For assistance, please call: 1-800-619-3848

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.
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WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION-To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions

The lightning flash with arrowhead symbol, within an equilateral triangle 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.

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

"Note to CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electrical Code that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the

This product utilizes tin-lead solder, and fluorescent lamp containing a small amount of mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eia.org

FCC STATEMENT
FCC Notice
PDP TV: A CLASS B digital device
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 when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC CAUTION:
Pursuant to 47CFR, Part 15.21 of the FCC rules, any changes or modifications to this monitor not expressly approved by the manufacturer could cause harmful interference and would void the user’s authority to operate this device.

WARNING: This is a CLASS B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures to counter interference.
Important Safety Precautions

Electrical energy can perform many useful functions, but it can also cause personal injuries and property damage if improperly handled. This product has been engineered and manufactured with the highest priority on safety. But IMPROPER USE CAN RESULT IN POTENTIAL ELECTRICAL SHOCK OR FIRE HAZARD. In order to prevent potential danger, please observe the following instructions when installing, operating and cleaning the product. To ensure your safety and prolong the service life of your PDP TV product,

1. Read these instructions All operating instructions must be read and understood before the product is operated.

2. Keep these instructions These safety and operating instructions must be kept in a safe place for future reference.

3. Heed all warnings All warnings on the product and in the instructions must be observed closely.

4. Follow all instructions All operating instructions must be followed.

5. Do not use this apparatus near water for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like. Do not use immediately after moving from a low temperature to high temperature environment, as this causes condensation, which may result in fire, electric shock, or other hazards.

6. Clean only with dry cloth Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

7. Ventilation Do not block any ventilation openings. Install in accordance with the manufacturer instructions. The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer’s instructions are followed. 4” clearance on all sides and back are required

8. Heat sources Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Grounding or Polarization Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Power cord protection Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Attachments Only use attachments/accessories specified by the manufacturer. Do not use attachments not recommended by the manufacturer. Use of improper attachments can result in accidents.
12. Stand  Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. Do not place the product on an unstable trolley, stand, tripod or table. Placing the product on an unstable base can cause the product to fall, resulting in serious personal injuries as well as damage to the product. When mounting the product on a wall, be sure to follow the manufacturer’s instructions. Use only the mounting hardware recommended by the manufacturer.

13. Careful move  When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip over. Sudden stops, excessive force and uneven floor surfaces can cause the product to fall from the trolley.

14. Lightning  Unplug this apparatus during lightning storms or when unused for long periods of time. For added protection for this television equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the equipment due to lightning and power line surges.

15. Servicing  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 have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

16. Replacement parts—In case the product needs replacement parts, make sure that the service person uses replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. Use of unauthorized parts can result in fire, electric shock and/or other danger.

17. Overloading  Do not overload wall outlets, extension cords, or convenience receptacles on other equipment as this can result in a risk of fire or electric shock.

18. Entering of objects and liquids  Never insert an object into the product through vents or openings. High voltage flows in the product, and inserting an object can cause electric shock and/or short internal parts. For the same reason, do not spill water or liquid on the product.

19. Damage requiring service  If any of the following conditions occurs, unplug the power cord from the AC outlet, and request a qualified service person to perform repairs.
   a. When the power cord or plug is damaged.
   b. When a liquid is spilled on the product or when objects have fallen into the product.
   c. When the product has been exposed to rain or water.
   d. When the product does not operate properly as described in the operating instructions.
   Do not touch the controls other than those described in the instructions. Improper adjustment of controls not described in the instructions can cause damage, which often requires extensive adjustment work by a qualified technician.
   e. If the product has been dropped or the cabinet has been damaged in any way.
   f. When the product displays an abnormal condition or exhibits a distinct change in performance. Any noticeable abnormality in the product indicates that the product needs servicing.

20. Safety checks—Upon completion of service or repair work, request the service technician to perform safety checks to ensure that the product is in proper operating condition.

21. Wall or ceiling mounting  When mounting the product on a wall or ceiling, be sure to install the product according to the method recommended by the manufacturer. This is a safety feature.
22. Power source  This product is intended to be supplied by a listed power supply indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the product due to lightning and power line surges. When the unit has to be used with another power supply voltage, the power cable must be changed. Consult your product dealer. The socket outlet should be installed near the equipment and easily accessible. Use only the power cord designated by our dealer to ensure safety and EMC. When connecting other products such as VCRs and personal computers, you should turn off the power of the unit for protection against electric shock.

23. Panel protection  The PDP panel used in this product is made of glass. Therefore, it can break when the product is dropped or impacted upon by other objects. Be careful not to be injured by broken glass pieces in case the PDP panel breaks.

24. Pixel defect  The PDP panel is a very high technology product, giving you finely detailed pictures. Occasionally, a few non active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product.

If an outside antenna is connected to the television equipment, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can collide with such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.
Using the Remote Control

- Use the remote control by pointing it towards the remote sensor window of the set. Objects between the remote control and sensor window may prevent proper operation.

**Note:** The illustration is for your reference only, the remote sensor may locate differently with different model.

Cautions regarding use of remote control

- Do not expose the remote control to shock. In addition, do not expose the remote control to liquids, and do not place in an area with high humidity.

- Do not install or place the remote control under direct sunlight. The heat may cause deformation of the unit.

- The remote control may not work properly if the remote sensor window of the main unit is under direct sunlight or strong lighting. In such a case, change the angle of the lighting or PDP TV set, or operate the remote control closer to the remote sensor window.

Batteries for the Remote Control

If the remote control fails to operate the PDP TV functions, replace the batteries in the remote control.

1. Open the battery cover.
2. Insert two size AAA batteries.
3. Replace the cover and slide in reverse until the lock snaps.

Precaution on battery use

Improper use of batteries can result in a leakage of chemicals and/or explosion. Be sure to follow the instructions below.

- Place batteries with their terminals corresponding to the (+) and (−) indications.

- Different types of batteries have different characteristics. Do not mix batteries of different types.

- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries and/or cause old batteries to leak chemicals.

- Remove batteries as soon as they are non operable. Chemicals that leak from batteries can cause a rash. If chemical leakage is found, wipe with a cloth.

- The batteries supplied with the product may have a shorter life expectancy due to storage conditions.

- If the remote control is not used for an extended period of time, remove the batteries from the remote control.
**Preparations (continued)**

## Power connection

1. Connecting the female plug to the AC socket on the unit.
2. Connecting the male plug to the wall outlet as illustrated.

**Note:**
- This product should be operated only from the type of power source indicated on the marking label.
- Always unplug the AC cord from power outlet when not using for a long period of time.

## Speaker connection (Optional)

Connect the speaker audio cable to the external speaker output jack on the unit matching the "+" and "-" ends of the cable with color.

