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## Before Use

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Before operating the tv, please read this manual thoroughly. This manual should be retained for future reference.

### ***FCC Class B Radio Frequency Interference Statement WARNING: (FOR FCC CERTIFIED MODELS)***

**NOTE:** This equipment has been tested and found to comply with the limits 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:

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

### **NOTICE:**

1. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibilities of the user to correct such interference.
2. To avoid the risk of electric shock or component damage, switch off the power before connecting the PDP to other devices, such as VCR, DVD or PC.

## Introduction

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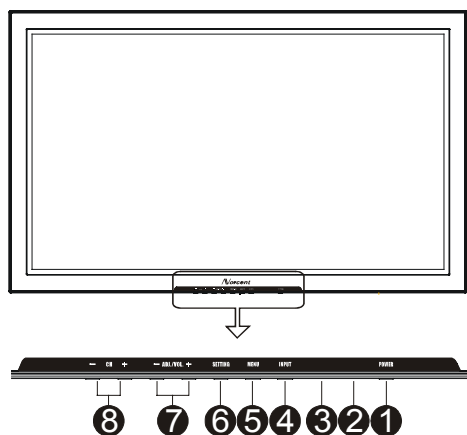
### The features you'll enjoy include:

- Advanced DCDi Sampling Progressive Scan method is employed.
- 480p, 720p and 1080i HDTV signal compatibility.
- PCs, VCRs, Laser Disc and DVD player source compatibility.
- RGB input (2\*), Video input (2\*), YPbPr or YCbCr input (1\*), Audio input (3), External Control input (1).
- Component video input terminal for DVD, 15.75 kHz (YCbCr), 31.5 kHz (YPbPr).
- Receive TV / cable broadcasting program.

### Contents of the Package

- Video/Audio cable (RCA pin jack to RCA pin jack connector × 3 ).

## Part Names and Function



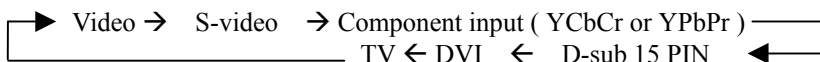
|    |                               |
|----|-------------------------------|
| 1. | POWER                         |
| 2. | POWER/Standby Indicator       |
| 3. | REMOTE SENSOR Windows         |
| 4. | INPUT Select                  |
| 5. | MENU                          |
| 6. | SETTING                       |
| 7. | ADJ. +, ADJ. - / VOL +, VOL - |
| 8. | CH+, CH-                      |

### Front View

#### 4. INPUT Select

Switch the input in the following order.

The available component input depends on the setting of “component input”.



#### 5. MENU

Sets the On-Screen Display (OSD) Menu mode and displays the main menu.

#### 6. SETTING

- In the on screen menu execute the selected highlight item or level setting
- Not in the on screen menu mode:  
Switches the second screen input in the following order

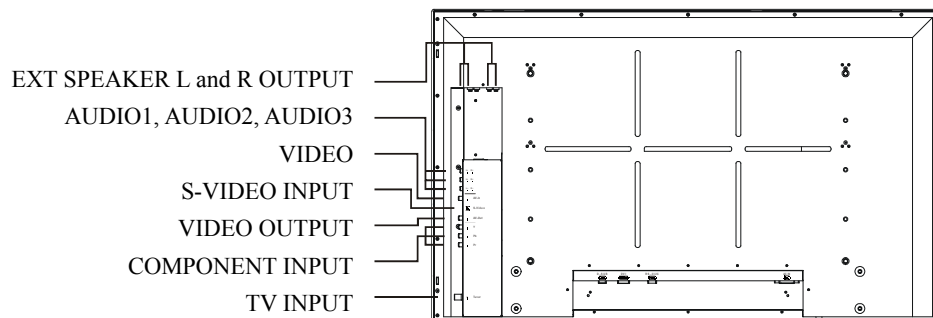


#### 8. CH+, CH- (Only for TV function)

Increase / decrease TV channel number.

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## Rear View / Terminal Board



### EXT SPEAKER L and R OUTPUT

Connect [external](#) speakers here. Maintain the correct polarity.

### AUDIO1, AUDIO2, AUDIO3

These are Audio input terminals.

[You can select the video source to match the audio source on the OSD menu.](#)

[The Audio3 can be set either input or output mode on the OSD menu.](#)

### VIDEO, S-VIDEO INPUT

[Connect composite signal to VIDEO INPUT. Connect S-Video signal to S-VIDEO INPUT.](#)

### VIDEO OUTPUT

Output the video in composite video format.

### COMPONENT INPUT

YPbPr signal : [Connect YPbPr video signal from video source, such as progressive scan DVD player.](#)

YCbCr signal : [Connect YCbCr video signal from video source, such as non-progressive scan DVD player.](#)

### TV INPUT

[Receive TV/cable broadcasting program.](#)

## Remote Control

### POWER

Switches power ON/OFF.  
(This does not operate when  
POWER/STANDBY indicator of the main  
unit is off.)

