the Green ( ) button.
- Freeze teletext
- Press the Yellow ( ) button.
- Unfreeze teletext
- Press the Blue ( ) button.
- Press the TEXT button again to return normal viewing.





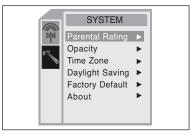
## Selecting the Time Zone

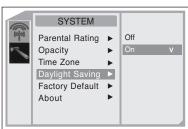


- 1 Press the SETUP button.
- Press the (▲ ▼) button to select SYSTEM and press the OK button.
- 3 Press the (▲ ▼) button to select Time Zone and press the OK button.
- Select a appropriate time zone by pressing the (▲ ▼) button and press the OK button to change the setting. You can select the time zone in the following order: NSW/ACT (New South Wales/ACT) VIC/TAS (Victoria/Tasmania) QLD ( Queensland) SA (South Australia) WA (Western Australia) NT (Northern Territory) Auto Time Zone
- Press the EXIT button to return to the previous menu or press the SETUP button to return normal viewing.

# Setting the Daylight Saving Time (Summer Time)

You can adjust current local time when summer time is applicable.



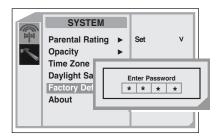


- 1 Press the SETUP button.
- 2 Press the (▲ ▼) button to select SYSTEM and press the OK button.
- 3 Press the (▲ ▼) button to select Daylight Saving and press the OK button.
- **4** Press the (▲ ▼) button to select On or Off.
  - On: Set for daylight saving function activated, The current time automatically moves one hour ahead.
  - Off: Set for daylight saving function deactivated.
  - If you select Auto Time Zone in the time Zone menu, this function does not work.
- **5** Press the EXIT button to return to the previous menu or press the SETUP button to return normal viewing.

## **Setting the Factory Default**

The status of DTV Mode settings will return to factory default parameters by using this function.

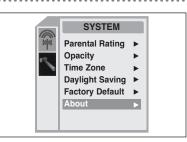
- 1 Press the SETUP button.
- 2 Press the (▲ ▼) button to select System and press the OK button.
- 3 Press the (▲ ▼) button to select Factory Default.
- Enter 4-digit password.
  - The default password is "oooo"
- **5** Press the **OK** button to set to factory default settings.

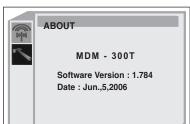


# **System Information**

You can check the current information about your TV such as TV's software version or manufacturing date.

- 1 Press the **SETUP** button.
- Press the (▲ ▼) button to select SYSTEM and press the OK button.
- Press the (▲ ▼) button to select About and press the OK button.
  - This information is necessary when you download new software
- Press the EXIT button to return to the previous menu or press the SETUP button to return normal viewing.

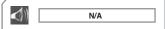




### TV / RADIO Switching

You can use this menu when you change a TV channel to a radio channel or vice versa.





- Press the TV/RADIO button.
- When listening a radio channel, radio channel information will be displayed on the TV screen.
  - This TV/RADIO button does not work when the radio channel is not stored.

## EPG (Electronic Program Guide)

You can check the channel information on the channels of the transponder you are watching.

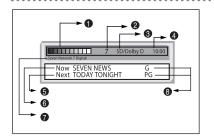




- Press the EPG button then the following menu will be displayed.
  - 1. You can check local time, channel name, and other brief information on the current programme.
    - 2. If you didn't set local time under 'Time zone' section, the EPG function may not work properly.
    - 3. EPG information is delivered by terrestrial signal from service providers. If the channel does not carry any signal on the guide data, this function may not work properly.
- Press the ( $\blacktriangle \blacktriangledown$ ) button to select channel. Then you can see current or next programme information of the selected channel.
- If you want to see programme information of a program in the program schedule list, press the (▲ ▼) button to select the programme. Then you can see the programme information in the button window.
- Press the **SETUP**, **EXIT** or **OK** button to finish **GUIDE** menu.

