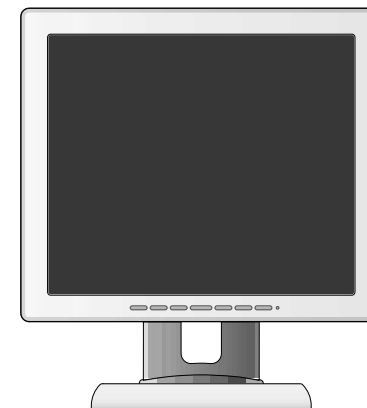


H950

TFT-LCD Color Monitor

19



Printed on the recyclable paper
Printed in Korea
Part No. 942205010002- 01

INFORMATION TO USER :

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation; if this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient/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.

CAUTION

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment

ENERGY STAR

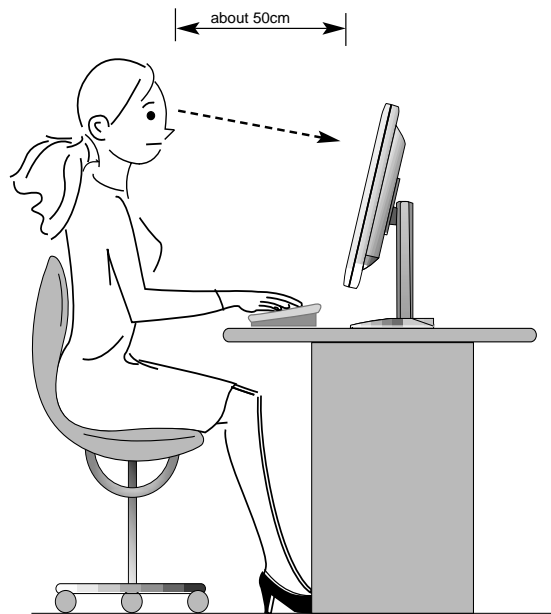
As an ENERGY STAR partner, Hansol Electronics Inc. has determined that this product meets energy Star guidelines for energy efficiency.

Table of Contents

Parts	3
Connection to Signal Source	4
the range of control Angle	5
Installing Monitor Driver	6
Name and Function of Front	8
Power Management Feature	10
Adjusting OSD	11
Hot Key	19
Standard Signal Table	19
Specification	20
Troubleshooting	22
Warning	24

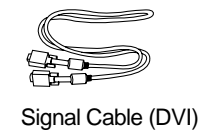
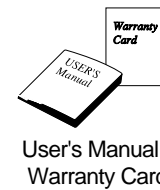
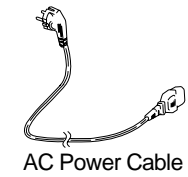
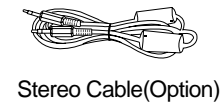
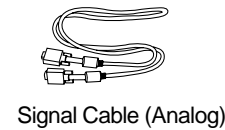
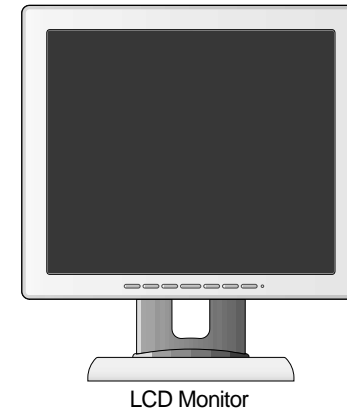
Good Posture Guide

- ◆ Place the monitor to face the user and then adjust the monitor angle.
- ◆ Take a break (for about 10 minutes) at every hour during the work with monitor.
- ◆ Refer to the following figure to take the correct posture.