**Note:** the illustration may be different depending on model.
Preparations (continued)

**CABLE TV (CATV) CONNECTION**

A 75 ohm coaxial cable connector is built into the set for easy hookup. When connecting the 75 ohm coaxial cable to the set, screw the 75 ohm cable to the ANT. Terminal.

Some cable TV companies offer "premium pay channels". Since the signals of these premium pay channels are scrambled, a cable TV converter/descrambler is generally provided to the subscriber by the cable TV company.

This converter/descrambler is necessary for normal viewing of the scrambled channels. For more specific instructions on installing cable TV, consult your cable TV company. One possible method of utilizing the converter/descrambler provided by your cable TV company is explained below. Please note: An RF switch provided with two inputs (A and B) is required (not supplied).

```
```

**Antenna Connection**

**ANTENNAS**

The antenna requirements for good color television reception are more important than those for black & white television reception. For this reason, a good quality outdoor antenna is strongly recommended. The following is a brief explanation of the type of connections that are provided with the various antenna systems.

```

1. A 75 ohm system is generally a round cable with F type connector that can easily be attached to a terminal without tools (not supplied).
2. A 300 ohm system is a flat "twin lead" cable that can be attached to a 75 ohm terminal through a 300/75 ohm adapter (not supplied).
```

**OUTDOOR ANTENNA CONNECTION**

Use one of the following two diagrams if you connect an outdoor antenna.

A: Using a VHF/UHF combination outdoor antenna.
B: Using separate VHF and/or UHF outdoor antennas.

Connect the outdoor antenna cable lead in to the ANT. terminal on the rear of the TV set.
Identification of Controls

Main unit (front view)

1. POWER
   Press this button to turn the unit ON from STANDBY mode. Press it again to turn the set back to STANDBY.

2. MENU
   Press this button to access the MENU main page.

3. Volume < / >
   Press the VOL ‡ or VOL † button to directly increase or decrease the sound volume level.
   In OSD Menu, press these buttons to adjust the value or setting of each item.

4. Channel < / >
   Press these two buttons to directly change the TV channel.
   In OSD Menu, press these buttons to choose the OSD items.

5. Power Switch: Press to remove power from the unit

POWER ‡, VOL ‡ / †, CH < / > and MENU on the main unit have the same functions as the corresponding buttons on the remote control.
Identification of Controls (continued)

1. RS232 terminals
   For service use only. The user cannot operate the unit through the RS232 terminals.

2. DVI input /Audio in
   Receives the digital video/audio signals from a set top box.

3. VGA input /Audio in
   Connect to the VGA/audio output jacks on your PC.

4. Component inputs 1 (Y, Pb/Cb, Pr/Cr, Audio)
   Connect to the audio and component output jacks of a DVD player or Set Top Box.

5. Component inputs 2 (Y, Pb/Cb, Pr/Cr, Audio)
   Connect to the audio and component output jacks of a DVD player or Set Top Box.

6. Headphone jack

7. AV outputs (Video, Audio L, R)
   Connect to the VCR input jacks to record programs.

8. AV inputs (Video, Audio L, R)
   Receive video/audio signals from external sources such as VCR or DVD player.

9. Antenna input
   Allows you to connect cable or outdoor antenna.

10. S-Video input
    Receive a S Video signal from external source such as VCR or DVD player. (Note: S Video
        Shares audio input with AV input.)
Identification of Controls  (continued)

Remote Control

1. **POWER**
   - Turn the unit on or standby

2. **CH ▲/▼, VOL+/-</CH ▲/▼** Use to switch channels;
   - VOL+/- Use to adjust volume;
   - In MENU operation, use CH ▲/▼ to select menu item and
     VOL+/- to adjust selected item

3. **MENU**
   - To access the MENU main page

4. **STILL**
   - To freeze current picture

5. **ZOOM**
   - To go into ZOOM or PAN mode

6. **S.M**
   - To access sound mode select menu

7. **P.M**
   - To access picture mode select menu

8. **0~9 digit buttons**
   - Direct channel select

9. **SOURCE**
   - To access source select menu

10. **MUTE**
    - Sound mute

11. **ENTER**
    - To confirm your operation or setting or access the
      submenu

12. **SLP**
    - To access Sleep timer setting menu

13. **CLK**
    - To access Current time setting menu

14. **RETURN**
    - To quickly jump between current channel and last
      selected channel.

15. **DSP**
    - To display channel status or signal information

16. **MTS**
    - To select STEREO, SAP or MONO

Note: Remote layout subject to change

Flip the cover, open in the direction of the
17. MODE
   To access screen layout select menu
18. PIP display
   To activate picture in picture
19. POS
   To access PIP frame position select menu
20. SIZE
   To access PIP frame size adjusting menu
21. SPEAKER
   In multi picture mode, press this button to output the sound of the selected picture frame from speaker
22. SWAP
   To exchange PIP and MAIN PICTURE source
23. HEADPHONE
   In multi picture mode, press this button to output the sound of the selected picture frame from headphone
24. MENU
   To access the MENU main page
25. ▲▼→←
   ▲▼: To move upward or downward in menu operation;
   To adjust zoom rate in ZOOM mode and pan picture in PAN mode;
   To select picture frame in multi picture mode, the selected picture frame displays with a green border;
   →←: To move left or right in menu operation;
   To adjust selected menu item in menu operation;
   To pan picture in PAN mode;
   ☑: To confirm your operation or setting or to access a submenu.
26. AUTO
   To rectify the picture automatically in VGA mode

Note: Remote layout subject to change
Connections

Cautions before connecting
- Carefully check the terminals for position and type before making any connections.
- The illustration of the external equipment may be different depending on your model.
- Loose connectors can result in image or color problems. Make sure that all connectors are securely inserted into their terminals.
- Refer to the user manual of the external device as well.
- When connecting an external device, turn the power off on the panel to avoid any issues.

Connect a VCR

How to connect:
Connect the Audio/Video cables between the Audio (L/R)/Video jacks on the unit and VCR.

Note:
For better video, you can use the S video terminal if your source supports it. When you use S video terminal, the source menu displays SV instead of AV. S video and AV input can not be used together. S Video is master over AV.

To play VCR
1. Turn on your PDP TV, press SOURCE button on the remote control.
2. Press VOL+/-- to select AV (VIDEO) and press ENTER to

source AV VIDEO
Connect a Camcorder

Yellow (VIDEO)
@ White (AUDIO L)
@ Red (AUDIO R)

How to connect:
Connect the Audio/Video cables between the Audio (L/R)/Video jacks on the unit and camcorder.

To playback Camcorder
1. Turn on your PDP TV, press SOURCE button on the remote control.
2. Press VOL+/ - to select AV (VIDEO) and press ENTER to confirm.
3. Turn on your camcorder and set it to output mode. (For details, refer to your camcorder user

Note:
The operations of the camcorder may be different and is

The operations of the camcorder may be different and is

source  A D  C1 C2 AV TV
VIDEO
Connect a DVD player

How to connect a DVD Player using Component Video Connections:
Connect the Video cable between the Y, Cb, Cr input jacks on the unit and Y, Cb, Cr output jacks on the DVD player.

To play DVD
1. Turn on your PDP TV, press **SOURCE** button on the remote

4. Turn on your DVD player, insert a DVD disc and press the

**source**

YPbPr1/YCbCr1

Note:
This unit identifies the type of component video terminals automatically. If you connect Y, Cb, Cr terminals, the screen displays **YCbCr detected** on the bottom right corner. Similarly, if the component
Connect a DTV receiver

How to connect:
Connect the cable or antenna to the antenna input jack on the DTV receiver.
Connect the Video cable between the Y, Pb, Pr input jacks on the unit and Y, Pb, Pr output jacks on the DTV receiver.

To Watch DTV
1. Turn on your PDP TV, press SOURCE button on the remote control.
2. Press VOL+/- to select C1(YPbPr1/YCbCr1) or C2(YPbPr2/YCbCr2).
Connect a PC

How to connect:
Connect a VGA cable between the VGA jack on the PC and the VGA input jack on the unit.
Connect an Audio cable between the AUDIO output on the PC and AUDIO input jack on the unit.

To Watch the PC screen
1. Turn on your PDP TV, press SOURCE button on the remote control.
2. Press VOL+/- to select A (VGA).
3. Press ENTER to confirm.
Connect a VCR (for recording) or external amplifier

How to connect:
Connect the Audio/Video cables between the Audio (L/R)/Video jacks on the unit and VCR.

To record program
1. Turn on your PDP TV, select AV or TV source you wish to record.
2. Turn on your VCR, insert a videotape for recording.
3. Press the Record button to begin recording.

To enjoy high-quality sound through an external amplifier
1. Turn on your PDP TV, select AV or TV source.
2. Turn the main volume of the amplifier to minimum.
3. Turn on the amplifier and adjust for a proper volume.

Note:
The operations of the amplifier may be different depending on model. Please read the user manual of your amplifier to confirm proper operation.
The AV output terminals output audio/video signal inputted from Antenna input or AV inputs only.
Turning the Unit On and Off

Turning On

Insert the power cord into the wall outlet.
Press the Power Switch on the unit.
Press the Power button on the remote control.

Turning Off

With the power on, Press the Power button on the remote control to turn off the unit temporarily. If you want to cut off

Note:

Viewing the Menus and Displays

Your PDP TV has a simple, easy to use menu system that appears on the screen. This system makes it convenient and fast to use features on the unit.

Viewing the Menus

1. With the power on, press the MENU button on the remote

2. Use the CH ▲ / ▼ to select menu item. Use VOL+/– to adjust value or setting of each item. Use ENTER to confirm or access items of menu.

   On screen menu will disappear from the screen automatically after about 15 seconds, or you can press

Note:

To clearly introduce the menu operations, this operation

3. In MENU operations, the ▲ / ▼ buttons have the same function with the CH ▲ / ▼ buttons, the ◄ / ► buttons have the same function with the VOL+/– buttons, the button

Displaying Status Information

Press the DSP button on the remote control, the unit will display current status information such as
Your PDP TV can memorize and store all of the available channels for both antenna and cable channels. After the available channels are memorized, use CH↑/↓ to scan through the available channels.

Selecting the Signal Source

Before your PDP TV can memorize the available channels, you must specify the type of signal source that is connected.

1. Press **MENU** to display the menu main.
2. Press **VOL+/-** repeatedly to display **options** menu page.
3. Press **CH** to select tv tuner item.
4. Press **VOL+** or **ENTER** to access the submenu.
   
   If the search menu does not display, press **VOL+/-** repeatedly to display search menu page.
5. Press **CH** to select source item.
6. Press **VOL+/-** to select antenna or cable.

   If you are connected to an antenna, please select antenna (the selected item displays in green). If you connect cable, please select cable.

Storing Channels in Memory Automatically

1. Repeat steps 1~4 in [Selecting the Signal Source] to
2. Press **CH** twice to select autoset item.
3. Press **ENTER** to store channels in memory automatically.

   The unit will begin memorizing all of the available channels.

   **Note:**
   
   The process of auto memory will be stopped if you press the **MENU** button.
Memorizing TV Channels (continued)

Setting Auto Fine Tune (AFT)

1. Repeat steps 1~4 in [Selecting the Signal Source] to display search menu page.

2. Press CH ▼ repeatedly to select auto fine tune item.

3. Press VOL+/- to select on or off.
   When the AFT is set to On, the unit will automatically tune the program frequency to provide the best possible picture and sound.

Manual Fine Tuning

1. Repeat steps 1~4 in [Selecting the Signal Source] to display search menu page.

2. Press CH ▼ repeatedly to select fine tune item.

3. Press VOL+/- to fine tune till the best possible picture and sound are obtained.
   If you fine tune a program manually, the auto fine tune item will be turned to off automatically.

Adding and Erasing Channels

1. Use number buttons to directly select a channel that will be added or erased.

2. Repeat steps 1~4 in [Selecting the Signal Source] to display search menu page.

3. Press CH ▼ repeatedly to select channel skip item.

4. Press VOL+/- to select on or off.
   When the item is set to on, the selected channel will be erased. When the item is set to off, the selected channel will be added.
   The erased channels can not be selected by using the CH ▲/▼ buttons unless you use number buttons to input channel number directly.
Changing Channels

**Using the Channel Buttons (CH↑ or CH↓)**

Press the CH↑ or CH↓ to change channels. When you press the CH↑ or CH↓, the unit changes channels in sequence. You will see all the channels that the unit has memorized. You will not see channels that were erased, not memorized or unavailable.

**Direct Accessing Channels**

Press the number buttons to go directly to a channel. To select a one digit channel:
Input the channel using the 0-9 number buttons directly and then press ENTER or wait for 3 seconds.
To select a two digit channel:
Input the channel using the 0-9 number buttons directly and then press ENTER or wait for 3 seconds.
To select a three digit channel:

*Note:*
Be sure to enter the channel within 3 seconds.
When you use the number buttons, You may directly select channels that were erased.

**Using the RETURN button**

Press this button to switch between the current channel and the previous channel.

**Adjusting the Volume**

**Using the volume buttons (VOL- and VOL+)**

Press the VOL+ or VOL- to increase or decrease the volume.

**Using the Mute**

**Using the MUTE button**

At any time, you can temporarily turn off the sound using the MUTE button.

