

Displayable Monitor Specification

RGB Mode (640 x 480 resolution recommended.)

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640 x 350	31.469	70.09
	37.861	85.08
640 x 400	37.927	85.03
	31.469	70.08
720 x 400	37.927	85.03
	31.469	59.94
640 x 480	35.000	66.66
	37.861	72.80
	37.500	75.00
	43.269	85.00
	45.913	90.03
	53.011	100.04
	64.062	120.00
800 x 600	35.156	56.25
	37.879	60.31
	48.077	72.18
	45.875	75.00
	53.674	85.06
	56.000	90.00
532 x 624 (MAC)	64.016	100.00
	49.725	74.55
1024 x 768	48.363	60.00
	55.476	70.06
	60.023	75.02
	68.677	84.99

Component Mode (Y, CB/PB, CR/PR)

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	
640 x 480	15.73	60.00	SDTV, DVD-480i
640 x 480	15.63	50.00	SDTV, DVD-480i
704 x 480	31.47	59.94	SDTV, 480P
1280 x 720	45.00	60.00	HDTV, 720P
1280 x 720	44.96	59.94	HDTV, 720P
1920 x 1080	33.75	60.00	HDTV, 1080i
1920 x 1080	33.72	59.94	HDTV, 1080i

Help

Synchronization input from : separate

■ Out Of Range

appears when there is unrecognizable resolution input.

Turning on the Monitor

※ Please aim the remote control sensor at the monitor when using.

To Turn on the monitor, after initial set up.

Connect the power cord.

Press **ON/OFF** button on the left side of the monitor.

The monitor will be switched to stand by mode.

Press **Power** button on the right side of the monitor or the remote control.

To Turn off the monitor

- Press **Power** button on the right side of the monitor or the remote control.
The monitor will be switched to stand by mode.
- If you turn off the monitor for a long period of time, press **ON/OFF** button on the left side of the monitor.

Help

To control the volume level, Press ◀, ▶ to decrease, increase the volume.

Checking Menus

①

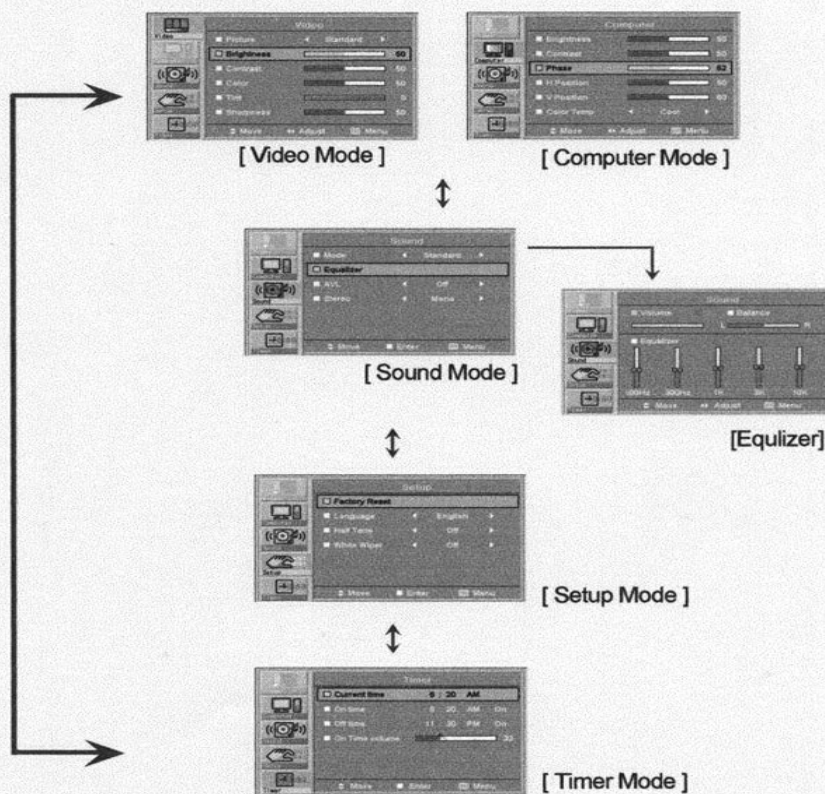
- Video menu will be activated on Composite, S-Video, Component input.
- Computer menu will be activated on Analog/Digital RGB.

