

HL700A
HL700M

User's Reference

High Resolution
TFT LCD Monitor



WOO YOUNG Telecom CO.,LTD.

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the user's authority to operate such equipment.

Appendix A. Specifications

Panel	Type	TFT active matrix
	Size	17 inch
		337.92mm × 270.336mm
	Pixel Pitch	0.264mm × 0.264mm
	Display Color	8-bit (16,777,216 colors)
Display Resolution	Basic	1280 × 1024@60Hz
	Maximum	1280 × 1024@75Hz
Frequency	Horizontal	31.5~80KHz
	Vertical	56~75Hz
Sync Signal		TTL, P. or N.
Connectors		D-Sub 15pin connector
		Speaker Input / Headphone Output (Audio Cable)
		24pin Digital Cable *2
		Audio Cable *2
		RCA Cable *2
		S-Video Cable *2
		External TV Box(HL700MT Only)
Tilting Degree (U/D)		-3°~20°Degree
Plug&Play		VESA DDC 1/2B
Power	Input	90~265VAC
	Output	Adapter DC 12V, 4.16A
	Consumption	40W 미만
	Standby mode	5W 이하
Power Management		VESA DPMS
Environmental Consideration	Temperature	0~40°C (32°F~104°F)
	Humidity	90% less
Dimensions	Outside	416mm(W) × 409mm(H) × 186mm(D)
Weight	Monitor	5.2kg
	Carton	3kg

*2=For HL700M/MT Only

※ The specification of this monitor is subject to be changed without notice to improve performance.

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1

Before setting up

This is 17.0 inch TFT-LCD monitor. Before setting up the LCD Monitor, please read this manual to help your understanding of the LCD Monitor.

Brief Specification of LCD Monitor

- Resolution : 17.0 inch SXGA (1280 X 1024@75Hz) *1
- Color display : 16,777,216 colors
- DPMS (Display Power Management Signaling)
- OSD (On Screen Display)
- Auto Configuration : Hot key
- Speaker [L + R : 3W + 3W = 6W (max)]
- DDC 1/2B : Plug & Play

In Multimedia Model, added the below function:

- DVI(Digital Video Interface)
- Composit video input
- Composit Audio input
- S-Video input
- TV(HL700MT Only)

*1 In DVI mode, max Resolution is 1280 × 1024@60Hz

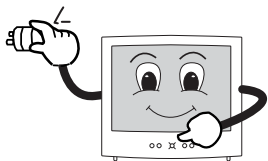


Notice

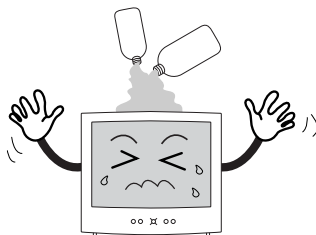
According to PC system, DDC 1/2B may not be supported. If you meet Error message, check your video card which compatibility with DDC. If you want to know more information, please contact our service center.

Precautions

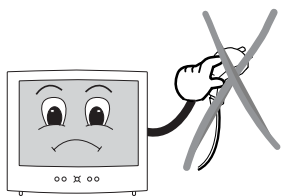
90V~265V



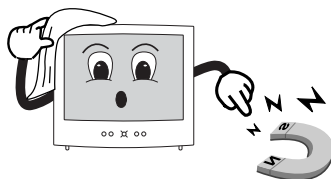
Check the voltage corresponds to the local electrical supply before connecting the AC power cord.



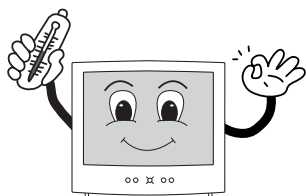
Do not use Ketone type material (ex. Acetone), Ethyl Alcohol, Toluene, Ethyl Acid or Methyl chloride, to clear the panel. It might permanently damage the panel.