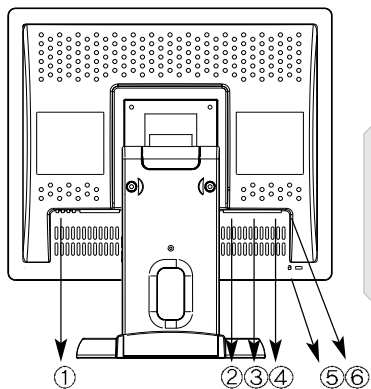
- Look down the monitor below the horizon.
- Adjust the monitor to prevent reflection.
- Relax shoulders and arms, and sit back on the chair.
- Adjust the monitor stand to acquire required angle.
- Maintain the arms horizontally and place hands softly on the keyboard.
- Keep feet flat on the ground.

Parts



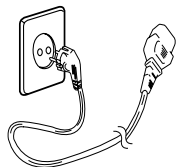
Connection to Signal Source

Basic Connection



- ① Port for AC power cable
- ② Port for Audio cable from audio source.
- ③ Port for Head Phone or External Speaker
- ④ Port for signal cable from DVI signal source.
- ⑤ Kensington Lock
- ⑥ Port for signal cable from analog signal source.

< Power source connection >



1. Use 220 V or 110 V. (Free Voltage)
2. Connect monitor and Signal Source via Signal cable
3. Power on the monitor and computer.
4. Connection is finished.

< Signal cable connection >

▶ General



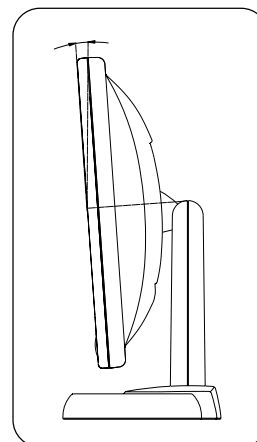
▶ For Macintosh



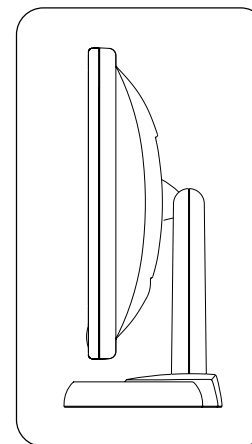
Adapter for Macintosh (Optional)
 Refer to the table on the rear side of the optional Macintosh adapter and adjust DIP switch by the resolution.

The range of control Angle

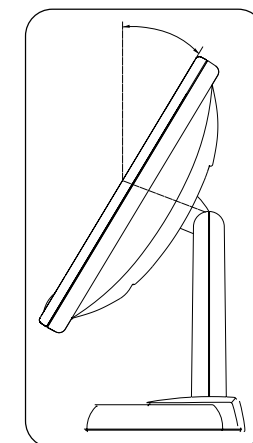
▼ How to Adjust the Stand



▲ Forward 5°



▲ Default



▲ Backward 33°

Installing Monitor Driver

Run (Click) "Install" at Floppy Diskette driver and select the model name to set the optimum display in Window 95, 98 or 2000, XP.

