This unit has been engineered and manufactured to ensure your personal safety, however improper use may result in potential e shock or fire hazards. In order to allow the proper operation of all safeguards incorporated in this display, observe the following basic rules for its installation, use, and servicing.

On Safety

Use only the power cord supplied with the unit. In case you use another power cord, make sure that it is certified by the applicable national standards if not being provided by the supplier. If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.

The power supply cord is used as the main disconnection device. Ensure that the socket-outlet is easily accessible after installation.

Operate the display only from a power source indicated in the specifications of this manual or listed on the display. If you are not sure what type of power supply you have in your home, consult with your dealer.

Overloaded AC outlets and extension cords are dangerous. So are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.

Do not Open the Display.
- There are no user serviceable components inside.
- There are Dangerous High Voltages inside, even when the power is OFF.
- Contact your dealer if the display is not operating properly.

To Avoid Personal Injury :
- Do not place the display on a sloping shelf unless properly secured.
- Use only a stand recommended by the manufacturer.

To Prevent Fire or Hazards:
- Always turn the display OFF if you leave the room for more than a short period of time. Never leave the display ON when leaving the house.
- Keep children from dropping or pushing objects into the display's cabinet openings. Some internal parts carry hazardous voltages.
- Do not add accessories that have not been designed for this display.
- During a lightning storm or when the display is to be left unattended for an extended period of time, unplug it from the wall outlet.
- Do not place objects on top of the media station or cover it. Obstructing ventilation holes may damage your media station or overheat the machine causing fire.

On Installation

Do not allow anything to rest upon or roll over the power cord, and do not place the display where the power cord is subject to damage.

Do not use this display near water such as near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.
Displays are provided with ventilation openings in the cabinet to allow the release of heat generated during operation. If these openings are blocked, built-up heat can cause failures which may result in a fire hazard. Therefore, NEVER:
■ Block the bottom ventilation slots by placing the display on a bed, sofa, rug, etc.
■ Place the display in a built-in enclosure unless proper ventilation is provided.
■ Cover the openings with cloth or other material.
■ Place the display near or over a radiator or heat source.

Do not rub or strike the Active Matrix LCD with anything hard as this may scratch, mar, or damage the Active Matrix LCD permanently.

Do not press the LCD screen with your finger for a long time as this may cause some afterimages.

Some dot defects may appear as Red, Green or Blue spots on the screen. However, this will have no impact or effect on the display performance.

If possible, use the recommended resolution to obtain the best image quality for your LCD display. If used under any mode except the recommended resolution, some scaled or processed images may appear on the screen. However, this is characteristic of the fixed-resolution LCD panel.
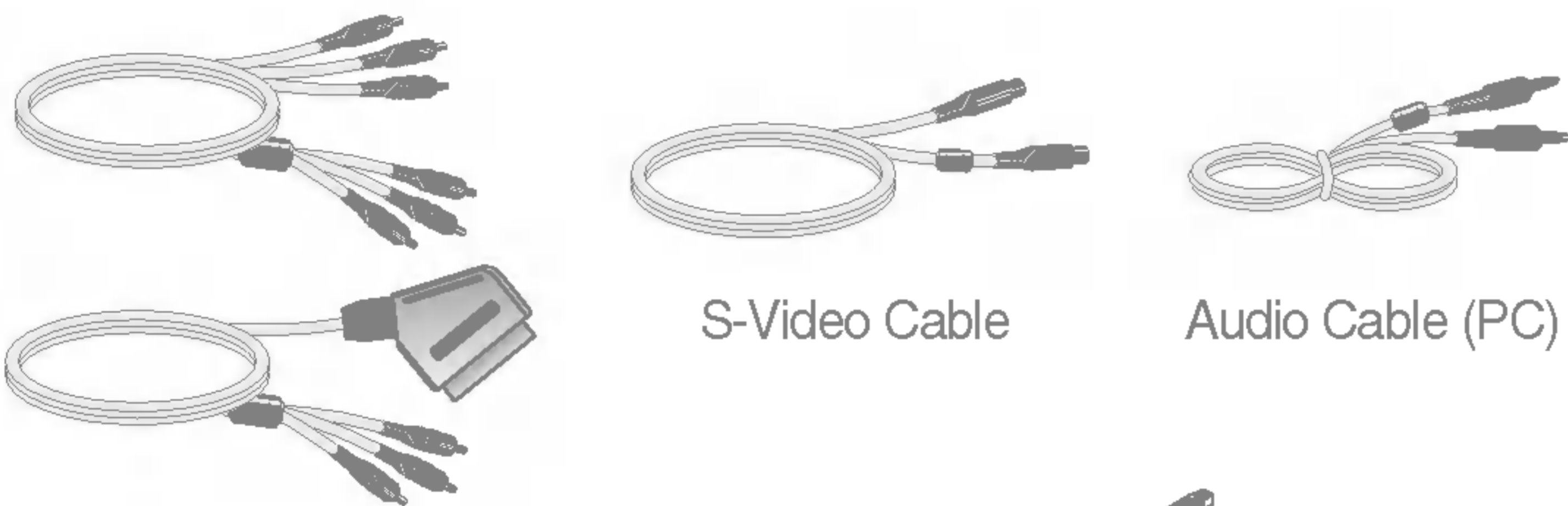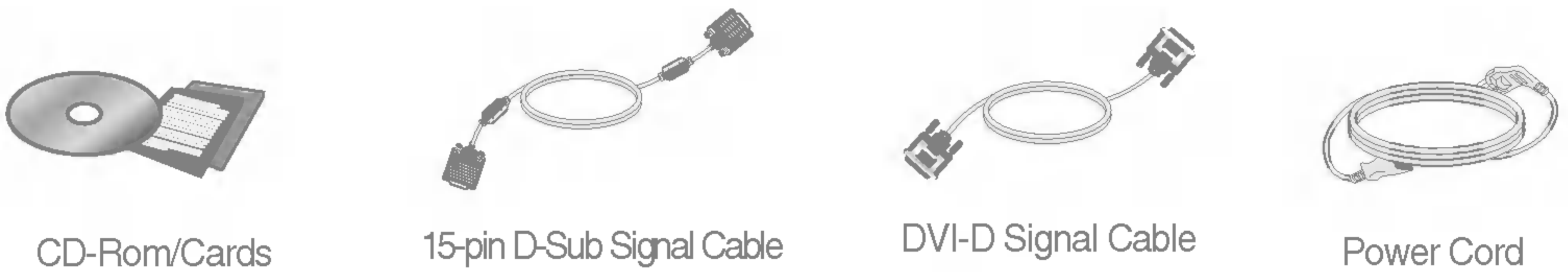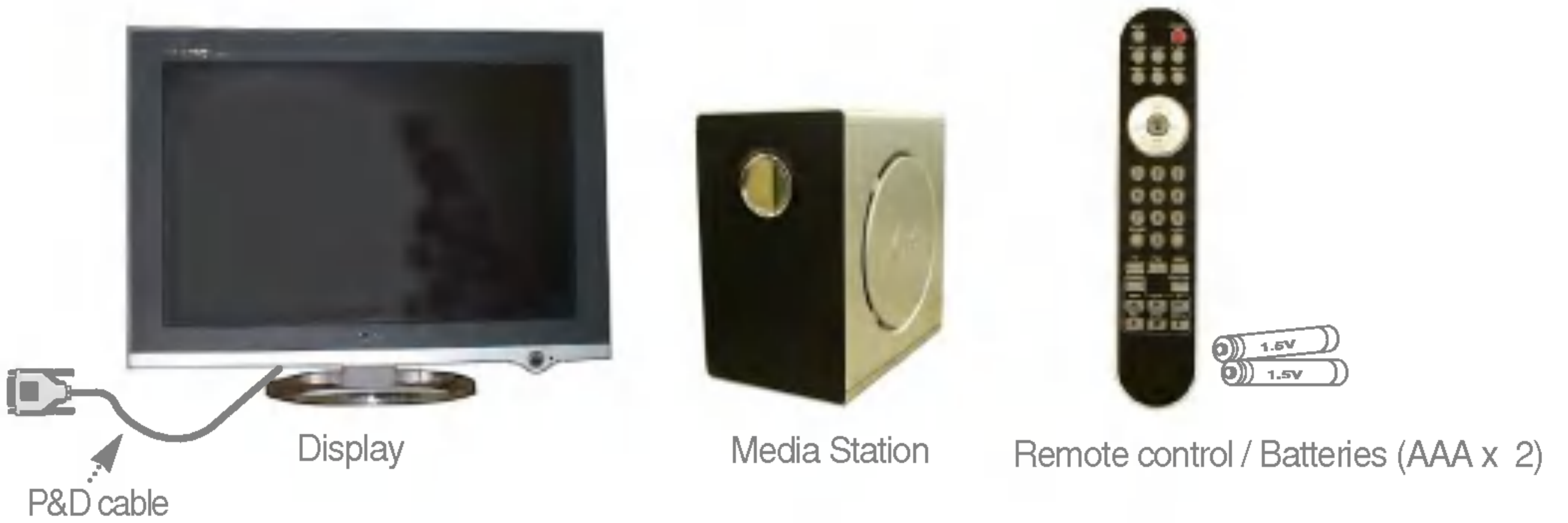
On Cleaning

■ Unplug the display before cleaning the face of the display screen.
■ Use a slightly damp (not wet) cloth. Do not use an aerosol directly on the display screen because over-spraying may cause electrical shock.

On Repacking

■ Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it in its original material.

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

Display

P&D cable

Media Station

Remote control / Batteries (AAA x 2)

1.6V
1.5V

CD-Rom/Cards

15-pin D-Sub Signal Cable

DVI-D Signal Cable

Power Cord

RCA Cable or SCART Cable

-It varies from country/region to country/region.

S-Video Cable

Audio Cable (PC)

USB Cable

Speakers (options)

Bright Window

This function provides exceptionally adjustable contrast and brightness that can be applied to any specially sized section of the screen.

Swap

To switch the main-screen and sub-screen in PIP/POP mode.

Spectacle

This function provides different areas of the screen with a varied ratio, so that the ratio at the central area is close to 4:3 and near the edges it exceeds 16:9. Since most people concentrate their focus upon the central area of the screen, they do not clearly recognize a nonlinear expansion of the image near the edges of the display. Therefore a 4:3 image can fit into the wide screen fairly naturally. However, it should be noted that this function is useful for TV or motion pictures, but not suitable for a PC environment such as computer graphics or word processing.

Sleep Timer

You can set a time period after which the AV/DVD/HDTV should switch itself to standby.
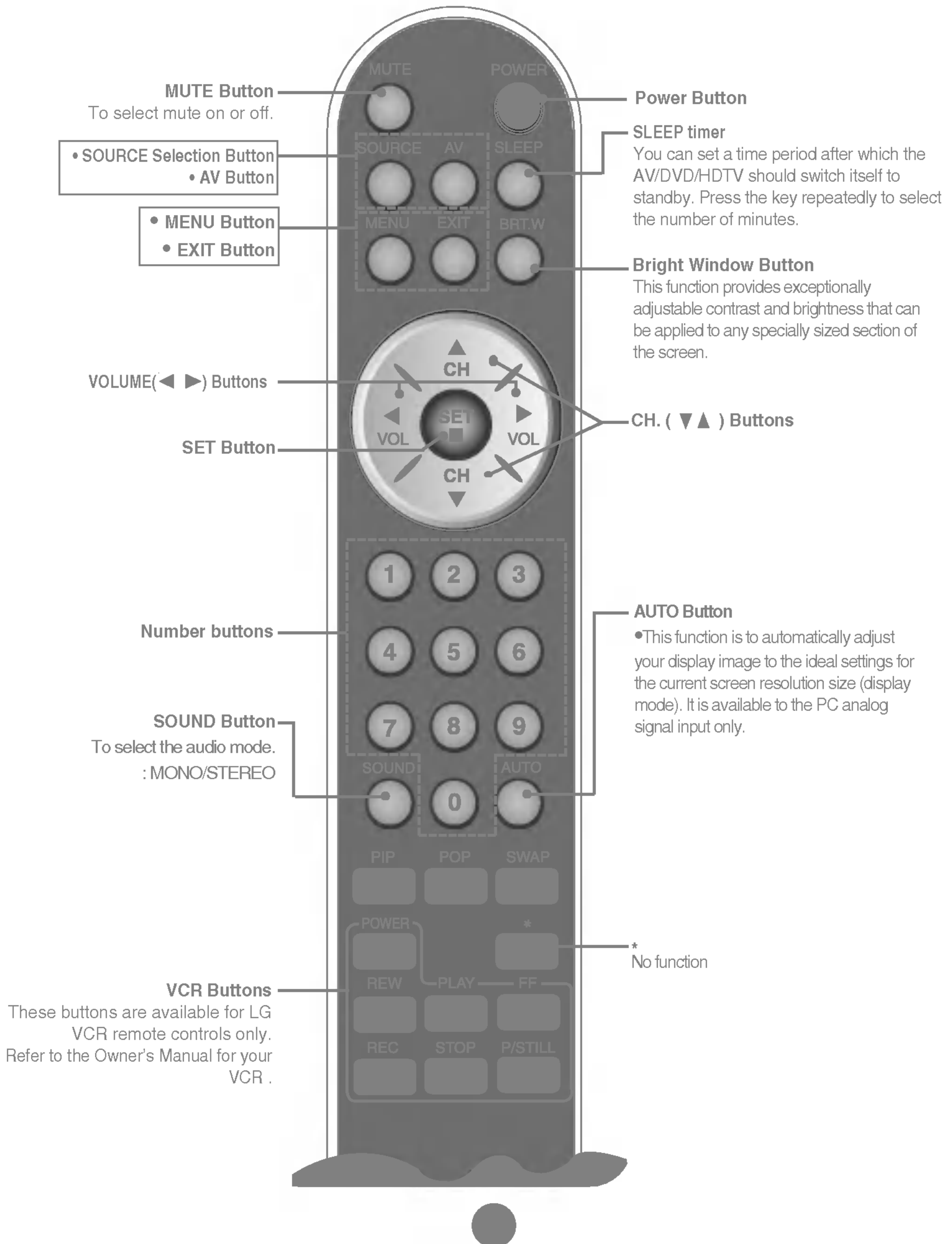
Press the key repeatedly to select the number of minutes.

BBE Fuction

To improve the clarity and distinction of audio quality.

For detailed instructions of each button on the remote control, refer to the appropriate pages of this manual.

Remote Control

MUTE Button
To select mute on or off.

• **SOURCE Selection Button**
• **AV Button**

• **MENU Button**
• **EXIT Button**

VOLUME(◄ ►) Buttons

SET Button

Number buttons

SOUND Button
To select the audio mode.
: MONO/STEREO

VCR Buttons
These buttons are available for LG VCR remote controls only. Refer to the Owner's Manual for your VCR .

Power Button

SLEEP timer
You can set a time period after which the AV/DVD/HDTV should switch itself to standby. Press the key repeatedly to select the number of minutes.

Bright Window Button
This function provides exceptionally adjustable contrast and brightness that can be applied to any specially sized section of the screen.

CH. (▼▲) Buttons

AUTO Button
•This function is to automatically adjust your display image to the ideal settings for the current screen resolution size (display mode). It is available to the PC analog signal input only.
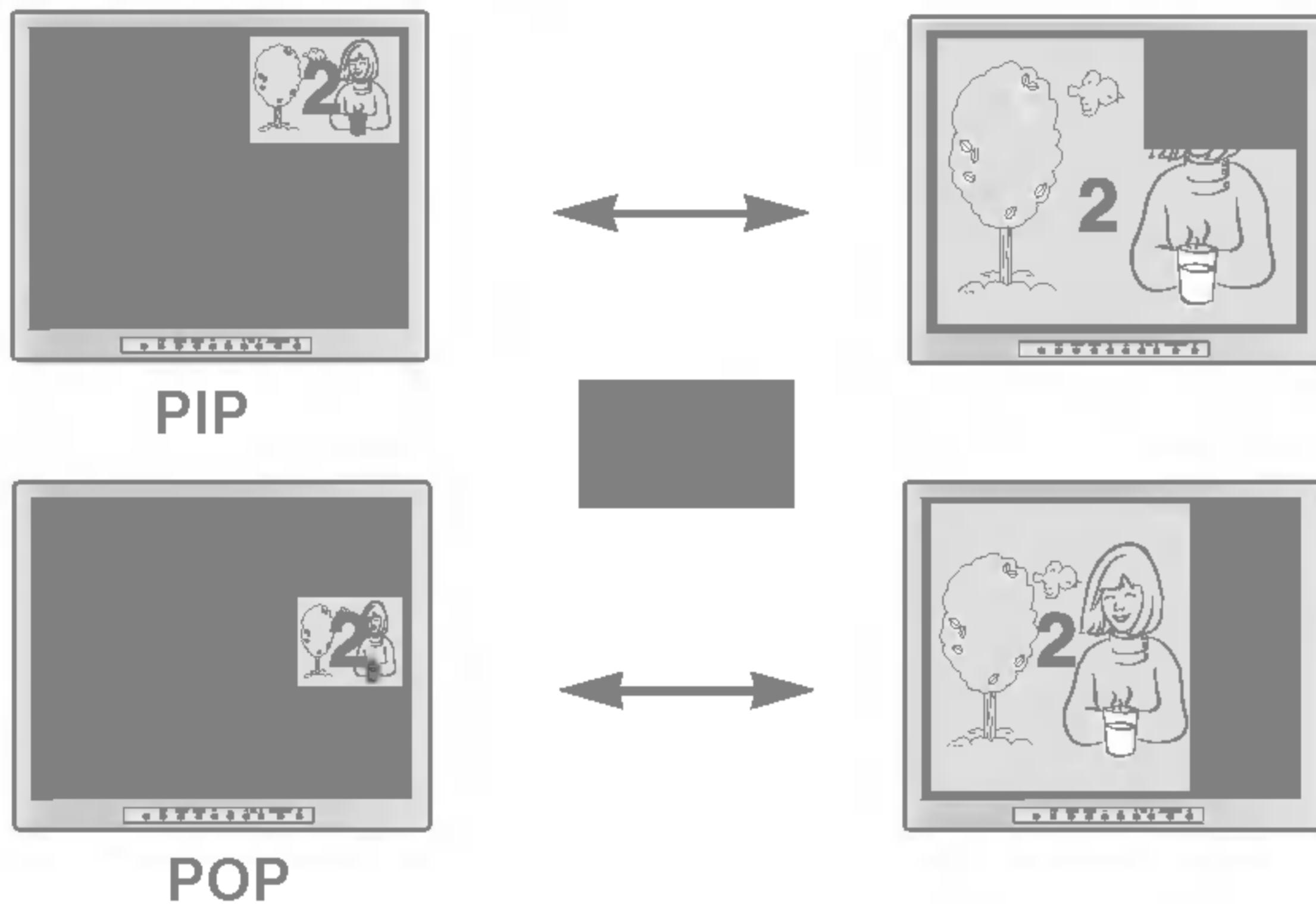
*
No function

PIP (Picture in Picture)

The sub-screen is changed in the order shown below.
: SMALL -> LARGE -> OFF

POP (Picture out Picture)

The sub-screen is changed in the order shown below.
: SMALL -> MEDIUM -> LARGE -> OFF

SWAP function

To switch the main-screen and sub-screen in PIP/POP mode.

PIP

POP

SOURCE 1	SOURCE 2
• D-SUB • DVI-I ANALOG • DVI-I DIGITAL • HDTV YPbPr*	• DVI-D • VIDEO • S-VIDEO • DVD YPbPr • HDTV YPbPr*

When the signal of **SOURCE 1** is supplied to the main-screen, the sub-screen receives the signal of **SOURCE 2** only. Conversely, when the signal of **SOURCE 2** is supplied to the main-screen, the sub-screen only receives the signal of **SOURCE 1.** The positions of **SOURCE 1** and **SOURCE 2** can be transposed by selecting **SWAP**.

* HDTV supports both PIP and POP without any restriction of the sources.
(However, the combination of two HDTV signals for the two sources is not possible.)
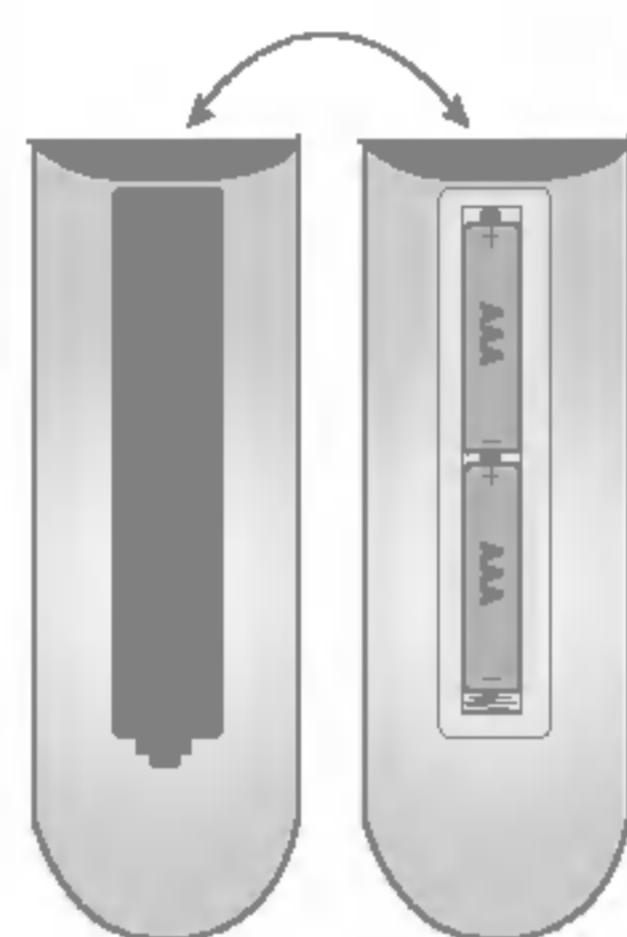
Insert the batteries into the remote control to operate the monitor.