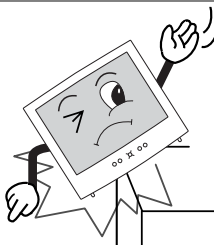
Never use the damaged AC power cord.



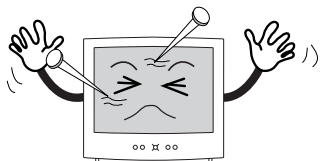
Keeps it away from stoves, heaters, fireplaces and other sources of heat and magnets.



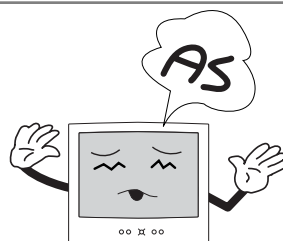
Don't put your LCD monitor in a location with high humidity and dust.
Temperature : 0~40°C
Humidity : 90% less



Place the LCD monitor on a solid surface. If dropped, the screen can be damaged easily.



Don't touch the screen with a acute nail and pin



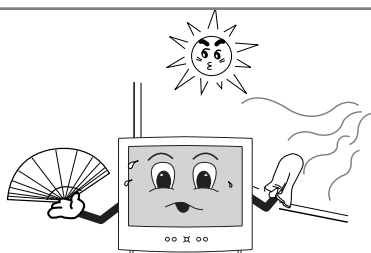
The LCD monitor consists of electrical devices.
If the LCD monitor is damaged, contact immediately our service center.



The LCD monitor can be damaged easily by shock.



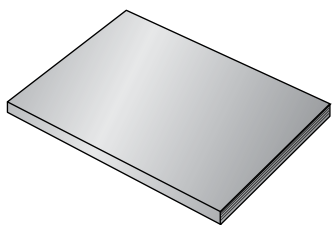
If you don't use the LCD monitor for a long time, unplug the LCD monitor.



Don't use your LCD monitor under direct sunlight.