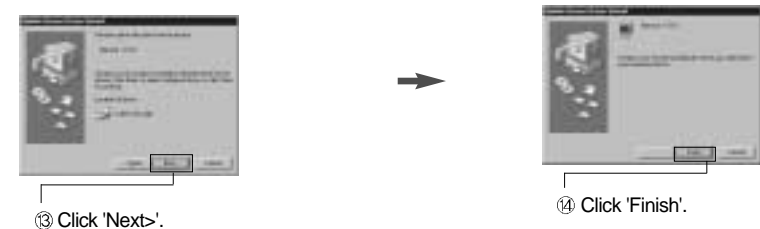
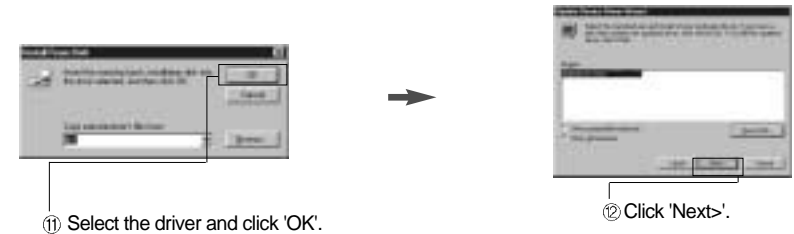
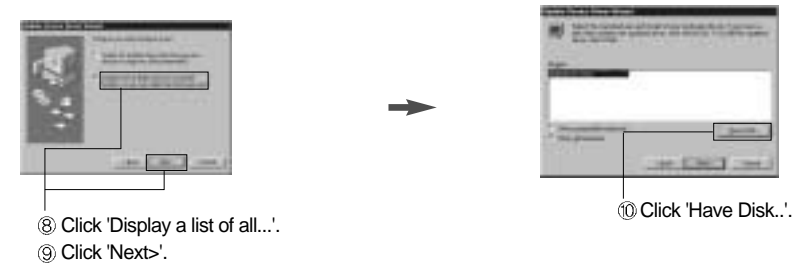
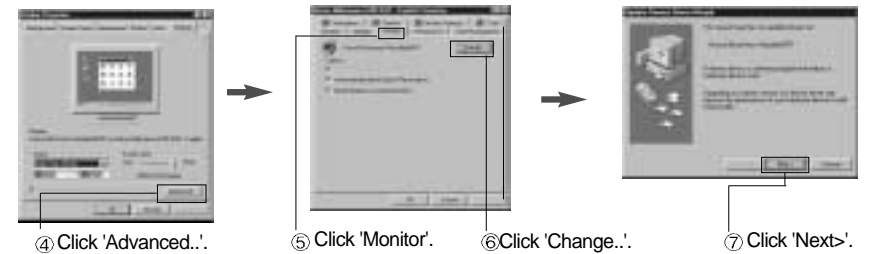
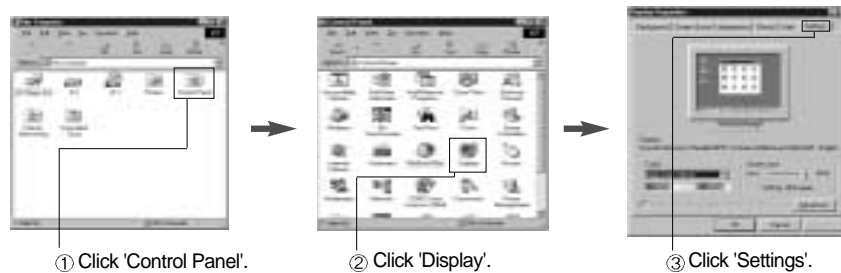
► Use the Driver provided.

Automatic Installation

1. Insert the Diskette to the Floppy Diskette driver.
2. Double-click "Install.exe".
3. Select the model and click "OK" button.
4. Select inf file, and then click "OK" button.
5. Click "Exit" button to close the installation.

Manual Installation

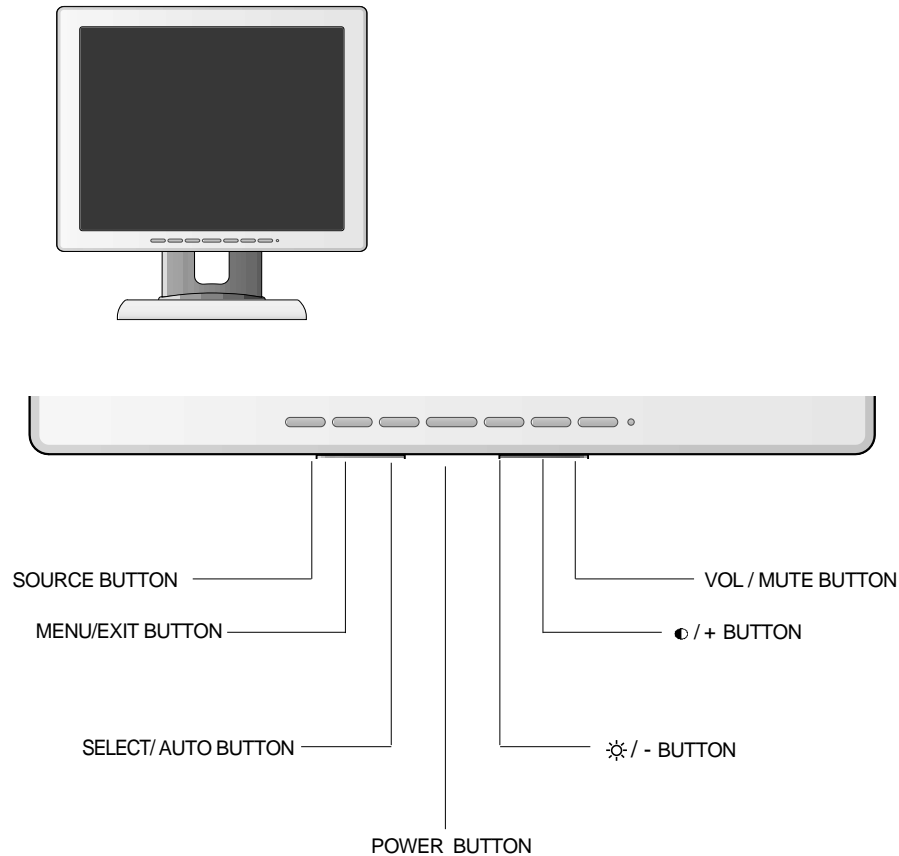
1. Insert the Diskette to the Floppy Diskette driver.
2. Click 'My Computer' and follow the procedure below.



3. Select "Exit" if the monitor model is changed, and then reboot the Windows.

Name and Function of Front

Front panel



Functions

- ◆ **Power button**
Power button is located in the lower center of the Front Bezel.
You can push the button to turn on/off the power.
- ◆ **Power Indicating LED**
 - Dark : Power off
 - Green : Normal mode
 - Green blinking : DPMS mode or Check Signal Cable mode.
- ◆ **On Screen Display (OSD) Function Button**
OSD buttons on the front of bezel perform the following functions.
 - SOURCE : Press this button to change Analog/DVI display.
 - MENU/EXIT : Press this button to display menus. if you press this button when OSD is displayed, you can switch display to the previous menu and exit menu.
 - SELECT/AUTO : Press this button, when OSD is not displayed, to perform automatic setting.
When OSD is displayed, You can select icons.
 - POWER : Power button.
 - +/●, -/☀ : By pressing these button when OSD is displayed, You can move cursor into the menu which you want.
After press the SELECT button, you can change gauge level or select submenus.
When OSD is not displayed, you can adjust brightness or contrast.
 - VOLUME / MUTE : Press this button for volume control. when control is displayed, You can control mute by pressing this button

Power Management Feature

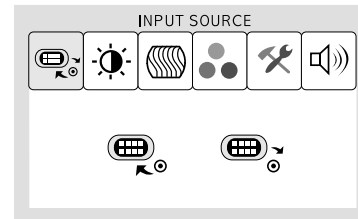
The monitor is equipped with a power saving circuit that conforms to the world-standard Display Power Manager Signalling (DPMS) mode of Video Electronics Standard Association (VESA). The power management feature requires that the video card of the computer should support DPMS function.

Status	LED Sign	Power Consumption
Normal mode	Green ON	Normal Power
DPMS mode	Green Blinking	1W or Below(Analog)/ 3.5W or Below(DVI)
DPMS with Audio (Option)		
Mute ON		1W or Below(Analog)/ 3.5W or Below(DVI)
Mute OFF		10W or Below

- No image is displayed with Green blinking.
Monitor is in power saving mode.
Use mouse or keyboard to release power saving mode.
- No image is displayed without LED on.
Power cable plug must be pulled out.
Check the power plug on monitor and on the wall.
- "Out of range" displayed on the screen.
This message is displayed when the signal from video card exceeds the maximum frequency of the monitor. Readjust resolution and frequency in accordance with the monitor capacity. (Refer to Standard Signal Table)

Adjusting OSD

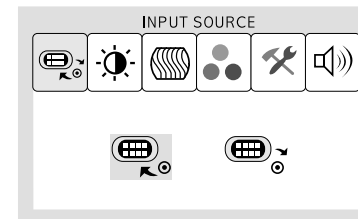
Input Source



MENU → - + → **SELECT**

1. Press the MENU button to access main menu.
2. Use -, + to move Input source ICON.
3. Press SELECT button into the submenu.

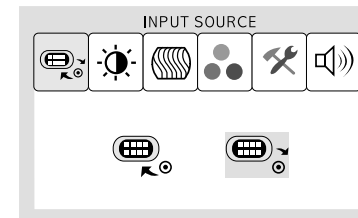
Digital Input



- + → **SELECT**

1. Use -, + to move Digital input ICON.
2. Press SELECT button to select DVI display.

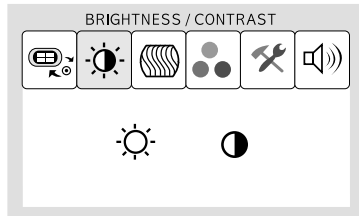
Analog Input



- + → **SELECT**

1. Use -, + to move Analog input ICON.
2. Press SELECT button to select Analog display.

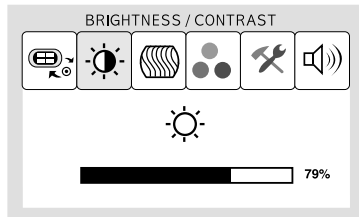
Brightness & Contrast



MENU → - + → SELECT

1. Press the MENU button to access main menu.
2. Use -, + to move Brightness and Contrast ICON.
3. Press SELECT button into the submenu.

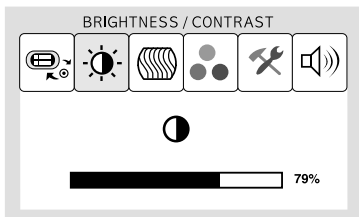
Brightness



- + → SELECT → - +

1. Use -, + to move Brightness ICON.
2. Press SELECT button to select it.
3. Use -, + to adjust the brightness.

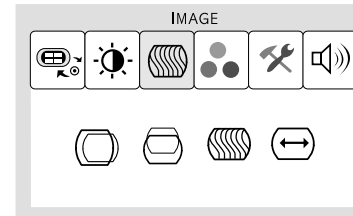
Contrast



- + → SELECT → - +

1. Use -, + to move Contrast ICON.
2. Press SELECT button to select it.
3. Use -, + to adjust the contrast.

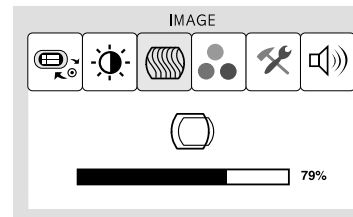
Image



MENU → - + → SELECT

1. Press the MENU button to access main menu.
2. Use -, + to move Image ICON.
3. Press SELECT button into the submenu.

Horizontal Position

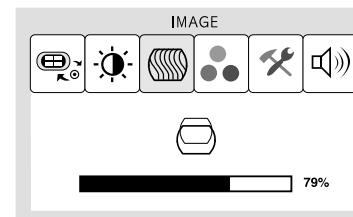


- + → SELECT → - +

1. Use -, + to move H-Position ICON.
2. Press SELECT button to select it.
3. Use -, + to adjust display left or right.

According to the characteristic of video card, control range can be changed.

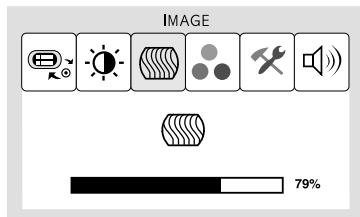
Vertical Position



- + → SELECT → - +

1. Use -, + to move V-Position ICON.
2. Press SELECT button to select it.
3. Use -, + to adjust display upward or downward.

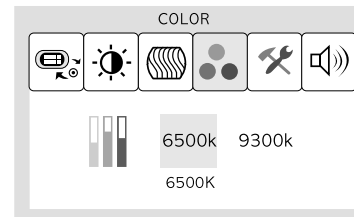
According to the characteristic of video card, control range can be changed.



Clock Phase

← + → **SELECT** → ← +

1. Press ←, + to move Clock Phase ICON.
2. Use SELECT button to select it.
3. Use ←, + to correct fine trembling or Video noise.



Preset Color

← + → **MENU**

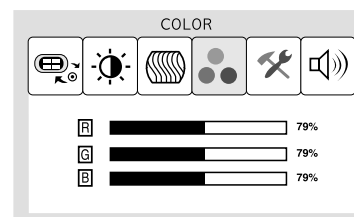
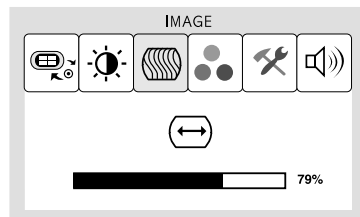
1. Use ←, + to select the 6500K, and 9300K.
2. Press the Menu button to return previous state.

6500K : Reddish white 9300K : Bluish white

Clock

← + → **SELECT** → ← +

1. Use ←, + to move Clock ICON.
2. Press SELECT button to select it.
3. Press ← or + to remove vertical noise.
(Adjusting clock phase is required after the adjustment of clock.)



User Color

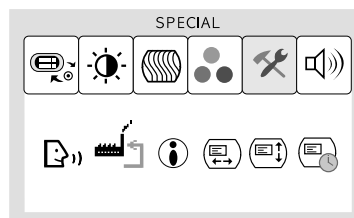
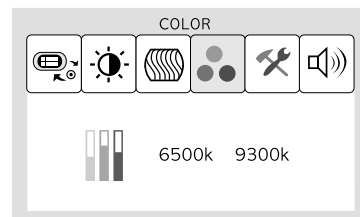
← + → **SELECT** → ← + → **MENU**

1. Use ←, + to move User color ICON.
2. Press SELECT button to select it.
3. Use ←, + to Shift the Color what you want.
4. Use select button to select it.
5. Use ←, + to increase or decrease each color.
6. Press the menu button to return previous state.

Color

MENU → ← + → **SELECT**

1. Press MENU button to access main menu.
2. Use ←, + to move Color ICON.
3. Press SELECT button into the submenu.

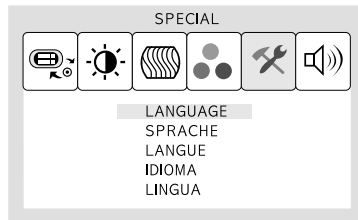


Special

MENU → ← + → **SELECT**

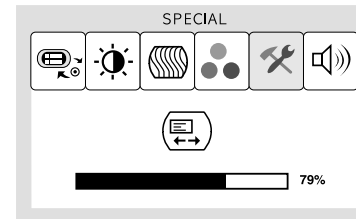
1. Press MENU button to access main menu.
2. Use ←, + to move Special ICON.
3. Press SELECT button into the submenu.

Language



MENU → - + → **SELECT** → - +

1. Use -, + to move Language ICON.
2. Press SELECT button to select it.
3. Use -, + to select language.

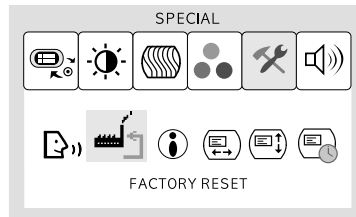


OSD H-Position

- + → **SELECT** → - +

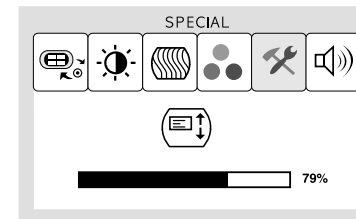
1. Use -, + to move OSD H-Position ICON.
2. Press SELECT button to select it.
3. Use -, + to adjust OSD left or right.

Factory Reset



- + → **SELECT**

1. Use -, + to move the Factory Reset ICON.
2. Press SELECT button to return to default setting.



OSD V-Position

- + → **SELECT** → - +

1. Use -, + to move OSD V-Position ICON.
2. Press SELECT button to select it.
3. Use -, + to adjust OSD upward or downward.

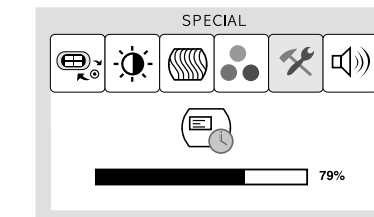
Information



MENU → - + → **SELECT**

1. Use -, + to move the Information ICON.
2. Press SELECT button to select it.

You can know display information



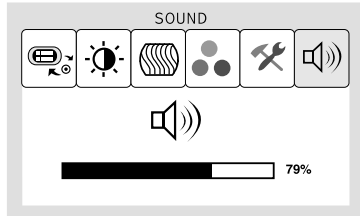
OSD Time

- + → **SELECT** → - +

1. Use -, + to move OSD Time ICON.
2. Press SELECT button to select it.
3. Use -, + to adjust OSD display time.

※ According to the characteristic of video card, display information can be incorrect

Sound (Option)



MENU → - + → **SELECT or VOL BUTTON**

1. Use -, + to move Sound ICON.
2. Press SELECT button to select it.
3. Use -, + to control volume.
4. Press MENU button to return previous state.

HOT KEY

ANALOG & DVI

1. When change DVI display into Analog display, select source button located in the left. Analog display will be showed after Analog input message.
2. When change Analog display into DVI display, select source button located in the left. DVI display will be showed after DVI input message.
3. No signal input message will be displayed when video card output is not mated with monitor source.

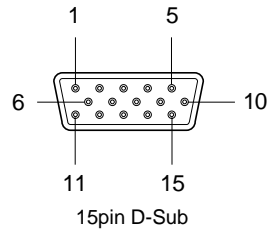
Standard Signal Table

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Clock Frequency (MHz)
VGA (720 X 400)	31.469	70.087	28.322
VGA (640 X 480)	31.469	59.940	25.175
VGA (640 X 480)	37.500	75.000	31.500
SVGA (800 X 600)	37.900	60.320	40.000
SVGA (800 X 600)	46.875	75.000	49.500
XGA (1024 X 768)	48.363	60.004	65.000
XGA (1024 X 768)	60.023	75.029	78.750
SXGA (1280 X 1024)	63.981	60.020	108.000
SXGA (1280 X 1024)	79.976	75.025	135.000
MAC (640 X 480)	35.000	66.667	30.240
MAC (832 X 624)	49.726	74.551	57.284
MAC (1152 X 870)	68.681	75.062	100.000

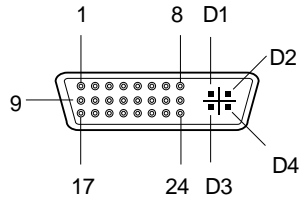
Pin assignment table D-Sub Mini 15pin connector

Analog Cable

Pin No.	Assignment	Pin No.	Assignment
1	Red Video	9	5V Input
2	Green Video	10	Ground
3	Blue Video	11	Ground
4	N.C	12	SDA
5	Ground	13	H.Sync
6	Red Video Ground	14	V.Sync
7	Green Video Ground	15	SCL
8	Blue Video Ground		



DVI Cable



Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment
1	TX2-	9	TX1-	17	TX0-	25	NC
2	TX2+	10	TX1+	18	TX0+	26	NC
3	DVI input detect	11	Ground	19	Ground	27	NC
4	NC	12	NC	20	NC	28	NC
5	NC	13	NC	21	NC		
6	(D_DSCL)	14	DVI_ ground	22	Ground		
7	(D_DSDA)	15	Ground	23	TXC+		
8	NC	16	5V input	24	TXC-		