Preparing the Remote Control

1. Open the battery cover.

2. Insert batteries (AAA size).

Make sure to match the + and - on the batteries to the marks inside the battery compartment.

3. Close the cover.

Note
- Do not insert the batteries into the remote control in the wrong direction.
- Do not charge, heat, open, or short-circuit the batteries. Also do not throw the batteries into the fire.
- Do not use different types of batteries together, nor mix old and new batteries.

This section shows you how to use the remote control.

Operating with the Remote Control

Point the remote control at the remote sensor and press the buttons.

30° | 30°
Within about 23ft (about 7m)
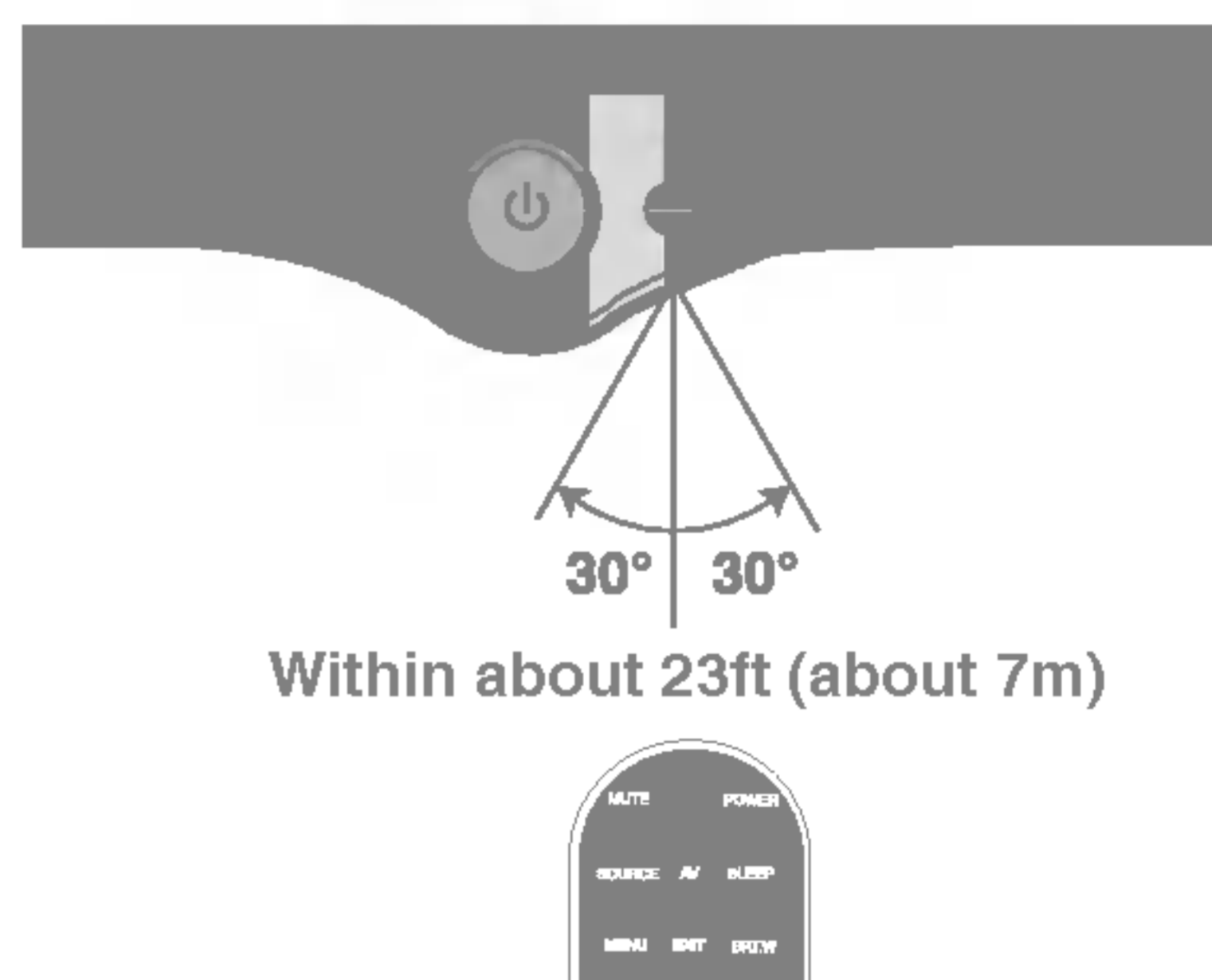
Distance : About 23 ft (7 m) from the front of the remote sensor.
Angle :   About 30° in each direction of the front of the remote sensor.

Do not expose the sensor of remote control in the monitor to a strong light source such as direct sunlight or illumination. If so, may not be able to operate the monitor with the remote control.

Note
- Do not drop the remote control or handle it roughly.
- Do not leave the remote control in extremely hot or humid conditions.
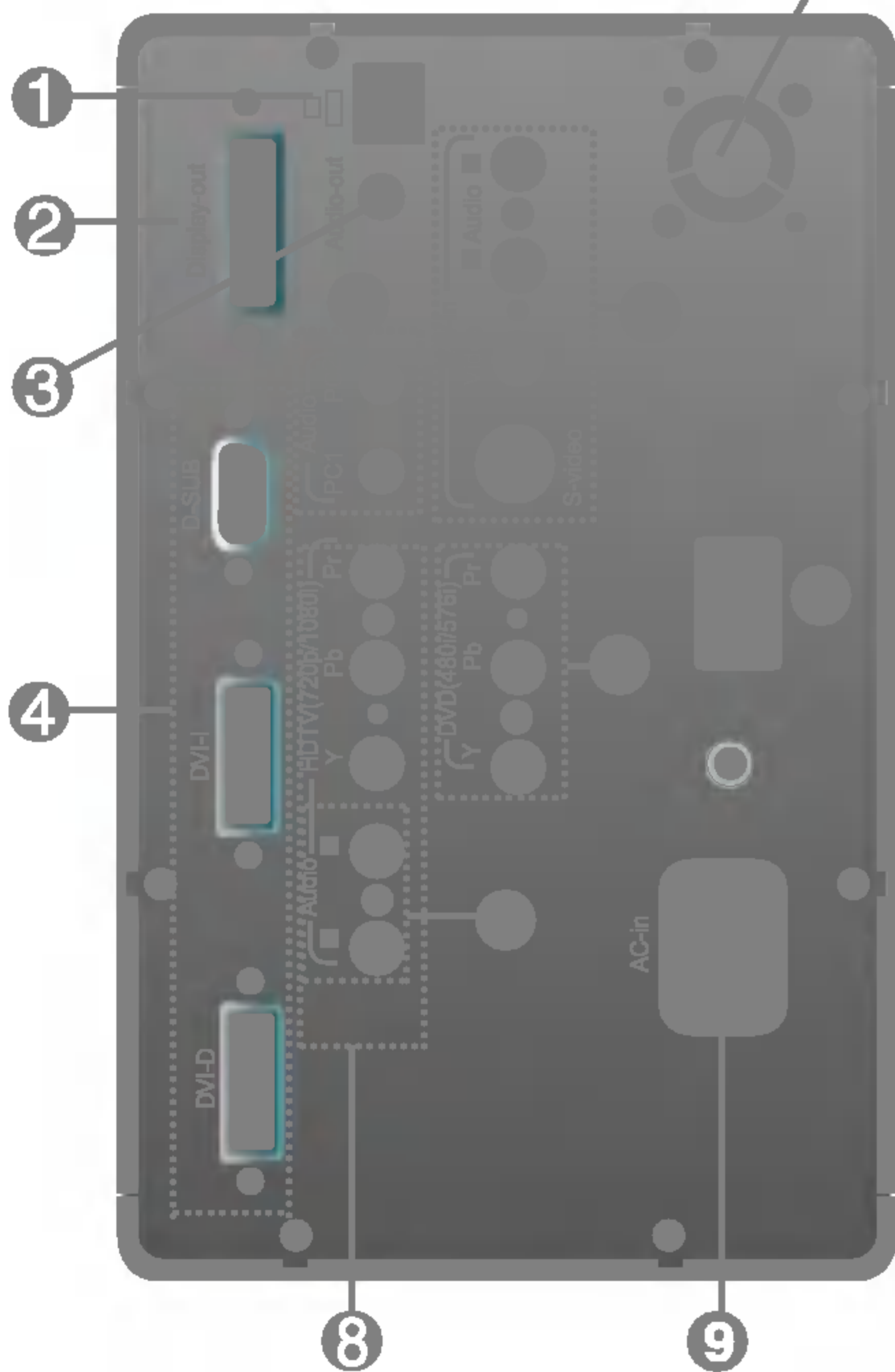- Do not expose the remote control to water or anything wet.

Display Rear

❶ Headphone/Earphone Input
Automatically mutes the speaker volume when the headphones are plugged in.

❷ USB downstream ports

Media Station Rear

Fan: Should the temperature of the media station rise above a preset level, the fan will start up automatically to cool down the unit.

❶ USB upstream port

❷ Connect the P&D cable

❸ Connect to the speaker including a built-in amplifier(AMP)

❹ PC signal inputs

❺ Connect the audio cable to the *LINE OUT jack of the PC sound card.
-PC1 : When connecting D-SUB/DVI-I signal cable
-PC2 : When connecting DVI-D signal cable

❻ AV Input ports

❼ DVD(YPbPr) Input ports - 480i/576i

❽ HDTV(YPbPr) Input ports - 720p/1080i

❾ Connect the power cord

❿ Power cut-off switch of the monitor

⓫ DVD(YPbPr), HDTV(YPbPr) Audio(L/R) Input ports

*LINE OUT
A terminal used to connect to the speaker including a built-in amplifier (Amp). Make sure that the connecting terminal of the PC sound card is checked before connecting. If the Audio Out of PC sound card has only Speaker Out, reduce the PC volume.

If the Audio Out of the PC sound card supports both Speaker Out and Line Out, convert to Line Out using the card jumper of the program (Refer to the Sound Card Manual).
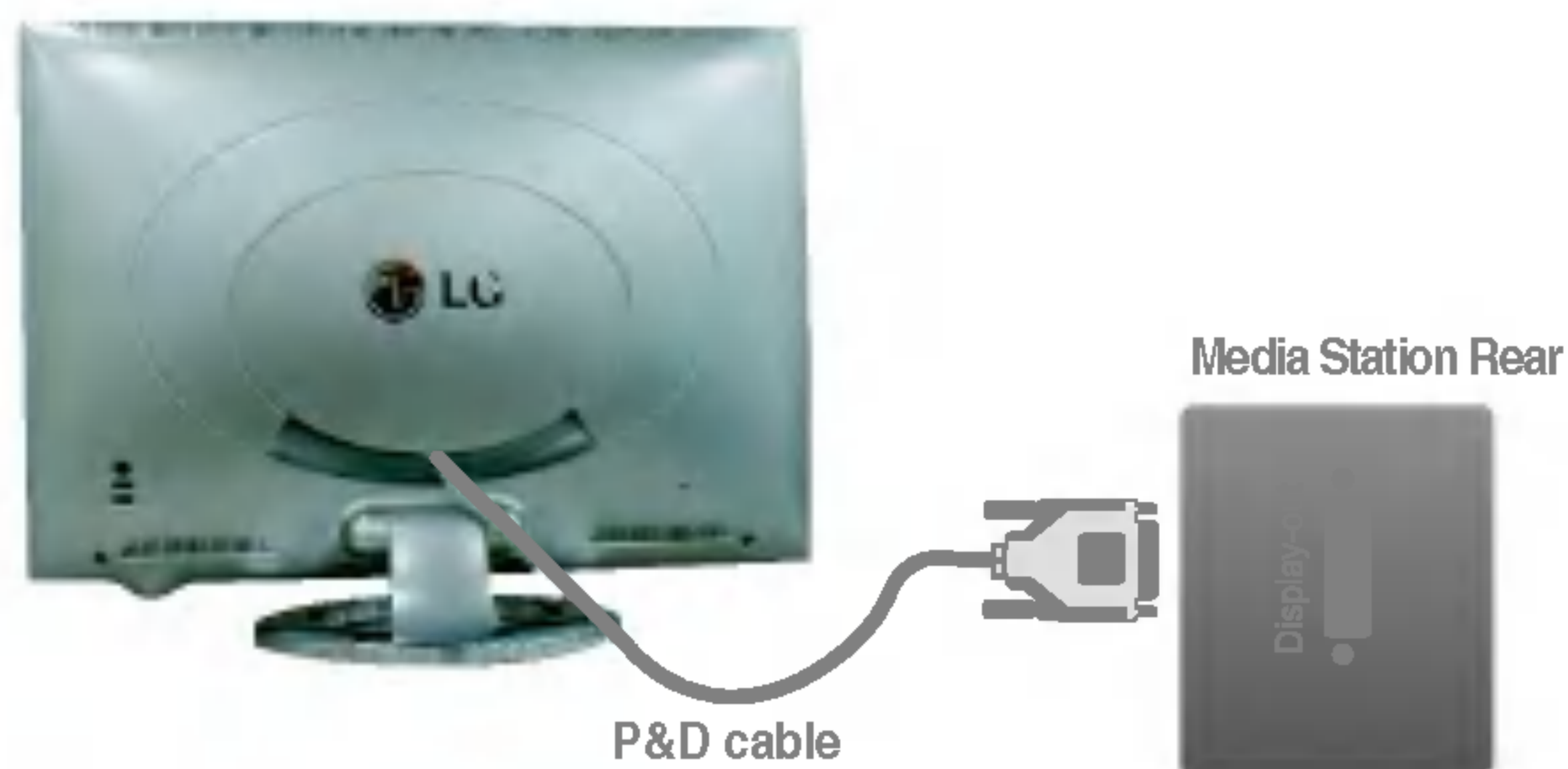
■ **Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.**

Using the Computer

1. Connect the P&D (Plug and Display) cable. When attached, tighten the thumbscrews to secure the connection.

Media Station Rear

P&D cable

2. Connect the signal cable

(2-1) When connecting D-SUB signal cable

Media Station Rear

PC

D-SUB

MAC
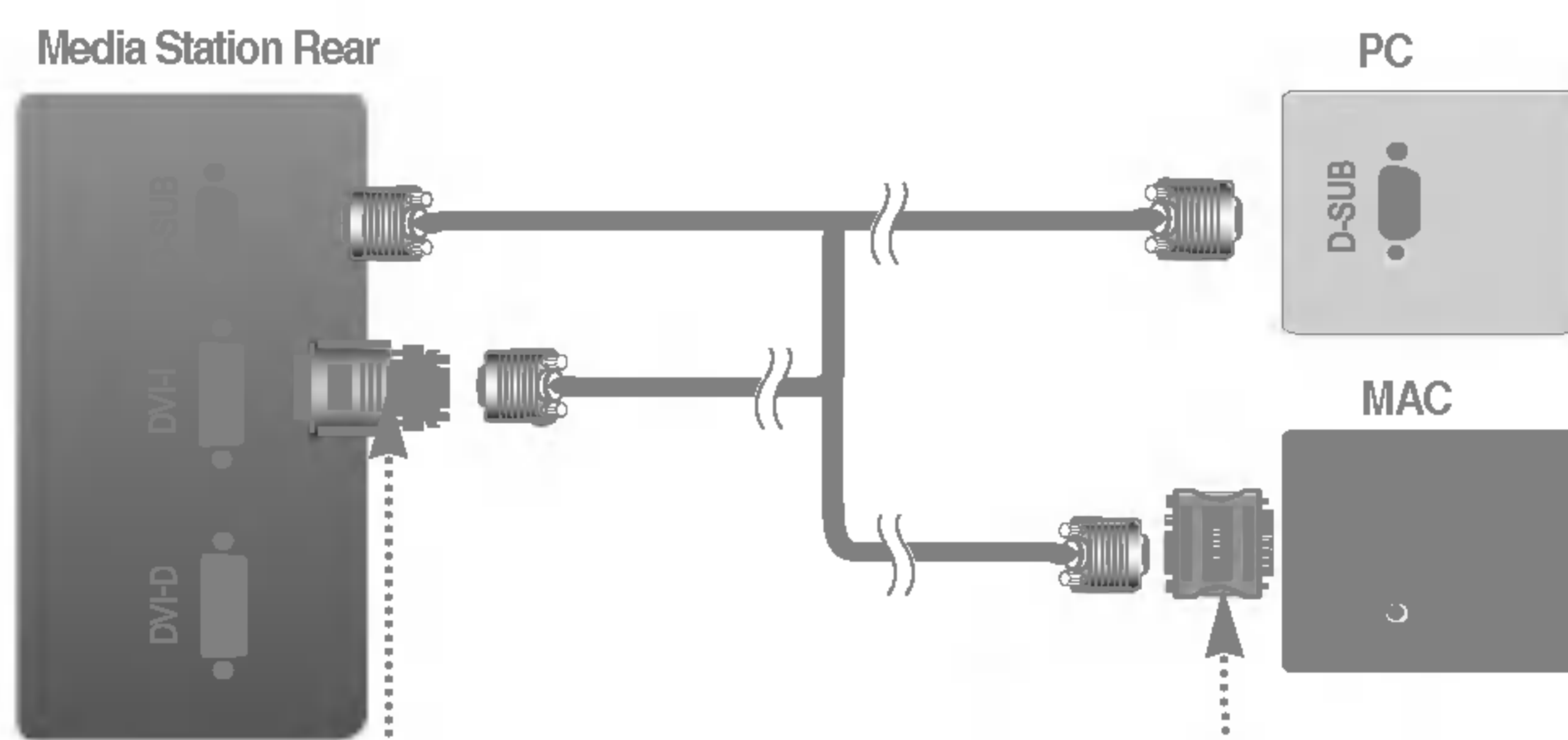
D-sub to DVI Adapter (not included)
In the case DVI-I connector is to be hooked up through D-sub indicator, use D-sub with DVI Adapter to supplement the assembly.
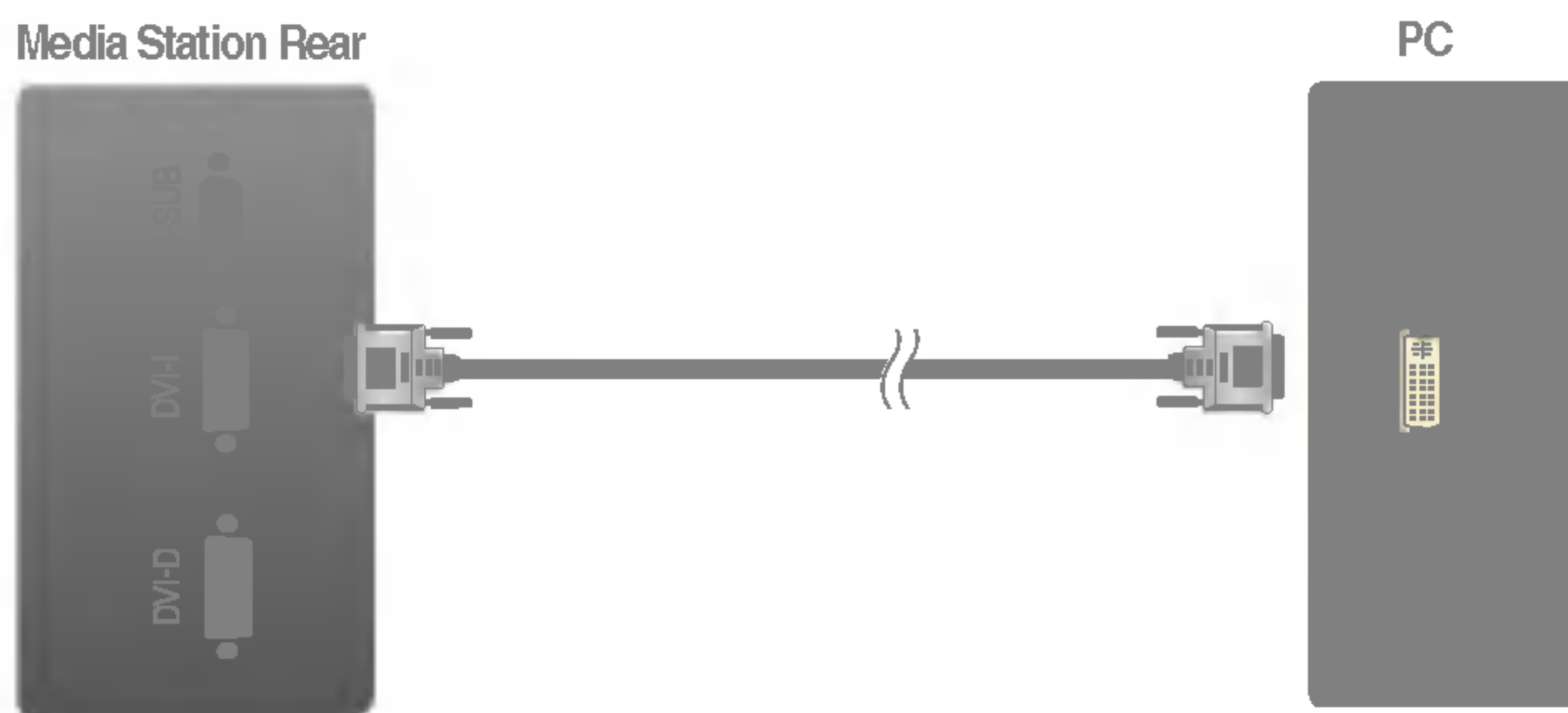
Mac adapter (not included)
For Apple Macintosh use, a separate plug adapter is needed to change the 15 pin high density (3 row) D-sub VGA connector on the supplied cable to a 15 pin 2 row connector.