②

Press the **MENU** button.

Press **▼**, **▲** button.

- You will see the menus in following orders each time you press.



③

- Press **▶** button and then press **▼**, **▲** buttons to select sub menus.
- Press **■** button to save or Enter
- Press **MENU** button to Exit.

Function in PC mode

Auto Configure

- ① Auto Configure is available only on **Analog RGB** mode.
- ① Automatically optimize the condition of the screen.

1

Press ARC button.



2

Press ARC button again if the screen is not corrected properly.



3

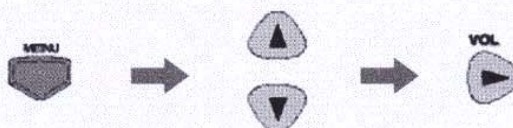
If picture needs more adjustment, try adjusting H-position, V-position and Phase.

Function in PC mode

Horizontal / Vertical Position Adjustment

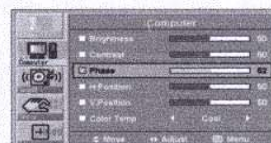
Press the **MENU** button and then press ▼,▲ to select  menu.

Press ► button for sub menu.



①

Select **H position/V position** by using ▼,▲ and then press ► button.



②

Press ◀, ▶ to adjust desired position and then press **MENU** button.

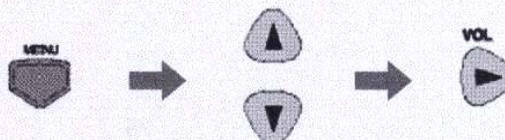
- The adjustment range of H position is 0 ~ 100.
- The adjustment range of V position is 0 ~ 100.
- Based on the input signal, the position of the picture may not change even though you have adjusted the horizontal or vertical position with this function.



Phase adjustment

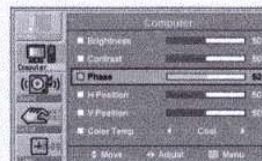
① After auto adjustment on **Analog RGB** mode, adjust **Phase** when the picture is not clear or characters tremble

Press the **MENU** button and then press ▼,▲ button to select menu.
Press ► button.



①

Select **Phase** by using ▼,▲ button and then press ► button.



②

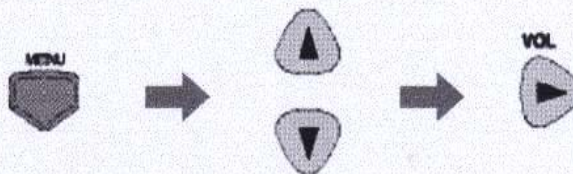
Press ◀,▶ button to adjust **Phase** and then press **MENU** button.
Adjustment range : 0~100.



Factory reset

- ① Initialize the adjusted values.

Press the **MENU** button and then press ▼,▲ button to select menu.
Press ► button.



1

Select **Factory reset** by using ▼,▲ button and press ■ button.



- ① All adjusted values will be initialized.

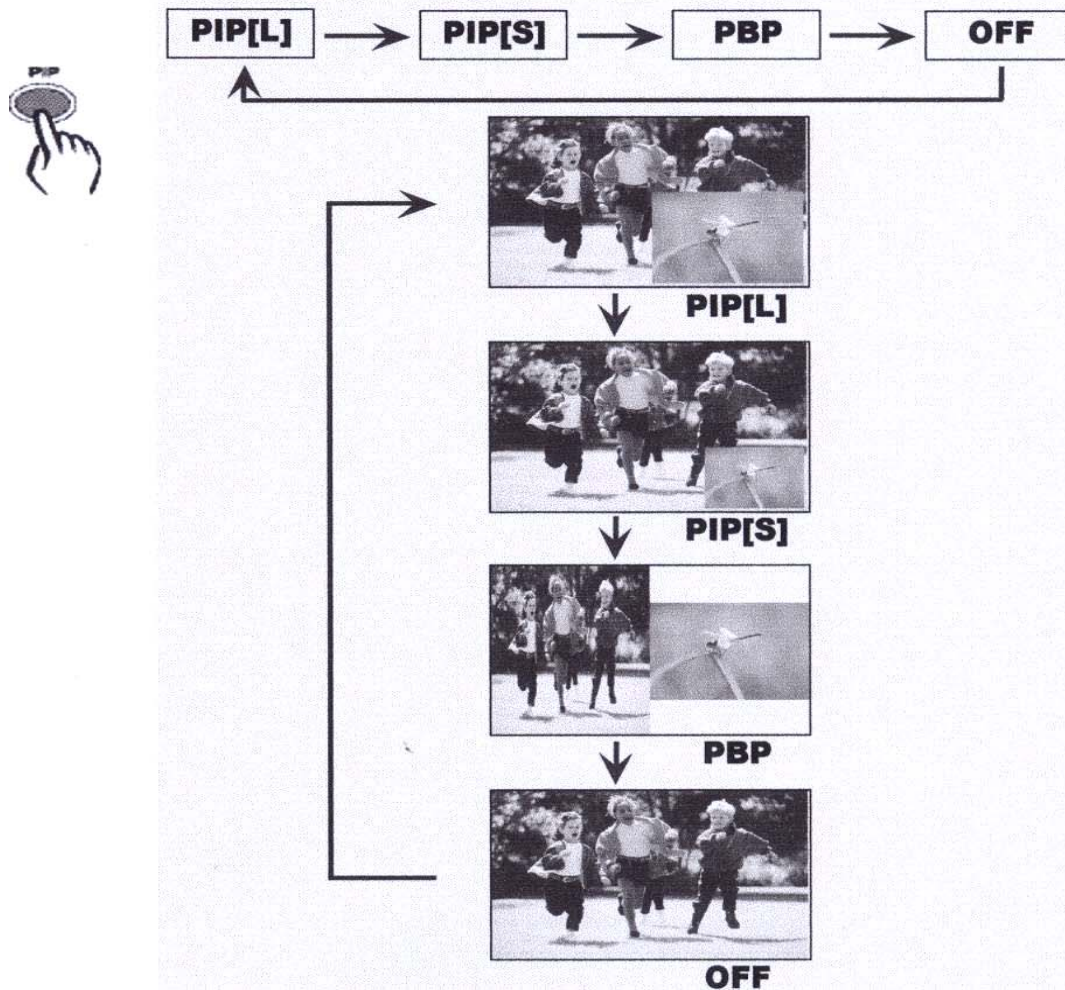
PIP Function

- ※ You may enjoy all sources as main picture only when Composite, S-Video, Component(480i) are sub picture.
- ※ This function works only in the following resolution;
640×480, 800×600, 1024×768
- ※ Color of main picture may be different from sub picture's in PIP mode.

How to use PIP (Picture in Picture)

Press **PIP** button.

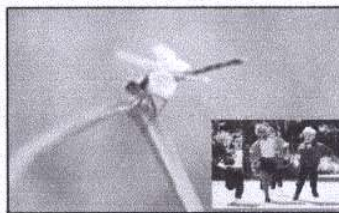
- Press PIP button to change the **PIP** size as below.



PIP SWAP

① PIP SWAP is available when main and Sub picture sources are Composite, S-Video, Component(480i).

① Press  button to PIP SWAP

**PIP****PIP SWAP**

PIP Sound SWAP

① PIP Sound SWAP is available when PIP is ON.

① Press  button to PIP Sound SWAP

Selecting Sub Picture



Press **PIP INPUT** button in PIP mode.

- Each time when you press **PIP INPUT**, it toggles as below
- **Component** source only works in 480i mode.

Composite → **S-Video** → **Component**

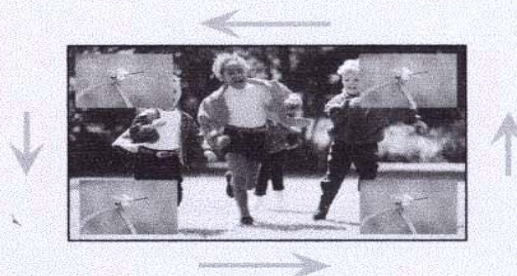


Sub Picture Location



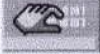
Press **POSITION** button in **PIP** mode.

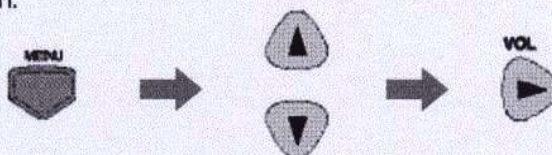
- Move the sub picture by pressing the **POSITION** button.



ⓘ Sub picture will not move if not connected.

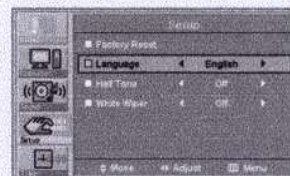
Language Selection

※ Press **MENU** button and then press ▼, ▲ button and select  menu.
Press ► button.



①

Select **Language** by using ▲, ▼ button.



②

Use ◀, ▶ button to select the desired language.

③

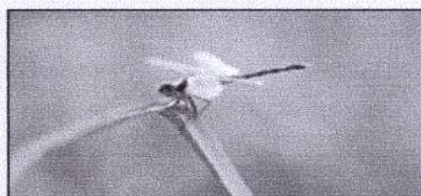
Press **MENU** button to save and exit.

Still Function

1

Press **STILL** button.

- You can capture the current screen.
- All Main and sub picture will be captured in PIP



<Moving>



<Still>

2

Press still button again to exit.

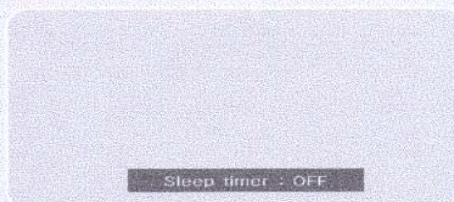
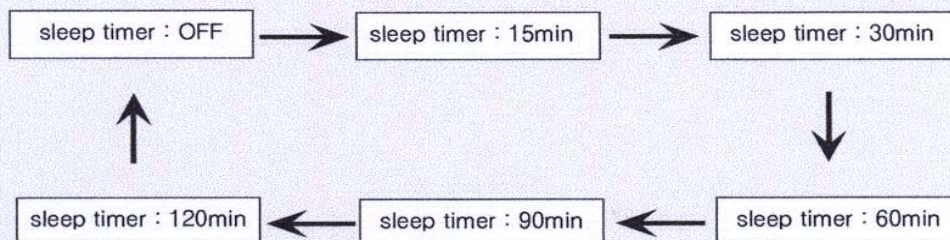
Help

- The still image will become dark after 5 minutes. Another function will bring it back to normal. If another function is activated, normal brightness of the screen is restored.
- Please do not let STILL image for more than 15 minutes. It may cause permanent damage on the screen.

Sleep Time Setting

Press **SLEEP** button to set sleep time.

- Press **SLEEP** button to increase the time you would like to set to turn the monitor.



- To release sleep time setting, Press **SLEEP** button repeatedly to select.

sleep timer : OFF

Help

The screen display will be disappeared after 20 seconds.
To check remaining sleeping time, press ■ button once.
Sleep timer will be erased after power off.

Auto Picture Control

[Optimize picture appearance]

※ This function is not available in Analog/Digital RGB.

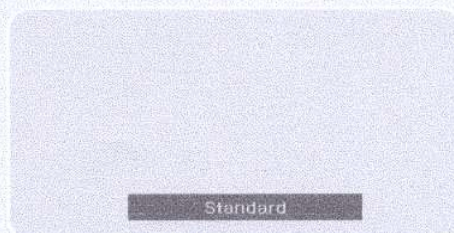
PSM (Picture Status Memory)

1

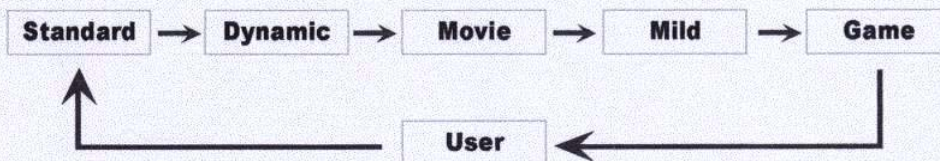
Press **PSM** button.

2

Press **PSM** button to select your desired picture condition.



• Following display will be shown after pressing PSM each time.



- You can also select in the **[Video → Picture]** menu.
- The picture **Standard, Dynamic, Movie, Mild, Game** are programmed for good picture reproduction at the factory and cannot be changed.

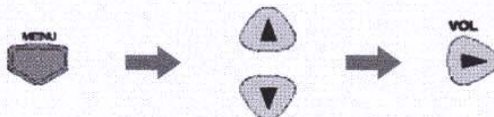
Picture Condition Adjustment

[User can manually change the picture condition]

Video Menu

- ① You may change the value of Brightness on Composite, S-Video, Component mode.
- ① You may change in any picture mode(Standard, Dynamic, Movie, Mild, Game, User)and saved to the User value.

Press **MENU** button and then press ▼,▲ button to select  menu.
Press ► button.



①

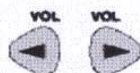
Select **Brightness** by using ▼,▲ button and then press ► button.
(To adjust brightness)



②

Use ◀,▶ button to make appropriate adjustment and press **MENU** button.

• Follow same steps to adjust Contrast, Color, Tint, Sharpness.



Picture Condition Adjustment

Computer Menu

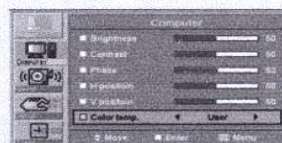
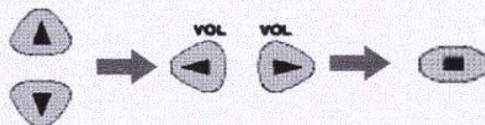
- ① You may change the R, G, B color value in the **[Color Temp → User]** Menu.

Press **MENU** button and then press **▼, ▲** button to select  menu.
Press **▶** button.



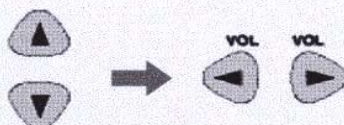
①

Select **Color Temp** by using **▼, ▲** button, select **[User]** by using **◀, ▶** button and press **■** button.



②

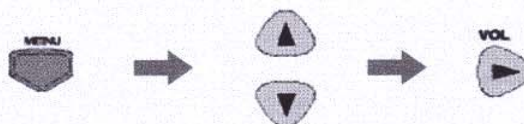
Use **▲, ▼** button to select the color and change the value by using **◀, ▶** button.



Sound Adjustment

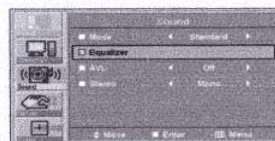
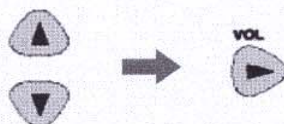
※ [User can manually change the sound condition]

Press **MENU** button and then press ▼, ▲ button to select  menu.
Press ► button for sub menus.



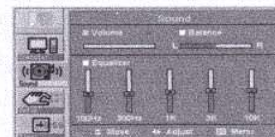
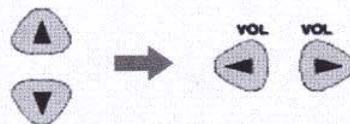
①

Select **Equalizer** by using ▼, ▲ button and then press ► button.



②

Use ▲, ▼ button to select the desired menu and change the value by using ◀, ▶ button.



Auto Sound Adjustment

- ※ SSM (Sound Status Memory)
- ※ This function lets you enjoy the best sound without any special adjustment because the Monitor automatically selects the appropriate sound point based on the program content.

Auto Sound Adjustment

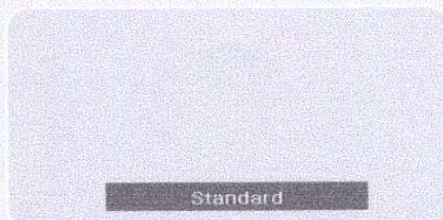
[PDP sets the optimum sound quality based on the program content]

①

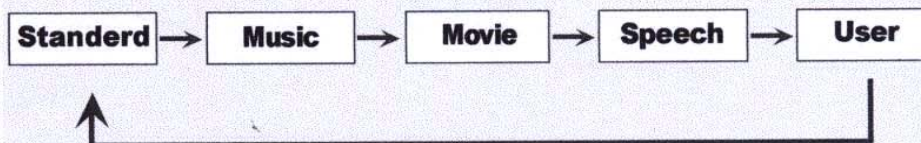
Press **SSM** button.

②

Press **SSM** button to select for sound change.



- Each time you press, it changes as below.



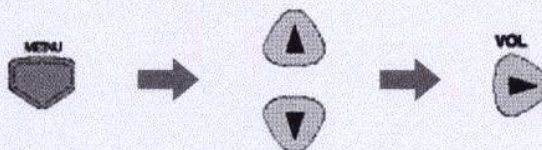
- You can also select **SSM** from the [Sound → Mode] menu.

Auto Volume Leveler

AVL (Auto Volume Leveler)

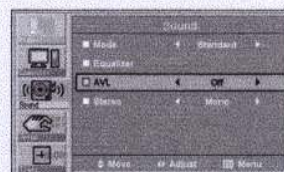
※ It automatically equalizes the volume level from each TV channel.

Press **MENU** button and then press ▼, ▲ button to select  menu.
Press ► button for sub menus.



1

Select AVL by using ▼, ▲ button.



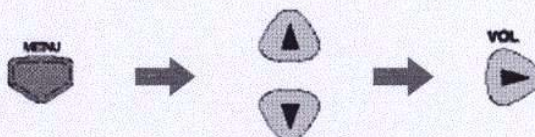
2

Each time you press ◀, ▶ it toggles age below.



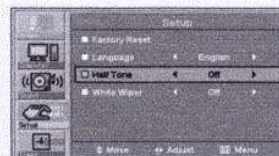
OSD Transparency Adjustment

Press **MENU** button and then press ▼,▲ button to select  menu.
Press ► button for sub menus.



①

Select **Half Tone** by using ▼,▲ button.



②

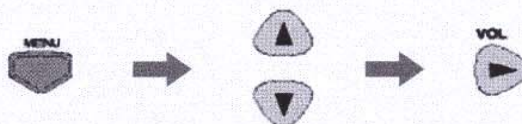
Use ◀,▶ button to turn on or off.



Image Sticking Protection

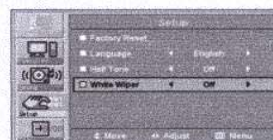
- ※ A frozen still picture from a VCR, 4:3 picture format or if a CH label is present, the fixed image may remain visible on the screen.
- ※ This is the protection function from fixed image remaining on the screen when using still picture for a long time.

Press **MENU** button and then press ▼, ▲ button to select  menu.
Press ► button for sub menu.



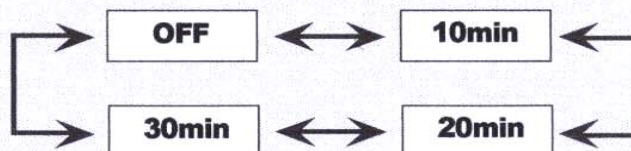
①

Select **White Wiper** by using ▼, ▲ button.



②

Use ◀, ▶ button to select OFF, 10min, 20min, 30min.



- When the white wiper **ON**, the white bar pass the screen every 10, 20, 30 minute to protect the PDP panel.

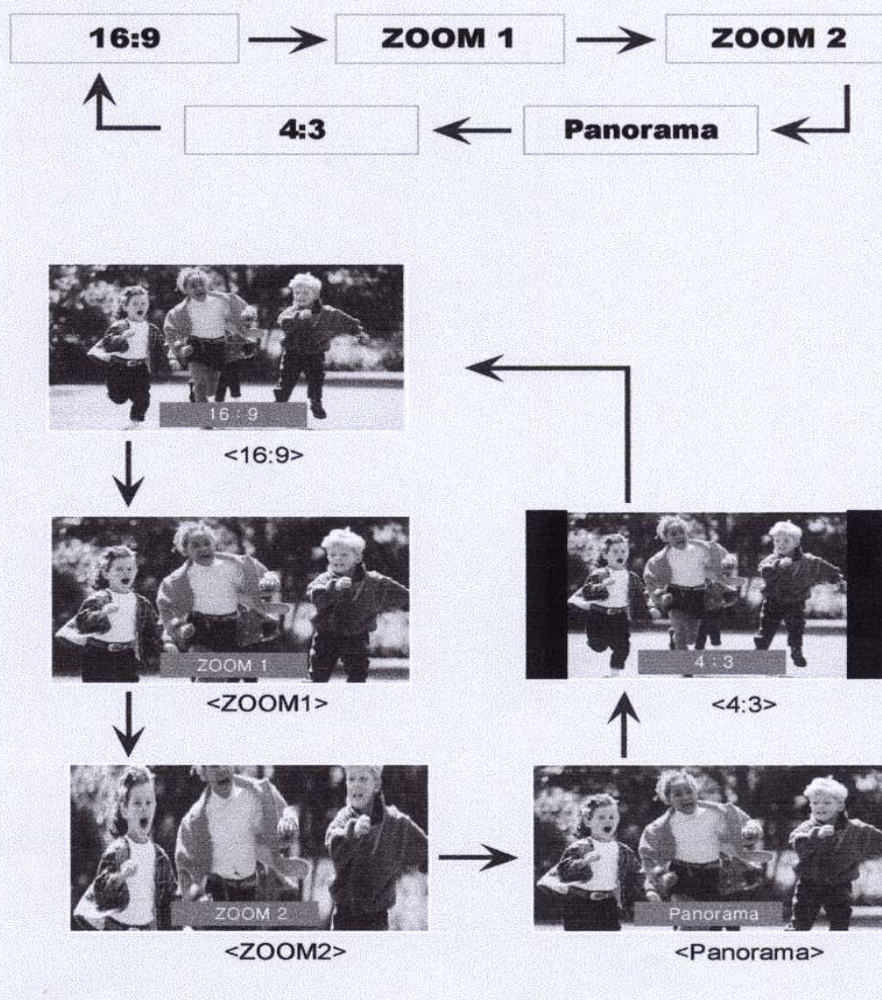
Picture Format Setting

- ※ Only 16:9 is available on DTV 1080i, and Analog/Digital RGB.
- ※ Do not display 4:3 picture format on screen for a long period of time.

①

Press **ARC** button to select a picture format.