1. Press the MUTE button and the sound turns off.

2. To turn mute off, press the MUTE button again, or simply press either the VOL- or VOL+.
Select input source signal

Using the SOURCE button

1. Press the SOURCE button to access source menu.

2. Press VOL+ or VOL- to select a desired input channel.

3. Press ENTER to confirm and the unit displays signal from the selected input channel.

   | A | VGA, select signal from VGA (15 pin D sub) terminals. |
   | D | DVI, select signal from DVI terminals. |
   | C1 | YPbPr1/YCbCr1, select signal from YPbPr1/YCbCr1 terminals. |
   | C2 | YPbPr2/YCbCr2, select signal from YPbPr2/YCbCr2 terminals. |
   | AV | VIDEO (SVIDEO), select signal from S Video or Video terminal. |
   | TV | Select TV signal. |

Note:
This unit identifies the type of component video terminals automatically. If you connect Y, Cb, Cr terminals, the screen displays YCbCr detected on the bottom right corner. Similarly, if the component video terminals are Y, Pb, Pr, the screen displays YPbPr detected on the bottom right corner.

Using source select menu

1. Press MENU to display the menu main.

2. Press VOL+/− to display settings menu page.

3. Press CH ▼ repeatedly to select source select item.

4. Press VOL+ to access source select menu.

5. Press CH ▲ or CH ▼ to select a desired input channel.

6. Press ENTER to confirm and the unit displays signal from the selected input channel.

Selecting a MENU language

1. Press MENU to display the menu main.

2. Press VOL+/− repeatedly to display settings menu page.

3. Press CH ▼ twice to select language item.

4. Press VOL+/− to select the appropriate language: English, French and Spanish.

5. Press MENU to exit.
**Setting Channel Options**

**Editing Channel Label**

1. Press **MENU** to display the menu main.

2. Press **VOL+/-** repeatedly to display **options** menu page.

3. Press **CH** to select **tv tuner** item.

4. Press **VOL+** to enter.

5. Press **VOL+** again to display **channel** menu page.

6. Press **CH** to select **edit labels** item.

7. Press **VOL+** to enter into channel label editing mode.

8. Use **CH up/down** to select a channel you want to add label to.

   Use **↑/↓** to select character.

   Use **←/→** to move cursor left or right.

   Use **SOURCE** to clear label text if you wish to reset.

   Use **MENU** to return.

---

**TV Menu Options**

- **tv tuner**
- **content blocking**

**Channel Menu Options**

- **edit labels**

**Channel Up/Down**

- channel up/down to change channels
- up/down/left/right to edit label
- source to clear label
- menu to return
Setting Picture

Customizing the Picture

1. Press **MENU** to display the menu main.
   If the picture menu does not display, press **VOL+/-** repeatedly to display picture menu page.

2. Press **CH ▲ / ▼** to select the item you wish to change.

3. Press **VOL+/-** to adjust the value of the item.

4. Press **MENU** to exit.

Using the Preset Picture Mode

1. Press **P.M** on the remote to display picture mode select menu.

2. Press **VOL+/-** to select a desired picture mode.

3. Press **MENU** to exit.

   There are three preset picture modes (**Normal**, **Bright** and **Soft**) and one user set picture mode (**User**).
   Each preset mode has its own picture settings.
   **Normal**: Select for a normal picture.
   **Bright**: Select for a bright picture.
   **Soft**: Select for a fine/soft picture.
   Adjusted settings are stored in User.
Setting System

Setting the Menu Background

1. Press **MENU** to display the menu main
2. Press **VOL+/-** to display **settings** menu page.
3. Press **CH** to select **menu background** item.
4. Press **VOL+/-** to select **opaque** or **translucent**.

Setting Sleep Timer

1. Press the **SLP** button to display **sleep time** menu.
2. Press **VOL+/-** to adjust.
3. Press **MENU** to exit.
Changing Screen Options

Changing the Scaling mode of Image

1. Press **MENU** to display the menu main page.
2. Press **VOL+/-** to display **window** menu page.
3. Press **CH** to select **image size** item.
4. Press **VOL+/-** to select a proper image size.
   The image size can be selected between: fill all, normal, wide and zoom.
   - **Fill All**
     The Fill All mode stretches the input vertically and horizontally to fill the display from edge to edge. This mode is the default mode.
   - **Normal**
     The Normal mode fills the display vertically with a 4:3 aspect picture, preserving the geometry of the input format.
   - **Wide**
     The Wide mode only affects displays that are greater than 4:3 aspect. If the picture is less than or equal to 4:3, this mode acts as if it is in Normal mode. It is intended to display 4:3 images on a 16:9 panel with the least picture deformity. The center of the picture is left unstretched. The left and right sides of the picture are stretched in a non-linear fashion with the areas of greatest distortion on the extreme left and right edges of the picture. The top and bottom five percent of the picture are cropped.
   - **Zoom**
     If the display aspect ratio is greater than 4:3, this mode fills the panel horizontally, cropping 10 percent off the top and bottom of the picture. If the display aspect ratio is less than 4:3, this mode crops the picture by 16.5 percent on all sides and fills the panel with the remaining picture.

Freezing the Picture

1. Press **MENU** to display the menu main page.
2. Press **VOL+/-** to display window menu page.
3. Press **CH** repeatedly to select **freeze window** item.
4. Press **VOL+/-** to select **on** or **off**.
   When you set this item to **on**, the current picture will be frozen until you set this item to **off**.

**Note:**
This menu item appears only when the current screen layout is full screen.
You can also quickly freeze current picture by using the **STILL** button.
Changing the Position of the Image

The unit allows you to adjust the position of the image if it is not well aligned.

1. Press **MENU** to display the menu main page.
2. Press **VOL+/-** to display **window** menu page.
3. Press **CH▼** repeatedly to select **h position** or **v position**.
4. Press **VOL+/-** to adjust until the picture is well aligned.

Using Digital Pan and Zoom

1. Press **MENU** to display the menu main page.
2. Press **VOL+/-** to display **window** menu page.
3. Press **CH▼** repeatedly to select **digital pan and zoom**.
4. Press **VOL+** to enter.
5. Press **CH▼ / ▲** to adjust zoom ratio.

**Note:**
You can quickly access Zoom menu by using the **ZOOM** button.
Digital pan and zoom are not always available.

The unit allows you to pan the picture after you zoom in the picture.

1. Repeat steps 1~5 above to zoom in the picture.
2. Press **ENTER** to access Pan mode.
3. Press **VOL+/-** or **CH▼ / ▲** to pan the current picture in the relevant direction.
Setting Sound

Using the Preset Audio Mode

1. Press **MENU** to display the menu main page.
2. Press **VOL+/−** to display audio menu page.
3. Press **CH ▼** to select Audio mode item.
4. Press **VOL+/−** to select a desired Audio mode.

**Note:**
You can not access the **treble** and **bass** item unless the Audio mode is set to **User**.

Customizing the Sound

1. Press **MENU** to display the menu main.
2. Press **VOL+/−** to display audio menu page.
3. Press **CH ▼ / ▲** to select treble, bass or balance item.
4. Press **VOL+/−** to adjust the value of the item.

Using the S.M button

1. Press **S.M** to display Audio mode select menu.
2. Press **VOL+/−** to select a desired Audio mode.
3. Press **MENU** to exit.

There are three preset Audio modes (Cinema, Music and News) and one user set Audio mode (User). Each preset mode has its own Audio settings.

- **Cinema:** Select for a movie program picture.
- **Music:** Select for a music program.
- **News:** Select for a speech or conversation program. Adjusted settings are stored in User mode.

Adjusting the Headphone Volume

1. Press **MENU** to display the menu main.
2. Press **VOL+/−** to display audio menu page.
3. Press **CH ▼** repeatedly to select headphone item.
4. Press **VOL+/−** to adjust the volume of headphone.
Choosing a Multi-Channel Sound (MTS) Soundtrack

1. Press **MENU** to display the menu main page.

2. Press **VOL+/-** to display audio menu page.

3. Press **CH** repeatedly to select MTS item.

4. Press **VOL+/-** to select **STEREO**, **SAP** or **MONO**.

   Choose **STEREO** for channels that are broadcasting in stereo.
   Choose **MONO** for channels that are broadcasting in mono, or if you are having difficulty receiving a stereo signal.
   Choose **SAP** to listen to the Separate Audio Program, which is usually a foreign language translation of a program.

Using the MTS button

1. Press the MTS button to access MTS setting menu.

2. Press **VOL+/-** to select **STEREO**, **SAP** or **MONO**.

3. Press **MENU** to exit.

Using the Auto Volume

Each broadcasting station has its own signal conditions, which can make it necessary to adjust the volume every time the channel is changed. “Auto volume” lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

1. Press **MENU** to display the menu main page.

2. Press **VOL+/-** to display audio menu page.

3. Press **CH** repeatedly to select **Auto volume** item.

4. Press **VOL+/-** to select **on** or **off**.
Selecting Screen Layout

Using the Layout Menu

1. Press **MENU** to display the menu main page.

2. Press **VOL+/-** to display **layout** menu page.

3. Press **CH ▲/▼** to select item.

4. Press **VOL+** or **ENTER** to confirm.

Using the MODE button

1. Press the **MODE** button to display the **screen layout** select

2. Press **VOL+/-** to select item.

3. Press **ENTER** to confirm.

4. Press **MENU** to exit.

Full Screen

When this item is selected, only main frame displays on the screen.
Changing Screen Layout (continued)

**PIP**

When this item is selected, one main frame and one PIP frame display on the screen at the same time.

![PIP Diagram]

**Split Screen**

When this item is selected, the screen will be split into two frames.

![Split Screen Diagram]

**POP3**

When this item is selected, one main frame and three scanning frames display on the screen.

![POP3 Diagram]

**Grid**

When this item is selected, the screen displays 9 scanning frames.

![Grid Diagram]
PIP Operations

Viewing the Picture-in-Picture

1. Press **MENU** to display the menu main page.

2. Press **VOL+/-** to display **layout** menu page.

3. Press **CH** twice to select **pip** item.

4. Press **VOL+** or **ENTER** to display pip frame. The screen displays one main frame and one PIP frame.

5. Press **▲** or **▼** to select main frame or PIP frame. The selected frame displays with a green border.

**Note:**
- You can quickly open or close PIP frame by directly using the **PIP displaying** button.
- Many but not all adjustments and settings can be applied to the PIP picture when the PIP frame is selected.
- To cancel PIP frame, press the **PIP displaying** button or select the full screen item and confirm.
- The audio of the selected picture can be output from the speaker or headphone by using the **SPEAKER** or **音** button on the remote control.

Swap the Contents of the PIP Image and Main Image

1. Press the **PIP displaying** button to display the PIP frame.

2. Press the **SWAP** button to swap the contents of the PIP image and main image.
Changing the Position of the PIP Frame

1. With the PIP frame displaying, press **MENU** to display the menu main page.
2. Press **VOL+/-** to display **window** menu page.
3. Press **CH▼** repeatedly to select **pip position** item.
4. Press **VOL+/-** to select a desired position for the PIP frame.

Using the **POS** button

1. Press the **POS** button to quickly access the **pip position** select menu.
2. Press **VOL+/-** to select a desired position for the pip frame.
3. Press **MENU** to exit.

Adjusting the Size of PIP Frame

1. With the PIP frame displaying, press **MENU** to display the menu main page.
2. Press **VOL+/-** to display **window** menu page.
3. Press **CH▼** repeatedly to select **pip size** item.
4. Press **VOL+/-** to adjust the size of PIP frame.
5. Press **MENU** to exit.

Using the **SIZE** button

1. Press the **SIZE** button to quickly access the **pip size** adjusting menu.
2. Press **VOL+/-** to adjust the size of the pip frame.
3. Press **MENU** to exit.
Adjustment in PC (VGA) Mode

With working in VGA mode, this unit allows you to perform several adjustments.

Adjusting Picture

1. Press **MENU** to display the menu main page.
   If the **picture** menu does not display, press **VOL+/-** repeatedly to display **picture** menu page.

2. Press **CH ▲ / ▼** to select **brightness** or **contrast** item.

3. Press **VOL+/-** to adjust the value of the item.

Adjusting the Phase and Frequency

1. Press **MENU** to display the menu main page.
   If the **picture** menu does not display, press **VOL+/-** repeatedly to display **picture** menu page.

2. Press **CH ▲ / ▼** to select **phase** or **frequency** item.

3. Press **VOL+/-** to adjust the value of the item.

4. Press **MENU** to exit.

   You may find that images blur, depending on the clock phase of your PC's Processor. If you experience blurring, you can obtain a clearer image by adjusting the phase setting.
   Adjust the clock frequency of the set's internal clock signal. If shimmering or rainbow like noise is apparent in the image, try adjusting the frequency setting.

Adjusting the Picture Automatically

If you are not satisfied with the picture, you may quickly adjust the picture by using the **AUTO** button. After the **AUTO** button is pressed, the message "Auto running" appears on the screen and the picture adjustments are automatically activated.
Adjustment in PC (VGA) Mode (continued)

Changing the Scaling mode of Image

1. Press **MENU** to display the menu main.
2. Press **VOL+/-** to display **window** menu page.
3. Press **CH** to select **image size** item.
4. Press **VOL+/-** to select **fill all** or **Normal**.
5. Press **MENU** to exit.

- **Fill All** this mode stretches the input vertically and horizontally to fill the full screen. This mode is the default mode.
- **Normal** this mode displays the incoming picture with normal ratio.