2

Items



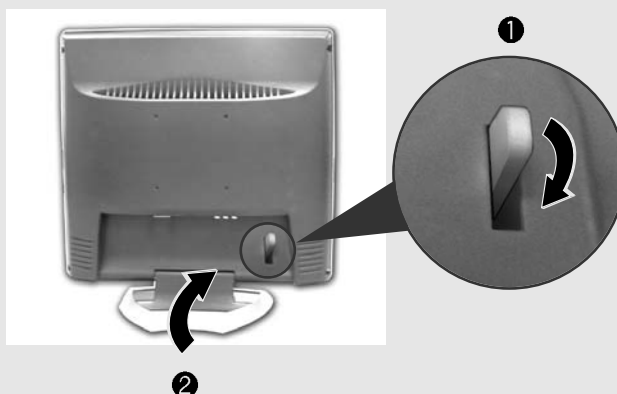
User Manual



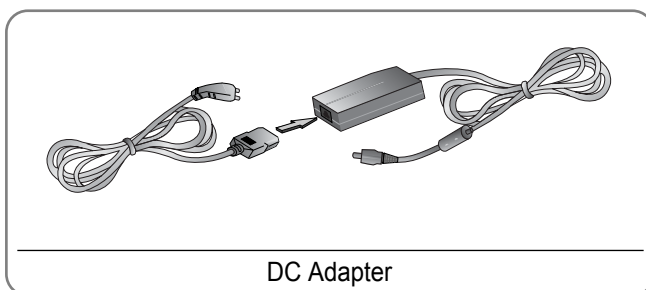
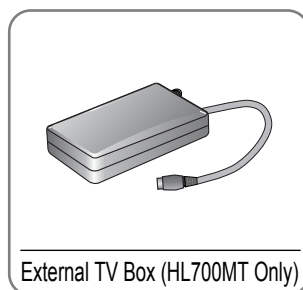
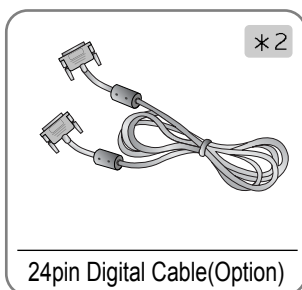
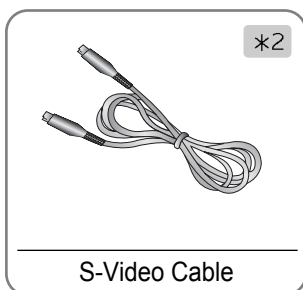
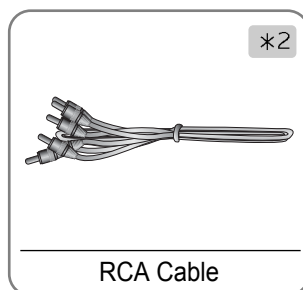
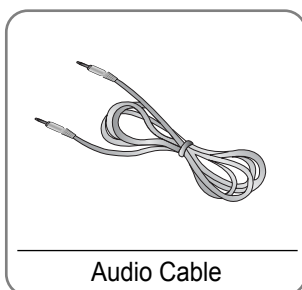
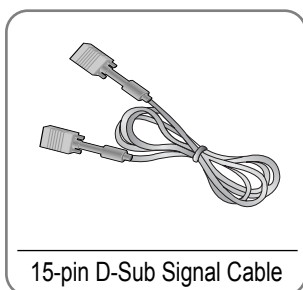
LCD Monitor

**Notice****How to fold stand**

If you need to fold stand for moving, please refer to the below picture.
To fold stand, you must down lever, and you can fold stand.



*2=For HL700M/ MT Only



Notice

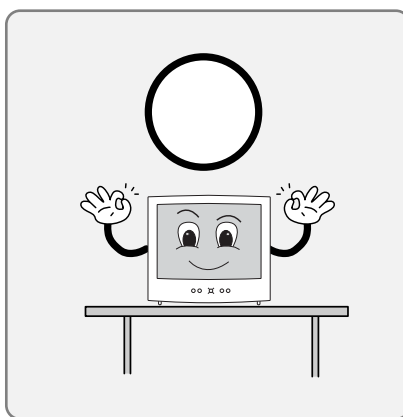
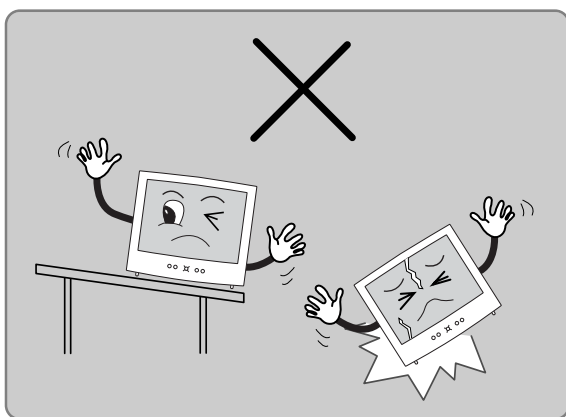
Please make sure the following items are included with your monitor.
If any items are missing, contact your dealer.

3

Setting up the LCD monitor

Where is a good place to position the monitor?

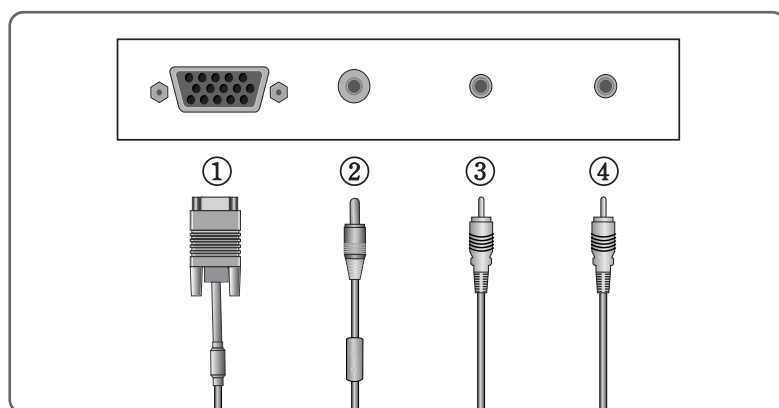
Place the LCD monitor on a solid and flat surface. If dropped, the screen can be damaged easily.