### VIDEO

Press this button to select video source on main screen.

→ VIDEO → S-VIDEO → COMPONENT VIDEO

VIDEO can also be selected using the INPUT SELECT  
button on the **TV**.

### COMP

Press this button to select component video  
source on MAIN screen.

### 0 ~ 9 –100 numeral keypad

Input TV channel number directly.

Example: select channel 20, directly key in  
“2”, “0”. To select channel 8, you can  
directly key in “0”, “8”, or only key in “8”  
you must be wait for 5 sec.

Select channel 104, directly key in “100”,  
“0”, “4”

### A, B

Preset two channel hot key.

### PIP

Normal → PIP → POP 2 (LEFT &  
RIGHT) → NORMAL

### PIP I/P

Press this button to select video source on  
second screen.

### MENU

DISPLAY OSD MENU

### ADJ+, ADJ-

Highlight the submenu or item you wish to  
enter

Adjust the level or change the setting of the  
selected item

### FREEZE

freeze on → freeze off → freeze on



### V-CHIP

RISTRICT TV and Movie Viewing  
according to the parental level  
chosen.

The preset PIN number to allow  
modification of the parental level set  
is “0000”.

Change this number to one you can  
remember the master PIN number  
will show as “xxxx” and if forgotten  
cannot be reset.

### MUTE

MUTE ON → MUTE OFF → MUTE ON

### GRAPHIC

Inputs RGB signal of personal computer,  
etc.

RGB:

→ D\_sub 15 pin → DVI

### TV

Switch to TV channel

### CH+, CH-

Increase / decrease TV channel number.

### CHRTN

At TV mode to exchange channel between  
currently channel and before channel

At channel scan press “CHRTN” KEY to  
stop channel scan.

### VOL +, VOL -

Volume up / down.

### MTS

Select stereo, mono or SAP.

### WIDE

4:3 → 16:9 → ZOOM 1 (VIDEO ONLY) →  
ZOOM 2 (VIDEO ONLY) → 4:3  
(ZOOM 1 and ZOOM 2 only work on  
composite video, s-video and component video.)

### SWAP (PIP & POP mode only)

Swap the screen of PIP or POP  
(Only work at main screen source VIDEO/S-  
VIDEO/YCbCr)

### ENTER

Execute the selected highlight item or level  
setting

### CCD

Setting the caption to turn on or off

### SLEEP

NO TURN OFF → 30 MIN OFF → 60 MIN  
OFF → 90 MIN OFF → 120 MIN OFF →  
NO TURN OFF

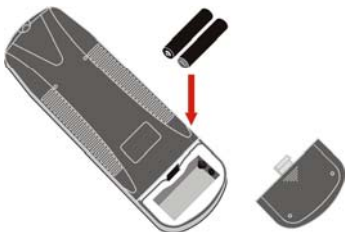
### Reserved keys

TT, HOLD, SUBTITLE  
REVEAL, R, G, Y, C, EXIT,  
INDEX, MIXER, DISPLAY

\*For teletext control only

## Battery Installation and Replacement

Insert the battery, making sure to set them in with the proper polarity.

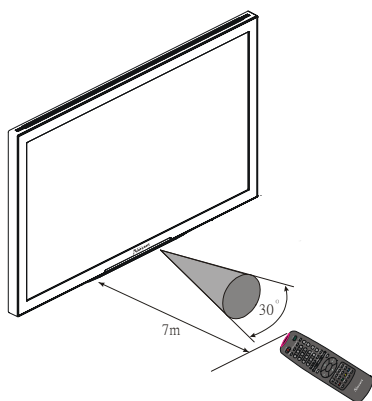
|                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1. Press and open the cover.                                                      | 2. Align the batteries according to the (+) and (-) indication inside the case.   | 3. Replace the cover.                                                               |
|  |  |  |

### BATTERY CAUTIONS

- \* Use only the size and type of batteries specified.
- \* Be sure to follow the correct polarity when installing the batteries as indicated in the battery compartment. Reversed batteries may cause damage to the device.
- \* Do not mix different types of batteries together (e.g. alkaline and carbon-zinc) or old batteries with fresh ones.
- \* If the device is not to be used for a long period of time, it is required to remove the batteries to prevent damage or injury from possible battery leakage.
- \* Do not try to recharge batteries which is not intended to be recharged; they can overheat and rupture. (follow battery manufacturer's directions)
- \* Weak batteries can leak and severely damage the unit.
- \* Always remove batteries as soon as they become weak.
- \* The batteries of remote control may last approximately one year depending on how much the remote control is used.
- \* For the best performance it is recommended the batteries of remote control be replaced on a yearly basis, or when remote control operation becomes erratic.
- \* Do not take apart the batteries, heat them, or throw them into a fire.