Changing the Position of Image

After connecting the unit to your PC, adjust the position of the screen if it is not well aligned.

1. Press **MENU** to display the menu main.
2. Press **VOL+/-** to display window menu page.
3. Press **CH** to select **h position** or **v position** item.
4. Press **VOL+/-** to adjust the value of the item until the screen is well aligned.
5. Press **MENU** to exit.

Displaying the Information

When the **DSP** button is pressed in PC (VGA) mode, the unit displays some information such as the vertical frequency and resolution.
Adjustment in YPbPr Mode

Changing the Scaling mode of Image

1. Press **MENU** to display the menu main page.
2. Press **VOL+/-** to display window menu page.
3. Press **CH** to select image size item.
4. Press **VOL+/-** to select fill all or Normal.
5. Press **MENU** to exit.

- **Fill All**  this mode stretches the input vertically and horizontally to fill the full screen. This mode is the default mode.
- **Normal**  this mode displays the incoming picture with normal ratio.

Changing the Position of Image

After connecting the unit to your device, adjust the position of the screen if it is not well aligned.

1. Press **MENU** to display the menu main
2. Press **VOL+/-** to display window menu page.
3. Press **CH ▲▼** to select h position or v position item.
4. Press **VOL+/-** to adjust the value of the item until the screen is well aligned.
5. Press **MENU** to exit.

Adjusting Image width and height

1. Press **Menu** to display the menu main
2. Press **VOL+/-** to display window menu page.
3. Press **CH ▲▼** to select h wide or v high item.
4. Press **VOL+/-** to adjust the value of the item.
5. Press **Menu** to exit.
Viewing Closed Captions

The unit 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 can also provide closed captions. Most prerecorded commercial video tapes provide closed captions as well. Check for the closed caption symbol in your television schedule and on the tape’s packaging:

Note: The Caption feature works in TV mode only. Not all the programs and videos will offer closed captioning. Please look for the symbol to ensure that captions have been provided.

Setting Closed Caption

1. Press \textit{MENU} to display the menu main page.
2. Press \textit{VOL+/-} to display \textit{settings} menu page.
3. Press \textit{CH} repeatedly to select \textit{close caption} item.
4. Press \textit{VOL+/-} to select \textit{off}, \textit{on} or \textit{on mute} item.
   - \textit{Off}: Turn off the closed caption. If you select \textit{off}, the close caption mode and close capt. background can not be accessed.
   - \textit{On}: Turn on the closed caption.
   - \textit{On Mute}: Turn on the closed caption when mute. If you select \textit{on mute}, the close caption mode and close capt. background can not be accessed unless you mute the sound.
5. Press \textit{CH} to select \textit{close caption mode} item.
6. Press \textit{VOL+/-} to select a desired mode.
   
   You can select between \textit{cc1, cc2, t1, t2, cc3, cc4, t3} and The Closed Caption broadcasts can be viewed in two modes: \textit{CAPTION} and \textit{TEXT}. For each mode, four channels

   The [CAPTION] mode shows subscripts of dialogues and commentaries of TV dramas and news programs while allowing a clear view of the picture. 
   The [TEXT] mode displays various information over the picture (such as TV program schedule, weather forecast, etc.) that is independent of the TV programs.

Setting the Background of Closed Caption

1. Press \textit{MENU} to display the menu main page.
2. Press \textit{VOL+/-} to display \textit{settings} menu page.
3. Press \textit{CH} repeatedly to select \textit{close capt. background} item.
4. Press \textit{VOL+/-} to select \textit{opaque} or \textit{transparent}.
Adjusting V-CHIP Settings

V-CHIP
This function allows TV programs to be restricted and TV usage to be controlled based on FCC data. It prevents children from watching violent or sexual scenes that may be harmful.
Restriction of TV programs includes two ratings that contain information about the program: the MPAA rating and the TV Parental Guidelines. The MPAA rating is restricted by age. TV Parental Guidelines are restricted by age and content.
Since a TV program may use either the MPAA rating or the TV Guidelines, both should be adjusted for complete control.

[1] Movie Rating (MPAA)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>GENERAL AUDIENCES. All ages admitted.</td>
</tr>
<tr>
<td>PG</td>
<td>PARENTAL GUIDANCE SUGGESTED. Some material may not be suitable for children.</td>
</tr>
<tr>
<td>PG 13</td>
<td>PARENTAL STRONGLY CAUTIONED. Some material may be inappropriate for children under 13.</td>
</tr>
<tr>
<td>R</td>
<td>RESTRICTED. Under 17 requires accompanying parent or adult guardian.</td>
</tr>
<tr>
<td>NC 17</td>
<td>NO ONE 17 AND UNDER ADMITTED.</td>
</tr>
<tr>
<td>X</td>
<td>X Rating is an older rating that is unified with NC 17 but may be encoded in the data of older movies.</td>
</tr>
<tr>
<td>NR</td>
<td>NOT RATED.</td>
</tr>
</tbody>
</table>

Note:
The Movie rating is only age based.

Example 1:
“PG-13” in the age based rating is blocked, this will automatically block the higher ratings “R”, “NC-17”, “X” also.

Example 2:
“R” in the age based rating is blocked, this will automatically block the higher rating “NC-17”, “X” also.

<table>
<thead>
<tr>
<th>Rating</th>
<th>D</th>
<th>L</th>
<th>S</th>
<th>V</th>
<th>FV</th>
</tr>
</thead>
<tbody>
<tr>
<td>age based</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV-Y (All children)</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>TV-Y7 (Direct to Older Children)</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>TV-G (General Audience)</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>TV-PG (Parental Guidance)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Suggested</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>TV-14 (Parents Strongly)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

- × ——— Content Rating can be set but this Rating is not normally broadcast by TV Station.
- ● ——— Content Rating can be set.

**Note:**

- **Age based ratings** can be modified by the content based ratings but only in the combinations indicated by an ● in the table above.
- Choosing lower age based rating blocks the higher age based ratings regardless of content ratings settings.

**Example 1:**

When TV-Y7 in the age-based rating is set to BLOCK, this will automatically block the higher ratings: TV-G, TV-PG, TV-14 and TV-MA.

**Example 2:**

When TV-14 in the age-based rating is set to BLOCK, this will automatically block the higher ratings: TV-MA.

In addition, if you block “L” sub-rating in TV-PG, then the “L” sub-ratings in TV-14 and TV-MA will automatically be blocked.
Adjusting V-CHIP Settings (continued)

Accessing the V-CHIP Menu

1. Press **MENU** to display the menu main page.
2. Press **VOL+/-** to display **options** menu page.
3. Press **CH** to select **content blocking** item.
4. Press **VOL+** or **ENTER** to display password menu page.
5. Press **CH** to select **enter** item.
6. Input the password and highlight **OK**.
   - Use **VOL+/-** to move password digit leftward or rightward.
   - Use **CH** to select character for password.
   - The default password is **000000**, you may change the password yourself.
7. Press **ENTER** to access the **V-CHIP** menu.
   - The unit allows you to access the V CHIP menu if you input the right password, or you will be denied.

Changing the Password

1. From the **password** menu page, press **CH** to select **change** item.
2. Input a new password and highlight **OK**.
   - Use **VOL+/-** to move password digit left or right.
   - Use **CH** to select character for new password.
3. Press **ENTER** to confirm.
   - Be sure to write down your password and retain it for future use.
Adjusting the Movie Rating

1. Repeat steps 1~7 in [Accessing the V-CHIP Menu].

2. Press the MENU button.

3. Press VOL+/− to display movie blocking menu page.

4. Press CH ▲/▼ to select a rating to be blocked.

5. Press ENTER to confirm and MENU to return.

“PG 13” in the age based rating is blocked, this will automatically block the higher ratings “R”, “NC 17”, “X” also.

How to unblock a Movie Rating
If you want to unblock a movie rating, please repeat steps 1~3 in [Adjusting the Movie Rating] and use CH ▲/▼ to select a blocked movie rating, then press ENTER to confirm.

Adjusting the TV Rating

1. Repeat steps 1~7 in [Accessing the V-CHIP Menu].

2. Press the MENU button.

3. Press VOL+/− to display tv blocking menu page.

4. Press CH ▲/▼ or VOL+/− to select an age or content rating to be blocked.

5. Press ENTER to confirm and MENU to return.

When TV Y7 in the age based rating is set to BLOCK, this will automatically block the higher ratings: TV G, TV PG, TV 14 and TV MA. In addition, if you block “L” sub rating in TV PG, then the “L” sub ratings in TV 14 and TV MA will automatically be blocked.

Note:
Since a TV program may use either the MPAA rating or the TV Guidelines, both should be adjusted for complete control.

How to unblock a TV Rating
If you want to unblock a TV rating, please repeat steps 1~3 in [Adjusting the TV Rating] and use CH ▲/▼ or VOL+/− to select a blocked TV rating (including age rating and content rating), then press ENTER to confirm.
Troubleshooting