## **Channel Information**

Brief information is displayed, such as current channel type, name, local start/end time, guide information, current time, fav/normal mode, Audio mode and Audio ID.



- pop-up.
  - RF Signal Strength
  - Ochannel Number
  - A/V Info.
  - Ourrent Time
  - Service Provider and Service
  - If you have no information:
    - Check your local time setting is correct.
    - Information is not sent by the channel provider.

Press the **DISPLAY** ( ) button, then the information bar will

- O Current Program
- Next Program
- Parental Guidance Rating

# Standard Display Mode

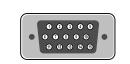
If the signal from the system equals the standard signal mode, the screen will adjust automatically. If the signal from the system does not equal the standard signal, adjust the display mode as shown below referring to your video card instructions. Otherwise, there will be no picture or only power may turn on.

Mode					
SD	720 x 480	60i	VESA	800 x 600	56
SD	720 x 480	60p	VESA	800 x 600	60
SD	720 x 576	50i	VESA	800 x 600	72
SD	720 x 576	50p	VESA	800 x 600	75
HD	1280 x 720	50p	VESA	800 x 600	85
HD	1280 x 720	60p	MAC	832 x 624	75
HD	1920 x 1080	50i	VESA	1024 x 768	60
HD	1920 x 1080	60i	MAC	1024 x 768	60
VESA	720 x 400	85	VESA	1024 x 768	70
VESA	720 x 350	85	IBM	1024 x 768	72
IBM	720 x 400	70	VESA	1024 x 768	75
IBM	720 x 350	70	MAC	1024 x 768	75
VESA	720 x 480	60	VESA	1024 x 768	85
MAC	720 x 480	67	IBM	1280 x 768	60
VESA	720 x 480	72	IBM	1280 x 768	75
VESA	720 x 480	75	IBM	1366 x 768	66
VESA	720 x 480	85			

# **Pin Configurations**

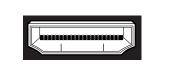
#### PC Input Connector ( D-Sub 15Pin )

Pin	PC IN	Pin	PC IN
1	Red (R)	8	Blue (B) Grounding
2	Green (G)	9	Reserved
3	Blue (B)	10	Sync Grounding
4	Grounding	11	Grounding
5	Grounding (DDC)	12	Data (DDC)
6	Red (R) Grounding	13	Horizontal Sync
7	Green (G) Grounding	14	Vertical sync
		15	Clock (DDC)



#### **HDMI**

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



# Troubleshooting

For TV		
No picture or sound.	<ul> <li>Make sure the TV is plugged in.</li> <li>Make sure that the power cord is connected to the consent correctly</li> <li>Check the power failure.</li> </ul>	
Screen is black.	<ul> <li>Make sure that the external signal source mode is selected.</li> <li>Press the TV/AV ( ) button to change to TV.</li> </ul>	
Picture is OK but there is no sound.	<ul> <li>Press the Mute button.</li> <li>Check another channel.</li> <li>Press the button to increase the volume.</li> </ul>	
Poor sound quality.	Make sure that the channel using a stereo broadcast by pressing the <b>DISPLAY</b> ( ) button.  Select Mono. The sound quality of a stereo broadcast may be unstable in an area with a weak signal. (See page 20)	
No image on a specific channel.	<ul> <li>Make sure that the channel selection is correct.</li> <li>Change the antenna direction to the right or left.</li> <li>Adjust the fine tuning of the channel.</li> </ul>	
Image is not stable and may appear to vibrate, horizontal bars appear.	<ul> <li>Adjust the fine tuning of the channel.</li> <li>Make sure that there is no powerful electromagnetic wave interference from the transmitting station.</li> <li>Stop using a hair dryer, electric drill or electric blender.</li> </ul>	
No color on a specific channel (a black & white image).	channel broadcasting a black & white program.  Adjust the colour. (See page 16)	
Black or white dots appear on all channels or a specific channel.  Make sure the antenna is connected correctly. (See page Make sure the that status of the antenna or wire is good and specific channel.		

# Troubleshooting

For Monitor	
"No signal" message	<ul> <li>Check if the signal cable (15 Pin D-sub) is properly connected to the computer. (See page 33)</li> </ul>
"Not Supported Video" message	This message may appear when the resolution and frequency of the video card in the computer are out the range of the TV. Select the proper resolution and frequency for the TV. (See page 43)
Picture rolls down vertically.	<ul> <li>Check if the signal cable (15 Pin D-sub) is properly connected to the computer. (See page 33)</li> </ul>
A shadowed area appears on the screen.	Make sure that the resolution and frequency of the computer video card are set properly to the range of the TV. Set the picture again referring to the standard display mode and current mode. (See page 43)
The image is too large or too small.	<ul> <li>Adjust the picture to use the screen position feature.</li> <li>(See page 34)</li> </ul>
Horizontal or vertical bars appear on the screen.	<ul> <li>Adjust the frequency and fine tuning.</li> <li>Adjust the resolution and frequency to the recommended specifications. (See page 43) (1024 x 768 @ 60Hz)</li> </ul>
For DTV (Option)	
No Picture	<ul> <li>Make sure the power is on.</li> <li>Check the video input mode of the TV.</li> <li>Connect antenna cable correctly.</li> <li>In case antenna cannot receive signal due to weak broadcasting signal, picture may not display on the screen.</li> </ul>
No Sound	<ul><li>Check the volume level of the TV.</li><li>Check the mute function of the TV.</li></ul>
On screen displayed " No Signal "	<ul> <li>Connect antenna cable correctly.</li> <li>If signal is weak, adjust the aerial antenna.</li> </ul>
Back and white screen or V-Hold.	Check the broadcasting video format in your TV.
It takes a while to display picture on the screen after turning power on or after changing channel.	In case of digital broadcasting, it could take 1 to 2 seconds to receive data. Therefore, it is not a inferior STB if the screen displays picture at the end.
Poor video quality or screen flickering.	It results from the weak signal of your local digital broadcasting. Product Name

# Specifications

		•			
Display	Туре		a-Si TFT Active Matrix LCD		
	Aspect Ratio		16:9		
	Native Resolution		1366×768		
	Number of Colors		16M		
	Video C	ompatible	480i/P, 576i/P, 720P, 1080i		
	System		PAL/SECAM BG, DK, I, L, L', AV NTSC		
	Channel		100 Programs		
	OSD Language		12 Language		
			(Eng/Fr/Ger/Ita/Spa/Dutch/Por/Norse/Dan/Swed/Fin+1)		
	Comb Filter		3D Digital		
	Noise Reduction		YES		
TV/Video	PIP		Single		
i v/video	POP/Tw	vin Screen	YES		
	Progressive Scan		YES		
	Auto Channel Scan		YES		
	Favorite Channel Memory		YES		
	On Timer/Off Timer		YES		
	Sleep Timer		10~180 Min.		
	Auto Power Off		30 Min.		
DTV	DVB-T	(HD/SD) Tuner	Option		
	Output Power		10W+10W (RMS)		
Audio	Sound		Stereo (NICAM)		
Addio	Surround Sound		SRS WOW Surround (Option)		
	Graphic Equalizer		5 Band		
	Sync.	Horizontal	30~61 kHz		
DC Compatible	Syric.	Vertical	56~75 Hz		
PC Compatible	Display Color		16.7 M (True)		
	Max. Resolution		1366×768		
Input/Output Terminal	RF Input		UHF/VHF/CATV, 75 Ohm Unbalanced, F Type		
	Video Input		1.0 V p-p		
	Audio Input		500mV RMS		
	HD Component Input (Y,Pb,Pr)		Y:1.0V p-p, Pb Pr:0.7V p-p		
	PC Input (15Pin D-sub)		RGB 0.7 V p-p		
	Headphone Jack		3.5 Ø Stereo Jack		
	HDM	I	Ver. 1.1		
Powe	Power Requirements		AC 100~240V, 50/60 Hz		
			1		

<sup>•</sup> Design and specifications are subject to change without notice.