### Operating Range

- \* Use the remote control within a distance of about 7m/23ft. from the front of the tv's remote control sensor and at horizontal and vertical angles of up to approximately 30°.
- \* The remote control operation may not function if the tv's remote control sensor is exposed to direct sunlight or strong artificial light, or if there is an obstacle between the sensor and the remote control.



### Handling the remote control

- Do not drop or mishandle the remote control.
- Do not get the remote control wet. If the remote control gets wet, wipe it dry immediately.
- Avoid heat and humidity.

## Installation

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### Connecting Your VCR or Laser Disc Player

Use common RCA cables to connect your VCR or laser disc player to your plasma tv. To make these connections, simply:

1. Turn off the power to your plasma tv and VCR or laser disc player.
2. Connect one end of your RCA video to the video output connector on the back of your VCR or laser disc player, connect the other end to the Video input on your plasma tv. Use standard RCA audio patch cords to connect the audio from your VCR or laser disc player to your plasma tv (if your VCR or laser disc player has this capability). Be careful to keep your right and left channel connections correct for stereo sound.
3. Turn on the plasma tv and the VCR or laser disc player.

**Note:** Refer to your VCR or laser disc player owner's manual for more information about your equipment's video output requirements.

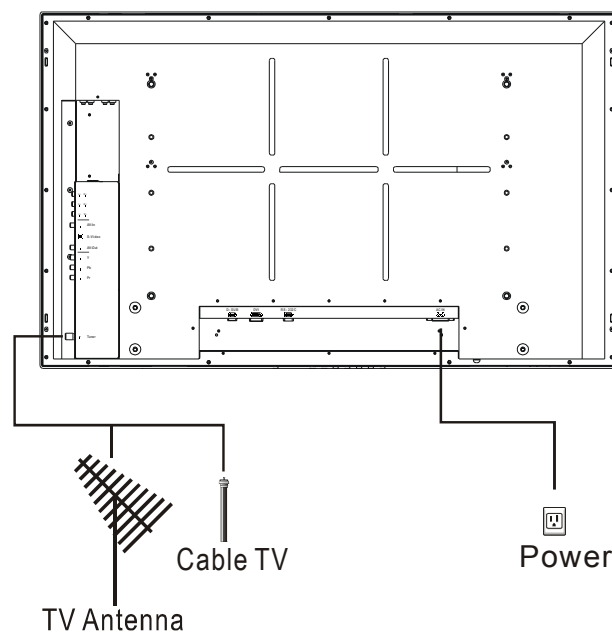
### Connecting TV system

Use 75  $\Omega$  standard coaxial cable to your plasma TV, To receive TV program.

For reduce noise of the RF signal level then we suggest that custom uses shielding coaxial cable to get good quality of signal. To make these connections, simply:

1. Turn off the power to your plasma tv.
2. Connect one end of your coaxial cable to the RF input on your plasma tv.
3. Turn on the plasma tv.

此图中的单词



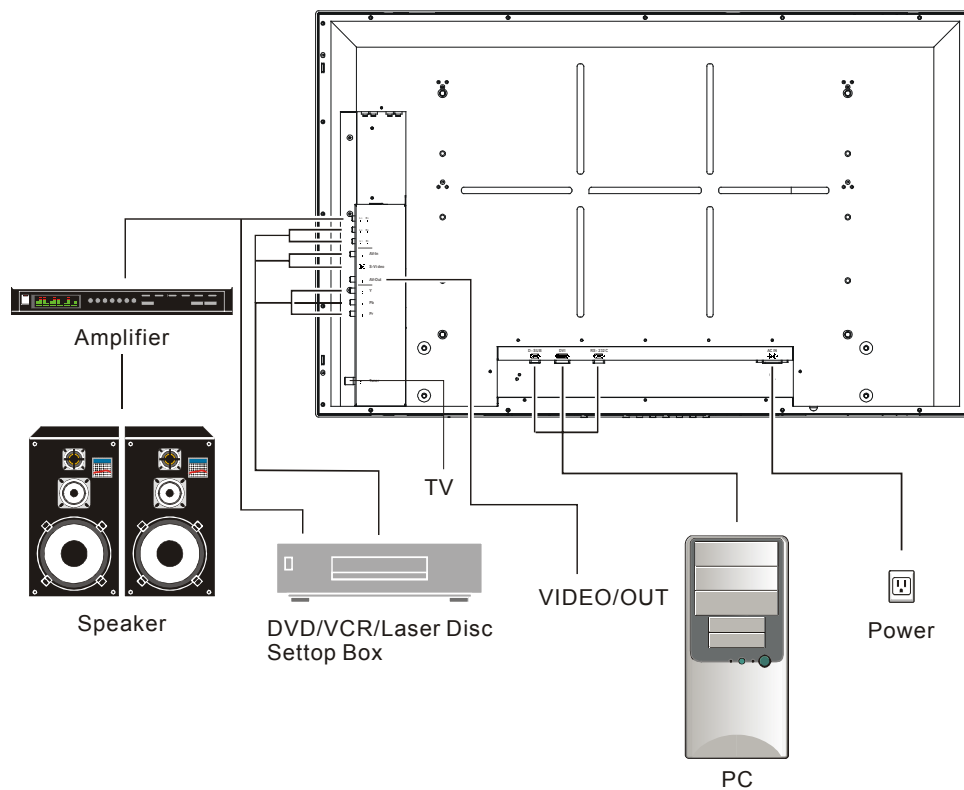
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## Connecting Your DVD Player