Check before connecting the power cord and the signal cable !!

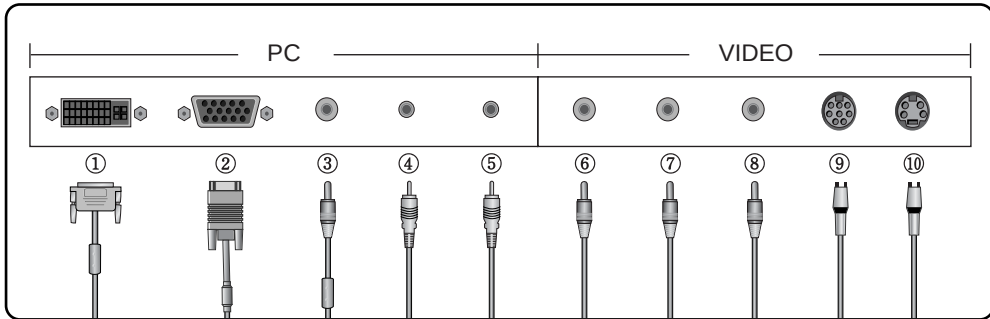
Turn off the PC power before connecting the power cord and signal cable to the LCD monitor.

Monitor's connectors (HL700A)



No.	Name	Cable connections
1	PC	15-pin D-Sub Signal Cable
2	DC12V	DC Adaptor
3	PC AUDIO IN	Audio Cable
4	SPK OUT	External Speaker

Monitor's connectors (HL700A)



No.	Name	Cable connections	No.	Name	Cable connections
1	DVI	Digital Video Cable(option)	6	AUDIO(R)	Audio output(R) (Red)
2	PC	15-pin D-Sub Signal Cable	7	AUDIO(L)	Audio output(L) (White)
3	DC12V	DC Adapter	8	VIDEO1	DVD/VCR Cable (Yellow)
4	PC AUDIO IN	Speaker Cable	9	Ext.	External TV Box (HL700MT Only)
5	SPK OUT	External Speaker Cable	10	VIDEO2	S-Videl Cable

Connecting Your LCD Monitor

For HL700A

- Connecting your PC system
 1. Connect the 15-pin D-Sub Signal Cable from PC to No.1.
 2. If you use a speaker, connect the Audio Cable from PC to No.3.
 3. If you use a headphone and earphone, connect the Headphone Cable from PC to No.4.

For HL700M /MT

- Connecting your PC system
 1. Connect the 15-pin D-Sub Signal Cable from PC to No.2.
 2. If you have a DVI compliant video graphics adaptor, connect Digital Video Cable from PC to No.1.
 3. If you use a speaker, connect the Audio Cable from PC to No.4.
 4. If you use a headphone and earphone, connect the Headphone Cable from PC to No.5.
- Connecting your AV(DVD, VIDEO, CAMCODER) & TV
 1. Connect the DVD/VCR Cable from PC to No.6, No.7 and No.8.
 2. Connect the external TV box cable to NO.9.
 3. Connect the S-Video cable to NO.10.