Specification

Model		H950 (B19AF)
LCD Panel	Type	Amorphous active matrix super TFT LCD
	Screen Size	48.3cm (Diagonal)
	Maximum Resolution	1280 X 1024 @ 75 Hz
	Pixel Range	0.294 mm X 0.294 mm
	Display Colors	16.7M Color
	Contrast Ratio	500 : 1
	Viewing Angle	85° / 85° / 85° / 85° (Left / Right / Up / Down)
	Response Time	25 msec
	Luminance	250 cd/m ²
	Synchro nization	Horizontal Frequency
Vertical Frequency		75 Hz (Max.)
Video Input	Video Signal	Analog RGB (0.714Vpp) 75 ohm/ Digital(TMDS)
	Sync Type	H, V Separate TTL Sync,
Power Consumption	Maximum	48W
	Power Saving Mode	Under 1 W(Analog)/Under 3.5 W(DVI)
Control key	Front Part	SOURCE , MENU / EXIT, AUTO/SELECT, POWER, -/☼ , +/⦿, VOL/MUTE
Audio Output	Normal	1W/Ch
	Max	1.5W/Ch
Power Supply		Input : 100-240Vac (50/60 Hz), 0.6A
Wall Mount		VESA Standard
Safety Standard & EMI	Safety Standard	UL, CE, TUV, CB
	EMI	FCC,RRL
	Low Radiation	MPR-II
Dimension	Size and Weight	418 × 200 × 437.2 / 6.3kg

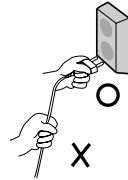
Troubleshooting

Power LED is dark. No picture.	▷ <ul style="list-style-type: none">• Check the power connection. (Refer to page 4)
OSD, "check signal." is displayed on the screen.	▷ <ul style="list-style-type: none">• Check the computer power is on.
Message, "check cable." is displayed on the screen.	▷ <ul style="list-style-type: none">• Check the signal cable between monitor and computer. (Refer to page 4)
Screen looks to be run down.	▷ <ul style="list-style-type: none">• Perform Auto_config.
Screen is not clear.	▷ <ul style="list-style-type: none">• Remove attaches to the signal line (Video extension cable and others) and switch on.• Perform Auto-config.• Adjust clock and PHASE.
Display is unstable and trembling.	▷ <ul style="list-style-type: none">• Check the resolution and frequency of computer and video card, and set up again refer to the current monitor mode and standard signal mode table.

Color is irregular.	▷ <ul style="list-style-type: none">• Adjust COLOR at User Mode in OSD Color Menu.
Double images or 'ghosts'.	▷ <ul style="list-style-type: none">• Check the resolution and frequency of computer and video card, and set up again in reference to the current monitor mode and standard signal mode table.
Picture is dark.	▷ <ul style="list-style-type: none">• Adjust COLOR at User Mode in OSD Color Menu.
Picture is biased or cut or too wide.	▷ <ul style="list-style-type: none">• Perform Auto-Config.
Power LED turns into Green blinking.	▷ <ul style="list-style-type: none">• Monitor is in DPMS mode.
NO SOUND	▷ <ul style="list-style-type: none">• Check the voice signal connection code or adjust volume

Warning

To prevent damage or loss, please read this warning carefully.



- When connecting/disconnecting the plug, pull out the plug itself, and never pull the cord to prevent fire caused by short.



- To prevent electric shock, do not connect/disconnect the plug with wet hand.



- If you see smoke or smell something burning, stop using the unit, switch off the power, pull out the plug, and then contact your local service station.



- To prevent fire, do not connect a large number of equipments in a single line.



- To prevent fire and electric shock, pull out the plug in case of thunder and lightning.



- To prevent fire and electric shock, do not try to take the monitor apart or repair it yourself. Contact your local service station or customer service center for inspection, modification or repair.