Before calling for repair service, check the following items for possible remedies to an encountered symptom.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Check item</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Ghost” or double images</td>
<td>• This may be caused by obstruction to the antenna due to high rise buildings or hills. Using a highly directional antenna may improve the picture.</td>
</tr>
<tr>
<td>No power</td>
<td>• Check that the AC power cord is plugged into the mains socket.</td>
</tr>
<tr>
<td></td>
<td>• Unplug the power cord, wait for 60 seconds. Then re insert plug into the mains socket and turn on the unit again.</td>
</tr>
<tr>
<td>No picture</td>
<td>• Check antenna connections at the rear of the unit to see if it is properly connected to the unit.</td>
</tr>
<tr>
<td></td>
<td>• Possible broadcast station trouble. Try another channel.</td>
</tr>
<tr>
<td></td>
<td>• Adjust the contrast and brightness settings.</td>
</tr>
<tr>
<td></td>
<td>• Check the Closed Captions control. Some TEXT modes could block the screen.</td>
</tr>
<tr>
<td></td>
<td>• Select a correct input.</td>
</tr>
<tr>
<td></td>
<td>• Is a non compatible signal being used?</td>
</tr>
<tr>
<td>Good picture but no sound</td>
<td>• Increase the VOLUME.</td>
</tr>
<tr>
<td></td>
<td>• Check that the unit is not muted.</td>
</tr>
<tr>
<td></td>
<td>• Check Whether the sound is output to headphone</td>
</tr>
<tr>
<td>Good sound but poor color</td>
<td>• Adjust the contrast, color and brightness settings.</td>
</tr>
<tr>
<td>Poor picture</td>
<td>• Sometimes, poor picture quality occurs when having activated an S VHS camera or camcorder connected and having connected another peripheral at the same time. In this case, switch off one of the other peripherals.</td>
</tr>
<tr>
<td>Horizontal dotted line</td>
<td>• This may be caused by electrical interference (e.g. hairdryer, nearby neon lights, etc.)</td>
</tr>
<tr>
<td></td>
<td>• Turn off the equipment.</td>
</tr>
<tr>
<td>Television not responding to</td>
<td>• Check whether the batteries are working. Replace if necessary.</td>
</tr>
<tr>
<td>remote control</td>
<td>• Clean the remote control sensor lens on the unit.</td>
</tr>
<tr>
<td></td>
<td>• Do not use the remote control under strong or fluorescent lighting.</td>
</tr>
<tr>
<td></td>
<td>• The batteries should be inserted with polarity (+, ) aligned.</td>
</tr>
<tr>
<td>Snowy picture and noise</td>
<td>• Check the antenna connection.</td>
</tr>
<tr>
<td>No stable or not</td>
<td>• Check if you have selected the correct VGA mode in your PC.</td>
</tr>
<tr>
<td>synchronized VGA picture</td>
<td></td>
</tr>
<tr>
<td>No output from one of the</td>
<td>• Adjust Balance in the <strong>audio</strong> menu.</td>
</tr>
<tr>
<td>speakers</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
If your problem is not solved, restart your TV by turning it off and then on using the POWER SWITCH.
Never attempt to repair a defective TV yourself.
**Specifications:**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Number:</strong></td>
<td>AR4200</td>
</tr>
<tr>
<td><strong>UPC number:</strong></td>
<td>0-44476-01943-2</td>
</tr>
<tr>
<td><strong>Display Specifications</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Display Type:</strong></td>
<td>Plasma</td>
</tr>
<tr>
<td><strong>Screen Size:</strong></td>
<td>42” (diagonal)</td>
</tr>
<tr>
<td><strong>Aspect Ratio:</strong></td>
<td>16:9 aspect</td>
</tr>
<tr>
<td><strong>Resolution (native):</strong></td>
<td>852 (H) x 480 (V)</td>
</tr>
<tr>
<td><strong>Active Area:</strong></td>
<td>36.73 inches (H) x 20.98 inches (V)</td>
</tr>
<tr>
<td><strong>Brightness:</strong></td>
<td>640 Cd/m² (Avg)</td>
</tr>
<tr>
<td><strong>Contrast Ratio:</strong></td>
<td>1000:1 aspect (Avg)</td>
</tr>
<tr>
<td><strong>Viewing Angle:</strong></td>
<td>160/160</td>
</tr>
<tr>
<td><strong>Dot Pitch:</strong></td>
<td>1.095 x 1.110mm</td>
</tr>
<tr>
<td><strong>Maximum Color:</strong></td>
<td>16,777,216</td>
</tr>
<tr>
<td><strong>MTBF Value</strong>*</td>
<td>30,000hours (8Hr/Day)</td>
</tr>
<tr>
<td><strong>TV Reception</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TV System:</strong></td>
<td>NTSC</td>
</tr>
<tr>
<td><strong>Channel:</strong></td>
<td>181 Channel Cable/Air</td>
</tr>
<tr>
<td><strong>Antenna Impedance:</strong></td>
<td>VHF-L, VHF-H, UHF 75 Ohm</td>
</tr>
<tr>
<td><strong>Connector type:</strong></td>
<td>Coax F-Connector</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Audio Output:</strong></td>
<td>10watt x 2ch</td>
</tr>
<tr>
<td><strong>Output connection:</strong></td>
<td>spring clips</td>
</tr>
<tr>
<td><strong>Total number of speakers:</strong></td>
<td>0</td>
</tr>
<tr>
<td><strong>Connections</strong></td>
<td><strong>Quantity</strong></td>
</tr>
<tr>
<td>RF: TV/CATV 75ohms coaxial</td>
<td>1</td>
</tr>
<tr>
<td>Composite Video input</td>
<td>1</td>
</tr>
<tr>
<td>S-Video input (4pin DIN)</td>
<td>1</td>
</tr>
<tr>
<td>L/R Audio for Composite/S-Video input</td>
<td>1 (RCA)</td>
</tr>
<tr>
<td>Component input (Y,Pb/Cb,Pr/Cr)</td>
<td>2 (480i/p, 720p**, 1080p**)</td>
</tr>
<tr>
<td>Component audio input jack</td>
<td>2 (3.5mm)</td>
</tr>
<tr>
<td>VGA input15 pin D-Sub</td>
<td>1 (640x480)</td>
</tr>
<tr>
<td>VGA audio input jack</td>
<td>1 (3.5mm)</td>
</tr>
<tr>
<td>DVI-D input</td>
<td>1 (not intended for PC use)</td>
</tr>
<tr>
<td>DVI audio input jack</td>
<td>1 (3.5mm)</td>
</tr>
<tr>
<td>Headphone:mini stereo jack</td>
<td>1 (3.5mm)</td>
</tr>
<tr>
<td>Composite Video output</td>
<td>1</td>
</tr>
<tr>
<td>L/R Audio for Composite output</td>
<td>1 (RCA)</td>
</tr>
<tr>
<td>RS232</td>
<td>1 (Service only)</td>
</tr>
<tr>
<td><strong>Video Standards supported</strong></td>
<td></td>
</tr>
<tr>
<td>Composite Video input</td>
<td>NTSC</td>
</tr>
<tr>
<td>Composite Video output</td>
<td>NTSC</td>
</tr>
<tr>
<td>S-Video Input</td>
<td>NTSC</td>
</tr>
<tr>
<td>RF</td>
<td>NTSC</td>
</tr>
<tr>
<td><strong>Specifications:</strong></td>
<td><strong>Features</strong></td>
</tr>
<tr>
<td>EDTV Ready</td>
<td></td>
</tr>
<tr>
<td>Progressive scan display</td>
<td></td>
</tr>
<tr>
<td>High Contrast Ratio</td>
<td></td>
</tr>
<tr>
<td>High Brightness (Cd/m²)</td>
<td></td>
</tr>
<tr>
<td>3D Digital Comb Filter</td>
<td></td>
</tr>
<tr>
<td>Picture in Picture (PIP) / Split screen / POP3 / Grid</td>
<td></td>
</tr>
<tr>
<td>Parental Control with V-Chip</td>
<td></td>
</tr>
<tr>
<td>Closed Captions (CC)</td>
<td></td>
</tr>
<tr>
<td>Sleep (Power/OFF)</td>
<td></td>
</tr>
<tr>
<td>Model Specific Remote</td>
<td></td>
</tr>
<tr>
<td>Wall mounting bracket included</td>
<td></td>
</tr>
<tr>
<td>User friendly OSD Menu</td>
<td></td>
</tr>
<tr>
<td>OSD Menu in Opaque or Translucent background</td>
<td></td>
</tr>
<tr>
<td>181 Channel Cable/Air Ready</td>
<td></td>
</tr>
<tr>
<td>Personal Computer (PC) support (VGA 15 pin D-Sub)</td>
<td>2 sets of component inputs</td>
</tr>
<tr>
<td>On Screen Audio Equalizer</td>
<td></td>
</tr>
<tr>
<td>No Cooling fans</td>
<td></td>
</tr>
<tr>
<td>Screen Mode (normal 4:3, Wide 16:9, zoom, fill all)</td>
<td>Preset Mode and Video settings</td>
</tr>
<tr>
<td>Power Source</td>
<td>AC100V-240V, 60/50Hz</td>
</tr>
<tr>
<td>Unit input power</td>
<td>AC100V-240V, 60/50Hz</td>
</tr>
<tr>
<td>Power ON consumption</td>
<td>400W</td>
</tr>
<tr>
<td>Standby consumption</td>
<td>5W</td>
</tr>
<tr>
<td><strong>Dimension (WxHxD):</strong></td>
<td></td>
</tr>
<tr>
<td>Unit W/stand</td>
<td>41.3 x 28.9 x 11.4 inches</td>
</tr>
<tr>
<td>Unit W/O stand</td>
<td>41.3 x 25.5 x 3.2 inches</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
</tr>
<tr>
<td>Unit W/Stand</td>
<td>81.4lbs</td>
</tr>
<tr>
<td>Unit W/O Stand</td>
<td>70.4lbs</td>
</tr>
<tr>
<td>G.W. Carton</td>
<td>99.0lbs</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td></td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 to 50</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>20 to 80% RH</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-55 to 60 p</td>
</tr>
<tr>
<td>Storage Humidity</td>
<td>20 to 80% RH</td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>1 Year</td>
</tr>
<tr>
<td>Parts and Labor</td>
<td></td>
</tr>
</tbody>
</table>

* measured at peak

** signal down converted to native resolution

*** Based on brightness at 50 percent, (Average time)
## Display Format Supported by This Unit

<table>
<thead>
<tr>
<th>VGA Format</th>
<th>Refresh Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x480 @ 60Hz, 72Hz, 75Hz, 85Hz</td>
<td>800x600 @ 60Hz, 72Hz, 75Hz, 85Hz</td>
</tr>
<tr>
<td>1024x768 @ 60Hz, 75Hz, 85Hz</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YPbPr Format</th>
<th>Refresh Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>480p @ 50Hz, 59Hz, 60Hz</td>
<td></td>
</tr>
<tr>
<td>720p @ 50Hz, 59Hz, 60Hz</td>
<td></td>
</tr>
<tr>
<td>1080i @ 50Hz, 59Hz, 60Hz</td>
<td></td>
</tr>
</tbody>
</table>
Design and specifications are subject to change without notice.