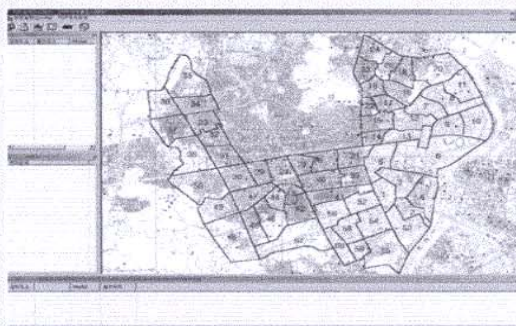
- Each time you press **ARC** button, you can select 16:9, Zoom1, Zoom2, Panorama or 4:3 alternatively.



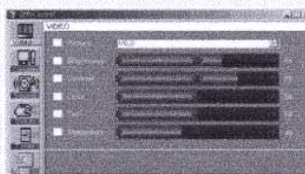
- ① Panorama format is used to fit picture with 4:3 format on a 16:9 screen by stretching the picture geometry at the borders.

Remote Controlling By TCP/IP

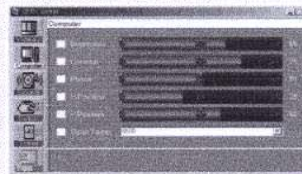
- ※ This is our unique feature for the customer.
- ※ You can control all of the monitor function from the main computer which connected by RS 232 or TCP/IP as shown below.



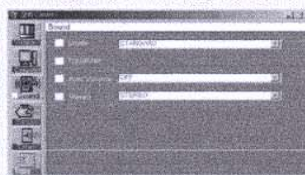
<PDP REMOTE CONTROLLING BY TCP/IP>



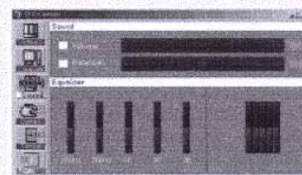
<VIDEO Mode>



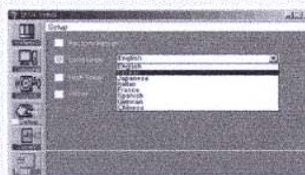
<COMPUTER Mode>



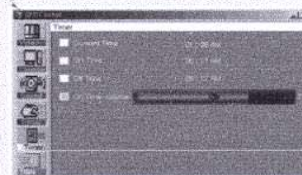
<SOUND Mode>



<EQUALIZER>



<SETUP Mode>



<TIMER Mode>

Troubleshooting Check List

No picture & No sound

- Check whether the Monitor is turned on.
- Power cord inserted into wall outlet?
- Plug another product's power cord into the wall outlet where the Monitor's power cord was plugged in.

Picture OK & No sound

- Press the **VOLUME** (▶) button.
- Sound muted? Press **MUTE** button.

The remote control doesn't work

- Check to see if there is any object between the Plasma Display and the remote control causing obstruction.
- Check to see if the batteries are installed with the correct polarities.
- Insert new batteries

No or poor colour or poor picture

- Select **Color** in the **Video** menu and press the **VOLUME** (▶) button.
- Keep a certain distance between the Monitor and the VCR.
- Activate any function to restore the brightness of the picture.
(If still picture is on the screen for more than 5 minutes, the screen gets dark.)

No output from one of the speakers

- Adjust **Balance** in the **Sound** menu.

Strange sound from the Monitor

- Typical sound due to normal Monitor operation, Monitor is not faulty.

Specifications

Model	EPM-420 NEW A/B
Aspect Ratio	16:9
Screen Size (H×V)	920.1×518.4mm
Resolution	852×480(Wide VGA)
Cell pitch (H×V)	0.36(H)×1.08(V)mm
Displayable Colours	16.77M(256×256×256)
Brightness	750cd/m ² (w/o filter)
Contrast	1000:1 (w/o filter)
Color Temperature	8500°K
Viewing Angle	160°
Input signal	NTSC, PAL-M, PAL-N, PAL, SECAM, SD, HD, VGA ~ XGA
RGB Input	DVI-I (Analog/Digital RGB)
AC INPUT	AC100-240V~, 50/60Hz, 3.0A
Power Consumption	340W

※ Specifications are subject to change without notice for Quality improvement