You can connect your plasma tv to a DVD player. To do so, simply:

1. Turn off the power to your plasma **tv** and DVD player.
2. Use a video cable (with Yellow RCA terminal) to connect your DVD player to the video input of plasma TV. If your DVD player has component video output (YCbCr or YPbPr), use component cable to connect to component inputs on your plasma TV. Or use the DVD player's S-Video output. Use a standard S-Video cable to connect to the S-Video input on the plasma TV S-Video input.
3. Use a pair of RCA audio cable (with Red and White RCA terminals) to connect the audio outputs of DVD player to one of the audio inputs on plasma TV.
4. Turn on the plasma **tv** and the DVD player.

此图中的单词



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## External Speaker Connections

External speakers (Option) may be connected to the plasma tv to reproduce sound.

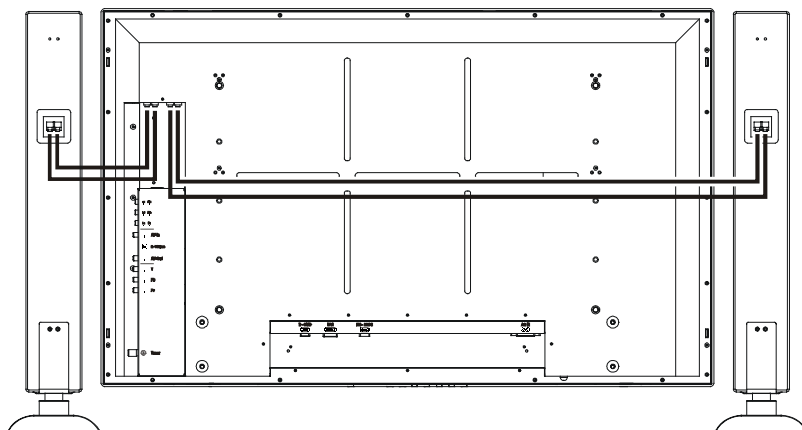
External speakers may be connected directly to the EXT SPEAKER L and R Output terminals.

(Connect EXT SPEAKER OUTPUTS to external speakers only. DO not connect EXT SPEAKER OUTPUTS to audio power amplifier, because you may damage the audio power amplifier.)

**CAUTION:** Unplug the plasma tv and all connected components before connecting external speakers. Use only speakers with 8-ohm impedance and a power input rating of 10 watts or more.

To connect external speakers directly to the plasma tv:

1. Strip the ends of the speaker wires.
2. Press down the tabs below the SPEAKERS terminals, insert the speaker wire and release the tab to secure the speaker wire connection:
  - (a) Connect the right speaker (located at right side of the tv when viewed from the front) positive (+) wire to RIGHT +.
  - (b) Connect the right speaker negative (-) wire to RIGHT -.
  - (c) Connect the left speaker negative (-) wire to LEFT -.
  - (d) Connect the left speaker positive (+) wire to LEFT+.

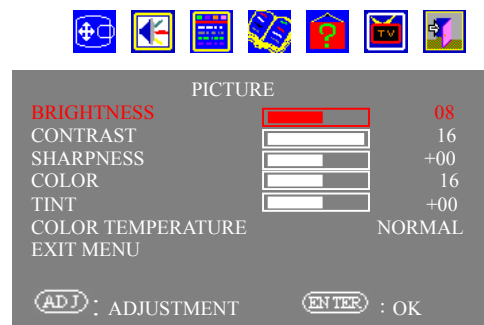
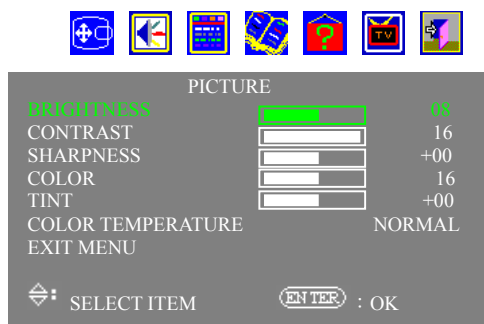
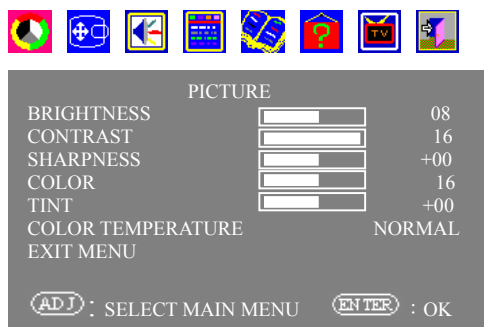