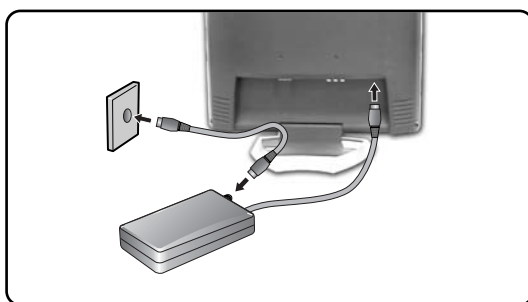
FCC RF INTERFERENCE STATEMENT

NOTE :

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Connecting for TV

- Connect the external TV Box to Monitors Ext. jack
- Connect the antenna cable to the external TV Box from wall antenna jack same as the below the picture



Plug & Play

The adoption of the new VESA Plug and Play solution eliminates complicated and time consuming setup. It allows you to install your monitor in a Plug and Play compatible system without the usual hassles and confusion. Your PC system can easily identify and configure itself for use with your display. This monitor automatically tells the PC system its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so the PC system can automatically configure itself to use the flat panel display.

Warm-up Time

All LCD monitors need time to become thermally stable whenever you turn on the monitor after letting the monitor be turned off for a couple of hours. Therefore, to achieve more accurate adjustments for parameters, allow the LCD monitor to be warmed up for at least 20 minutes before making any screen adjustments.

4

Adjusting The Monitor

The Function Control Buttons (HL700A)



How to use the Hot Key. (HL700A)



Sound Mute On/Off button.



When you push Auto button, this will optimize image quality automatically.



OSD menu On/Off button.



Menu select button.



Power On/Off toggle button.



You can adjust brightness or contrast as not key. When display adjust menu, you can adjust with Left/Right button arrow button.



When you push the Left/Right button, you can adjust the volume.

The Function Control Buttons (HL700M / MT)



How to use the Hot Key. (HL700M / MT)



Sound Mute On/Off button.



When you push Auto button, this will optimize image quality automatically.

Notice : In MENU, the button is "SELECT" function



OSD menu On/Off button.



Menu select button.



Power On/Off toggle button.



You can adjust brightness or contrast as not key. When display adjust menu, you can adjust with Left/Right button arrow button.

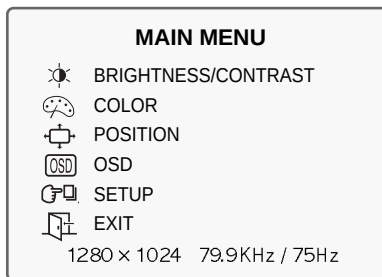
Notice : In TV mode, these -ch+



When you push the Left/Right button, you can adjust the volume.

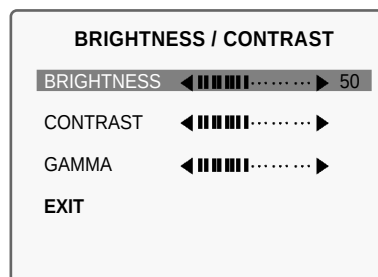
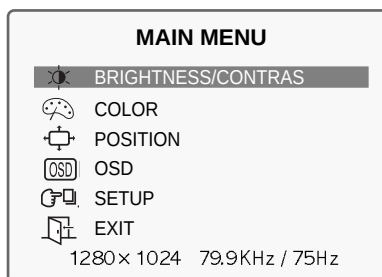
Main OSD Menu

When you push the menu button, you can see below main OSD menu.



BRIGHTNESS/CONTRAST

- Brightness : Changes the overall light intensity of the images being displayed.
- Contrast : Changes the ratio of light intensity between the brightest white and darkest black.
- You can adjust brightness/contrast values that you want by this hot key.
- Gamma : Change the gamma value.



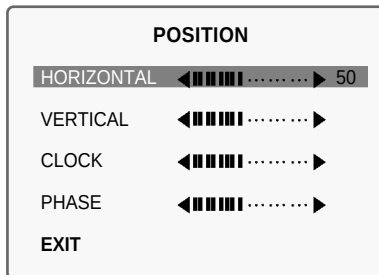
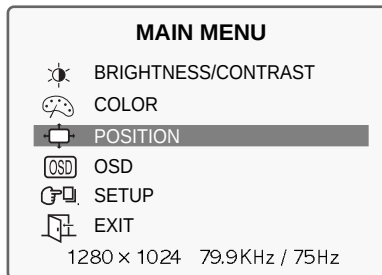
Notice

Adjusting Gamma Value is useful in case of game or movie screen.

POSITION & CLOCK/PHASE

CLOCK/PHASE

- When image is not clear, you can use clock/phase menu.
- PHASE/ CLOCK : Although 'Auto Adjustment' automatically finds the optimum values of Clock and Phase parameters as well as image position, it may be necessary for you to adjust those parameters manually. It is recommended for you to use 'Auto Adjustment' first. If the adjustment results are not satisfactory, then use Clock and Phase adjustment features to get the best adjustment results. Bear in mind that Clock and Phase adjustment may change the width of the image and affect image position as well. If the image is clear while out of center by a couple of pixels, use image position to center the image.



POSITION

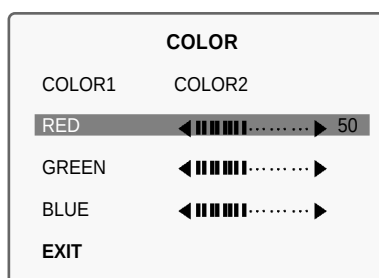
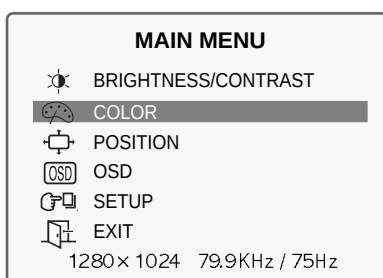
- Changes the location of the image.
- H-Position : Moves to the Left/Right
- V-Position : Moves to the Bottom/Top



If image is not clear (noise), you can adjust Clock/Phase.

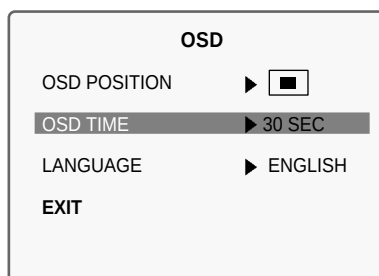
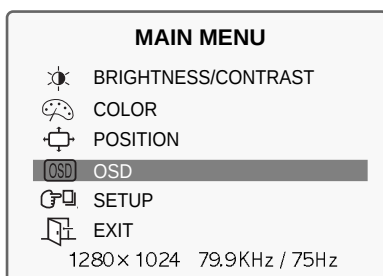
COLOR

- The tone of color can be changed from bluish white to reddish white.
- Color1 - Blue type
- Color2 - Red type
- RED, GREEN, BLUE - You can adjust red, green and blue values that you want.



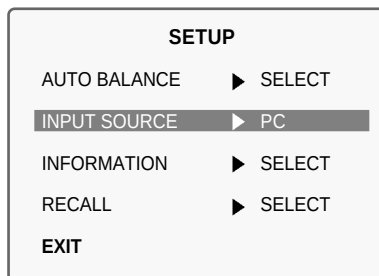
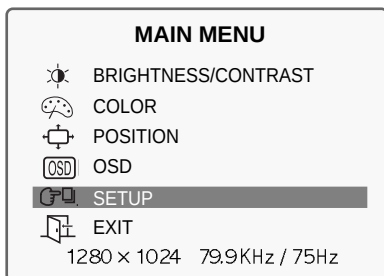
OSD MENU ADJUSTMENT & INPUT SOURCE

- Sets the OSD menu display position.
- OSD Position : Moves the OSD menu to the horizontal or vertical direction.
- OSD TIME : Shows the OSD TIME displays from 5 to 60sec.
- LANGUAGE : Select language in OSD menu.



SETUP MENU

- Auto balance : Automatic adjust color (white level) for various input source's white level.
- Input source : display input signal.
- Information : display monitor's information.
- Recall : Discards current setting and replaced all paramotors with the factory default values.



Input Source (HL700M / MT)

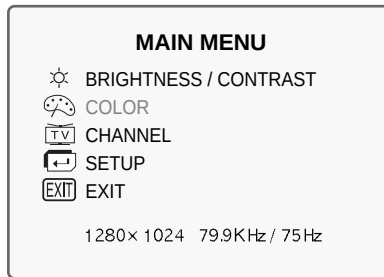
- INPUT SOURCE : Selects input signal.
(PC ⇄ DIGITAL ⇄ VIDEO1 ⇄ VIDEO2 ⇄ TV)



The mode button can adjust Input Source by hot key.
In this case, the mode change time spend 2~3sec.

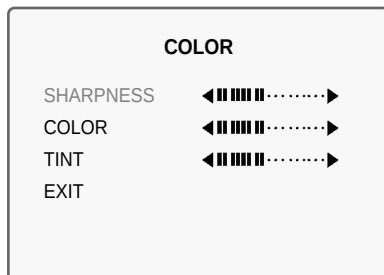
VIDEO1, VIDEO2 (HL700M / MT)

● MAIN MENU



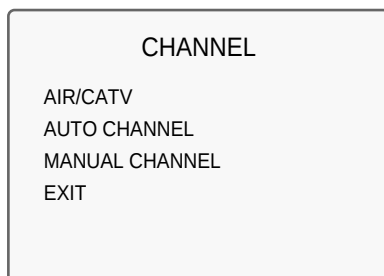
- **BRIGHTNESS / CONTRAST** : Increase or decreases the light intensity of the screen / increase or decrease the ratio of the light intensity between the brightest white and the darkest black.
- **COLOR** : Refer to below color menu.
- **CHANNEL** : Refer to below channel menu.
(TV installation)
- **SETUP** : Refer to OSD menu adjustment.
- **EXIT** : Finish the current status.

● COLOR



- **SHARPNESS** : Make image of the VIDEO/TV looked sharper.
- **COLOR** : Adjust color intensity of the VIDEO/TV.
- **TINT** : Adjust a color tone of the VIDEO/TV.
- **SETUP** : Refer to OSD menu adjustment.

● CHANNEL



- **AIR/CATV** : Select AIR or CATV.
- **AUTO CHANNEL** : Search the channel automatically.
(SELECT button ◀▶ button : select channel ◀▶ button (ADD/DEL))
- **MANUAL CHANNEL** : Search the channel manually.
- **FINE** : Adjust image quality of the TV.



Notice

The mode button can adjust Input Source by hot key.
In this case, the mode change time spend 2~3sec.

5

Appendix

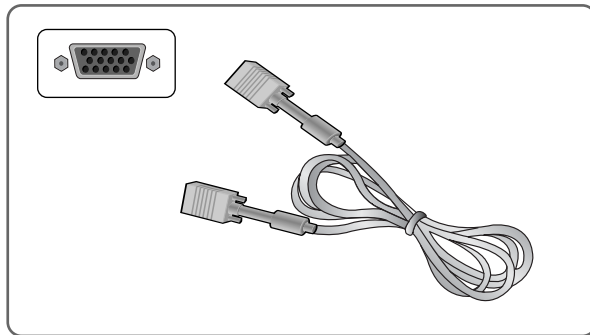
Appendix A. Display Modes

Mode	Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)	Pixel Clock Frequency(MHz)	Sync Polarity(H/V)
VGA	720 X 400	31.468	70.087	28.322	-/+
	640 X 480	31.468	59.940	25.175	-/-
		35.000	66.670	30.240	-/-
		37.500	75.000	31.500	-/-
SVGA	800 X 600	37.879	60.300	40.000	+/+
		48.077	72.188	50.000	+/+
		46.875	75.000	49.500	+/+
XGA	1024 X 768	48.363	60.004	65.000	-/-
		56.476	70.000	75.000	-/-
		60.023	75.029	78.750	+/+
SXGA	1280 X 1024				

Appendix B. 15-pin D-Sub Connector

- Input signal : Analog RGB
- 15-pin D-Sub connector

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	Analog Red Input	6	Analog Red Ground	11	Ground
2	Analog Green Input	7	Analog Green Ground	12	DDC Data
3	Analog Blue Input	8	Analog Blue Ground	13	Horizontal Sync
4	Ground	9	No Connect	14	Vertical Sync
5	DDC Ground	10	Sync Ground	15	DDC Clock

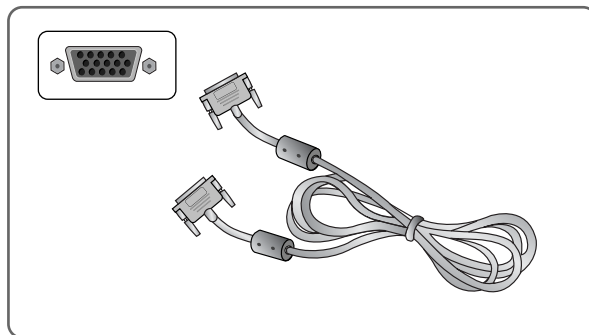


15pin D-Sub Signal Cable

Appendix C. 24-pin DVI Connector

- Input signal : Digital
- 24-pin DVI connector

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	TMDS DATA2-	9	TMDS DATA1-	17	TMDS DATA-
2	TMDS DATA2+	10	TMDS DATA1+	18	TMDS DATA+
3	DGND	11	DGND	19	DGND
4	NC	12	NC	20	NC
5	NC	13	NC	21	NC
6	DDC CLOCK	14	+5V POWER	22	DGND
7	DDC DATA	15	AGND	23	TMDS CLOCK+
8	Analog vertical Sync	16	NC	24	TMDS CLOCK-



24pin Digital Cable

Appendix D. DPMS Power Saving Mode

This monitor has a built-in power management system called DPMS Power Saving Mode. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain period of time. The available modes are “ON”, “Standby”, “Suspend”, and “OFF”.

State	Signal			Power Consumption	Recovery Time	LED Color and Operating status
	H-sync	V-sync	RGB			
ON	Active	Active	Active	Under 40Watt	-	Green
Standby mode	Inactive	Active	Blanked	Less than 5Watt	Within 2Sec	Amber
Standby mode	Active	Inactive	Blanked			Amber
OFF	Inactive	Inactive	Blanked			Amber

6

Troubleshooting

What you see	Suggested Actions
Screen is blank and power indicator is off.	Ensure that the power cord is firmly connected and the LCD monitor is on.
"out of range" message.	• Check the maximum resolution and the frequency of the video adaptor. • Compare these values with the data in the Display Modes Timing Chart.
"No signal input" message.	• Ensure that the signal cable is firmly connected to the PC or video sources. • Ensure that the PC or video sources are turned on.
Image is not stable and may appear to vibrate.	• Check that the display resolution and frequency from your PC or video board is an available mode for your monitor. On your computer check : Control Panel, Display, Settings • Note : Your monitor supports multiscan display functions within the following frequency domain: • Horizontal frequency : 31~80KHz • Vertical frequency : 56~75Hz • Maximum refresh rate : 1280 x 1024 @75Hz
The image is too light or too dark.	• Adjust the Brightness and Contrast. • Refer to the Brightness/Contrast
The image color is not good.	• Adjust the Color • Refer to the Color
Image is not centered on the screen.	• Executes Auto Configuration.
Screen is blank and power indicator light is steady amber or blinks.	• The monitor is using its power management system. • Move the computer's mouse or press a key on the keyboard.

A silver Sony CCD camera monitor with a blue screen. The monitor is a CRT type with a wide, flat bezel. It has a small control panel at the bottom center of the bezel. The screen is dark blue. The monitor is sitting on a small, light-colored stand.

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P/N : 97E9500117