TFT LCD Display
Owner's Instruction Manual
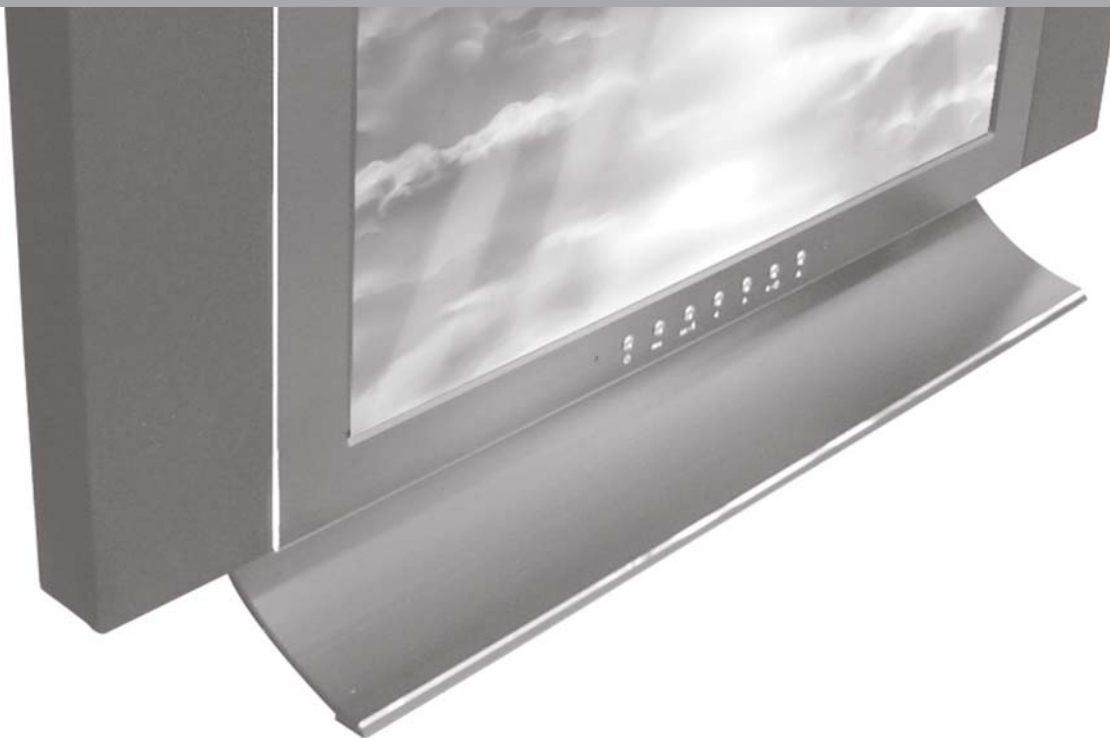
[**Before operating the unit, please read this manual thotoughtly and retain it for future reference**]
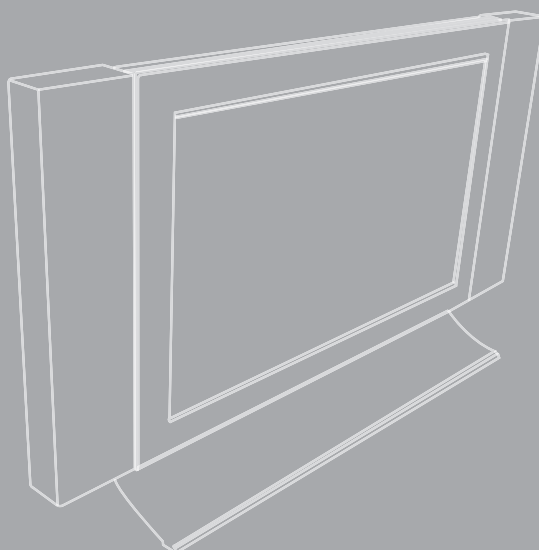
| On- Screen Display Menus | PC Display | Closed Caption | ViChip |

TFT LCD Display

Owner's Instruction Manual

**Before operating the unit,
please read this manual
thotoughtly and retain it
for future reference**

FCC Compliance Statements

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

Warning : Your are cautioned that any change or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate such equipment.

Multi-Function
LCD DISPLAY

Safety Instruction

WARNING

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

Warning:

**To reduce the risk of electric shock do not remove cover(or Back)..
No user serviceable parts inside. Refer servicing to qualified service personnel.**

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of insinuated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

Warning:

To prevent fire of shock hazard, do not expose the set to rain or moisture. Do not rub or strike the Active Matrix LCD with anything hard as this may scratch, mar, or damage the Active Matrix LCD permanently.

Caution:

- Do not attempt to modify this product in any way without written authorization.
- Read and keep these Instruction manual
- Heed all warnings and follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heats.
- This TV is not completely disconnected from a power supply line, as minute current is consumed even when the POWER switch is turned off.
- Do not place hot objects or naked flame sources, such as lighted candles or nightlights on, or close to the TV. High temperatures can melt plastic and lead to fires.
- Do not set on top of the TV. Any object or container that might spill liquids or small objects into the TV.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where it exits the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury form tip-over.
- Unplug this apparatus during lighting storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel., Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects has fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Installation

Power:

This set operates on an AC main supply, the voltage is as indicated on the label on the back cover.
Never apply any DC power to the set directly. Connect the power cord to an AC mains.
In the event of thunderstorms or power cuts, please pill out the mains and aerial plug of the set.
Do not allow anything to rest upon or roll over the power cord, and do not place the set where the power cord is subject to damage.

Warning:

To prevent fire of shock hazard, do not expose the set to rain or moisture. Do not rub or strike the Active Matrix LCD with anything hard as this may scratch, mar, or damage the Active Matrix LCD permanently.

Service

Never remove the back cover of the unit, this can expose you to high voltage and other hazards.
 If the unit does not operate properly, unplug it and call your dealer.
Antenna connect the antenna cable to the connection marked Ant. (on the rear).
For best reception, use an outdoor antenna.

Location

Position your unit so that no bright light or sunlight will shine directly on the screen.
Do not expose the unit to vibration, moisture, dust or heat. Also ensure that the unit is placed in a position that allows a free flow of air. Do not cover the ventilation openings on the back cover. You can install the unit on a wall or place it on a table-top or similar flat surface. Mounted the unit securely to eliminate the risk of injury from the unit falling. Contact your dealers to purchase the optional ceiling mount.
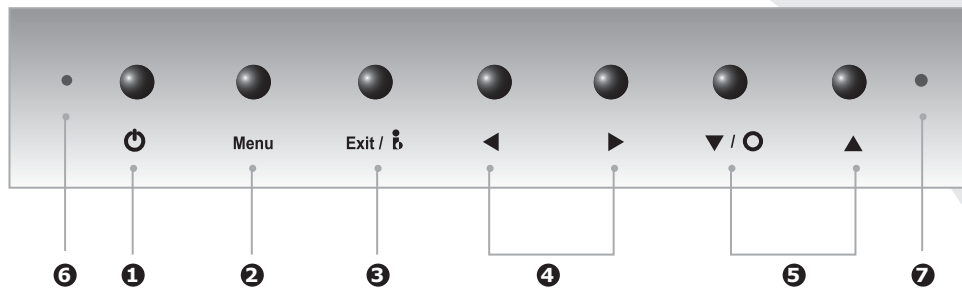
Cleaning

Unplug the unit before cleaning the face or the LCD Screen. Dust the unit by wiping the screen and cabinet with a soft, clean cloth. If the screen requires additional cleaning use a clean, damp cloth. Do not use liquid or aerosol cleaners.

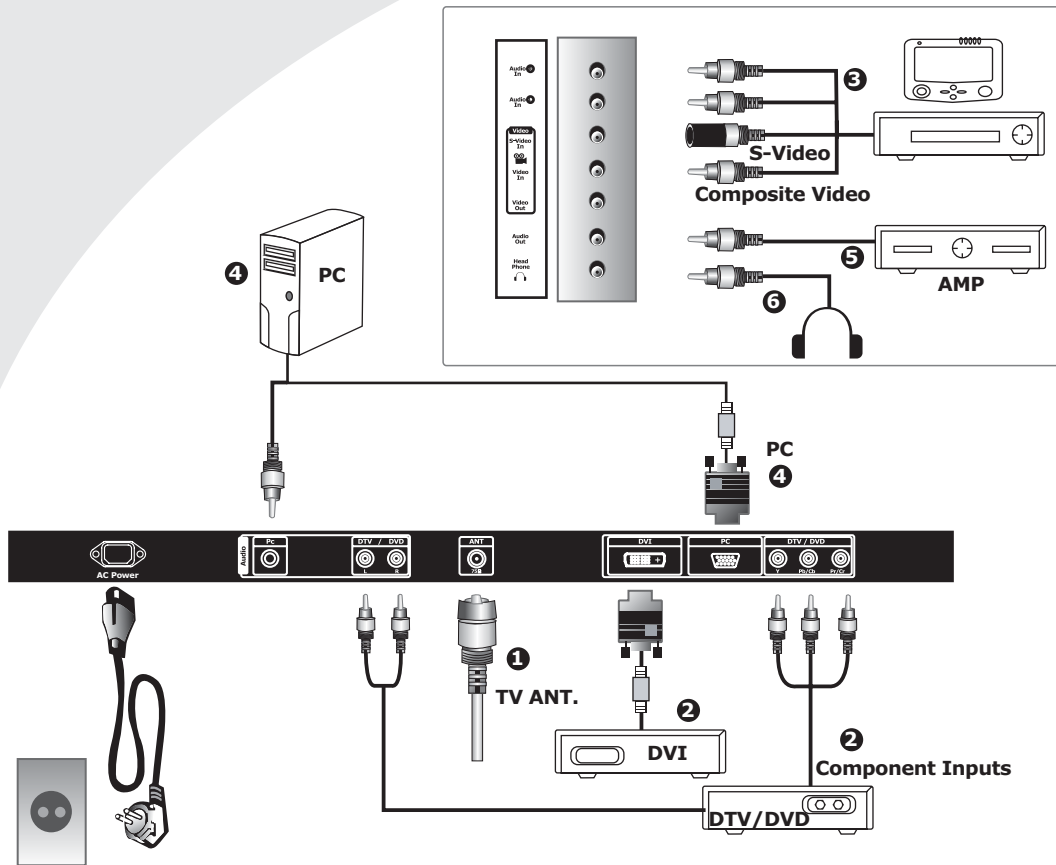# Contents

**Multi-Function
LCD DISPLAY**

The Front Panel

❶ **[Power Key ⏻]** *Power On/Off* your set

❷ **[MENU Key]** Press the **MENU** button, the OSD (On Screen Display) Menu will be displayed
on screen.

❸ **[EXIT/Source Key : �;]** During OSD operation, return to the normal viewing Or return to the
previous menu.
■ �; : Use it as the Source Key if there is no menu on the screen
(Ex: **TV -> PC -> DVI -> DTV -> DVD -> Video -> S-Video**

❹ **[Left/Right Key ◄ / ►]** *Volume Buttons*
During OSD operation, adjust certain sub menu or setting value.
When you select ◄ / ► , it is "Enter " function
Decrease or Increases the level of audio volume and the volume of the
selected function

❺ **[Up/Down Key ▼/○ , ▲]** *Channel Buttons*
Decreases or Increases the channel number.
Or make a curser move to the item you want to adjust during
OSD operation.
■ ○ : *Auto Configulation* on PC mode : Hotkey

❻ **[Power Indicator]** *LED Light* (2 Colors : red, green)
Light up when you turn the Power Off
Red Light shows in **Stand by** mode, Green light shows in Power-**On** mode.

❼ **Remote control Sensor**

Viewing the Connection of Back Panel (Over 26 inch)

S-Video

Composite Video

AMP

PC

PC

AC Power

TV ANT.

DVI

DVI

Component Inputs

DTV/DVD

● Whenever you connect an audio or video system to your set, ensure that all elements
are swiched off.   Refer to the documentation supplied with your equipment
for detailed connection instrctions and associated safety precautions.

Multi-Function
LCD DISPLAY

Viewing the Connection of Back Panel (22, 23 inch)

Audio R In
Audio L In
Video
S-Video In
Video In
Video Out
Audio Out
Head Phone

❸
S-Video
Composite Video
❹ PC
❺ AMP
❻

Power
Pc
Audio
DTV / DVD L R
ANT 75Ω
DVI
PC
DTV / DVD Y Pb/Cb Pr/Cr

PC ❹

❶ TV ANT.
❷ DVI
❷ Component Inputs
DTV/DVD

● Whenever you connect an audio or video system to your set, ensure that all elements
are swiched off.   Refer to the documentation supplied with your equipment
for detailed connection instrctions and associated safety precautions.

Viewing the Connection of Back Panel (Under 20 inch)

❶ TV ANT

❺ AMP

❸ Video

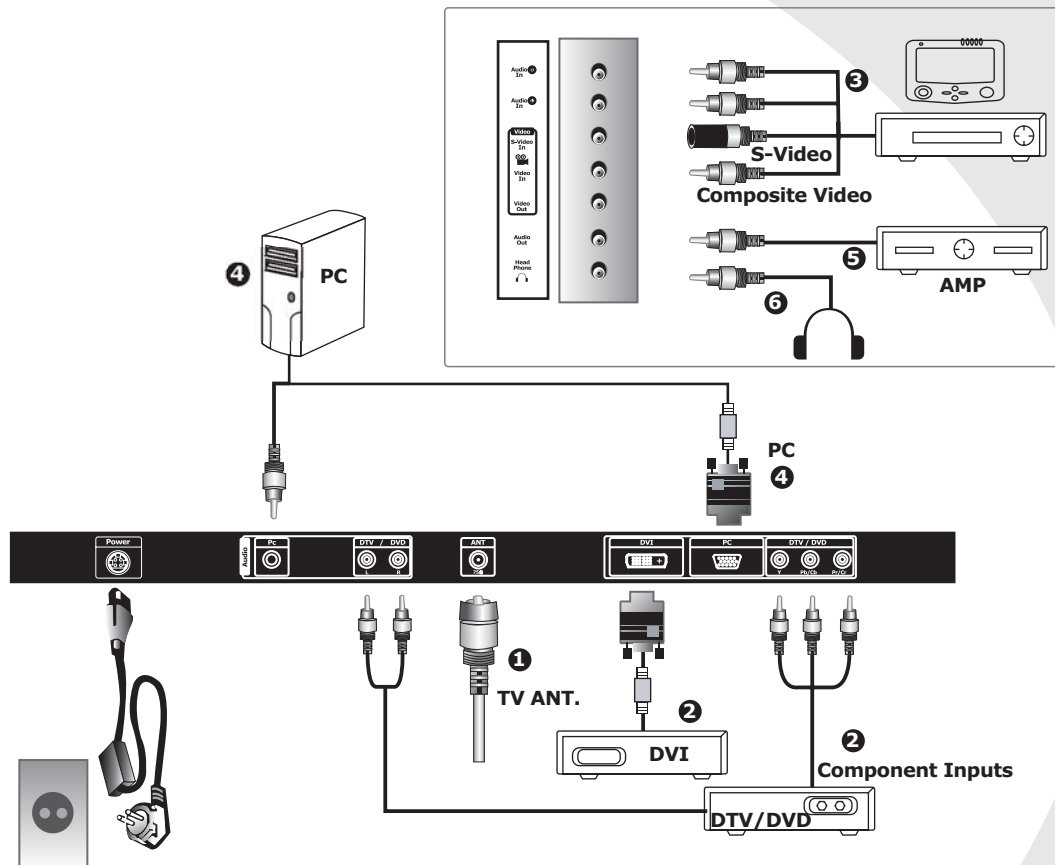S-Video

❹ PC

PC ❹

❻

❷ DVI

❷ Component Inputs

DTV/DVD

● Whenever you connect an audio or video system to your set, ensure that all elements are swiched off.   Refer to the documentation supplied with your equipment for detailed connection instrctions and associated safety precautions.
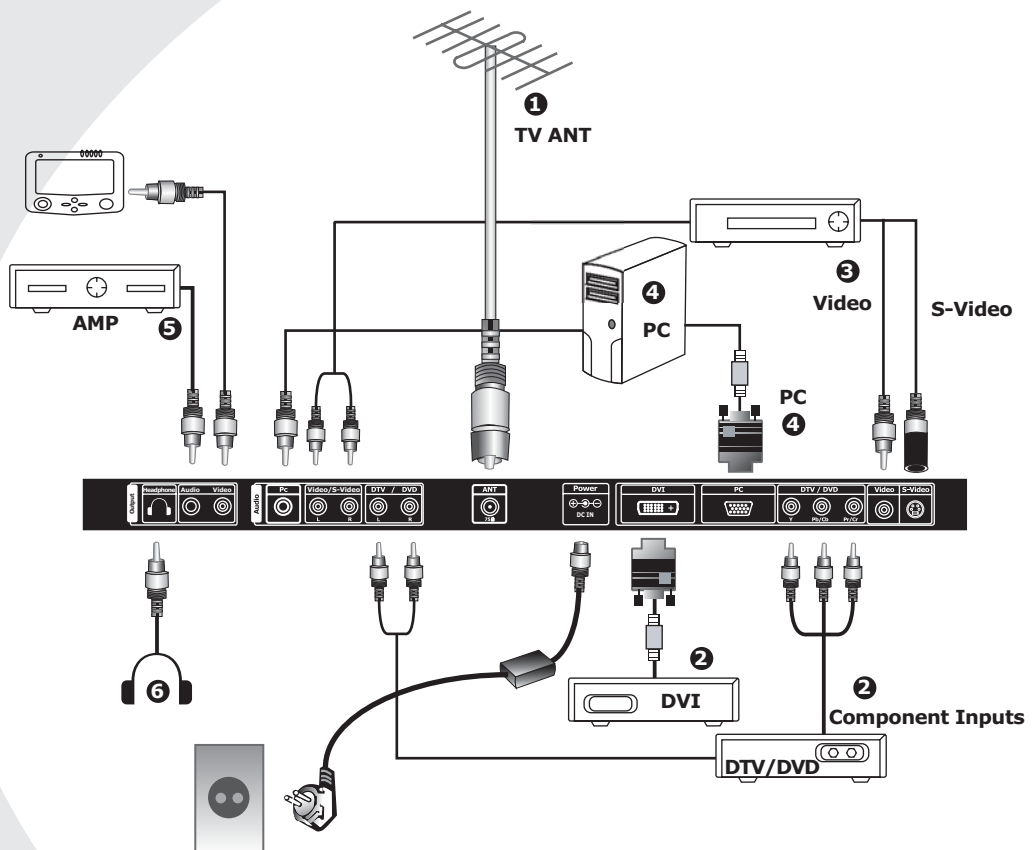
Multi-Function
LCD DISPLAY

Viewing the Connection to External equipments

❶ **Connecting an Aerial or Cable Television Network (depending on the model)**

To view television channels correctly, a signal must be received by the set from one of
the followngs sources;
- An outdoor aerial
- A cable television network
- A satellite network

❷ **Connecting a Set-Top Box, VCR or DVD**

Component 1 and 2 : Connect the VCR, or DVD or PVR or DTV component cable
to the comopnent input ports.

* You can get better picture quality if you connect DVD player with component input ports

Watching DTV

To watch digitally broadcast Programs, purchase and connect a digital set-top box

How to connect
Use the set's RGB, Component or DVI jack for video connections, connectors,
depending on your set-top box. Then, make the corresponding audio connections.

How to use
Turn on the digital set-top box (Refer to the owner's manual for the digital set-top box)
Use Sources Input Select on the remote control to select Component (DTV), RGB or DVI.

❸ **Connecting External A/V Devices**
Connect RCA or S-Video cables to an appropriate external A/V device such as a VCR, DVD,
Camcorder or Game box.

❹ **Connecting a Computer**
Connect the 15pin D-SUB connector or DVI socket to the PC RGB or DVI connector.
Connect the stereo audio cable from the sound card of PC to the PC Audio Input socket
of the set.

❺ **Audio Out (Line Out)**
Connect to the External Audio Amplifier.

❻ **Connecting Headphones**
Plug a set of headphones into the 3.5mm mini-jack socket on the left-side of the set
While the headphones are connected, the sound from the built-in speaker will be disabled.

**Multi-Function
LCD DISPLAY**

Remote Control Handset

⏻ **Power**
TV ON/OFF

🔇 **Mute**
Switches the sound on or off

Input Source
Select TV,PC/DVI,DTV, DVD,S/VIDEO

Numeric buttons for direct channel access

PIP PR +/-
Selects a program for the sub picture

MTS/Sound
TV select the language during dual language & Stereo broadcast.

Auto Adjust
Adjust automatically PC mode(Resolution)

PSM
Adjust the factory preset picture according to the room

Menu
OSD ON

VOLUME +/-
Increases / Decreases sound level
Adjust menu settings

Sleep
Sets the sleep timer

TV Program
Auto Program
Channel setting,
Manual setting,
Add, Del, CC,
V-Chip

POWER

MUTE

TV   SCART1/2   PC/CVI   SOURCE

DTV   DVD   S/VIDEO   PIP SIZE

1   2   3   PIP IMPUT

4   5   6   POSITION

7   8   9   P-SWAP

PIP PR -   0   PIP PR +   S-SWAP

PIP

AUTO ADJUST   MTS   INFO   ASPECT

PSM   PR+   SSM
CH+

◀VOL   MENU   VOL▶

SLEEP   CH-   EXIT
▼
PR-

AUTO   MANUAL   ADD   DEL

CC   V-CHIP   FAVIRITE   PREV

TV PROGRAM

MENU   SELECT

HDTV   TIME   PBP   STILL   PAN+

HDTV   PAN-

REMOTE CONTROLLER

Source
Display all input ources

PIP Size
Adjust the sub picture size on or off

PIP input
Switches the sub picture

Position
Switches the sub picture to
⇐ ⇑ ⇒ ⇓ direction

S-Swap
Alternates between main and sub sound

Info
Use to see information on the current broadcast

Aspect
Select Screen aspect Ratio
Fill, 4:3, 1:1, Zoom1,Zoom2

SSM
To select the sound appropriate to your viewing program character

CH +/-(PR+/-)
Select a Program / Channel or a menu

EXIT
Previous menu

09

Inserting the Batteries in the Remote Control

You must insert or replace the batteries in the remote control when you ;

- Purchase your set
- Find that the remote control is no longer operating correctly

1. Remote the cover on the rear of the remote control by pressing the symbol downwards and then pulling firmly to remove it.

2. Install two AAA size batteries.

   - + on the battery against + on the remote control
   - - on the battery against - on the remote control

3. Replace the cover by aligning it with the base of the remote control and presssing it back into place.

* Do not mix battery types,   (**Ex**), alkaline and manganese.
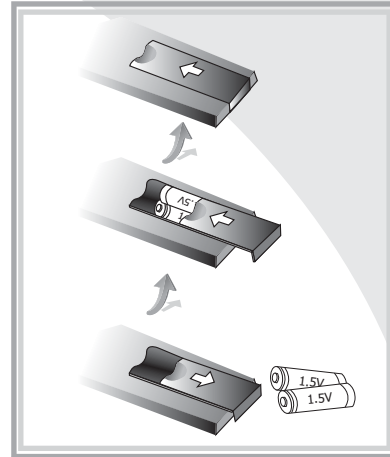
Viewing and Selecting an Input source from External sources

Once you have connected up your various audio and video systems, you can view the different sources by selecting the appropriate input.

1. Check that all the necessary connections have been made

2. ■ Press the **SOURCES(EXIT/)** button of Front panel or **Source** of Remote Control
   ■ The input sources are displayed in the picture.

3. There are also "Video, S-Video, **DVD**, **DTV**, DVI and PC" one of which you can select to fit a input source.

Switching On and Off (LED light : Red & Green)

⏻ **POWER**

1. Plug the mains lead into an appropriate socket.
   When the power cord is plugged in, the LED turns red.

2. Press the **POWER** button to switch on. Then the LED turns green.

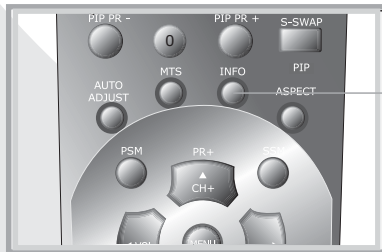3. To switch off, press the **POWER** button again. Then the LED turns red.
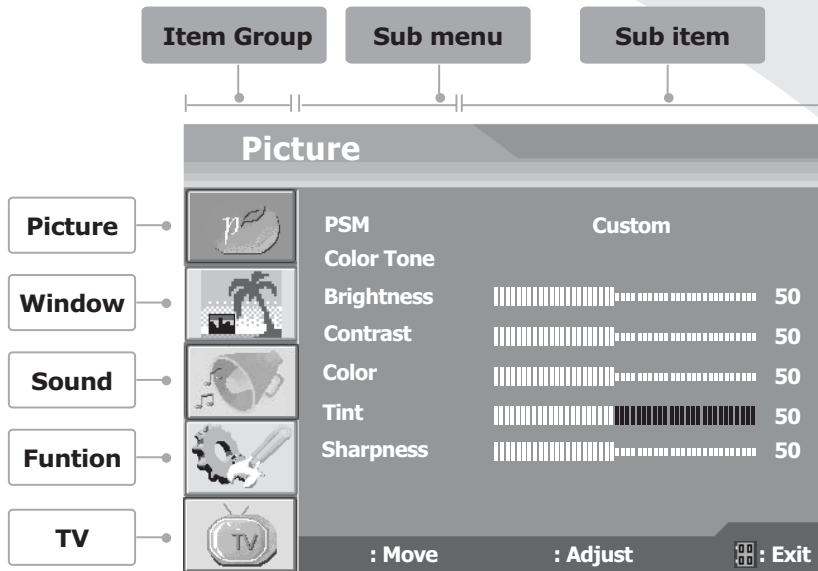
⏻ **POWER**

LED light

Displaying Information

You can see the setting status of selected by pressing the "**INFO**" button on the remote control. the information displayed varies according to the selected source.

INFO

Multi-Function
LCD DISPLAY

Item Group	Sub menu	Sub item

Picture

Picture

Window

Sound

Funtion

TV

PSM	Custom
Color Tone	
Brightness	50
Contrast	50
Color	50
Tint	50
Sharpness	50

: Move   : Adjust   : Exit

Use of OSD(On Screen Display) menu

If you want to adjust the displaying, please follow the following procedure.

1. Press the **MENU** button, then main Menu will be displayed.

2. Press   /   button to select the item Group you want to adjust

3. Press   button to enter. (to select Sub menu)

4. Sub item or adjusting Menu will appear. If Sub item shows up,
 repeat two or three times until you can see an adjusting Menu.

5. At the state of adjusting Menu, adjust the condition with   /   or   /   buttons

6. press the **EXIT** button to previous menu.

Storing Channels Automatically

You can scan for the frequency ranges available to you (and availability depends on you country). Automatically allocated programm numbers may not correspond to actual or desired programm numbers.
However you can sort numbers manually and clear any channels you do not wish to watch.
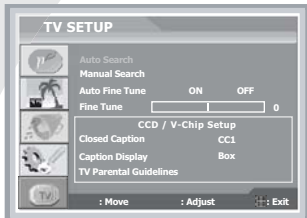
1. Press the **MENU** button.
     The main menu is displayed.

2. Press the   or   button to select the **TV**.
     The options available in the TV group are displayed.

3. Press the   or   button to select **Auto Search** for auto search.

4. Press the   button to search the channels.

5. To stop the search before it has finished. Press the Exit button to search the channels.

6. When the channels have been stored, you can;
     Stored channel is indicated in orange color, can not be stored channel is indicated in gray color.
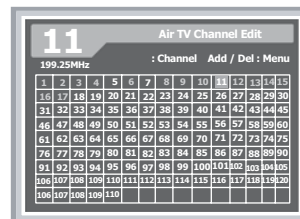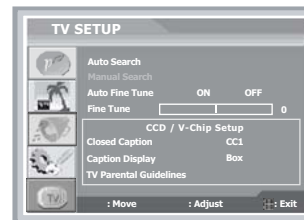
Multi-Function
LCD DISPLAY
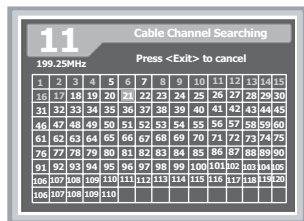
Storing Channels Manually

You can store up to 125 channels(Air : 2~69Ch), including those received via cable networks.
When storing channels manually, you can choose;

+ Whether or not to store each of the channels found.

1. Press the **MENU** button.
   The main menu is displayed.

2. Press the   or   button to select the **TV**.
   The options available in the TV group are displayed.

3. Press the   or   button to select the **Manual Tuning**.
   Press   button to enter

4. Setting list of channel will be displayed.

5. Press   ,   ,   ,   button to select the channel.

6. Press Menu Key to store/Delete the channel.

7. press Exit Key to disappear from setting list of channel
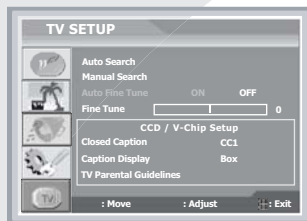   if setting is finished.

   Stored channel is indicated in orange color, can not be
   stored channel is indicated in gray color.

TV SETUP

Auto Search
Manual Search
Auto Fine Tune   ON   OFF
Fine Tune   0

CCD / V-Chip Setup
Closed Caption   CC1
Caption Display   Box
TV Parental Guidelines

: Move   : Adjust   : Exit

11   Air TV Channel Edit
199.25MHz   : Channel   Add / Del : Menu

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
106	107	108	109	110										

Multi-Function
LCD DISPLAY

Storing Channels Fine Tuning

You can set the fine picture, when the received picture is poor.

+ Each channels can be stored after tuning.

TV SETUP

Auto Search
Manual Search
Auto Fine Tune   ON   OFF
Fine Tune   0
CCD / V-Chip Setup
Closed Caption   CC1
Caption Display   Box
TV Parental Guidelines

: Move   : Adjust   : Exit

1. Press the Menu button.
   The main menu is displayed.

2. Press the   or   buton to select the **TV**.
   The options available in the TV group are displayed.

3. Press the   or   button to select the **Auto Fine Tune**.

4. Select auto fine tune On or Off by pressing the   or
   button.

5. Press the **Exit** button to exit.
   On : When change the channel, automatically correct
         frequency.

TV SETUP

Auto Search
Manual Search
Auto Fine Tune   ON   OFF
Fine Tune   0
CCD / V-Chip Setup
Closed Caption   CC1
Caption Display   Box
TV Parental Guidelines

: Move   : Adjust   : Exit

6. If you need to tuner the channel precisly, Press the   or
   button to select **Fine Tune**.
   Start the Fine Tune by pressing the   or   button.
      When Auto Fine Tune is off.

Viewing Closed Captions

Your TV decodes and displays the closed captions that are broadcast with certain TV shows. These captions are usually subtitles for the hearing impaired or foreign-language translations. All VCRs record the closed caption signal from television programs, so home-recorded video tapes also provide closed captions. Most pre-recorded commercial video tapes provide closed captions as well.

1. Press the **MENU** button.
    The main menu is displayed.

2. Press the   or   button to select the **TV**.
    The options available in the TV group are displayed.

3. Press the   or   button to select the **Closed Caption**.

4. Press the   or   button to select the CCD Mode.
    Off -> CC1 -> CC2 -> CC3 -> CC4 -> Text1 ->
    Text2 -> Text3 -> Text4 -> XDS

    XDS : indicated information regard to recent broadcast.
        (Broadcasting company / time /limited level / rest of time and so on)

6. Press the **EXIT** button to exit.

* Set up background of closed caption.

1. Press the **MENU** button.
    The main menu is displayed.

2. Press the   or   button to select the **TV**.
    The options available in the TV group are displayed.

3. Press the   or   button to select the **Caption Display**.

4. Press the   or   button to select the **Box** or **Shadow**.
    Box : set up the background of caption as black box - recommend
    Shadow : set up background of caption as clarity.
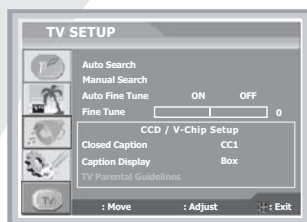
5. Press the **EXIT** button to previous menu.
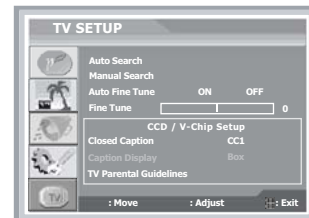
Set up Restrictions Using the TV Guidelines

The V-Chip feature automatically locks out programming that is deemed inappropriate for children.

First, set up a personal identification number (Password), and enable the V-Chip.
Parental restrictions can be set up using either of two methods:
The TV guidelines.

TV SETUP

Auto Search
Manual Search
Auto Fine Tune   ON   OFF
Fine Tune   0

CCD / V-Chip Setup
Closed Caption   CC1
Caption Display   Box
TV Parental Guidelines

: Move   : Adjust   : Exit

1. Press the **MENU** button.
   The main menu is displayed.

2. Press the   or   button to select the **TV**.
   The options available in the TV group are displayed.

3. Press the   or   button to select the **TV Parental Guidelines**.
   Press the   button to enter.

Enter Password

* * - -

4. The "Enter Password" screen will appear.
   Enter your 4-digit Password number.
   The default Password number for a new TV set is "0-0-0-0".

5. Press the   or   button to select the **TV Guidlines**.
   Press the   button to enter.

TV Guidelines

TV - Y   All   TV-Y : Young Children
TV - Y7   All   TV-Y7 : Young Children
TV - G   All   TV-G : Young Children
TV - PG   All   TV-PG : Young Children
TV - 14   All   TV-14 : Young Children
TV - MA   All   TV-MA : Young Children

FV : Fantasy Violence   V : Violence
S : Sexual Situation   L : Coarse Language
D : Suggestive Dialog

: Move   : Adjust   : Exit

6. The **TV Guidelines** screen will appear.
   Press the   or   button to select one of the six age-based categories:
   TV-Y Young children
   TV-Y7 Children 7 and over
   TV-G General audience
   TV-PG Parental guidance
   TV-14 Viewers 14 and over
   TV-MA Mature audience

7. Press the   or   button to select TV-Rating.
   All : For all of age
   FV : Fantasy Violence
   D : Sexual suggestive Dialog
   L : Adult Language
   S : Sexual situation
   V : Violence

8. Press the **EXIT** button to previous menu.

Set up Restrictions Using the MPAA Ratings

The MPAA rating system uses the Motion Picture Association of America (MPAA) system, and its main application is for movies.
When the V-Chip lock is on, the TV will automatically block any programs that are coded with objectionable ratings (either MPAA or TV-Ratings).

The user must first enter a Password (personal ID number) before any of the V-Chip restrictions can be set up or changed.

1. Take the same step as shown on the page 15 from
   No.1 to No.4.

2. Press the   or   button to select the **MPAA Rating**.
   Press the   button to enter.

3. Repeatedly press the   or   button to select a particular
   MPAA category.
     G : General audience (no restrictions).
     PG : Parental guidance suggested.
     PG-13 : Parents strongly cautioned.
     R : Restricted. Children under 17 should be accompanied
        by an adult.
     NC-17 : No children under age 17.
     X : Adults only.
     NR : Not rated.
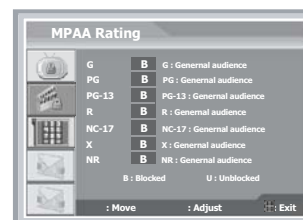
   Blocking : Enable/Disable the V-Chip

1. Same the previous page step 1 to 4.

2. Press the   or   button to select the **Change Password**.
   Press the   button to enter.

3. Press the   or   button to select the **Blocking**.
   To enable the V-Chip feature, press the   or   buttons
   so that the **Blocking** is set to **On**.
   (Pressing the   or   buttons will alternate between On and Off)
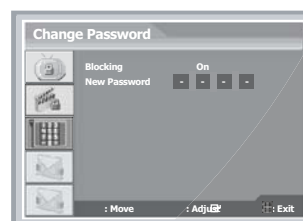
   Setting Up Your Password Number

1. Same the previous page step 1 to 4.

2. Press the   or   button to select the **Change Password**.
   Press the   button to enter.

3. Press the   or   button to select the **New Password**.
   Choose any 4-digits for your **Password Number** and   button to enter.
     Password Number select to the Remote-Control Numeric Button.

4. press the **EXIT** button to previous menu.

TV SETUP
Auto Search
Manual Search
Auto Fine Tune   ON   OFF
Fine Tune   0
CCD / V-Chip Setup
Closed Caption   CC1
Caption Display   Box
TV Parental Guidelines
: Move   : Adjust   : Exit

Enter Password
* * - -

MPAA Rating
G   B   G : General audience
PG   B   PG : General audience
PG-13   B   PG-13 : General audience
R   B   R : General audience
NC-17   B   NC-17 : General audience
X   B   X : General audience
NR   B   NR : General audience
B : Blocked   U : Unblocked
: Move   : Adjust   : Exit

Change Password
Blocking   On
New Password   - - - -
: Move   : Adjust   : Exit

Changing the Picture Standard

You can select the type of picture which best corresponds to your viewing requirements.

```
  Picture

  PSM              Custom
  Color Tone
  Brightness    |||||||||-------  50
  Contrast      |||||||||-------  50
  Color         |||||||||-------  50
  Tint          ||||||-----------  50
  Sharpness     |||||||||-------  50

      : Move       : Adjust    : Exit
```
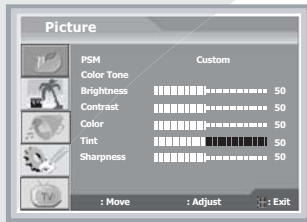
❶ Press the **Menu** button.
   The main menu is displayed.
❷ Press the   or   button to select the **Picture**.
   The options available in the **Picture** group are displayed.
❸ Press the   button to select **sub-Menu** button.
❹ Press the   or   button to select the **sub-Menu** item.
❺ Press the   button to select to change the value.

1. PSM(TV / Video / S-Video / DVD)
   Press the   button to change the sub-item

   Dynamic -> Cinema -> Custom -> Standard
   If you make any changes to these settings, the picture standard is automatically switched to
   Custom.

   You can also recall a desired picture (**Standard, Cinema, Custom, Dynamic**)
   with **PSM** button on the remote control. The Picture **Standard, Cinema** and **Dynamic**
   are programmed for good picture reproduction at the factory, and cannot be changed.

   Select the option (**Contrast, Brightness, Color, Sharpness or Tint** only) to be adjusted
   by pressing the   or   button.

2. Color Tone
   You can control the 6 kinds temperature of screen color.
   Press the   button to change the sub-item
   Cool1 -> Cool2 -> Nomal -> Warm1 -> Warm2-> User

3. Brightness
   Adjust screen brightness as bright or darkly. Press   or   , adjust the amount from 0 to 100.

4. Contrast
   Adjust contrast gap between the object in screen and background as softly or strongly.
   Press   or   , adjust the amount from 0 to 100.

5. Color
   Adjust the density of color as mild or deep. Press   or   , adjust the amount from 0 to100.

6. Tint (not available for TV mode)
   Adjust the shadow of color. Press   or   , adjust the amount from 0 to 100.

7. Sharpness
   Adjust the outline of object in screen as clear or misty. Press   or   , adjust the amount from 0 to 100.

8. Phase(PC,DTV), Frequency(PC Only)
   Press the   or   buttons to adjust the screen quality, vertical stripes may appear or the picture
   may be blurry.

Setting the Window

If you want to change the feature.

❶ Press the **Menu** button.
❷ Press the   or   button to select the **Window**.
   The options available in the Window group are displayed.
❸ Press the   button
❹ Press the   or   button to select the sub-item.

Window	
Aspect Ratio	Fill All
PIP Size	Off
PIP Source	Television
PIP Position	Upper Left
Sound Swap	Main Sound
H Position	50
V Position	50

: Move   : Adjust   : Exit
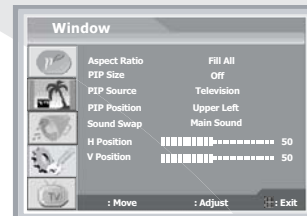
1. Aspect Ratio (Picture Format)
You can watch TV in various picture formats; Fill All, Zoom2, Zoom1 or One to One
Repeatedly press the Aspect button to select your desired aspect ratio picture format.
   Wide LCD : Fill All->Zoom2->Zoom1->4:3(TV, Video, S-Video, DVD), Fill All->4:3(PC, DTV, DVI)
   Normal LCD : Fill All->Zoom2->Zoom1->Wide(TV, Video, S-Video, DVD), Fill All->Wide(PC, DTV, DVI)

2. PIP Size(PC, DTV, DVI)
PIP is the picture in picture. Adjust the size of PIP window.
Press The   button Select the sub-item.
   Off -> **Small** -> **Large**

4. PIP Source
Choose the input source in PIP window. Press The   button Select the sub-item.
   TV, **Video**, **S-Video**
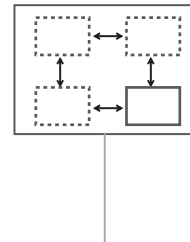
5. PIP Position ●
Move the position of PIP window   Press the   button select the sub-item.
Or press the Remote-control POSITION button.
   Upper Left -> Upper Right -> Lower Left -> Lower Right

6. Sound Swap
Exchange the main and sub sound.
Press The   button to exchange the sub-item.
   Main ←→ Sub

7. H Position(PC Only)
Press the   or   buttons to adjust the Horizontal Position.

8. V Position(PC Only)
Press the   or   buttons to adjust the Vertical Position.

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LCD DISPLAY

Changing the Sound Standard

You can select the type of special sound effect to be used when watching a given broadcast.

AUDIO	
Balance	L [____] R 0
Auto Volume	Off
Stereo Effect	Off
MTS	Mono
Language(A/B)	Language A
Stereo System	BTSC (USA)
SSM	Stand
Equalizer	
: Move	: Adjust : Exit
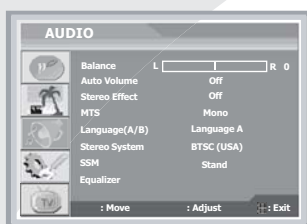
❶ Press the **Menu** button.
❷ Press the   or   button to select the **Sound**.
   The options available in the Sound group are displayed.
❸ Press the   button to select the sub-menu.
❹ Press the   or   button to select the sub-item.
❺ Press the **EXIT** button to previous menu.

1. Balance
   Press the   or   button to change the balance level between the left and right sound.

2. Auto Volume
   Reduces the differences in volume level between broadcasters.
   Press the   or   button to select **Off** / **On**.

3. Stereo Effect
   Press the   or   button to select **Off** / **On**.

4. MTS
   Mono/Stereo/SAP reception.
   Press the   or   button to select Mono, Stereo or SAP.

Language selection for dual language broadcast
If a programme received in two languages (dual language),
you can switch to **Language A, Language B or Language A+B** by pressing the Language(A/B)
sub-item.

 Language A sends the primary broadcast language to the loudspeakers.
 Language B sends the secondary broadcast language to the loudspeakers.
 Language A+B sends a separate language to each loudspeakers.

5. Stereo System
   Select the stereo system by nation .
   Press the   or   button to select **BTSC(USA)**, **A2(KOREA)** or **EIA-J(JAPAN)**.

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6. SSM(Sount Status Memory)
   Press the   or   button to select **SSM**.
   Press the   or   button to select a sound setting on the
   SSM menu.
   You can also recall a desired sound (**Stand, Music, Movie, Speech or User**)
   with **SSM** button on the remote control. The sound Stand, Music, Movie and Speech
   are programmed for good sound reproduction at the factory and cannot be changed.
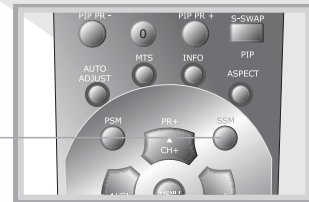
7. Equalizer
   Press the   or   button to select the **Equalizer**.
   Press the   or   to select the freguency bands of
   0.1 0.5 1.5 5.0 10KHz.
   Press the   or   button to adjust the appropriate value
   of the selected freguency band.

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Function

When you start using your set for the first time, you must select the language which will be used for displaying menu and indicators.

1. LANGUAGE
Press the **Menu** button.
Press the   or   button to select the **Function**.
The options available in the **Function** group are displayed.
Press the   or   button to select the **Language**.

```
FUNCTION

Language          English
Auto Adjust
Osd Time-Out      60   Sec
Sleep Timer       Time Off


        : Move      : Adjust      : Exit
```

2. Auto Adjust (PC only)
Press the **MENU** button and then use   or   button to select the **FUNCTION** menu.
Press the   button and then use   or   button to select **Auto Adjust**.
When **Auto adjust** has finished, **OK** will be shown on screen.
If the position of the image is still not correct, try Auto adjustment again.

Although the image is still not correct, your set is functioning properly but needs further adjustment.

3. Osd Time-Out
Press the MENU button and then use   or   button to select the FUNCTION menu.
Press the   button and then use   or   button to select **Osd Time-Out.**
The preset time out intervals :
10 -> 15 -> 20 -> 25 -> 30 -> 35 -> 40 -> 45 -> 50 -> 55 -> 60 (Minutes)

4. Sleep Timer
You can select a time period of between off and 240 minutes after which your set automatically switches off.
Press the MENU button and then use   or   button to select the FUNCTION menu.
Press the   button and then use   or   button to select **Sleep Timer.**
Select the number of minutes after which your set switch on by pressing the   or button repeatedly.
The preset time intervals :
Off -> 10 -> 20 -> 30 -> 60 -> 90 -> 120 -> 180 -> 240 (Minutes)

1. Features of Product

NTSC TV(One Tuner)
One Component Jacks(DTV, DVD)
One Composite and S-Video
   (option : mounted in left-hand Side of case for user friendly)
DVI-D
PC input
TV Stereo
PIP Window
new & graphic Multi OSD language
(English, French, Spanish, Korean, Chinese, Japane)
Audio Output Power (Over 22inch : 4Watts/Ch, Under 20inch : 2.5Watts/Ch)
Channel Edit/Delete
Closed Caption
V-Chip
Power Board Built-In(Over 26inch)
Remote Control Unit(57keys)

2. Overview Specfication

A. Summary of Specifications

Items		Specifications
Display	**Target Panel Size**	LCD 17/22/23/26/32 inch
	Aspect Ratio	4:3, 16:9 or 15:9
	Resolution	SXGA(1280x1024), WXGA(1280x768, 1280x720, 1366x768)
	Refresh Rate	50Hz, 60Hz
	Maximum Pixel Rate	110 MHz
	Interface	Daul Channel LVDS, Single Channel LVDS

Multi-Function
LCD DISPLAY

Supported Signals	**Analog PC**	H Frequency Range : 20 ~ 82 kHz
		V Frequency Range : 55 ~ 90 Hz
		Maximum resolution : 1280x1024 75Hz
		Maximum pixel rate : 135 MHz
		DTV mode support : 720P, 1080i
		Separate / Composite / SOG sync support
	Digital PC (DE Mode)	H Frequency Range : 20 ~ 82 kHz
		V Frequency Range : 55 ~ 75 Hz
		Maximum resolution :1280x1024 75Hz
		Maximum pixel rate : 135 MHz
		DTV mode support: 720P, 1080i
	CVBS, S-Video	NTSC-M PAL-B/G/H/I SECAM
	DVD Component	480i
	DTV Component	1080i 720P 480P
	TV	NTSC M Systems
Connection (Video)	**TV**	ANT In (75 ohms coaxial cable)
	CVBS	Composite RCA In (75 ohms 0.7/1.0 Vp-p
	S-Video	Mini Din-4Pin x 1 S-Video In
	Component	RCA x 3 (75 ohms, 0.7/1.0 Vp-p) YPbPr : DTV / YCbCr : DVD
	PC Analog	RGB D-Sub 15Pin (75 ohms ±10%, 0.7Vp-p ±5%)
	Component 2	Y-Pb-Pr DVD RCA In (75 ohms , 0.7/1.0 Vp-p)
	PC DVI	DVI- D
	Video Out	RCA x 1(75 ohms, 0.7/1.0 Vp-p)
Connection (Audio)	**TV**	Tuner SIF In
	PC / DVI	RCA x 2, Stereo Sound In (500mVrms)

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Connection (Audio)	**Video / S-Video**	RCA x 2, Stereo Sound In (500mVrms)
	Component	RCA x 2, Stereo Sound In (500mVrms)
	Speaker Out	2.5W(under 20 inch), 4W(Over 22 inch) x 2
	Headphone Out	Stereo Headphone Jack
	Autio Out	Stereo Headphone Jack
TV	**Tuning System**	NTSC-M
	Tuning Supports	Air / Cable (STD, HRC, IRC)
	Tuning Range	Air Ch : 2 ~ 69 Ch, Cable Ch : 1 ~ 125 Ch
	Channel Save Capacity	All Channel for Air and Cable (181 Ch)
	Sound System	BTSC (USA), A2 (KOREA), EIA-J (Japan)
	MTS Support	Mono, Stereo, SAP
OSD	**Color**	16 colors
	OSD Type	Graphic & Text
	Language Support	English, French, Spanish, Korean, Chinese, Japane
	Maximum OSD Size	512 (H) x 360 (V)
User Functions	**Picture**	Contrast, Brightness, Sharpness, Color, Tint, Color Temp, PSM(Picture Status Memory) Phase, Frequency
	Window	Aspect Ratio, PIP Size, PIP Source, PIP Position, Sound Swap, H Position, V Position
	Audio	Balance, Auto Volume, MTS, Language (A/B), Stereo System, 5 Band Equalizer SSM(Sound Status memory)
	Function	Language, Auto Adjust, OSD Time Out, Sleep Timer
	TV	Auto Search, Manual Search, Auto Fine Tune, Fine Tune, Closed Caption, Caption Display V-Chip : TV Guidelines, MPAA Rating, Blocking On / Off, Change the Password
Power	**Supply Voltage**	DC 12V (17 inch), AC 220 / 110V 50~60Hz
	Power Consumption	-

B. Supported Timings(* TBD)

Section	Resolution	H Frequency (kHz)	V Frequency (Hz)	Pixel Frequency (MHz)	Comment
PC	640x400	37.861	85.08	31.5	
	640x350	31.469	70.087	25.175	
	640x350	37.861	85.08	31.5	
	640x480	31.469	59.94	25.175	
	640x480	35.000	66.667	30.24	
	640x480	34.940	69.884	28.513	
	640x480	37.861	72.809	29.765	
	640x480	37.500	75.0	31.5	
	640x480	43.269	85.008	36.0	
	720x400	31.469	70.087	28.322	
	720x400	37.927	85.039	35.5	
	800x600	35.156	56.25	36.0	
	800x600	37.879	60.317	40.0	
	800x600	43.764	70.02	45.513	
	800x600	48.077	72.188	50.0	
	800x600	46.875	75.0	49.5	
	800x600	53.674	85.061	56.25	
	832x624	49.726	74.551	57.284	
	1024x768	48.780	60.001	64.11	
	1024x768	56.476	70.069	75.0	
	1024x768	57.703	72.039	78.476	
	1024x768	60.241	74.927	81.724	
	1024x768	60.030	75.029	78.75	
	1024x768	68.677	84.997	94.5	
	1024x768	68.677	84.997	94.5	

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1280x1024	79.976	75.025	135.0	
1280x1024	64.754	60.06	108.992	
1280x1024	78.125	72.005	135.0	
1280x1024	63.600	60.0	108.883	
1280x1024	74.620	70.0	128.943	
1280x1024	76.824	72.0	132.752	
720x480	31.469	59.94	25.175	
1280x720	44.964	59.94	74.176	
1920x1080	33.750	60.0	74.25	Interlace

Please surely note above specifications can be changed as per further improvement without notice.

Troubleshooting

If you cannot solve the problem using the instruction below, note the model and serial number of your set and contact your local dealer.

Problem	Check Item
No picture and sound	- Make sure the main lead has been connected to a wall socket. - Make sure you have pressed the Power button. LED light of the Power/Standby indicator is in red. - Make sure picture contrast and brightness settings. - Check the volume
No pricture/No picture from AV terminal	- Check the brightness setting of the display - Lamp may have malfunction - Make sure a cable with no Video input signal is connected to the S-Video Input terminal

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Normal picture, but no sound	- Check the volume - Make sure the sound is not muted. MUTE button has been pressed on the remote control - Make sure the connections of the optional speaker systems are securely inserted - Make sure the setting of AV Output terminal
Picture is too light	- Make sure color and contrast settings
Picture is too dark	- Make sure brightness setting is not set too low - Check to see if brightness setting - Lamp may have malfunction
Remote control does not work	- Change the batteries - Make sure the infrared transmitter window is not receiving strong light such as light from fluorescent lamps
No picture from AV OUT terminal	- Make sure AV Input is not set - Make sure the input source other than AV
The picture is not sharp	- The reception may be weak
The picture moves	- The state of the broadcast may also be bad - Make sure the antenna is facing the right direction - Make sure outside antenna is not disconnected
The picture is doubled or tripled	- Make sure the antenna is facing the right direction - There may be reflected electric waves from mountains or buildings
The picture is spotted	- There may be interference from automobiles, trains, high voltage lines, neon lights, etc.
There are stripes on the screen or colors fade	- Is the unit receiving interference from other devices? Transmission antennas of radio broadcasting stations and transmission antennas of amateur radios and cellular phones may also cause interference - Use the unit as far apart as possible from devices that may cause possible interference