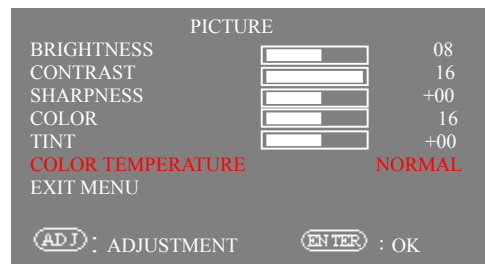
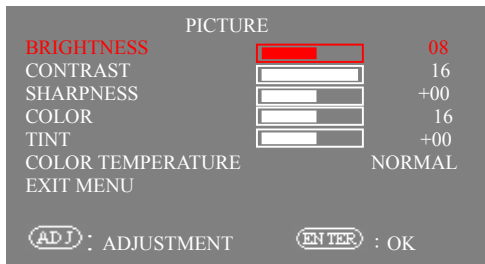
## OSD (On Screen Display) Controls

### Menu Operations

*Your PDP screen has an easy and convenient menu operation system. It helps you to use each PDP function quickly.*

1. After powering on PDP, press the MENU button on the remote control. The menu operation system will display on the screen.
2. Press the ADJ+/ADJ- button on the remote control to display, change, or use the selected menu. Press the ENTER button to enter each item on the menu (now the item glows green); if you need to change the selected item, press the ENTER button again to make changes (now the item glows red). After the change is made, press the ENTER button to exit the menu setup. If no operation is detected, the on screen menu will disappear after 20 seconds. You may also exit menu operation interface quickly by pressing the MENU button on the remote control.





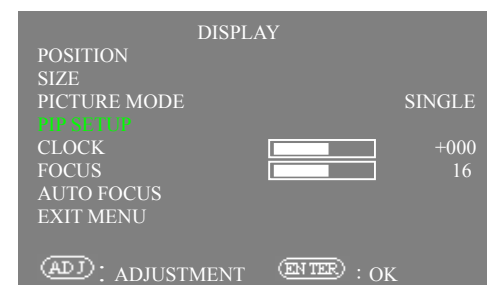
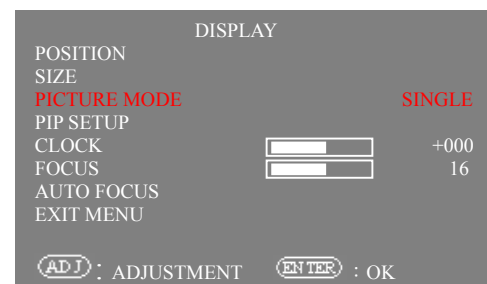
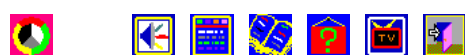
## Picture Quality Adjustment

*Your PDP has the following setup options which allow you to improve the picture quality.*

Brightness, contrast, sharpness, color, tint (only for NTSC), and color temperature.

When the Picture is selected, you can adjust the following items:

1. Press MENU button to display the menu operation interface on the screen.
2. Press ADJ+/ADJ- button to select Picture menu. Then press ENTER again to enter Picture submenu (selected item glows green).
3. Press ADJ+/ADJ- button to select the item you need then press ENTER button again to enter the selected adjustment submenu (Now the item glows red).
4. Adjustment items... Press ADJ+/ADJ- ...
  - Brightness Increase or decrease
  - Contrast
  - Sharpness
  - Color
  - Tint
  - Color Temperature Select desired color temperature (Normal, cold, warm)
5. If you are satisfied with your setup, press ENTER button again to complete menu setup (selected adjustment item glows green again).



## Picture-in-Picture

*You can select Picture-in-Picture (PIP) display mode to display two different pictures on the screen.*

Note: TV and composite video pictures cannot be displayed at the same time under PIP mode.

When the component input is YCBCR, if the primary picture input is TV or VIDEO, then YCBCR or S-VIDEO can be displayed as the secondary picture.

When the component input is YPBPR, if the primary picture input is TV or VIDEO, then only S-VIDEO can be displayed as the secondary picture.