(2-2) When connecting DVI-D signal cable

Media Station Rear

PC

DVI
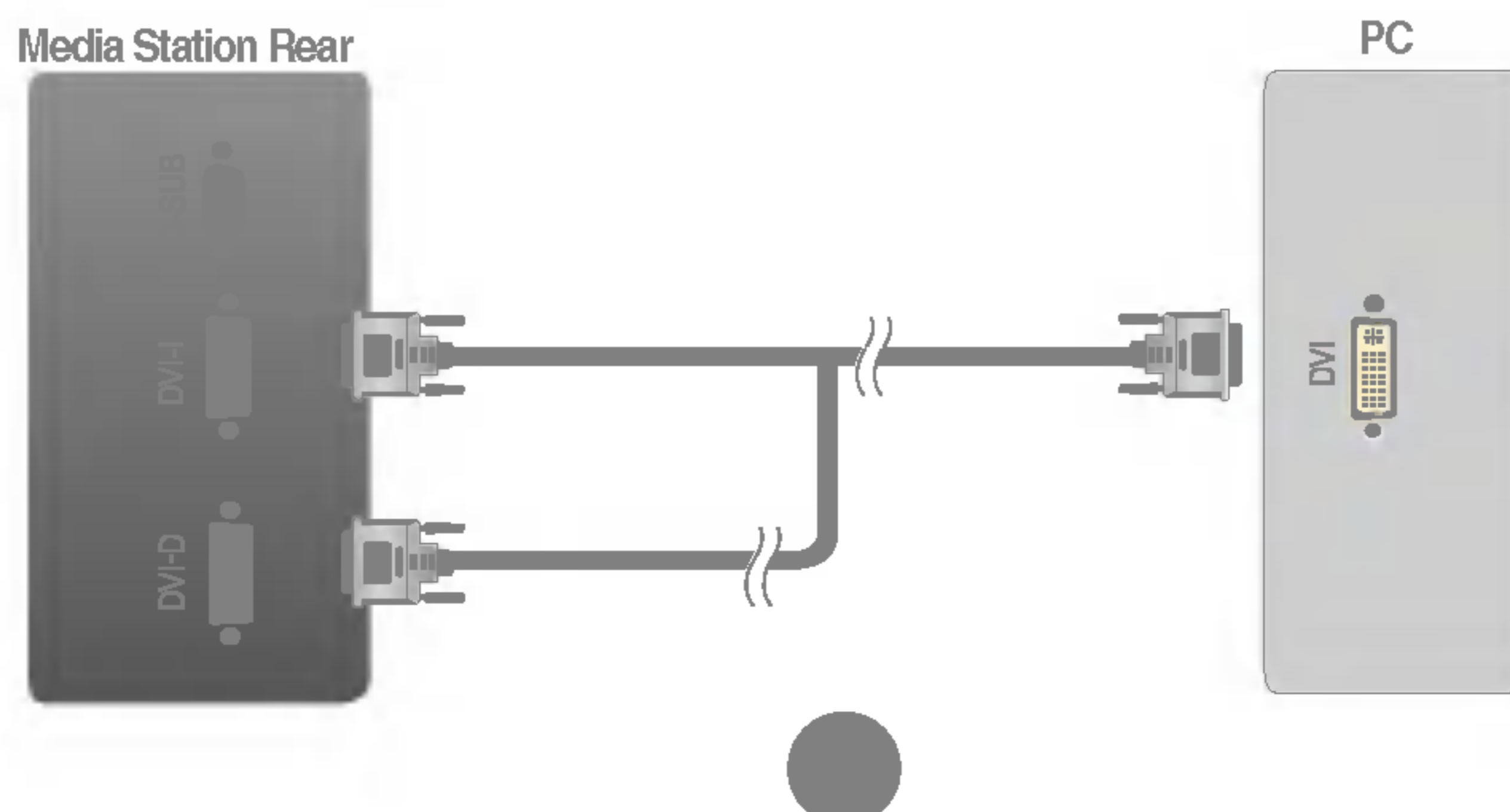
(2-3) When connecting DVI-I signal cable (not included)

Media Station Rear   PC

3. Connect the power cord into a proper power outlet that is easily accessible and close to the display.

Media Station Rear

4. Select an input signal.
Press the **SOURCE** button on the remote control to select an input.

```
SOURCE  →  ▼▲  →  SET
```
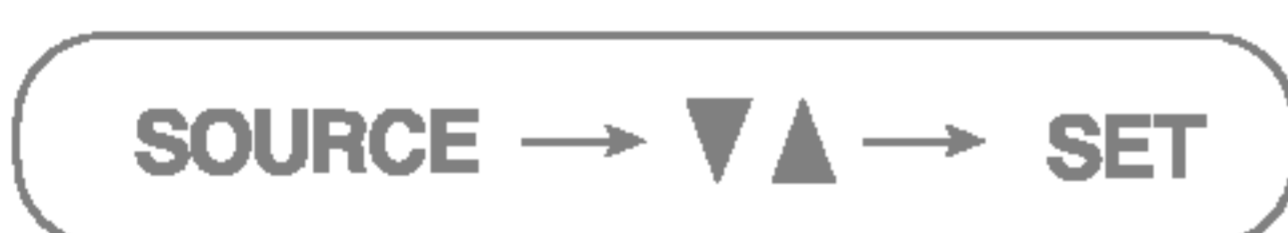
When connecting D-SUB signal cable
  • DSUB ANALOG: 15-pin D-sub analog signal

When connecting DVI-D signal cable
  • DVI-D DIGITAL: DVI-D digital signal

When connecting DVI-I signal cable (not included)
  • DVI-I ANALOG: DVI-I analog signal

  • DVI-I DIGITAL: DVI-I digital signal
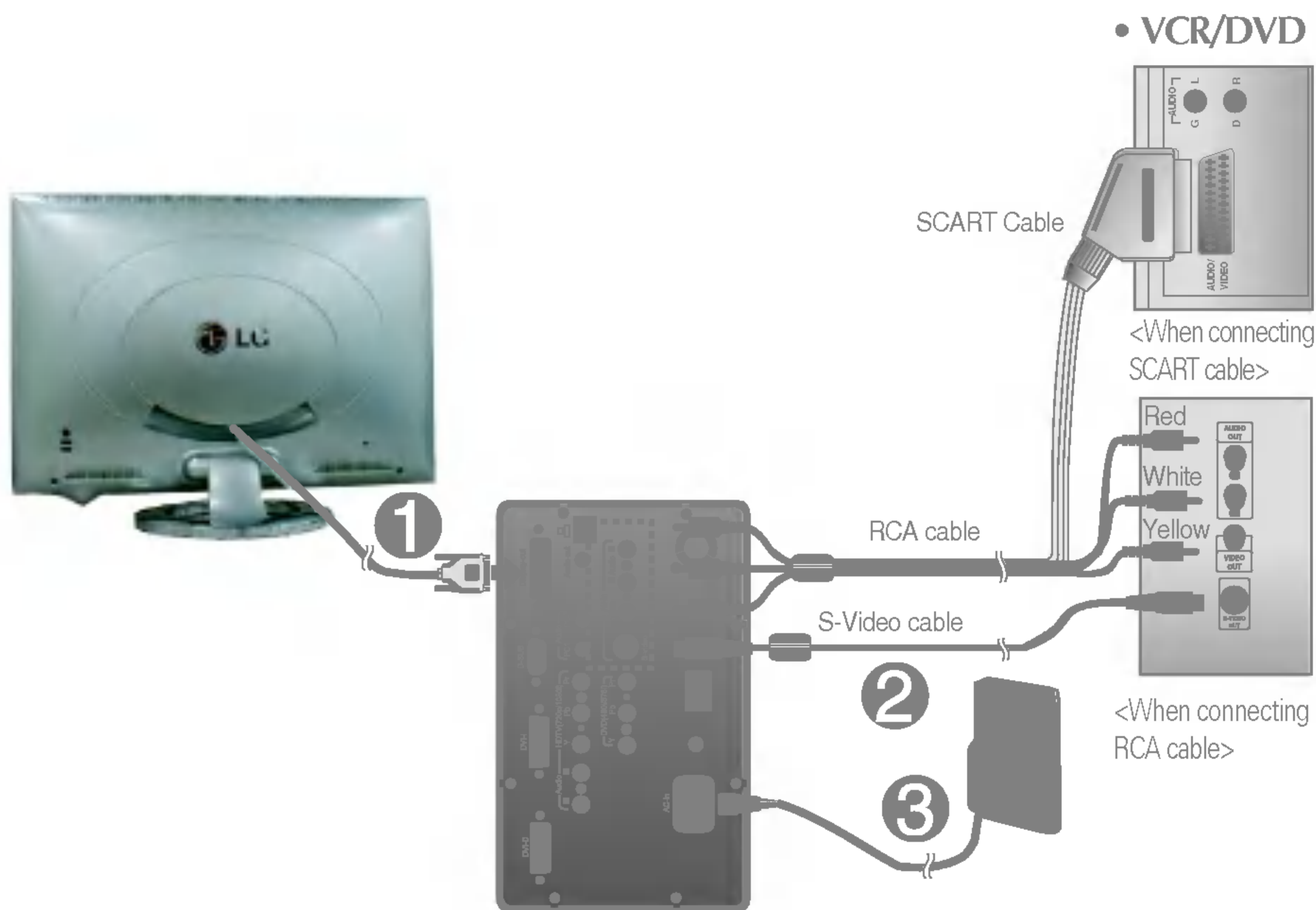
CH

SET

VOL   VOL

CH

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
VIDEO
DVD YPbPr
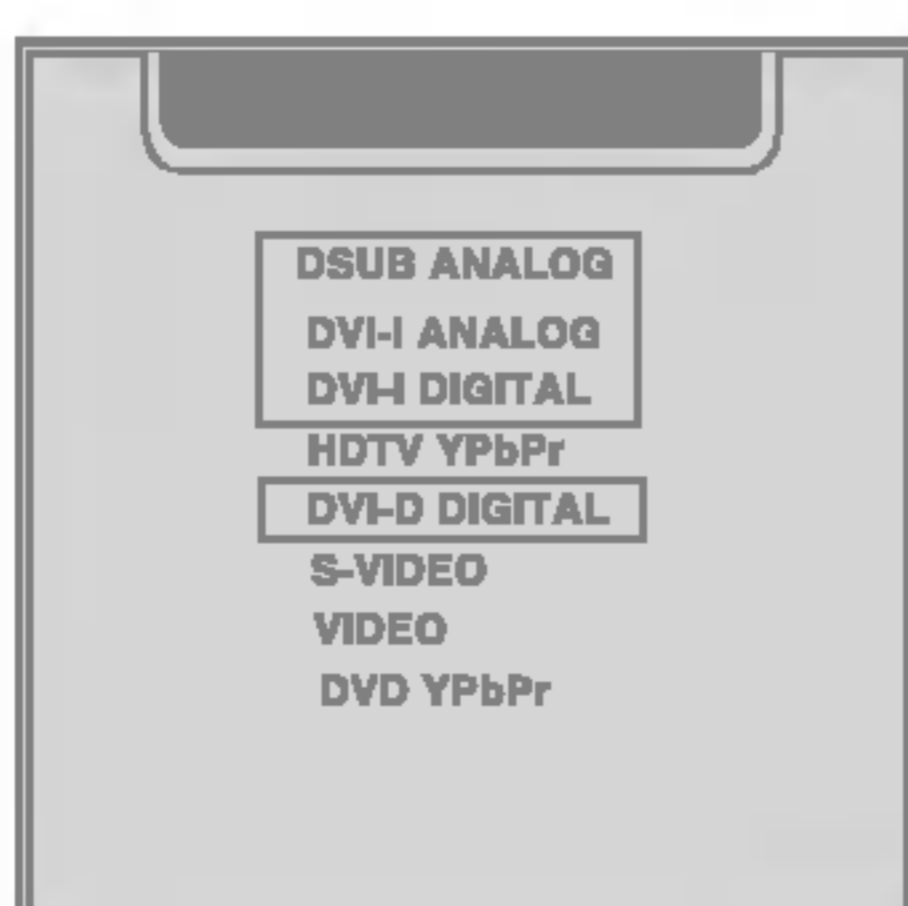
Connecting the Speakers -Optional

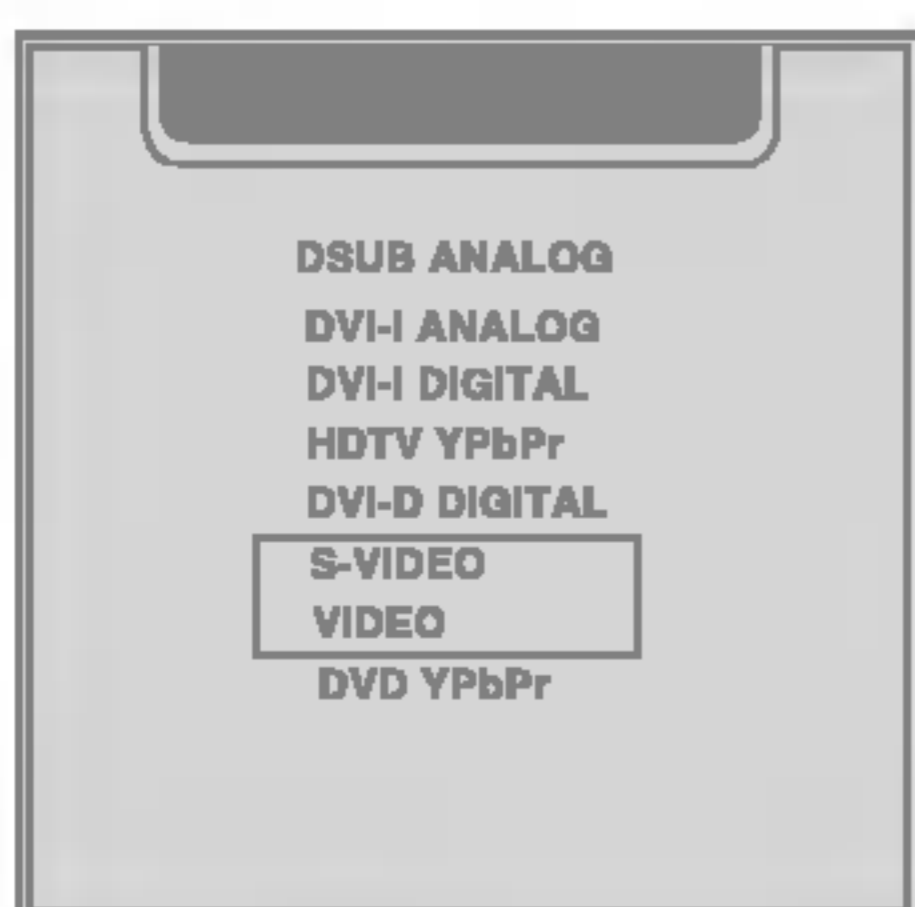Connect the audio cable.

PC
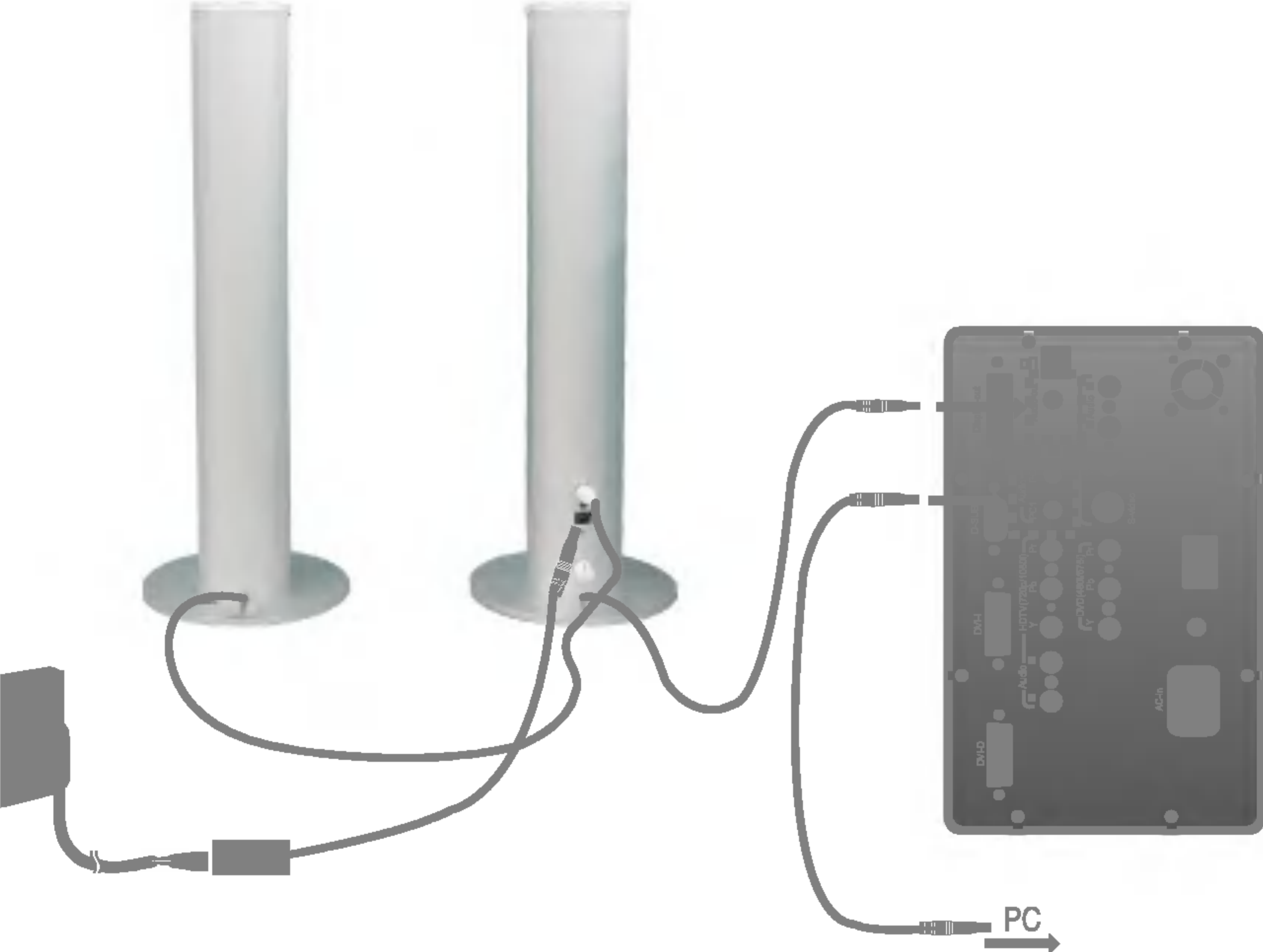
Connecting the VCR/DVD

1. Connect the each audio/video output jack of the VCR/DVD to the corresponding input port as shown on the Display (or Media station).
If you connect the S-Video input port to external equipment, you can have an improved definition image.

• **VCR/DVD**

SCART Cable

<When connecting SCART cable>

RCA cable

Red

White

Yellow

S-Video cable

<When connecting RCA cable>

❶

❷

❸

2. Select an input signal.
Press the **SOURCE** button on the remote control to select an input.

> SOURCE ⟶ ▼▲ ⟶ SET
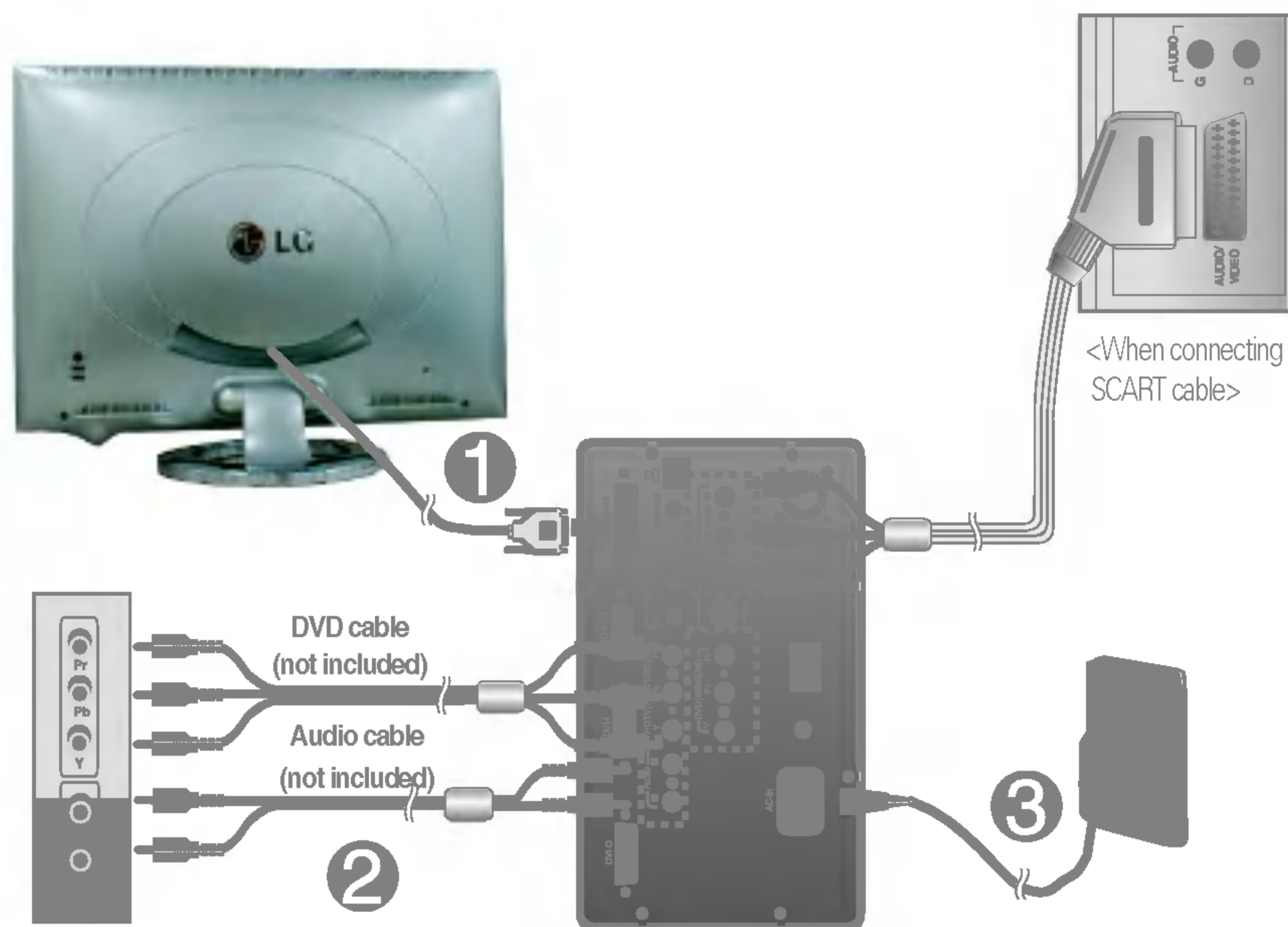
When connecting RCA cable
  • VIDEO: Composite video
When connecting S-Video cable
  • S-VIDEO: S video
When connecting SCART cable
  • VIDEO: Composite video

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
VIDEO
DVD YPbPr

CH ▲
◄ VOL   SET   VOL ►
CH ▼

Connecting the DVD (480i/576i)

1. Connect the each audio/video output jack of the DVD to the corresponding input port as shown on the Display (or Media station).

<When connecting
SCART cable>

DVD cable
(not included)

Audio cable
(not included)

<When connecting
DVD cable>

2. Select an input signal.
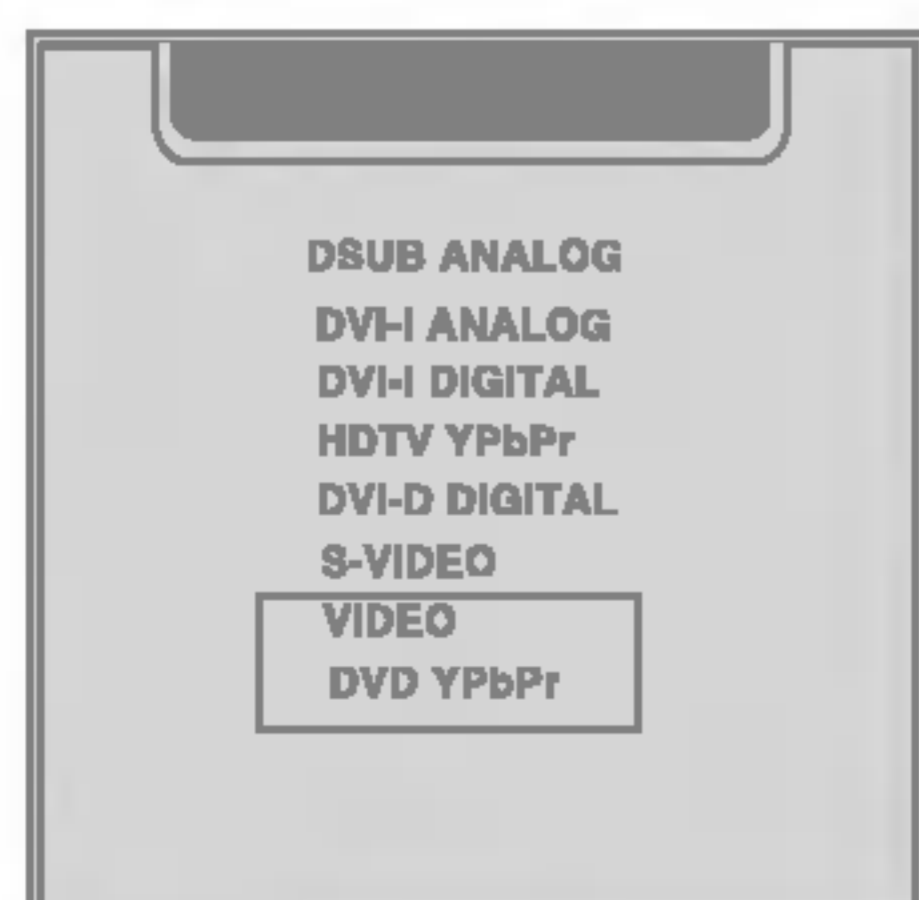Press the **SOURCE** button on the remote control to select an input.

SOURCE → ▼▲ → SET

When connecting DVD/Audio cable
• DVD YPbPr
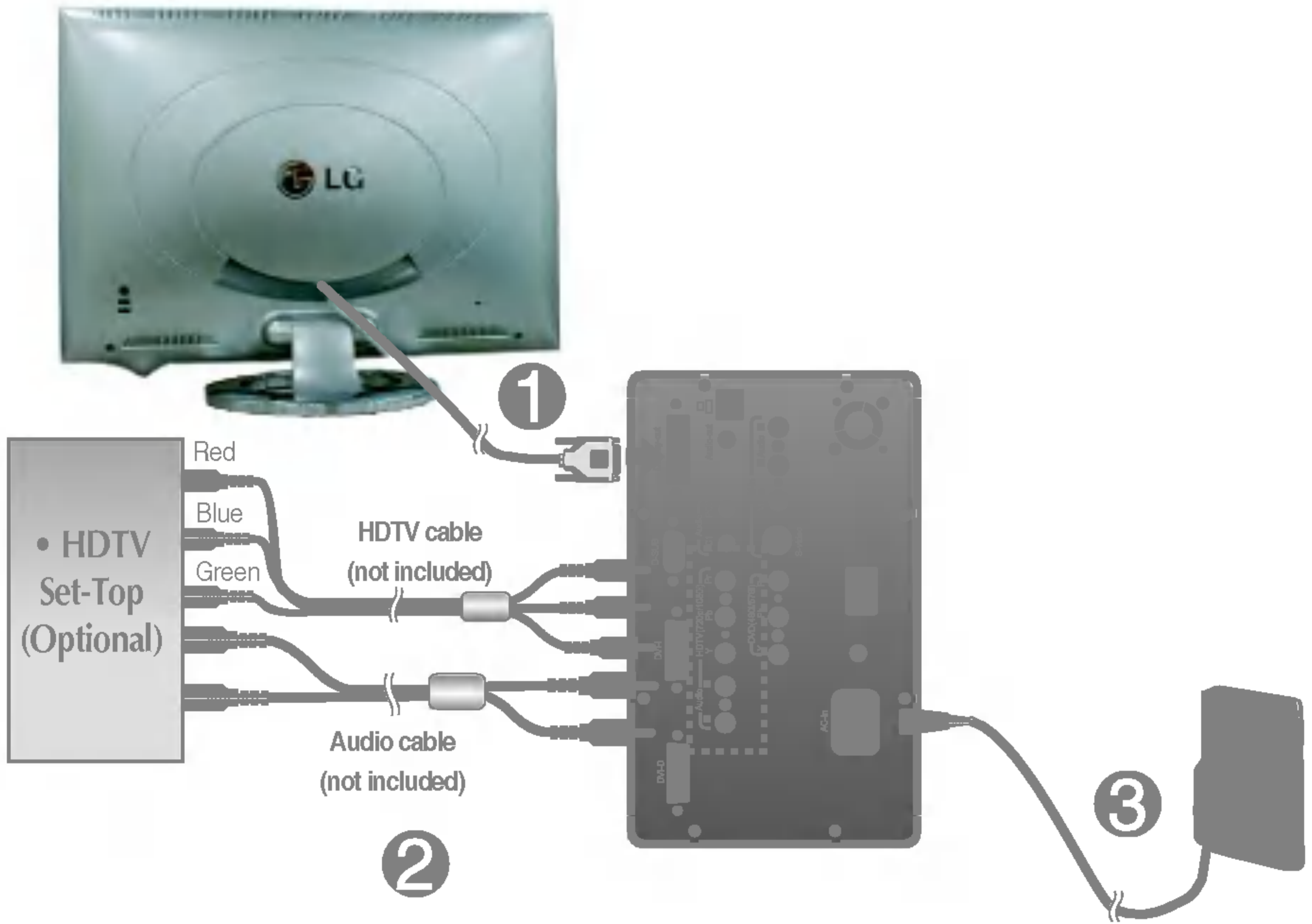When connecting SCART cable
• VIDEO: Composite video

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
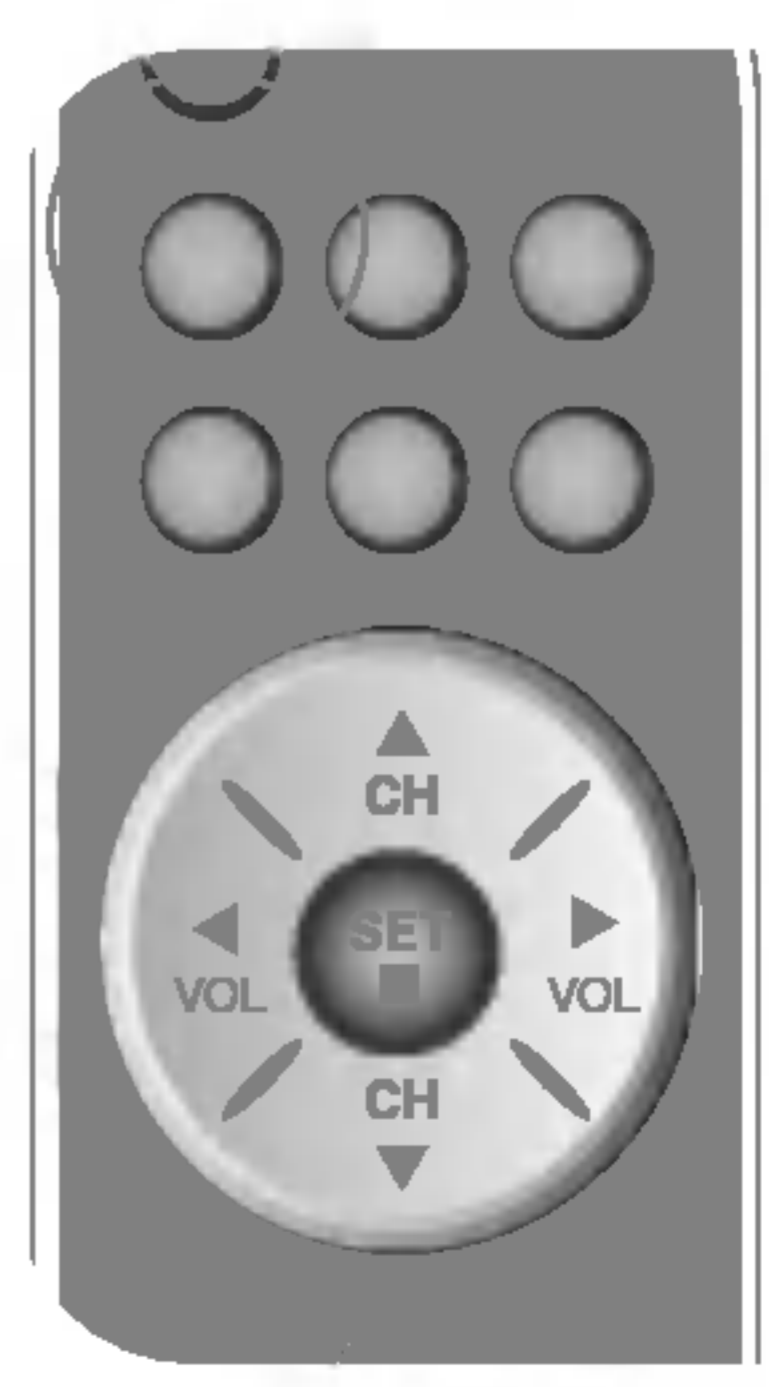DVI-D DIGITAL
S-VIDEO
VIDEO
DVD YPbPr

Watching HDTV (720p/1080i)

1. Connect both HDTV cable (Y/Pb/Pr) and audio cable (Audio L/R) to the Display (or Media station) jack and the Set-top box jack.
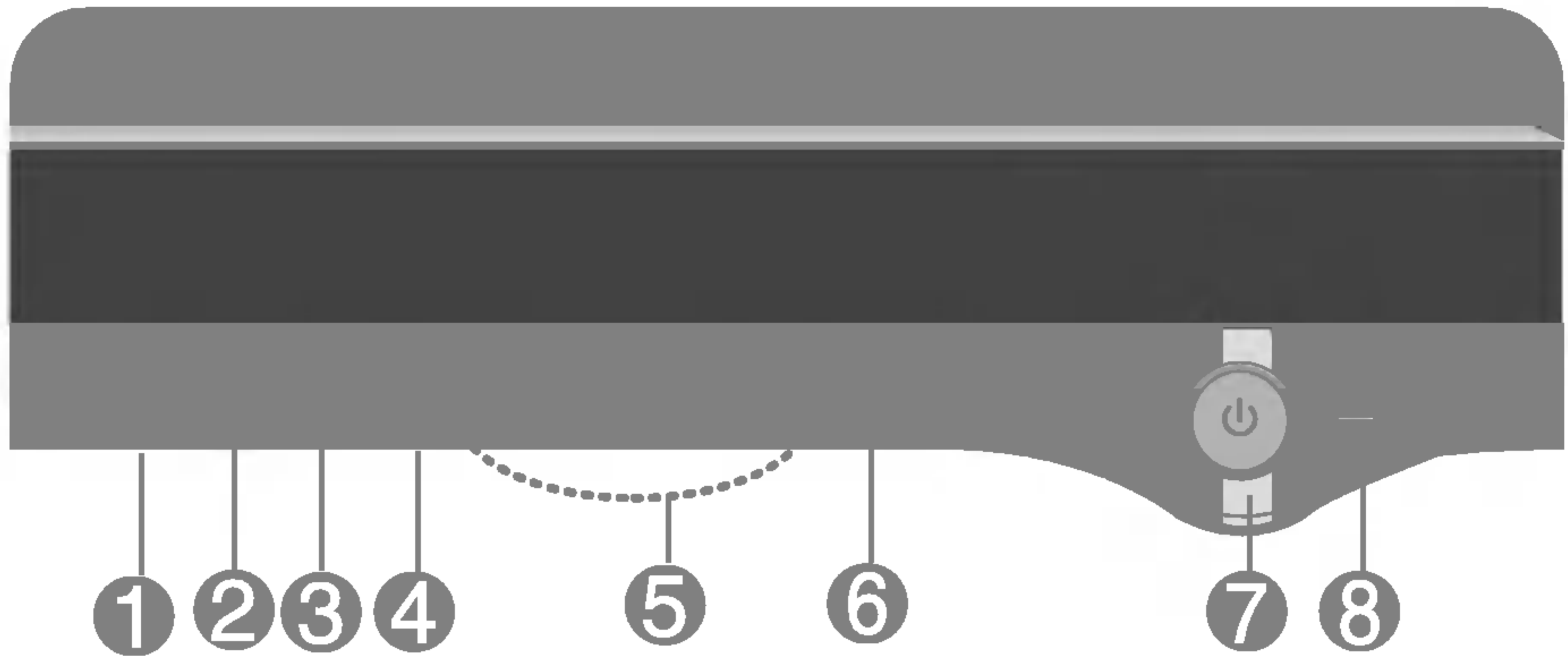

- HDTV Set-Top (Optional)

Red
Blue
Green

HDTV cable (not included)

Audio cable (not included)

❶
❷
❸

2. Select an input signal.
Press the **SOURCE** button on the remote control to select an input.

SOURCE → ▼▲ → SET

- HDTV YPbPr

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
VIDEO
DVD YPbPr

CH
VOL   SET   VOL
CH

Front Panel Controls

①②③④ ⑤ ⑥ ⑦⑧

---

①

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
VIDEO
DVD YPbPr

Source Selection:

Use this button to select an input signal.
- DSUB ANALOG: 15-pin D-sub analog signal
- DVI-I ANALOG: DVI-I analog signal
- DVI-I DIGITAL: DVI-I digital signal
- HDTV YPbPr: HDTV
- DVI-D DIGITAL: DVI-D digital signal
- S-VIDEO: S video
- VIDEO: Composite video
- DVD YPbPr: DVD

---

②

PIP (Picture in Picture) function

The sub-screen is changed in the order shown below.
: SMALL -> LARGE -> OFF

The positions of **SOURCE 1** and **SOURCE 2** can be transposed by selecting **SWAP** on the remote control.

---

③

POP (Picture out Picture) function

The sub-screen is changed in the order shown below.
: SMALL -> MEDIUM -> LARGE -> OFF

The positions of **SOURCE 1** and **SOURCE 2** can be transposed by selecting **SWAP** on the remote control.

|		
④	**MENU Button**	Use this button to enter or exit the On Screen Display.
⑤	100 ☼ ◐◁ ▷◑100 ☼	• Bring up Contrast and Brightness adjustment. It is available to the PC signal inputs only. CH.− CH.+ ⟶ CH.− CH.+ : To adjust the brightness VOL.− VOL.+ : To adjust the contrast
	🔊 ◀IIIIIIIII·······▶ 37	**VOL. - / VOL. +** Use these buttons to decrease or increase the volume level.
		Use these buttons to choose or adjust items in the On Screen Display.
⑥	AUTO IN PROGRESS	**AUTO adjustment function** When adjusting your display settings, always press the **AUTO/SELECT** button before entering the On Screen Display(OSD). This will automatically adjust your display image to the ideal settings for the current screen resolution size (display mode). It is available to the PC signal inputs only. The best display mode is **1920x1200 @60Hz**.
		Use this button to enter a selection in the On Screen Display.
⑦	**Power Button**	Use this button to turn the display on or off.
	Power (DPMS) Indicator	This Indicator lights up blue when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.
⑧	**Remote Control Sensor**	
	CONTROLS LOCKED CONTROLS UNLOCKED	**CONTROLS LOCKED/UNLOCKED :** **MENU and VOL.+** This function allows you to secure the current control settings, so that they cannot be inadvertently changed. Press and hold the **MENU** button and **VOL.+** button for 5 seconds: the message **"CONTROLS LOCKED"** appears. You can unlock the OSD controls at any time by pushing the **MENU** button and **VOL.+** button for 5 seconds: the message **"CONTROLS UNLOCKED"** will appear.

Screen Adjustment

Making adjustments to the image size, position and operating parameters of the display is quick and easy with the On Screen Display Control system. A short example is given below to familiarize you with the use of the controls. The following section is an outline of the available adjustments and selections you can make using the OSD.

To make adjustments in the On Screen Display, follow these steps:
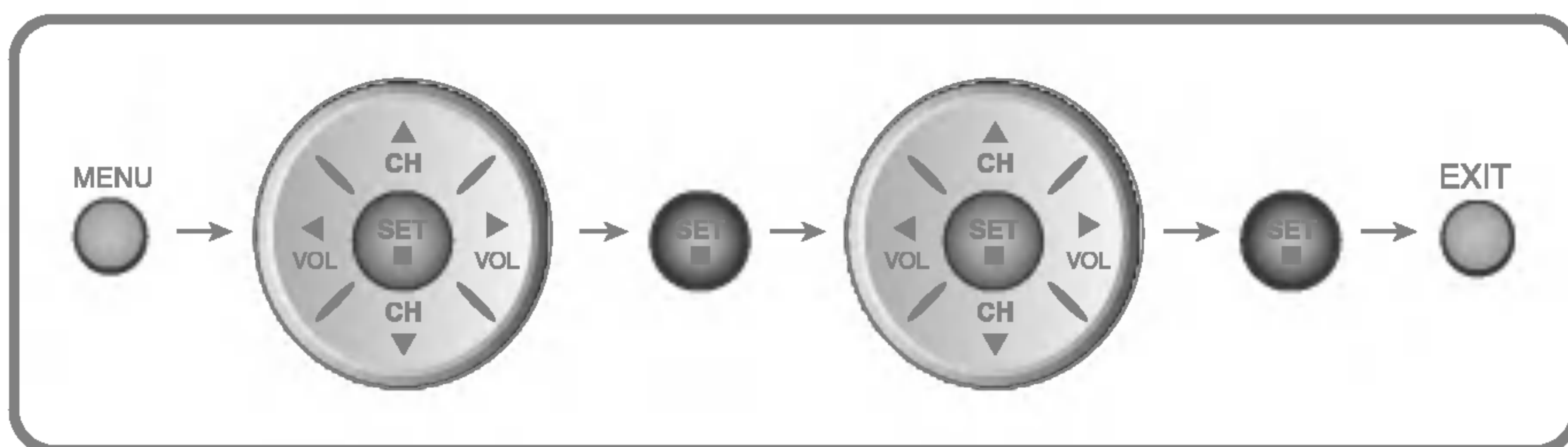
1   Press the **MENU Button**, then the main menu of the OSD appears.

2   To access a control, use the ▼ or ▲ **Buttons**. When the icon you want becomes highlighted, press the **SET Button**.

3   Use the ▼▲ ◄ ► **Buttons** to adjust the item to the desired level.

4   Accept the changes by pressing the **SET Button**.

5   Exit the OSD by Pressing the **EXIT Button**.

The following table indicates all the On Screen Display control, adjustment, and setting menus.

Main menu	Sub-menu		A	D	Reference
BRIGHTNESS CONTRAST	BRIGHTNESS		●	●	To adjust the brightness and contrast of the screen
	CONTRAST		●	●	
COLOR ADJUSTMENT	PRESET	9300K	●		To customize the color of the screen
		6500K	●		
	R/G/B(User Color)		●		
IMAGE POSITION	V POSITION		●		To adjust the position of the screen
	H POSITION		●		
TRACKING	AUTO		●		To improve the clarity and stability of the screen
	CLOCK		●		
	PHASE		●		
AUDIO	MUTE		●	●	To adjust the audio function
	VOLUME		●	●	
	BASS		●	●	
	TREBLE		●	●	
	BBE EFFECT		●	●	
SETUP	LANGUAGE		●	●	To customize the screen status for a user's operating environment
	IMAGE SIZE		●	●	
	OSD POSITION		●	●	
	TRANSPARENCY		●	●	
	ZOOM		●	●	
PIP/POP	PIP MODE		●	●	To adjust the PIP/POP/BRIGHT WINDOW of the screen
	POP MODE		●	●	
	BRIGHT WINDOW		●	●	

● : Adjustable   A : Analog Input   D : Digital Input

Using the VCR/DVD/HDTV

Main menu	Sub menu	V	H	Reference
ADJUSTMENT	CONTRAST	●	●	To improve the clarity and stability of the screen
	BRIGHTNESS	●	●	
	SHARPNESS	●		
	COLOR	●	●	
	TINT	●	●	
AUDIO	MUTE	●	●	To adjust the audio function
	VOLUME	●	●	
	BASS	●	●	
	TREBLE	●	●	
	BBE EFFECT	●	●	
	SOUND	●	●	
SETUP	LANGUAGE	●	●	To customize the screen status for a user's operating environment
	IMAGE SIZE	●	●	
	OSD POSITION	●	●	
	TRANSPARENCY	●	●	
PIP/POP	PIP MODE	●	●	To adjust the PIP/ POP/ BRIGHT WINDOW of the screen
	POP MODE	●	●	
	BRIGHT WINDOW	●	●	

● : Adjustable   V : VCR/DVD   H : HDTV

You were introduced to the procedure of selecting and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the all items shown on the Menu.
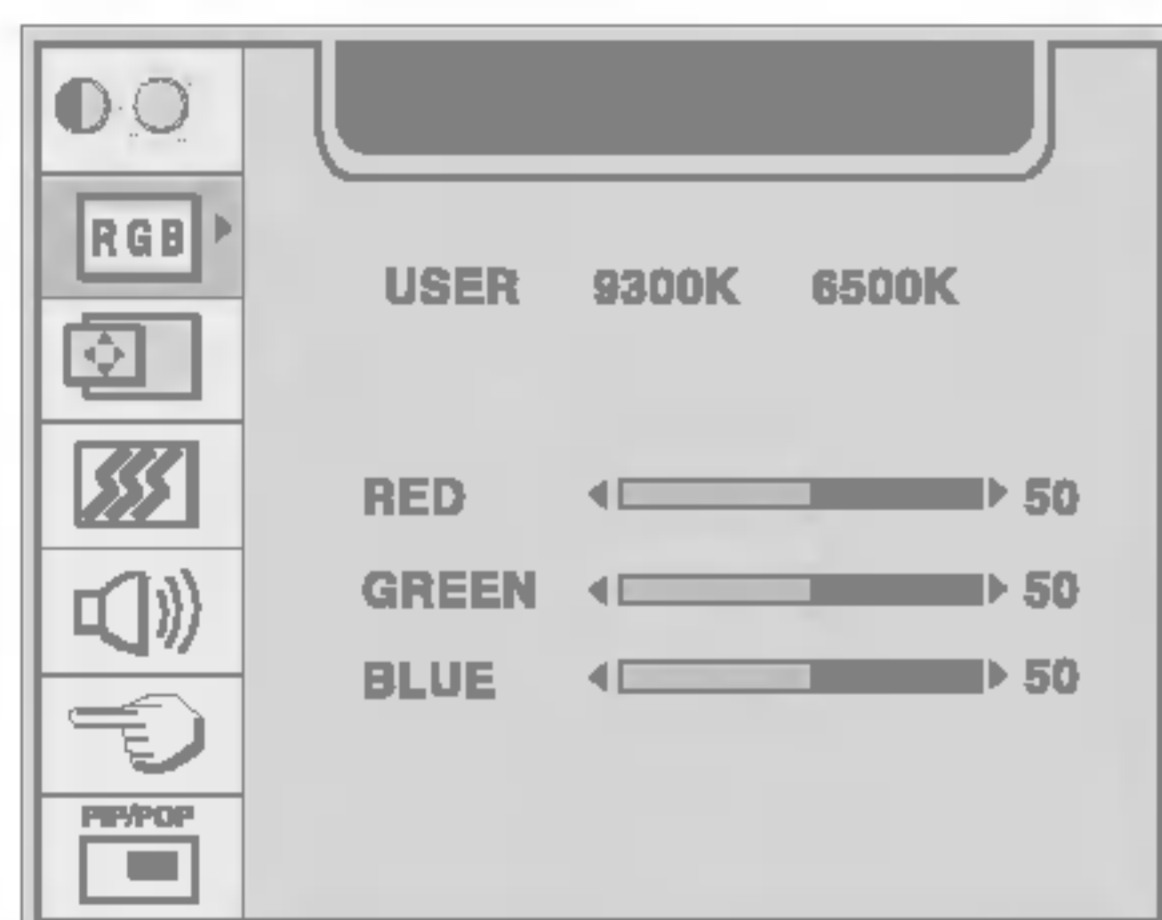
To adjust the screen when using the computer

To adjust the brightness and contrast of the screen
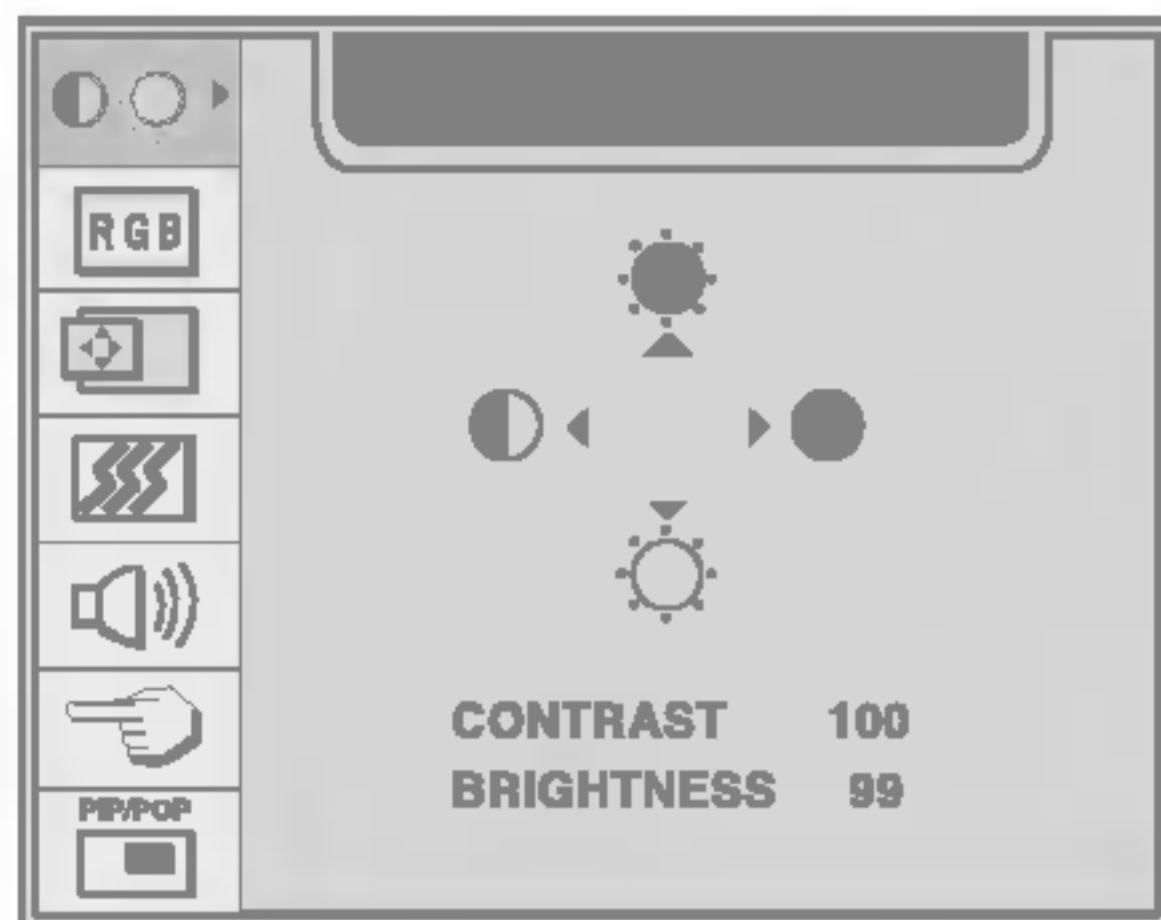
BRIGHTNESS
To adjust the brightness of the screen.

CONTRAST
To adjust the contrast of the screen.

To customize the color of the screen

USER   **RED/GREEN/BLUE**
Set your own color levels.

9300K   Select the screen color.
6500K
• 9300K: Slightly bluish white.
• 6500K: Slightly reddish white.

To adjust the position of the screen
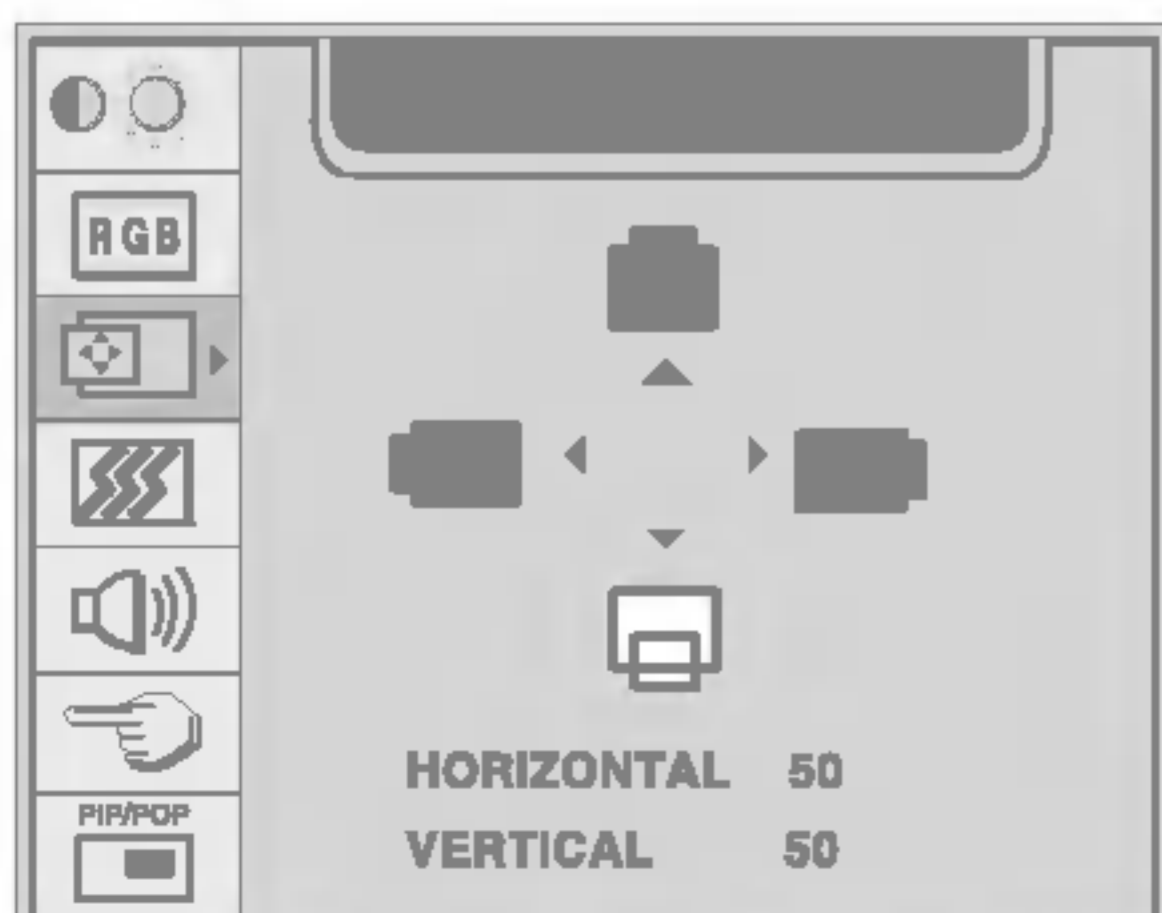
Horizontal Position
To move image left and right.

Vertical Position
To move image up and down.
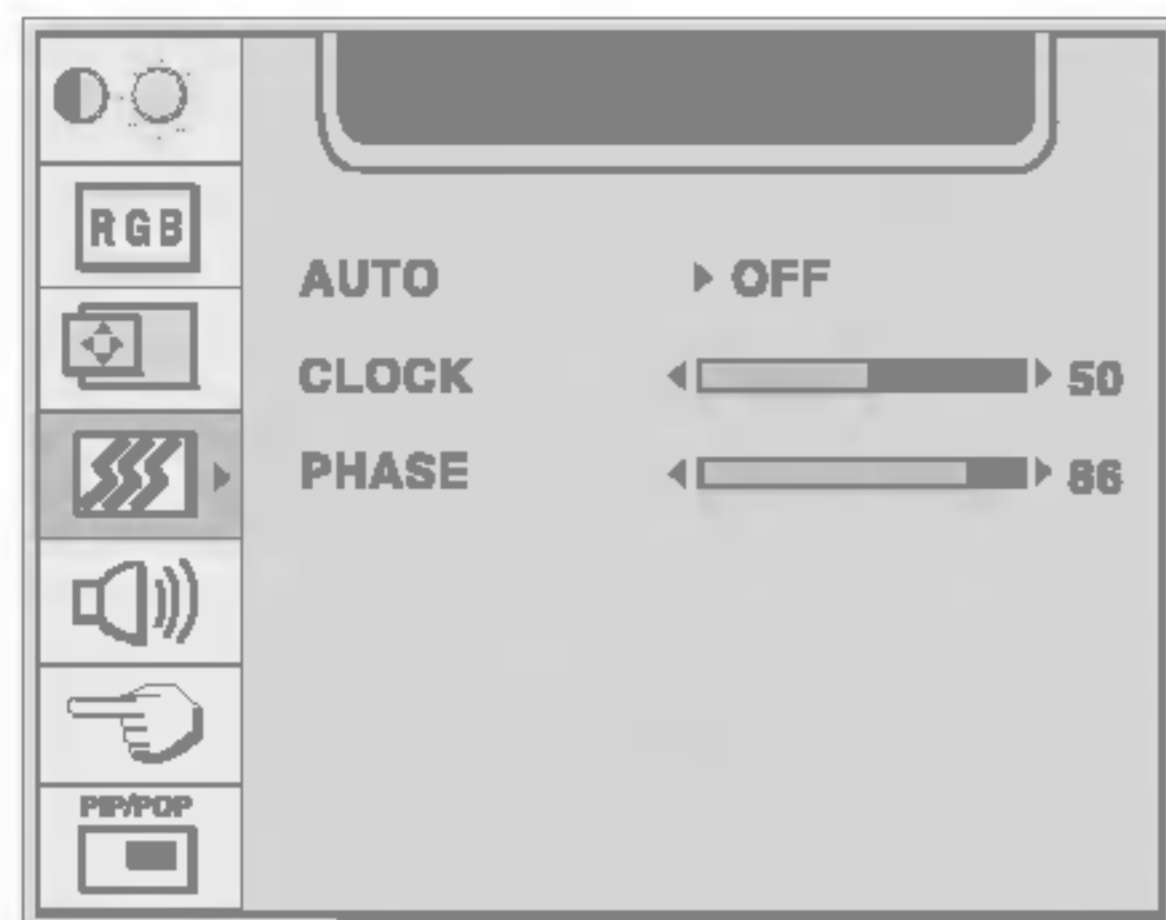
AUTO	This function is suitable for analog signal input only. This button is for the automatic adjustment of the screen position, clock and phase.
CLOCK	To minimize any vertical bars or stripes visible on the screen background.The horizontal screen size will also change.
PHASE	To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.

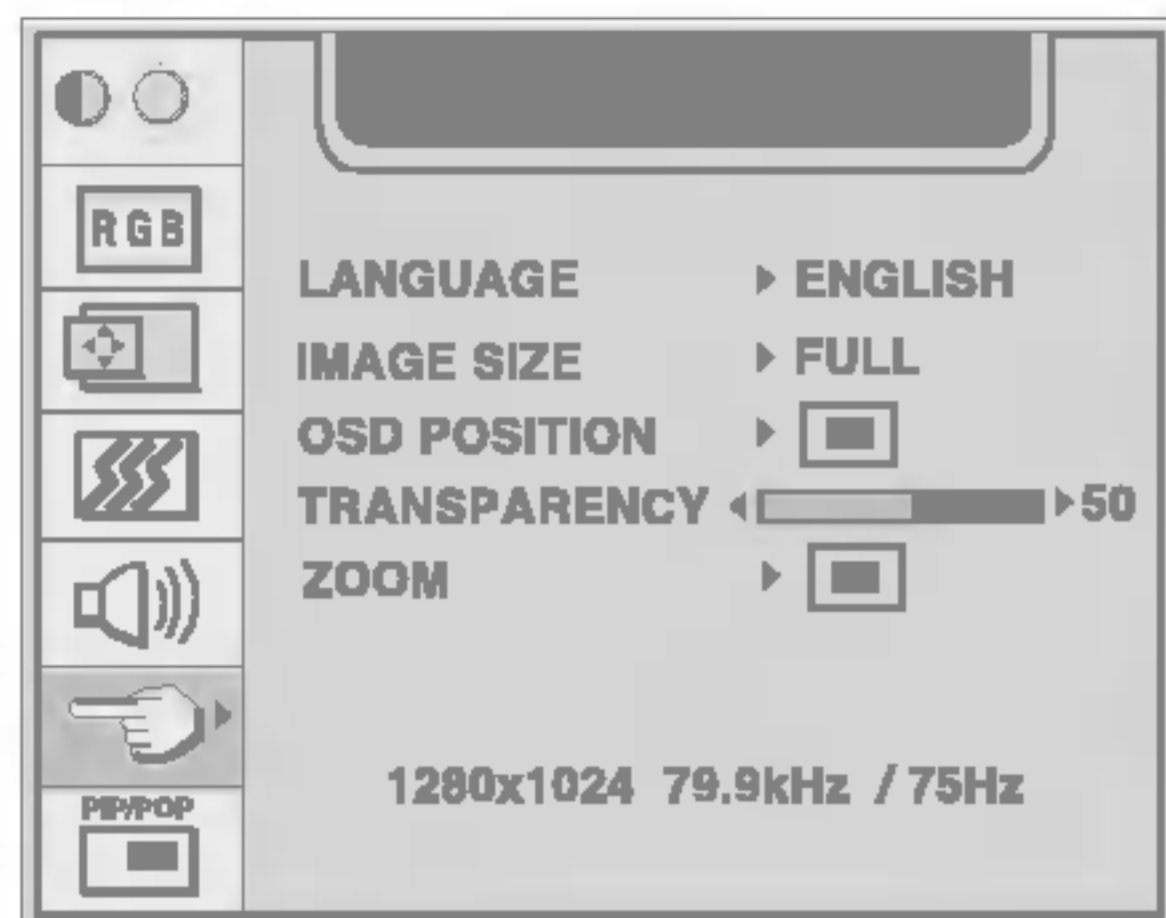| MUTE | Used to select mute on (means sound off) and mute off (means sound on). |
VOLUME	To decrease or increase volume level.
BASS	To decrease or increase bass level.
TREBLE	To decrease or increase treble level.
BBE EFFECT	To improve the clarity and distinction of audio quality.

**LANGUAGE** To choose the language in which the control names are displayed.

IMAGE SIZE To select the image size of the screen. FULL/SPECTACLE/1:1/4:3

OSD POSITION To adjust position of the OSD window on the screen. Press the ◀ ▶ button to display the submenu for OSD POSITION.
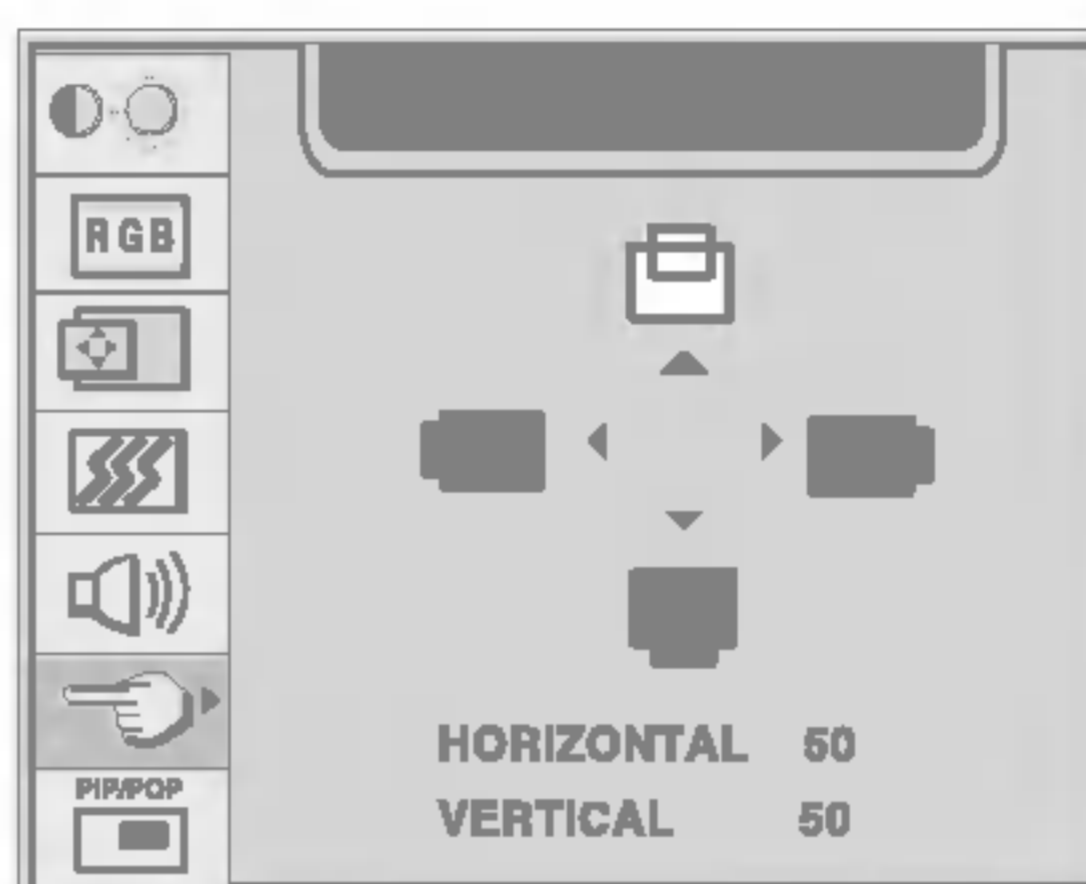

TRANSPARENCY To adjust the transparency of the OSD menu screen.

ZOOM To adjust horizontal and vertical image size simultaneously.
If you want to move the zooming point, use the H/V POSITION function in the sub-menu. However, if the monitor turns off when zooming in and out the screen, the monitor will be returned to original screen.
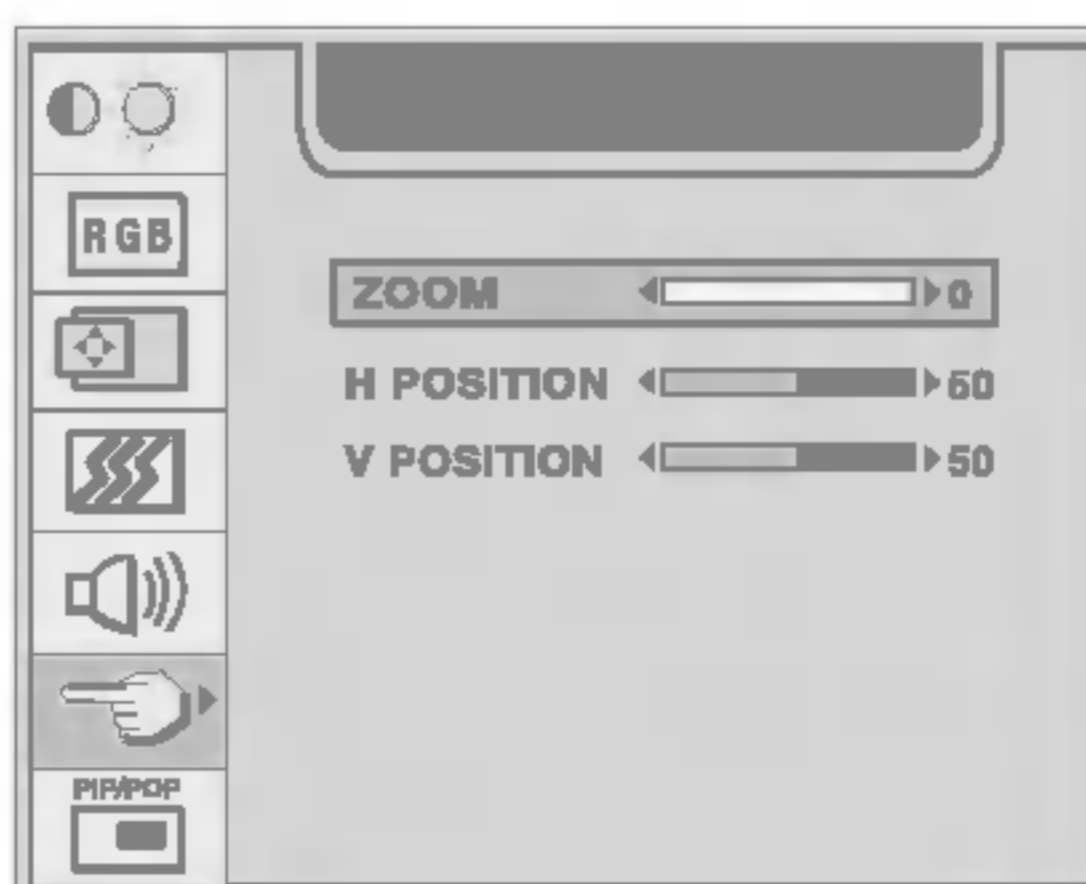
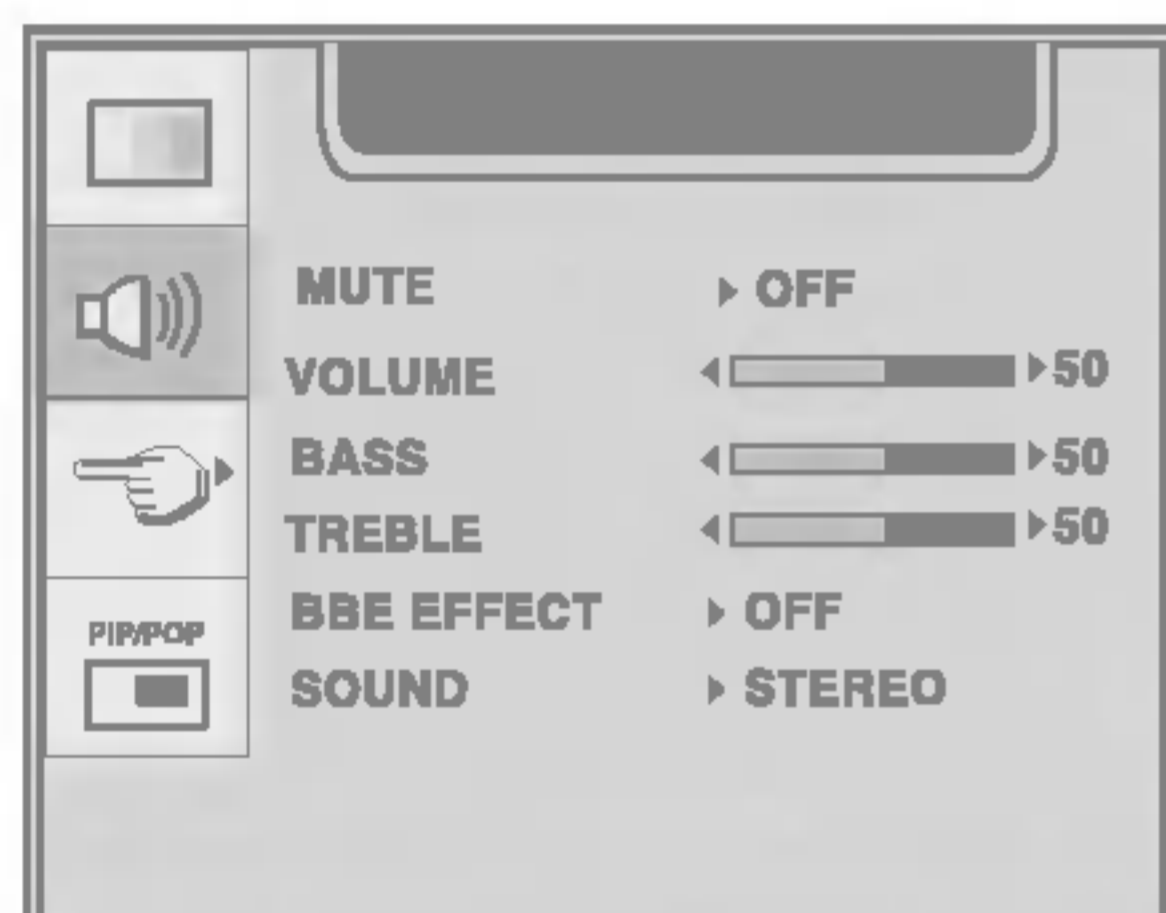## To adjust the screen when using the VCR/DVD/HDTV
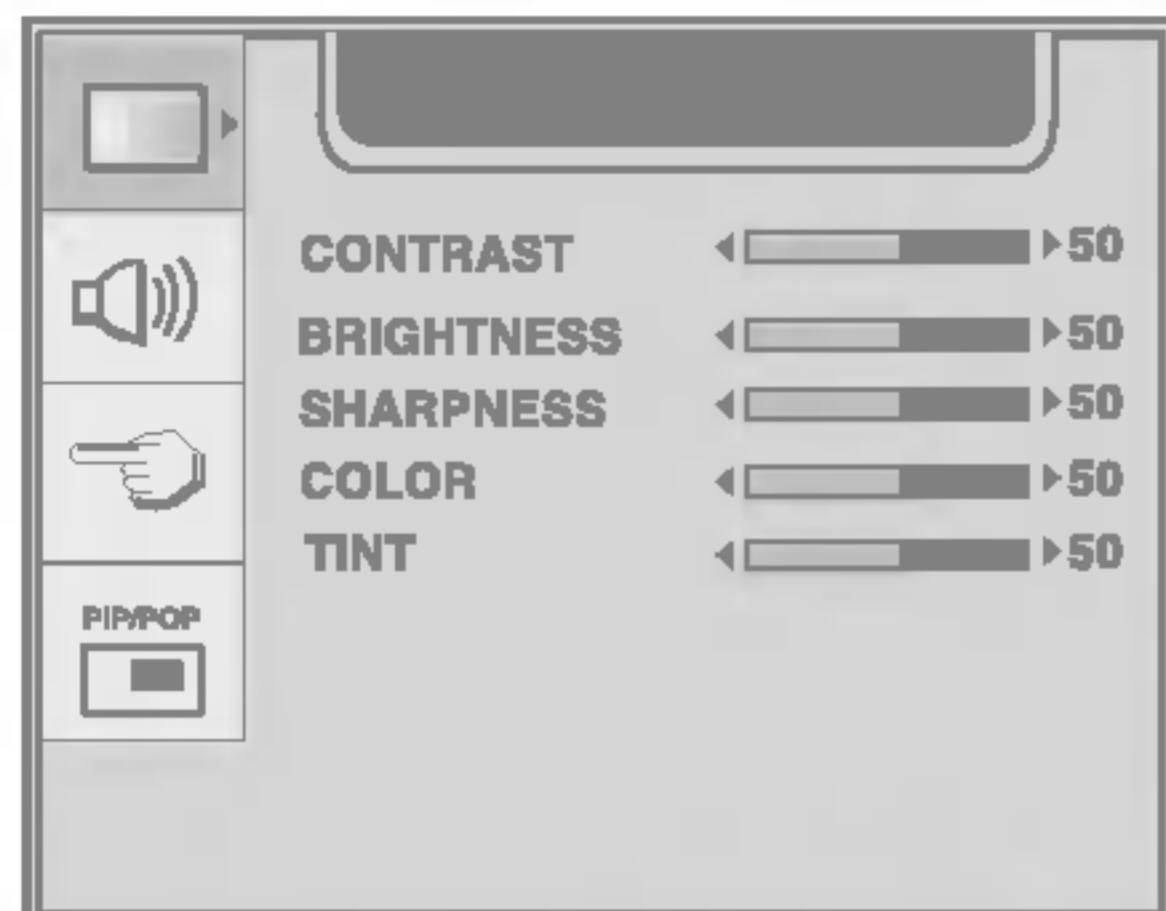
CONTRAST	To adjust the contrast of the screen
BRIGHTNESS	To adjust the brightness of the screen.
SHARPNESS	To adjust the clearness of the screen.
COLOR	To adjust the color to desired level.
TINT	To adjust the tint to desired level.

OSD panel:
CONTRAST ◄▭►50
BRIGHTNESS ◄▭►50
SHARPNESS ◄▭►50
COLOR ◄▭►50
TINT ◄▭►50
PIP/POP

|	
MUTE	Used to select mute on (means sound off) and mute off (means sound on).
VOLUME	To decrease or increase volume level.
BASS	To decrease or increase bass level.
TREBLE	To decrease or increase treble level.
BBE EFFECT	To adjust th clearness and sharpness of the sound.
SOUND	To select the audio mode. : MONO/STEREO

OSD panel:
MUTE ► OFF
VOLUME ◄▭►50
BASS ◄▭►50
TREBLE ◄▭►50
BBE EFFECT ► OFF
SOUND ► STEREO
PIP/POP

LANGUAGE   To choose the language in which the control names are displayed.

IMAGE SIZE   To select the image size of the screen. FULL/SPECTACLE/4:3

OSD POSITION   To adjust position of the OSD window on the screen. Press the ◀ ▶ button to display the submenu for OSD POSITION.
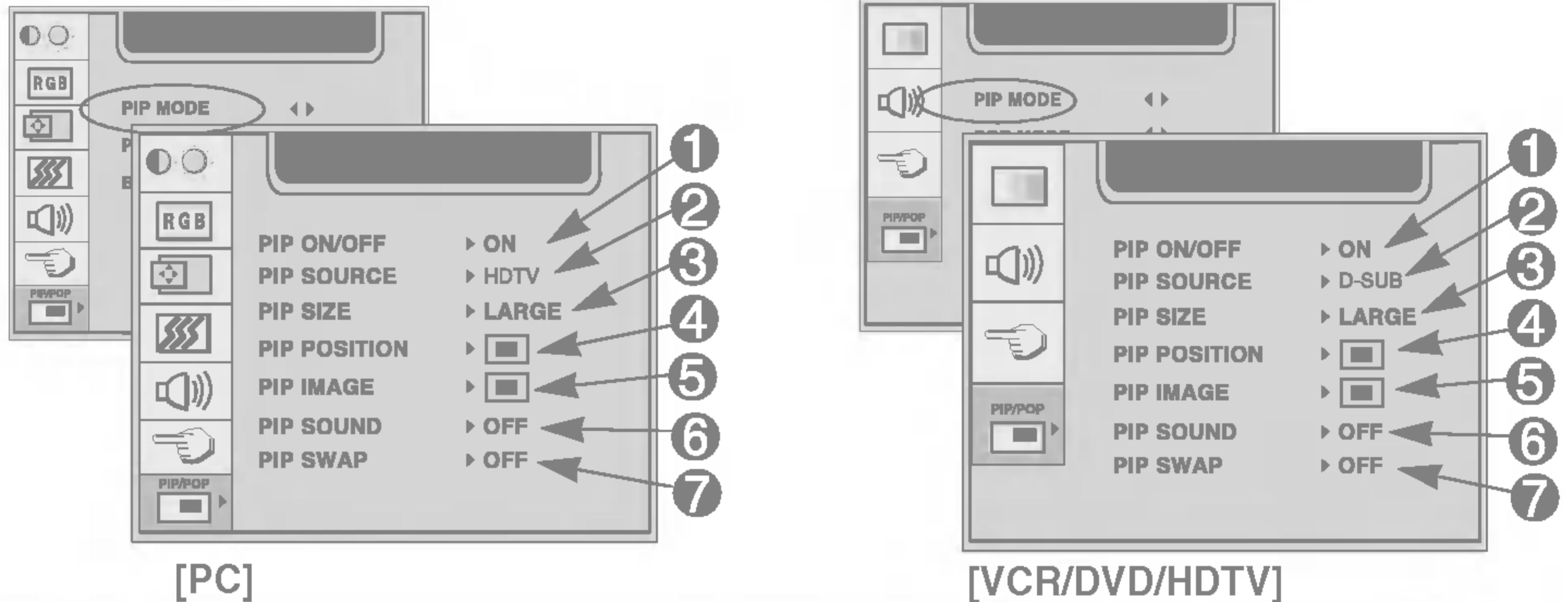
LANGUAGE ▸ ENGLISH
IMAGE SIZE ▸ FULL
OSD POSITION ▸
TRANSPARENCY ◀ ▸50

HORIZONTAL 50
VERTICAL 50
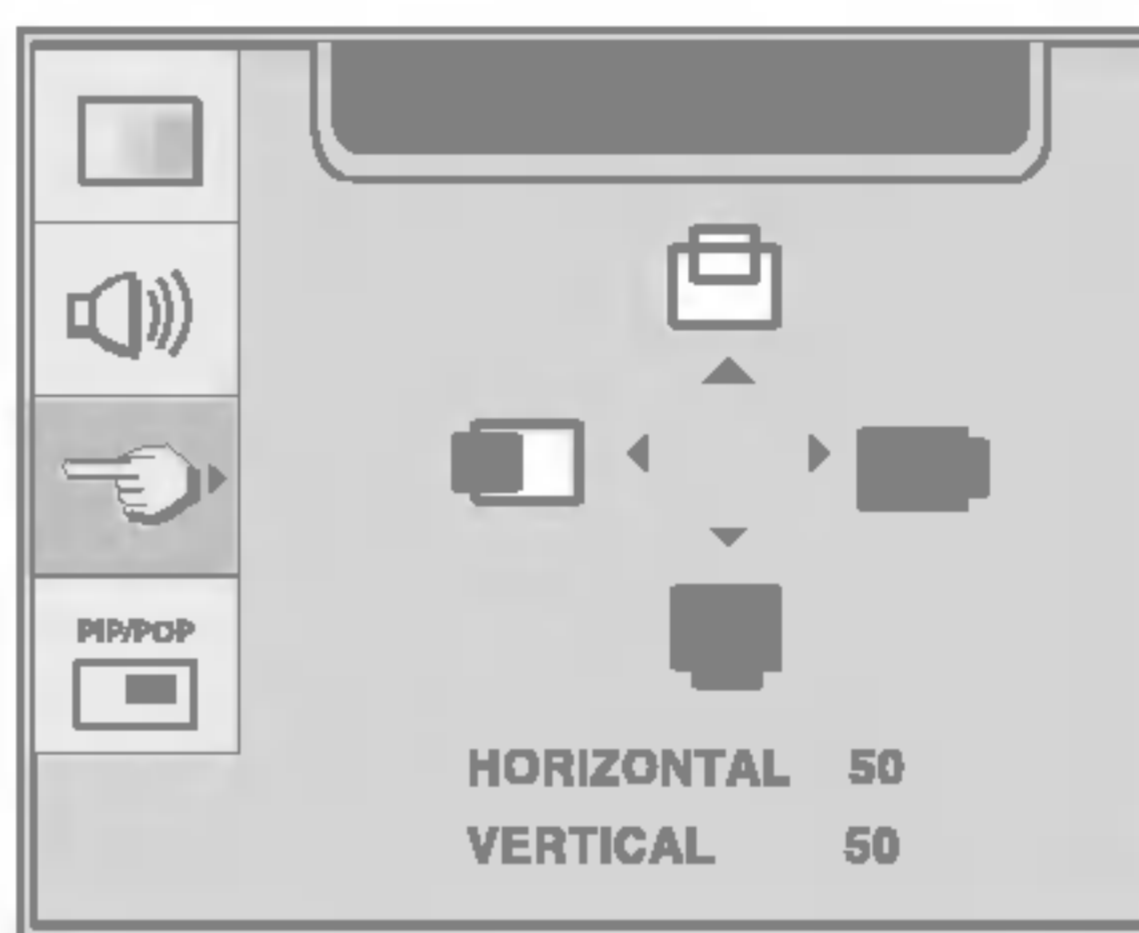
TRANSPARENCY   To adjust the transparency of the OSD menu screen.

PIP/POP/BRIGHT WINDOW function

[PC]

[VCR/DVD/HDTV]

① After selecting **ON** in the **PIP ON/OFF** menu, the following menu items can be adjusted.

② **PIP SOURCE** To select an input signal for PIP.

③ **PIP SIZE** To adjust the size of the PIP screen: SMALL/LARGE

④ **PIP POSITION** To adjust the position of PIP screen. Press the ◄ ► button to display the submenu for PIP POSITION.

[PC]   **[VCR/DVD/HDTV]**

⑤ **PIP IMAGE** To adjust the image of the PIP screen; Press the ◄ ► button to display the submenu for PIP IMAGE. Use the ◄ ► buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.

[PC]   **[VCR/DVD/HDTV]**

CONTRAST	To adjust the contrast of the screen.
BRIGHTNESS	To adjust the brightness of the screen.
SHARPNESS	To adjust the clearness of the screen.
COLOR	To adjust the color to desired level.
TINT	To adjust the tint to desired level.

⑥ **PIP SOUND**　　　　To turn the PIP sound on/off.

⑦ **PIP SWAP**　　　　To switch the main-screen and sub-screen in PIP mode.
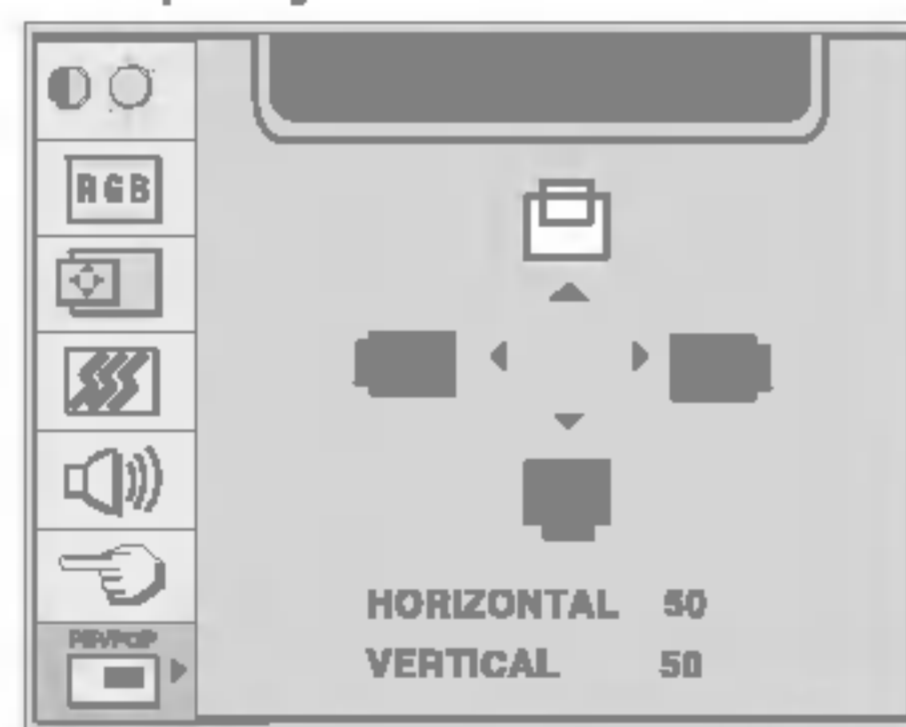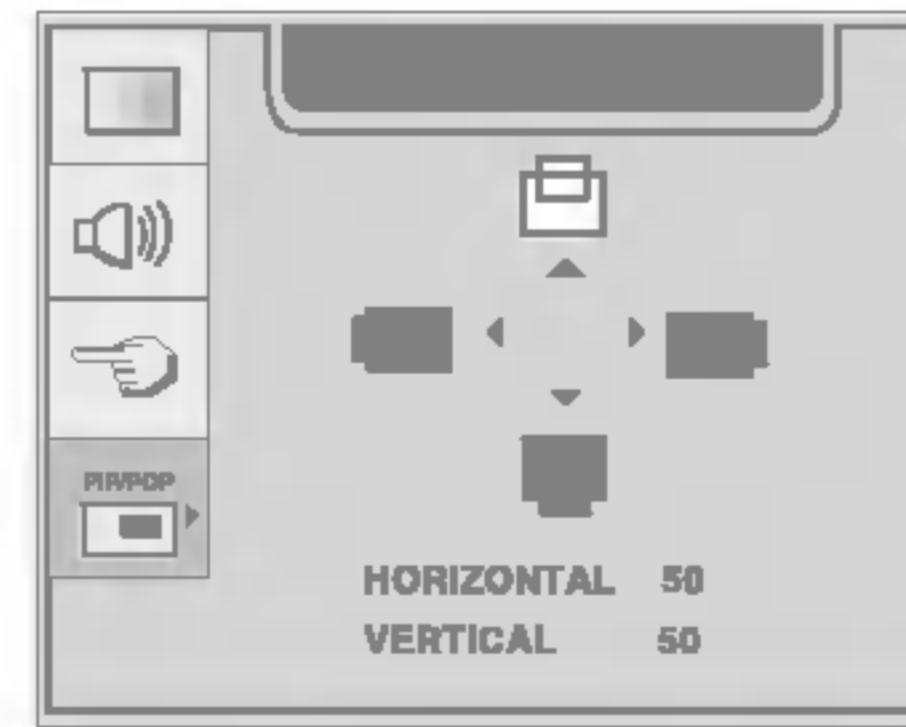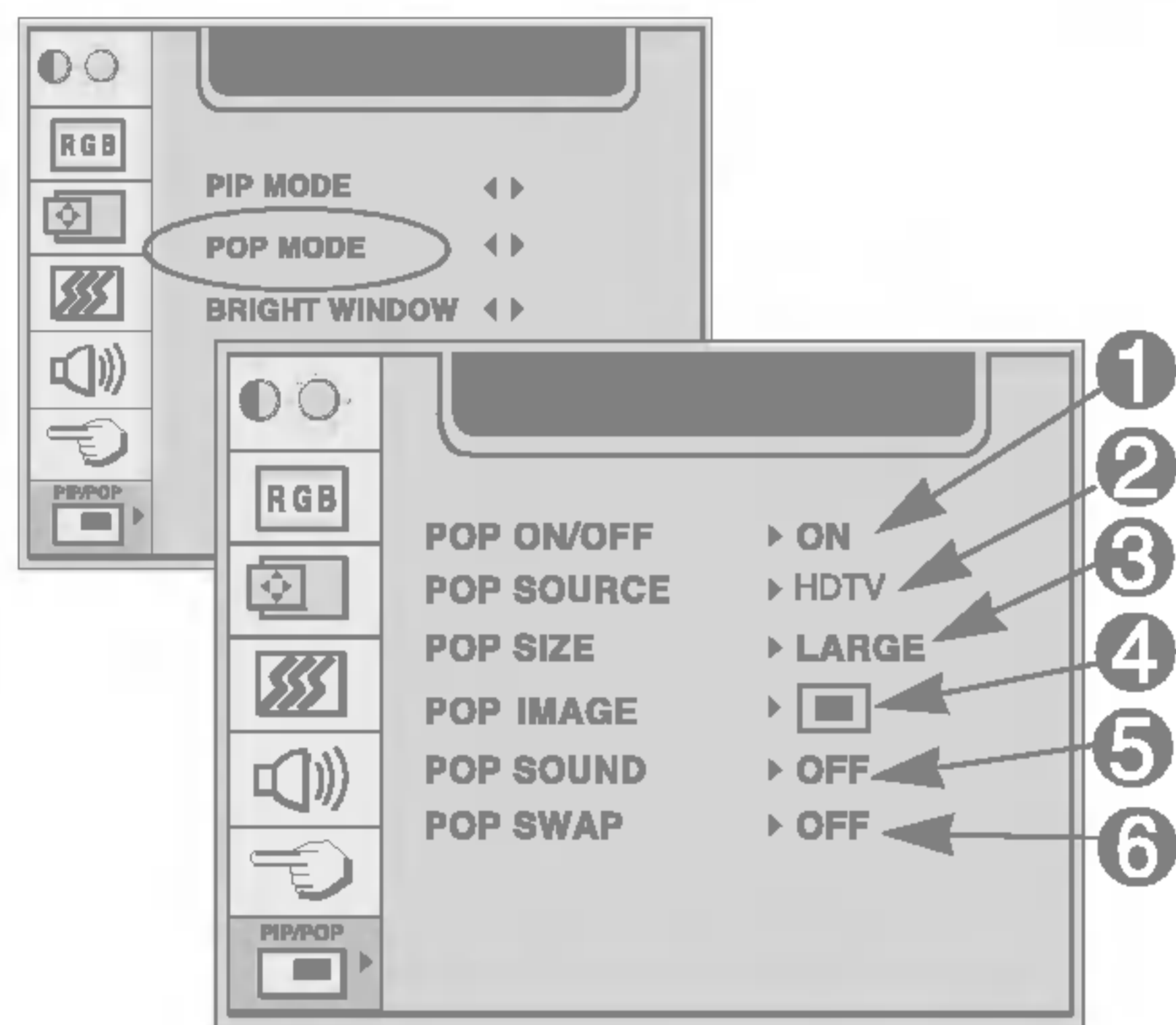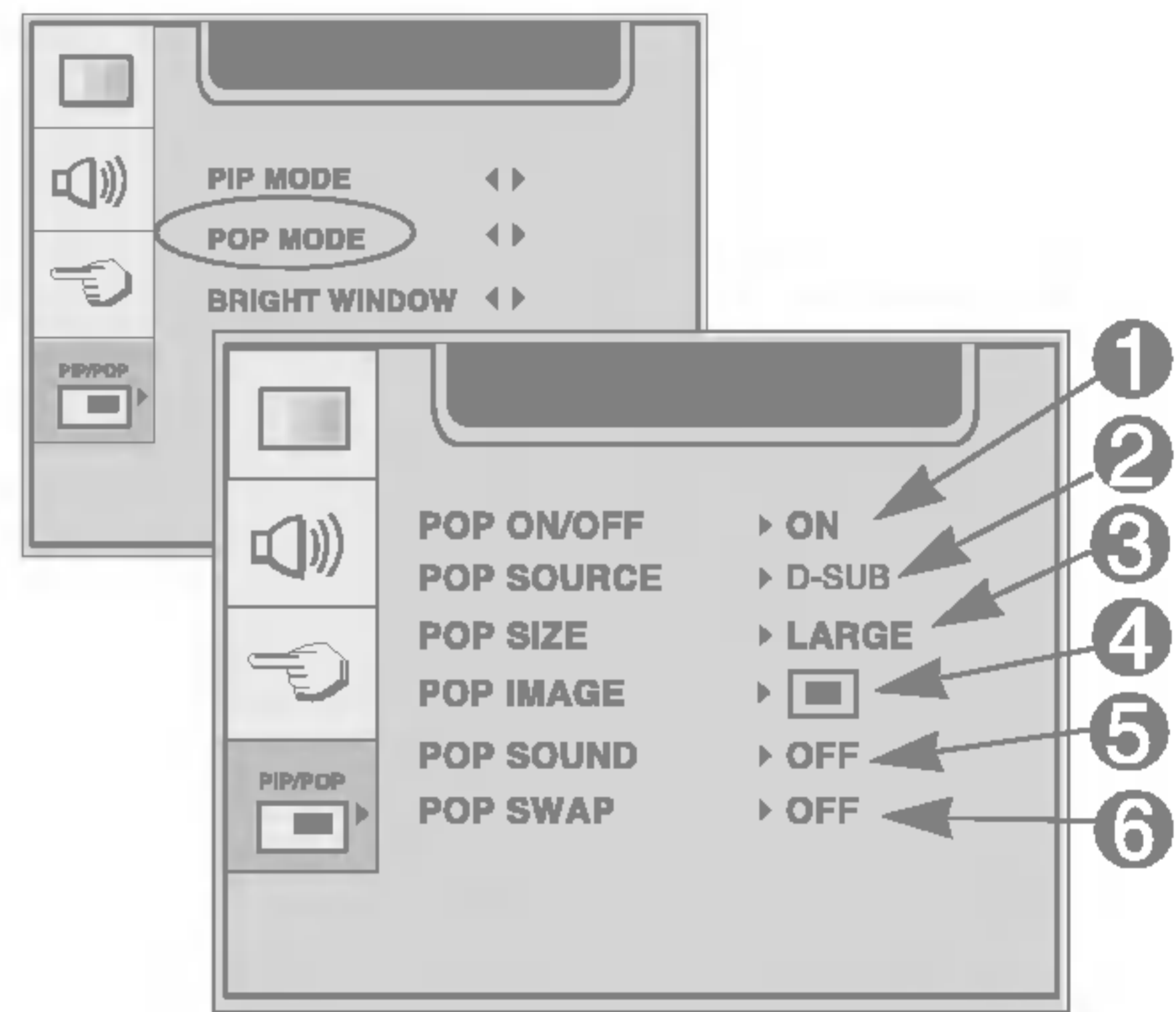
[PC]　　　　　　　　　　　　　　　　　　　　　　　[VCR/DVD/HDTV]

❶ After selecting **ON** in the **POP ON/OFF** menu, the following menu items can be adjusted.

❷ **POP SOURCE**　　　To select an input signal for POP.

❸ **POP SIZE**　　　　To adjust the size of the POP screen: SMALL/MEDIUM/LARGE

❹ **POP IMAGE**　　　To adjust the image of the POP screen; Press the ◀ ▶ button to display the submenu for POP IMAGE. Use the ◀ ▶ buttons to adjust the item to the desired level.

❺ **POP SOUND**　　　To turn the POP sound on/off.

❻ **POP SWAP**　　　To switch the main-screen and sub-screen in POP mode.

To adjust the BRIGHT WINDOW of the screen.

[PC]	[VCR/DVD/HDTV]
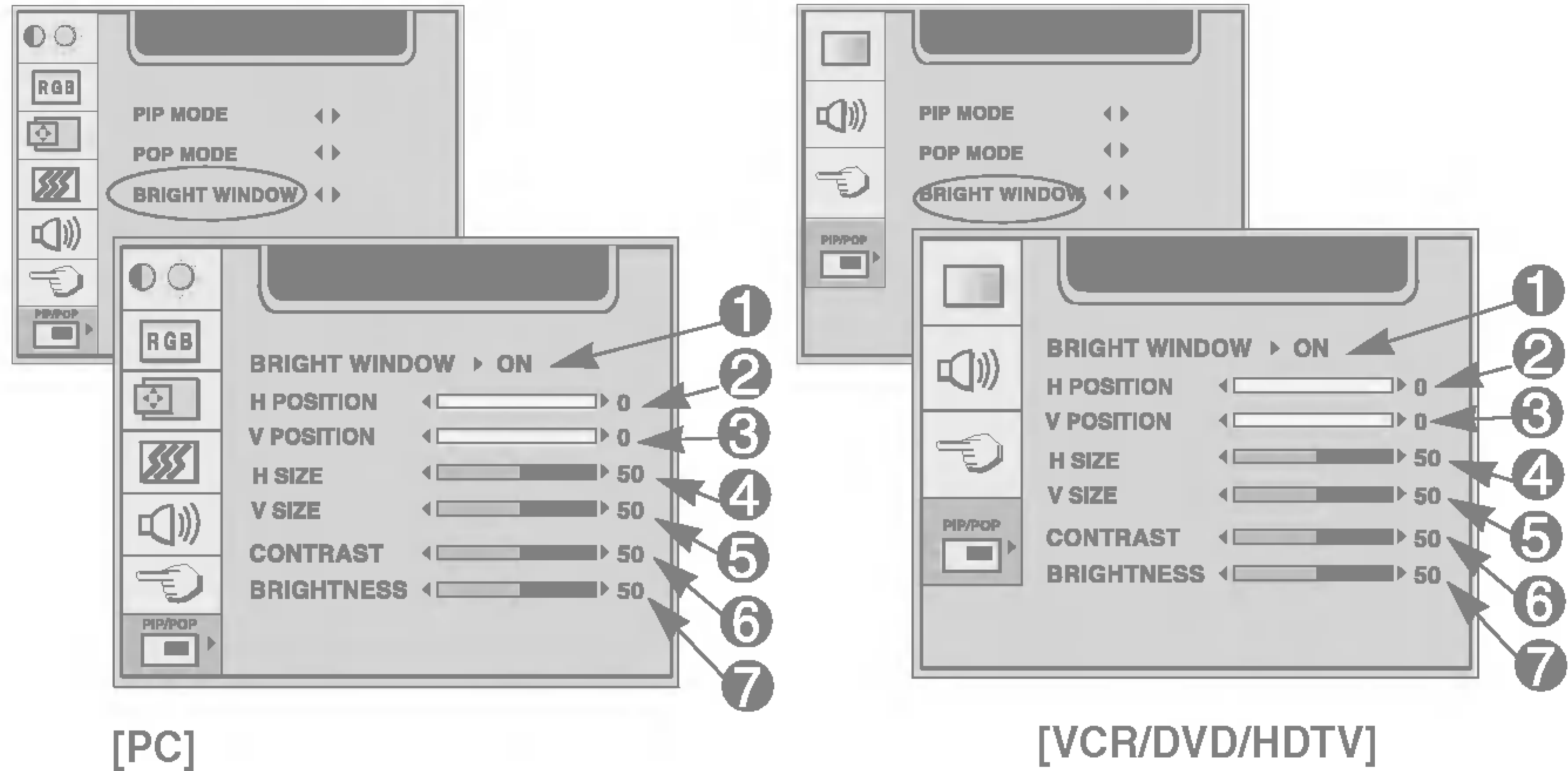
1 This function provides exceptionally clear contrast and sharpness that can be applied to any specially sized section of the screen. After selecting **ON** in the **BRIGHT WINDOW** menu, you can adjust the following menu items.

2 H POSITION   To move image left and right.

3 V POSITION   To move image up and down.

4 H SIZE   To adjust image width.

5 V SIZE   To adjust image height.

6 CONTRAST   To adjust the contrast of the BRIGHT WINDOW.

7 BRIGHTNESS   To adjust the brightness of the BRIGHT WINDOW.

Check the following before calling for service.

◉ **Is the power cord of the display connected?**	• Check and see if the power cord is connected properly to the power outlet.
◉ **Is the power indicator light on?**	• Press the Power button.
◉ **When the power is on with the power indicator lighting blue, does the screen appear dark?** (Display:blue, Media station:blue)	• Adjust the brightness and the contrast.
◉ **Is the power indicator amber?** (Display:amber, Media station:blue)	• If the display is in power saving mode, try moving the mouse or pressing any key on the keyboard to bring up the screen.

◉ **Do you see an "OUT OF RANGE" message on the screen?**	• This message appears when the signal from the PC (video card) is out of horizontal or vertical frequency range of the display. See the 'Specifications' section of this manual and configure your display again.
	  * Max Resolution
	    D-sub: 1920 x 1200 @60Hz (1600 x 1200 @75Hz)
	    DVI-I: 1600 x 1200 @60Hz
	    DVI-D: 1280 x 1024 @60Hz

◉ **Does the "OUT OF RANGE" message appear when you have set the main source as HDTV?**	• Check if the HDTV resolution of your set top box is set at 480i. If so, reconfigure it to 720p/1080i or reconnect the jack to the side of the DVD port.
◉ **Do you see a "CHECK SIGNAL CABLE " message on the screen?**	• This message appears when the signal cable between your PC and your display is not connected. Check the signal cable and try again. • Press the **SOURCE** button on the remote control and select and input signal connected.

A28

● **Display Position is incorrect.**	• Press the **AUTO** button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, adjust the image position using the **H position and V position** icon in the on screen display. • Check **Control Panel --> Display --> Settings** and see if the frequency or the resolution were changed. If yes, readjust the video card to the recommend resolution.
● **On the screen background, vertical bars or stripes are visible.**	• Press the **AUTO** button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, decrease the vertical bars or stripes using the **CLOCK** icon in the on screen display.
● **Any horizontal noise appearing in any image or characters are not clearly portrayed.**	• Press the **AUTO** button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, decrease the horizontal bars using the **PHASE** icon in the on screen display. • Check **Control Panel --> Display --> Settings** and adjust the display to the recommended resolution or adjust the display image to the ideal setting. Set the color setting higher than 24 bits (true color).
● **The screen color is mono or abnormal.**	• Check if the signal cable is properly connected and use a screwdriver to fasten if necessary. • Make sure the video card is properly inserted in the slot. • Set the color setting higher than 24 bits (true color) at **Control Panel - Settings**.
● **The screen blinks.**	• Check if the screen is set to interlace mode and if yes, change it to the recommend resolution.

◉ **Is the H/V position not adjustable from the ZOOM function?**	• Check if the ZOOM value is set at '0'. In case the ZOOM value is set at '0', the H/V position will not be adjustable.
◉ **Has the screen size of your PC changed automatically?**	• If the IMAGE SIZE is not full-screen when you use next your PC, execute POP and it will change back to regular settings.
◉ **In the PC signal source, is the brightness of the main screen different from that of the sub-screen?**	• Since the BRIGHTNESS and COLOR of a sub-screen can be adjusted in the PIP/POP IMAGE of the PIP/POP menus, it may be different from the main screen.

BRIGHTWINDOW function

◉ **Does a "NOT SUPPORTED" message appear when the BRIGHTWINDOW function is turned on?**	• Check if the IMAGE SIZE is set at 'FULL' in the OSD (On Screen Display) SETUP menu. (If it set at '4:3', 'spectacle' or '1:1', the BRIGHTWINDOW function will not be supported.)
◉ **Has the BRIGHTWINDOW function automatically turned off, after you turned it on?**	• If you configure a ZOOM function in the OSD (On Screen Display) SETUP menu, the BRIGHTWINDOW function is automatically turned off.
	• If you execute AUTO FUNCTION using the PC, the BRIGHTWINDOW function is automatically turned off.
	• If you turn power off and on, the BRIGHTWINDOW function is automatically turned off.
	• If you turn on the PIP/POP screen, the BRIGHTWINDOW function is automatically turned off.

"IMAGE SIZE" function on OSD menu does not work	
◉ **"IMAGE SIZE" function on OSD menu does not work?**	• Check if POP function is in use. While POP is in use, IMAGE SIZE function becomes disabled.

Have you installed the display driver	
◉ **Have you installed the display driver?**	• Be sure to install the display driver from the display driver CD (or diskette) that comes with your display. Or, you can also download the driver from our web site: http://www.lge.com.
◉ **Do you see an "Unrecognized monitor, Plug&Play (VESA DDC) monitor found" message?**	• Make sure to check if the video card supports Plug&Play function.

USB function	
◉ **USB function cannot be setup.**	• Check if the USB cable is correctly connected. • Check if the PC and OS are USB compliant. For verification of USB support, consult the manufacturer of each system.

⊙ **No sound.**	• Check if the audio cable is correctly connected. • Check the volume level. • Check if the sound source is correctly selected.
⊙ **No sound in PIP /POP mode.**	• Check if the SOUND is ON in the PIP/POP OSD menu.
⊙ **Sound is too high pitched or too low piched.**	• Adjust the **TREBLE** to an appropriate level. • Adjust the **BASS** to an appropriate level. • Select the **BBE EFFECT** to an appropriate level.
⊙ **Sound level is too low.**	• Check the volume level.

⊙ **Do you see "CONTROLS LOCKED" when you push MENU button?**	• You can secure the current control settings, so that they cannot be inadvertently changed. You can unlock the OSD controls at any time by pushing the **MENU** button and **VOL.+** button for 5 seconds: the message **"CONTROLS UNLOCKED"** will appear. It is not possible to configure this function with the remote control buttons. You can only do so from the monitor.

Display	23 inches (58.4cm) Flat Panel Active matrix-TFT LCD Anti-Glare coating 23 inches viewable 0.258mm pixel pitch	
Sync Input	Horizontal Freq.	D-SUB : 30 - 96kHz (Automatic) DVI-I : 30 - 80kHz (Automatic) DVI-D : 30 - 71kHz(Automatic)
	Vertical Freq.	56 - 85Hz (Automatic)
	Input Form	Separate TTL, Positive/Negative Composite TTL, Positive/Negative SOG (Sync On Green) Digital
Video Input	Signal Input	15 pin D-Sub Connector DVI - D connector (Digital) DVI - I connector (Digital/Analog) Composite video S video HDTV, DVD
	Input Form	RGB Analog (0.7Vp-p/75ohm), Digital, S-VIDEO, CVBS, Y Pb Pr (Y,Cb,Cr)
Resolution	Max	D-SUB : 1920 x 1200 @60Hz (1600x1200 @75Hz) DVI-I : 1600 x1200 @60Hz DVI-D : 1280 x1024 @60Hz
	Recommend	D-SUB : WUXGA 1920 x 1200 @60Hz DVI-I : UXGA 1600 x1200 @60Hz DVI-D : SVGA 1280 x1024 @60Hz
	DDC 2B	
	Display Input	DC 18.5V ⎓ 4.5A DC 5V ⎓ 0.5A
	Media station Input Output	AC 100-240V~ 50/60Hz 1.5A DC 18.5V ⎓ 5.0A DC 5V ⎓ 0.8A
	Normal Stand-by/Suspend DPMS Off Power switch Off Power cut-off switch off	: 98W ≤ 5W ≤ 3W ≤ 3W ≤ 1W

Dimensions &Weight	Display (with tilt stand)	
	Width	58.75cm / 23.13 inches
	Height	44.65 cm / 17.58 inches
	Depth	26.0cm / 10.24 inches
	Net	11.56Kg / 25.49lbs
	Media Station	
	Width	12.96 cm / 5.10 inches
	Height	19.16 cm / 7.54 inches
	Depth	20.56 cm / 8.09 inches
	Net	2.7 Kg / 5.95lbs
	Operating Conditions	
	Temperature	10°C to 35 °C
	Humidity	10 % to 80 % non-Condensing
	Storage Conditions	
	Temperature	-20°C to 60 °C
	Humidity	5 % to 95 % non-Condensing
	0°~20°	
	Attached(O), Detached ( )	

VESA wall mounting
Connected to another object (stand type and wall-mounted type.
This monitor accepts a VESA-compliant mounting interface pad.)
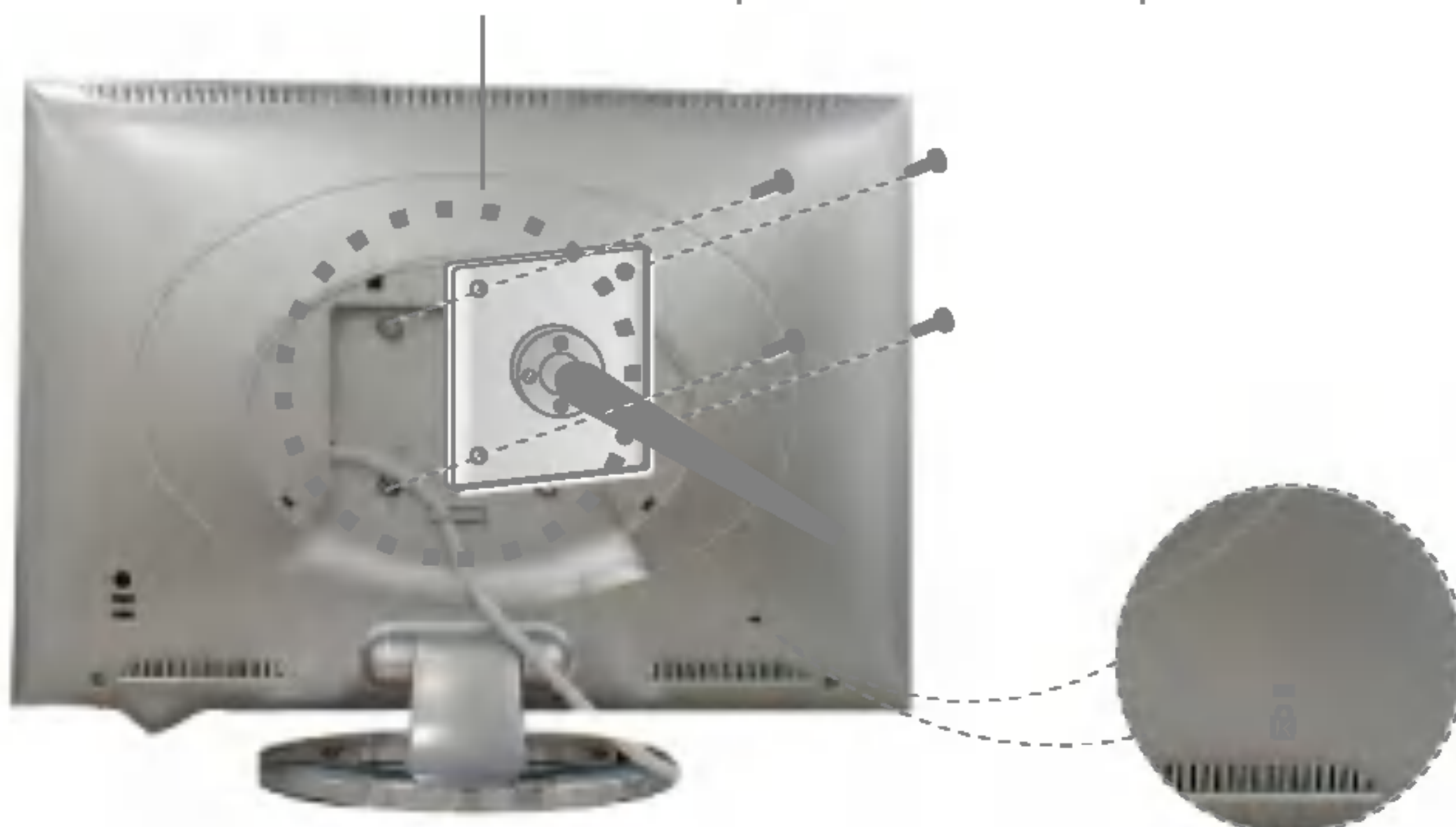
Kensington Security Slot- optional
Connected to a locking cable that can be
purchased separately at most computer stores

Display Modes (Resolution)

■ PC mode

1	VGA	640 x 350	31.469	70
2	VGA	720 x 400	31.468	70
3	VGA	640 x 480	31.469	60
4	VESA	640 x 480	37.500	75
5	VESA	640 x 480	43.269	85
6	VESA	800 x 600	37.879	60
7	VESA	800 x 600	46.875	75
8	VESA	800 x 600	53.674	85
9	MAC	832 x 624	49.725	75
10	VESA	1024 x 768	48.363	60
11	VESA	1024 x 768	60.123	75
12	VESA	1024 x 768	68.677	85
13	MAC	1152 x 870	68.681	75
14	VESA	1152 x 900	61.805	65.96
15	VESA	1280 x 1024	63.981	60
16	VESA	1280 x 1024	79.976	75
17	VESA	1600 x 1200	75.000	60
18	VESA	1600 x 1200	93.750	75
19	VESA	1920 x 1200	74.556	60

D-SUB : Mode 1 ~ Mode 19
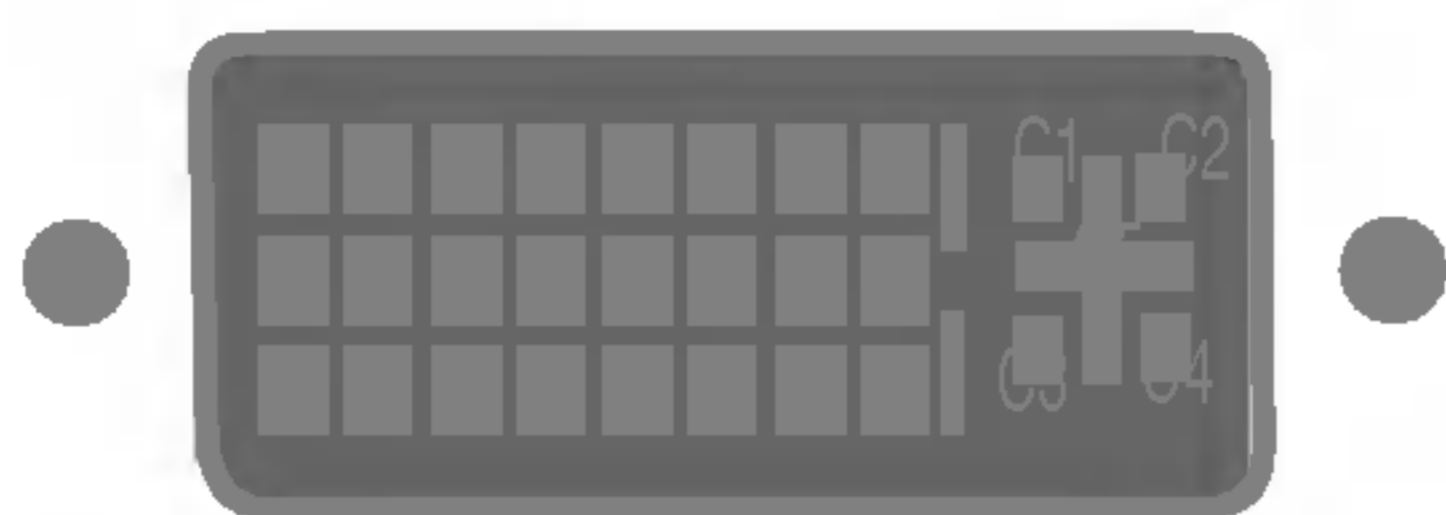DVI-I : Mode 1 ~ Mode 17
DVI-D : Mode 1 ~ Mode 15

■ HDTV mode
   Component Video Input(YPbPr)

1	720 x 483	31.50	59.94
2	1280 x 720	45.00	60.00
3	1280 x 720	44.96	59.94
4	1920 x 1080	33.75	60.00
5	1920 x 1080	33.72	59.94

Signal Connector Pin Assignment

■ DVI-D/ DVI-I Connector

1	T. M. D. S. Data2-	16	Hot Plug Detect
2	T. M. D. S. Data2+	17	T. M. D. S. Data0-
3	T. M. D. S. Data2/4 Shield	18	T. M. D. S. Data0+
4	T. M. D. S. Data4-	19	T. M. D. S. Data0/5 Shield
5	T. M. D. S. Data4+	20	T. M. D. S. Data5-
6	DDC Clock	21	T. M. D. S. Data5+
7	DDC Data	22	T. M. D. S. Clock Shield
8	Analog Vertical Sync.	23	T. M. D. S. Clock+
9	T. M. D. S. Data1-	24	T. M. D. S. Clock-
10	T. M. D. S. Data1+	C1	Analog Red
11	T. M. D. S. Data1/3 Shield	C2	Analog Green
12	T. M. D. S. Data3-	C3	Analog Blue
13	T. M. D. S. Data3+	C4	Analog H. Sync.
14	+5V Power	C5	Analog Ground
15	Ground (return for +5V, H. Sync. and V. Sync.)		

T. M. D. S. (Transition Minimized Differential Signaling)

C1~C5 : DVI-I only

Indicator

Normal	bule	bule
Stand-by/Suspend	amber	bule
DPMS Off	amber	bule
Power switch off	off	bule
Power cut-off switch off	off	off

USB (Universal Serial Bus) is an innovation in connecting your different desktop peripherals conveniently to your computer. By using the USB, you will be able to connect your mouse, keyboard, and other peripherals to your display instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. USB allows you to connect a chain of up to 120 devices on a single USB port; and you can "hot" plug (attach them while the computer is running) or unplug them while maintaining the Plug and the Plug auto detection and configuration. This display has an integrated Self-powered USB hub, allowing up to 2 other USB devices to be attached it.

USB connection

1. Connect the upstream port of the display (or media station) to the downstream port of the USB compliant PC or another hub using the USB cable. (Computer must have a USB port)

2. Connect the USB compliant peripherals to the downstream ports of the display.

USB upstream Port
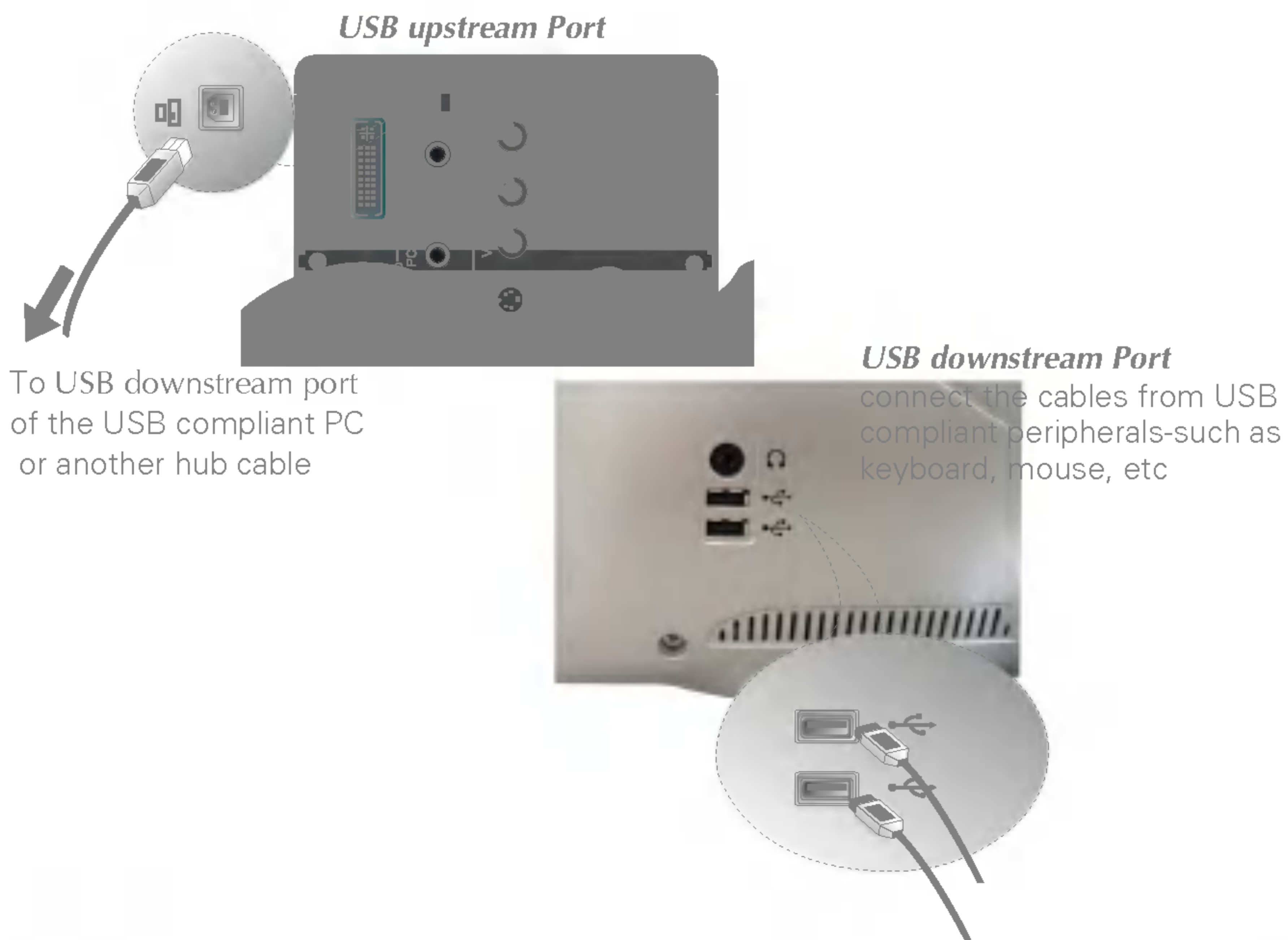
To USB downstream port of the USB compliant PC or another hub cable

USB downstream Port
connect the cables from USB compliant peripherals-such as keyboard, mouse, etc

NOTE
- To activate the USB hub function, the display must be connected to a USB compliant PC(OS) or another hub with the USB cable(enclosed).
- When connecting the USB cable, check that the shape of the connector at the cable side matches the shape at the connecting side.
- Even if the display is in a power saving mode, USB compliant devices will function when they are connected the USB ports(both the upstream and downstream) of the display.

USB Specifications

USB standard	Rev. 1.0 complied Self-powered hub
Downstream power supply	500mA for each (MAX)
	12 Mbps (full), 1.5 Mbps (low)
	1 Upstream port 2 Downstream ports