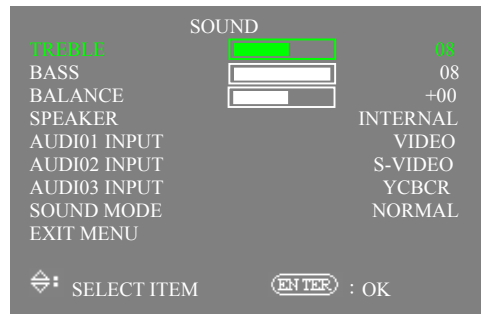
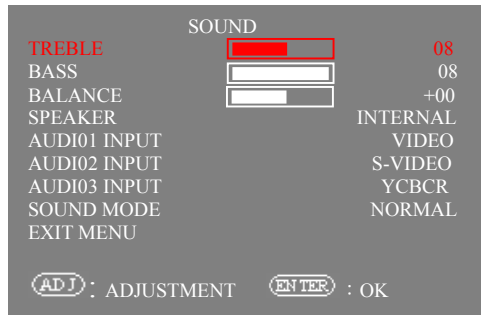
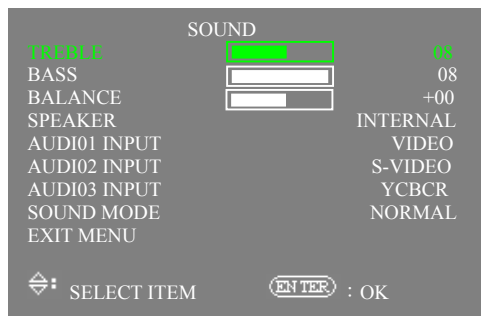
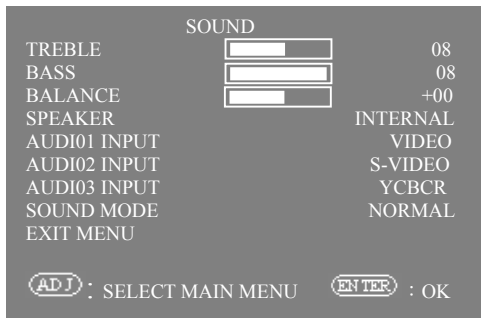
1. Press MENU button to display the menu operation interface on the screen.
2. Press ADJ+/ADJ- button to select Display menu and then press ENTER button.
3. Press ADJ+/ADJ- button to select the Display Mode under Display menu, and then press the ENTER button (now the Display Mode item glows red).
4. Press ADJ+/ADJ- button again to select PIP, and then press the ENTER button. PIP mode is displayed on the screen.

You can also turn on PIP function by using remote control.

Meanwhile, you can use the buttons on the remote control to operate more functions.

|     | Button name | Function Descriptions                              |
|-----|-------------|----------------------------------------------------|
| 1 . | PIP         | Turn on/off PIP/POP functions.                     |
| 2 . | VIDEO       | Select the display mode of the primary picture.    |
| 3 . | PIP I/P     | Select the display mode of the secondary picture.  |
| 4 . | SWAP        | Switch between the primary and secondary pictures. |

## Sound Setup



- Your PDP has an external/internal speaker selecting function. You can select different functions based on your preferences.
- Your PDP has three sets of audio input options which allow you to setup the audio input method as you wish and brings you more enjoyment.
- You can adjust the audio setup based on your preferences.

Treble, bass, balance, sound mode.

Your PDP was manufactured upon the certification and authorization of BBE Company.

1. Press MENU button to display the menu operation interface on the screen.
2. Press ADJ+/ADJ- button to select the sound menu and then press ENTER button.
3. Press ADJ+/ADJ- button to select the item you want to adjust and then press the ENTER button to enter the selected adjustment item (now the item glows red).
4. Adjustment Item      Press ADJ+/ADJ- ...
 

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
| Treble       | Increase or decrease                                            |
| Bass         | Increase or decrease                                            |
| Balance      | Increase or decrease                                            |
| Speaker      | Internal or external                                            |
| Sound Mode   | Select the sound mode desired.<br>(Normal, 3D Stereo, WOW, BBE) |
| AUDIO1 Input | Select input mode<br>( VIDEO, S-VIDEO, YCBCR/YPBPR, RGB, DVI )  |
| AUDIO2 Input | Select input mode<br>( VIDEO, S-VIDEO, YCBCR/YPBPR, RGB, DVI )  |
| AUDIO3 Input | Select input mode<br>( VIDEO, S-VIDEO, YCBCR/YPBPR, RGB, DVI )  |
5. If you are satisfied with the setup, press the ENTER button again to complete the menu setup (selected adjustment item glows green again).



## Function Setup

*Your PDP adds some special functions in the function setup menu to provide you with more benefits.*

### OSD

By turning on this function, you can see the current screen display mode while watching and changing programs.

### Auto Off

By turning on this function, if there is no signal input detected for a period of time, PDP will be turned off automatically to save energy.

### White Screen

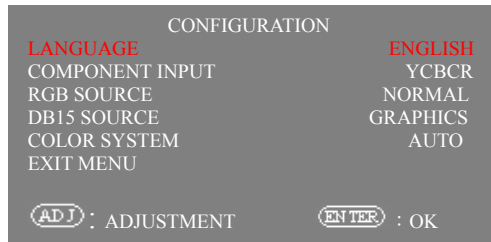
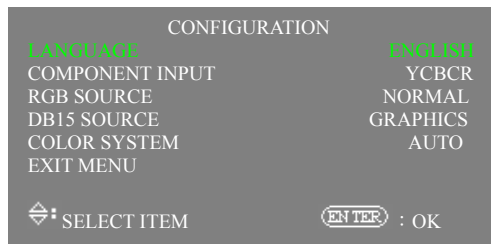
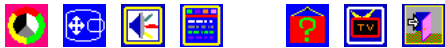
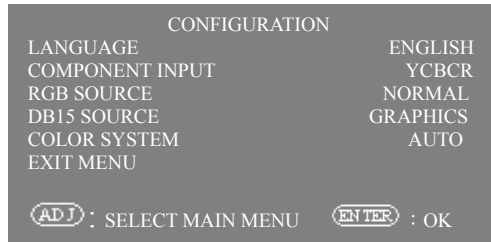
This function is usually turned off under normal situations. It is used as a screen evaluation tool while repairing PDP.

### Reset

Reset to factory's default settings.

1. Press the MENU button to display the menu operation interface on the screen.
2. Press ADJ+/ADJ- button to select Function menu and then press the ENTER button.
3. Press ADJ+/ADJ- button to select the item you want to adjust and then press the ENTER button to enter the adjustment item selected (now the item glows red).
4. Adjustment Item... Press ADJ+/ADJ-..

|              |                             |
|--------------|-----------------------------|
| OSD          | On or off                   |
| Auto Off     | On or off                   |
| White Screen | On or off                   |
| Reset        | Press ENTER button to reset |



## Language Selection

*When you use PDP for the first time, please select the desired OSD language.*

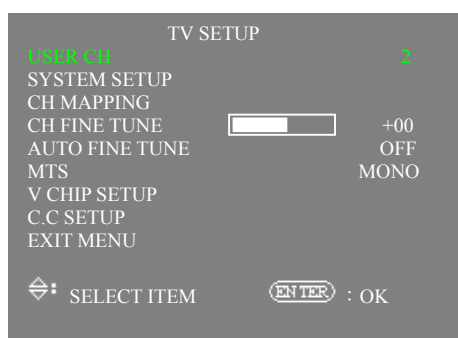
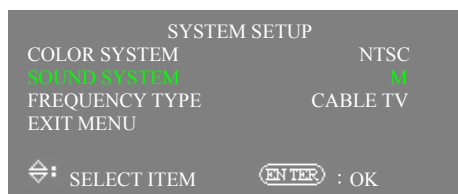
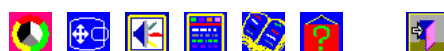
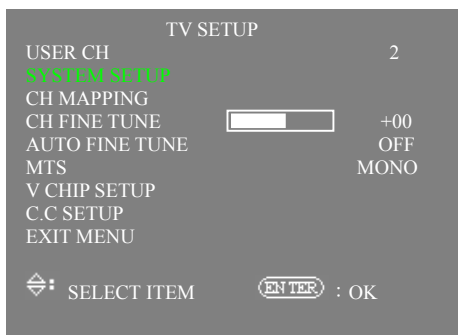
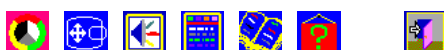
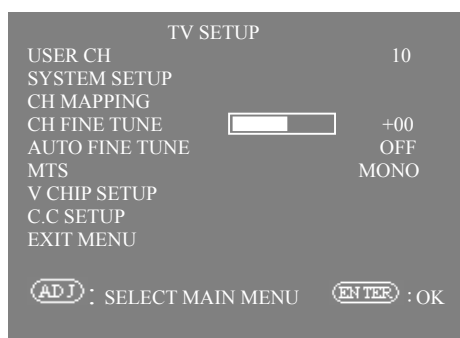
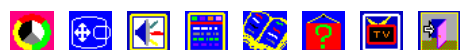
1. Press the MENU button on the remote control to display the menu operation interface on the screen.
2. Press the ADJ+/ADJ- button to select the Configuration menu and then press ENTER button.
3. Press the ADJ+/ADJ- button to select the Language option under the Configuration menu and then press the ENTER button (now the Language option glows red).
4. Press the ADJ+/ADJ- button again to select the language you desire. Then press the ENTER button to exit the Language submenu.



## Information Inquiry

*You can obtain the information of the current PDP input signal by using this function.*

1. Press the MENU button to display the menu operation interface on the screen.
  2. Press the ADJ+/ADJ- button to select the Information menu.
- The signal input information of the primary and secondary pictures will be displayed on the screen.



## TV Setup Operations

You can use your PDP in many different countries. Each country has its own TV broadcast standard. You can select the TV system you need in the TV Setting menu based on the TV standard of your country.

### User CH

The user can setup the TV channels to a mode that he/she is more familiar with.

### CH Fine Tune/Auto Fine Tune

In some areas with weaker TV signals, you can use this function to modify and correct the signal to obtain a better picture on the screen.

1. Press the MENU button to display the menu operation interface on the screen.
2. Press the ADJ+/ADJ- button to select the TV Setup menu and then press ENTER button.
3. Press the ADJ+/ADJ- button to select the item you wish to adjust and then press the ENTER button to enter the selected item (now the item glows red).
4. Adjustment Item... Press ADJ+/ADJ- ...  
 System Setup Select the item to adjust  
 (The adjusting method is the same as the menu operation.)  
 CH Fine Tune Increase or decrease  
 Auto Fine Tune On or off  
 MTS Select "Mono"、"Stereo"、"Sap"  
 V Chip Setup The V-Chip reads information encoded in the rated program and blocks programs from the set based upon the rating selected by the parent.  
 C.C Setup Setting the caption to turn on or off
5. If you are satisfied with the setup, press the ENTER button again to complete the setup (the selected adjustment item glows green again).

When you use the PDP's TV function the first time, we recommend channel scanning after selecting the required TV system. This lets you to watch more and higher quality TV programs.

If the signal is weaker in the area you live, we recommend you use the auto channel scanning.

1. Press the MENU button to display the menu operation interface on the screen.
2. Press the ADJ+/ADJ- button to select the TV Setup menu and then press ENTER button.
3. Press the ADJ+/ADJ- button to select CH Mapping option and then press ENTER button to enter the CH Mapping adjustment item.
4. Press the ADJ+/ADJ- button again to select the Channel Scan option and then press ENTER button. This item glows red.
5. Press the ADJ+/ADJ- button to select "on" and then press the ENTER button. The system turns on the channel scanning function.

## RS232C Control

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### Application

Only use in factory.

Table of HDTV resolution supported.

|           |       | H(KHz) | V(Hz) | Dot clock |
|-----------|-------|--------|-------|-----------|
| 720*480   | 480p  | 31.54  | 60.08 | 27.00     |
| 1280*720  | 720p  | 45.00  | 60.00 | 74.25     |
| 1920*1080 | 1080i | 33.75  | 30.00 | 74.25     |

## Troubleshooting

If the picture quality is poor or there is some other problem, check the adjustments, operations, etc., before requesting service.

| Symptom                                   | Checks                                                                                                                | Remedy                                                                                                        |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Picture appears but no sound is Produced. | •Is the volume set at the minimum?                                                                                    | •Increase the volume.                                                                                         |
|                                           | •Is the mute mode set?                                                                                                | •Press the remote control's MUTE button.                                                                      |
|                                           | •Are the speakers properly connected?                                                                                 | •Connect the speakers properly.                                                                               |
|                                           | •Is AUDIO INPUT set correctly?                                                                                        | •Set AUDIO INPUT on the SOUND menu correctly.                                                                 |
| Poor picture with VIDEO signal input.     | •Improper control setting.<br>Local interference.<br>Cable interconnections.<br>Input impedance is not correct level. | •Adjust picture control as needed.<br>Try another location for the tv.<br>Be sure all connections are secure. |

## Specifications

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Signals   | RGB, NTSC, PAL, HD*1, DVD*1, DTV*1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Input Terminals |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| RGB             | ANALOG RGB: 1 * mini D-sub 15-pin<br>DIGITAL RGB: 1 * DVI-D 29-pin<br>(Not compatible with analog input)                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Video           | COMPOSITE VIDEO: 1 * RCA<br>S-Video: 1 * DIN 4-pin<br>COMPONENT VIDEO ( YCbCr ) 3 * RCA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| DTV             | COMPONENT VIDEO ( YPbPr ) 3 * RCA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Audio           | Stereo RCA × 3(selectable)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| RS232C control  | D-sub 9-pin × 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Audio output    | Internal 5W + 5W at 16 ohm / External (option) 10W + 10W at 8 ohm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| OSD Functions   | Picture (Brightness / Contrast / Sharpness / Color / Tint / Color temperature),<br>Display (Position / Size / Picture mode / PIP setup / Clock / Focus / Auto focus),<br>Sound (Bass / Treble / Balance / Speaker / Audio 1 input / Audio 2 input / Audio 3 input & output ),<br>Function (OSD / Power saving / White Screen / Reset),<br>Configuration (Language / Component input / RGB source / DB15 source / Color system),<br>Information (Main source / Second source)<br>TV setup(User ch / System setup / Ch mapping / Ch fine tune / MTS ./ V chip setup / CC setup) |
| Other features  | 3D motion adaptive Scan Converter with 2-2 (50Hz), 2-3 (60Hz) Pull Down Converter,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Accessories     | AV cable, User's Manual (about TV part )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |