



HYUNDAI
HYUNDAI IT CORP.

**19" Wide LCD Monitor
User Manual**

Modelo : P90W, P90WU



U.S.A.

U.S.FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT INFORMATION TO THE USER

NOTE : 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.

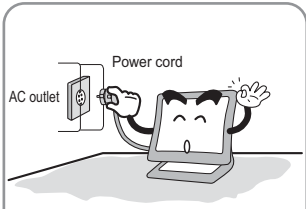
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet of a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for assistance.


Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Connecting of peripherals requires the use of grounded shielded signal cables.

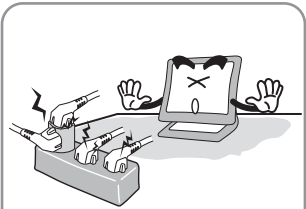
Warning : The following information will help you avoid the risk of electric shock, serious injury or death.




Plug the power cord into a properly grounded outlet. There is the risk of electric shock.




If you hear a noise or smell smoke from the computer or adaptor, unplug the power cord immediately, and call the service center. There is the risk of electric shock or fire.



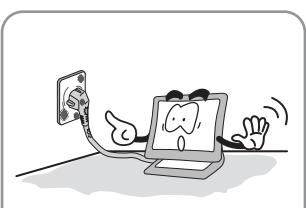
Do not overload an electrical outlet with too many devices. There is the risk of fire.



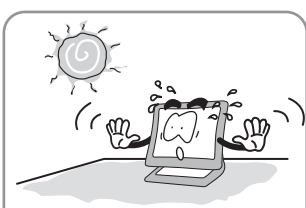
Do not unplug from the outlet by pulling the power cord or when your hands are wet. There is the risk of electric shock or fire.



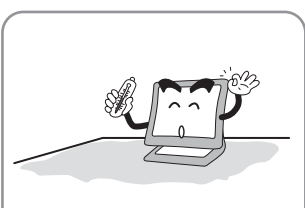
Do not bend the power cord excessively nor place heavy objects on it. Keep children and pets away from the power cord as they may damage the power cord. There is the risk of electric shock or fire.



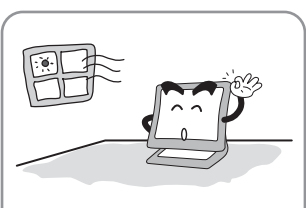
Do not use a damaged power cord or plug. Make sure the plug fits snugly into the outlet. There is the risk of electric shock or fire.




Do not expose the monitor to the direct sun light.




Keep the monitor away from high temperature, humidity, and dust.
 ■ Operating environment =10~40degrees Celsius
 ■ Operating environment =20~80relative humidity.



Do not block the fan louvers. There is the risk of fire or damage to the monitor.

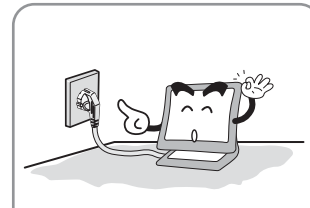


Do not allow any object or liquid to enter inside the monitor. There is the risk of electric shock, fire or damage to the monitor.

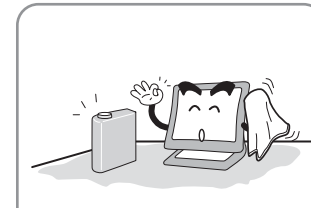


Do not attempt to disassemble, fix or modify the monitor. There is the risk of electric shock or fire.


Caution : The following information will help you avoid the risk of minor or moderate injury or damage to the monitor.




Use a proper voltage/current level indicated




Do not clean the LCD with abrasive chemicals. There is the risk of damage to the LCD.



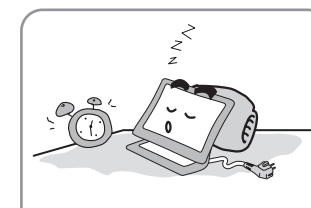
Do not scratch and damage the LCD with sharp objects.



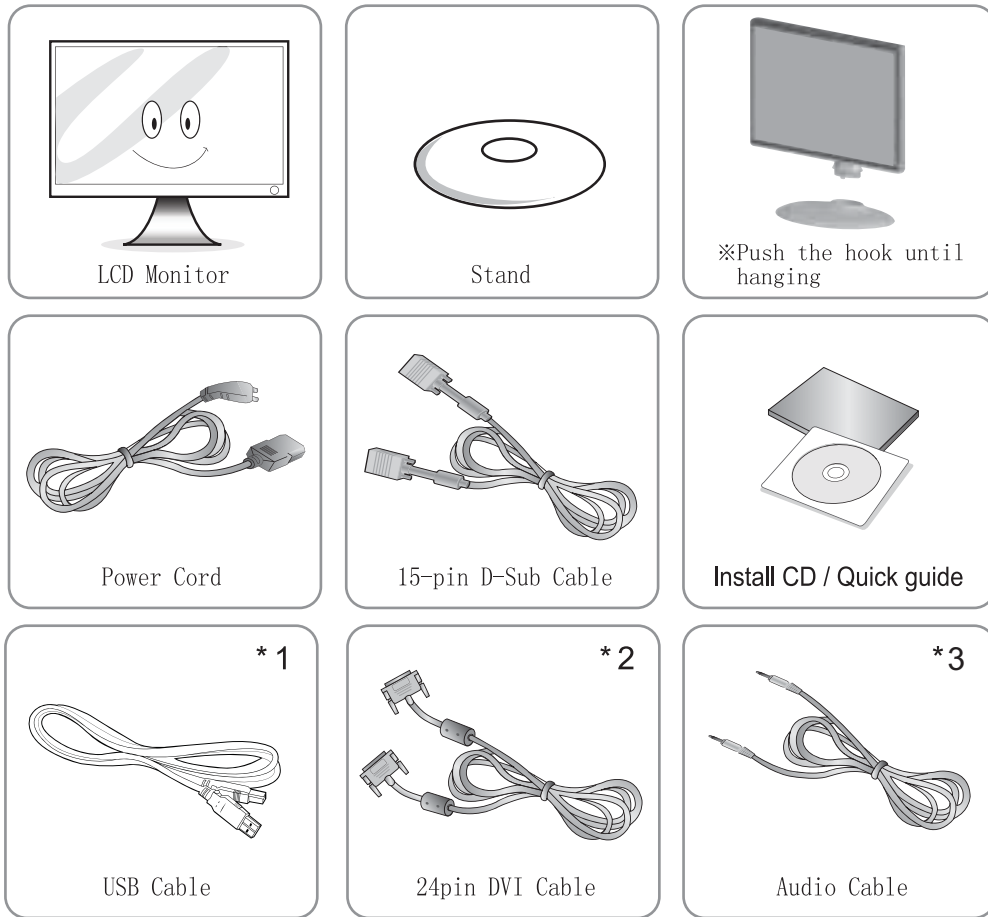
Keep the monitor away from objects and electrical appliances that may generate electromagnetic fields.



Place the monitor on a flat, stable surface. The monitor may fall and there is the risk of damage or injury.



Unplug the power cord when the monitor is not in use for a long period of time.

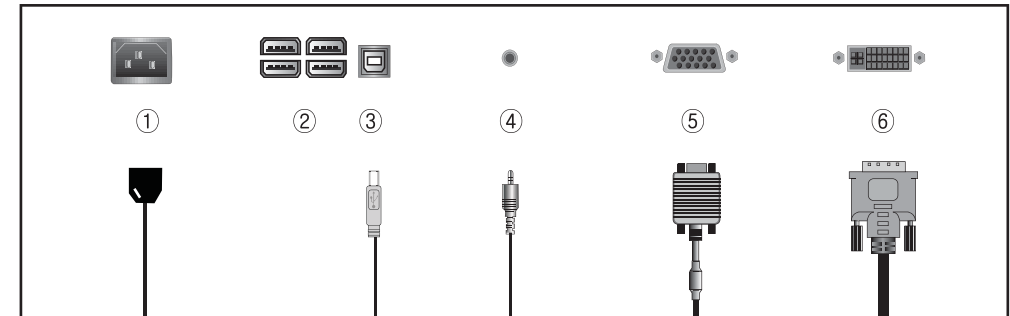


※Push the hook until hanging

*1 : For USB Model Only.
 *2 : For DVI Model Only.
 *3 : For Audio Model Only.

Notice Please make sure the following items are included with your monitor. If any items are missing, contact your dealer. Also we'd like to ask you to use our 'D-Sub' cable all the time, otherwise we are not in a position to be responsible for all the matters caused by that.

Setting up the LCD monitor



No.	Name	Cable connections
1	Power	Power Cord
2	USB Downstream Port (4) (Option)	To connect another USB Device*1
3	USB Upstream Port (Option)	USB to PC *1
4	AUDIO IN	AUDIO Cable *3
5	VGA	15-pin D-Sub Signal Cable
6	DVI (Option)	DVI-D Cable*2

*1 : For USB Model Only.
 *2 : For DVI Model Only.
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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 30 minutes before making any screen adjustments.

Notice When the condition of the screen is not good, please press the button " AUTO". (This function may cause some noises on the screen according to VGA Cards)

Buttons & functions

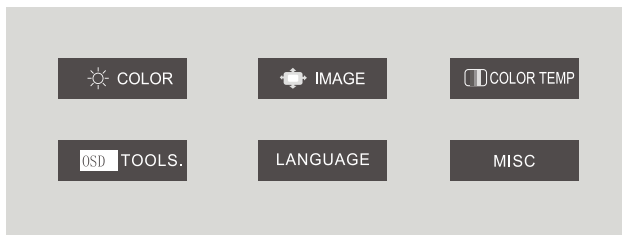
Button	Function description	Hot key setting
MENU	Opens OSD MENU window. Chooses icons.	
▼/🔊	Moves down icon choice bar. Decreases value of chosen icon.	Sound control *1
▼	Moves down icon choice bar. Decreases value of chosen icon.	
▲/INPUT	Moves up icon choice bar. Increases value of chosen icon.	SOURCE change
AUTO/EXIT	Cancels chosen OSD MENU step by step. Closes OSD MENU.	Automatic setting
🔌POWER	turns on/off monitors.	
State Lamp	Indicates monitors' state. LED ON(green) in normal state LED flicker(green off) in standby mode	

*1 : For Audio Model Only.

Functions

Hot key is a handy key to execute frequently used functions.

▼ Monitor & OSD screen settings



OSD screen selection and control procedures.

1. Press the "MENU" button to bring up the OSD screen.
2. Press the "▼/🔊(▼), ▲/INPUT" buttons to select the main option.
3. Press the "MENU" button after selecting the main option.
4. Bring up the sub-menu. Use the "▼/🔊(▼), ▲/INPUT" buttons to select the desired option.
5. Press the "MENU" button after selecting the desired sub-menu option.
6. Use the "▼/🔊(▼), ▲/INPUT" buttons to adjust the set value.
7. Pressing the "AUTO/EXIT" button three times saves and exits the setting mode.

*Pressing the " AUTO/EXIT" button moves back to the previous menu.

MAIN MENU ICON	MAIN MENU	SUB MENU	FUNCTION
☀️ COLOR	COLOR	BRIGHTNESS	Adjusts screen brightness.
		CONTRAST	Adjusts screen light and darkness.
📷 IMAGE	IMAGE	HORIZONTAL POSITION	Adjusts screen left or right.
		VERTICAL POSITION	Adjusts screen upwards or downwards.
		PHASE	Removes noise coming out horizontally on screen.
		CLOCK	Removes noise coming out vertically on screen.
🌡️ COLOR TEMP	COLOR TEMP	WARM	Screen colors turn mild.(6500K)
		COOL	Screen colors turn mild.(9300K)
		USER-DEFINED	Can adjust three colors(red, green and blue) individually, if USER-DEFINED is selected.
📄 OSD TOOLS.	OSD TOOLS	OSD H-POSITION	Adjusts OSD screen left or right.
		OSD V-POSITION	Adjusts OSD screen upwards or downwards.
🗨️ LANGUAGE	LANGUAGE		Select OSD languages (6 languages)
🗂️ MISC	MISC	AUTO ADJUST	Automatically sets optimum screen. (Not available in DVI)
		AUTO GAIN	Automatically sets optimum color. (Not available in DVI)
		FACTORY RESET	User setting values return to factory setting values.
		VOLUME	Adjusts volume of sound level. *1
		SCALE	Adjusts screen ratio. (4:3, 16:10)

*1 : For Audio Model Only.

English

Disposal of Used Electrical & Electronic Equipment



The meaning of the symbol on the product, its accessory or packaging indicates that this product shall not be treated as household waste. Please, dispose of this equipment at your applicable collection point for the recycling of electrical & electronic equipments waste. In the European Union and Other European countries which there are separate collection systems for used electrical and electronic product. By ensuring the correct disposal of this product, which could otherwise be caused by unsuitable waste handling of this product. The recycling of materials will help conserve natural resources. Please do not therefore dispose of your old electrical and electronic equipment with your household waste. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Dansk

Handtering af udtjente elektriske og elektroniske produkter (Gælder for den Europæiske Union og andre europæiske lande med separate indsamlingssystemer)



Dette symbol på produktet eller emballagen angiver, at produktet ikke må behandles som husholdningsaffald. Det skal i stedet indleveres på en deponeringsplads specielt indrettet til modtagelse og opbevaring af elektriske og elektroniske produkter. Ved at sikre at produktet bortskaffes korrekt, forebygges de eventuelle negative miljø- og sundhedsskadelige påvirkninger, som en ukorrekt affaldshandling af produktet kan forårsage. Genindvinding af materialer vil medvirke til at bevare naturens ressourcer. Yderligere information om genindvindingen af dette produkt kan fås hos myndighederne, det lokale renovationselskab eller butikken, hvor produktet blev købt.

Español

Eliminación de equipamiento eléctrico y electrónico usado



Este símbolo en el producto, sus accesorios o embalaje indica que el producto no debe tratarse como un residuo doméstico. Deshágase de este equipamiento en su punto de recogida más cercano para el reciclaje de residuos eléctricos y electrónicos. En la Unión Europea y otros países europeos existen diferentes sistemas de recogida de productos eléctricos y electrónicos usados. Al asegurar la correcta eliminación de este producto ayudará a evitar riesgos potenciales para el medio ambiente y al salud de las personas que podrían tener lugar si el producto no se eliminara de forma adecuada. El reciclaje de materiales ayudará a conservar los recursos naturales. Por consiguiente, no elimine equipamiento eléctrico y electrónico usado junto con residuos domésticos. Para información más detallada acerca del reciclaje de este producto, póngase en contacto con su oficina municipal, el servicio de eliminación de residuos domésticos o el establecimiento donde adquirió el producto.

Português

Eliminação de Equipamento Elétrico e Eletrónico Usado



O símbolo no aparelho, nos seus acessórios ou na embalagem indica que este aparelho não deve ser tratado como resíduos domésticos. Deixe este aparelho no ponto de recolha de material eléctrico e electrónico para reciclagem mais perto de si. Na União Europeia e noutros países europeus existem sistemas de recolha separada para produtos eléctricos e electrónicos usados. Garantindo uma eliminação correcta deste aparelho, ajudará a evitar possíveis danos ambientais e/ou pessoais, que um incorrecto tratamento do aparelho usado poderia provocar. A reciclagem de materiais ajuda a conservar os recursos naturais. Por isso, não deite fora os aparelhos eléctricos e electrónicos junto com os seus resíduos domésticos. Para informação detalhada sobre a reciclagem deste aparelho, contacte a sua Câmara Municipal, o seu serviço de recolha de lixo ou a loja onde comprou o aparelho.

Display Modes and frequency


Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)	
640 x 480	31,47 kHz	60 Hz	
	37,86 kHz	72 Hz	
	37,50 kHz	75 Hz	
720 x 400	31,47 kHz	70 Hz	
	37,88 kHz	60 Hz	
800 x 600	48,08 kHz	72 Hz	
	46,88 kHz	75 Hz	
	48,36 kHz	60 Hz	
1024 x 768	56,48 kHz	70 Hz	
	60,02 kHz	75 Hz	
	67,98 kHz	60 Hz	
1280 x 1024	79,98 kHz	75 Hz	
	55,40 kHz	60 Hz	
1440 x 900			
480p		50/60	DVI(HDCP)
576p		50/60	
720p		50/60	
1080i		50/60	

Power Save

This monitor has a built-in power management system called PowerSave. 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 monitor automatically returns to normal operation when you press a key on the keyboard. For energy saving, turn your monitor OFF when it is not used, or when leaving it unattended for a long period.

State	Power consumption	LED Color
ON	Under 55W	Green
OFF	Less than 1W	Flickering (Green)

Problem	Solution
Abnormal colors appear. It is in black and white.	Reconnect the cable to PC. Insert the PC's video card correctly. Re-boot the PC. Set the video card again after referring to the video card manual.
The displayed screen position suddenly changes or tilts inward.	Use the screen control to adjust the displayed screen shape. Set the resolution and/or frequency on the video card (refer to the supported mode table). Differences in the signal period of the video card may cause changes in the displayed position from time to time. Use the screen control functions to correct the displayed screen position.
Displays 16 colors only. The color has changed after replacing the video card.	Windows ME/XP/VISTA: Re-set the color from the Control Panel → Display → Setting, Re-install the video card driver.
Power indicator lamp blinks Green.	Monitor is in Sleep Mode
Cannot control the screen with the buttons on the front of the monitor.	Contact technical support
There are colored spots on the screen.	There may be a few colored (red, green, white, black) pixel spots on the screen during use. This is a natural characteristic in LCD panels. It is not a malfunction and does not affect the monitor's performance.
The power indicator lamp is off.	Check if the power cable is intact. Reconnect the power cable correctly if necessary.
The "No Signal" message appears on the screen.	Check if the connection between the PC and monitor is intact. Reconnect the cable correctly if necessary.
The "Out of Range" message appears on the screen.	The output signal from the video card exceeds the monitor's maximum resolution or frequency limit. Set the maximum resolution and frequency to suit the product limits.
The screen appears to be sliding downward.	Check the connection between the PC and monitor. Re-connect if necessary.
The screen is unclear.	Run the auto-adjusting function.
The screen appears unstable or flickers. The screen leaves shadows.	Check if the computer or video card output resolution and frequency is set within the limits. Re-set the screen display by referring to the resolution information and standard supported mode table.
The screen is too bright or dark.	Use the brightness or contrast controls to adjust the display.
The color on the screen is not uniform.	Use the color density control to set the color.
Lines appear on the screen and the screen flickers.	Turn off any cordless phones, hair dryers, electrical drills etc. that are in use.

 **Caution** Use a soft dry cloth to clean the product.

Use a clean cloth with a special screen cleanser.

- Do not scratch the monitor panel with your fingernails or other sharp objects.
- Do not use flammable substances such as benzene or paint thinner on the product. Do not use a wet cloth.
- Do not use acetone, benzene or paint thinner on the product.

	Specification	P90U, P90WU
LCD	Visible Screen Area	408.24mm(H) x 255.15mm(V)(19inch)
	Pixel Pitch	0.2835mm(H) x 0.2835mm(W)
	Recommended Resolution	1440 x 900@60Hz
	Maximum Visible Angle	160°/160°(H/V)
	Displayed Color	16.7M
	Brightness	300cd/m ²
	Contrast Ratio	1000:1
	Response Time	5 msec
Input Signal	Horizontal Frequency	30KHz-80KHz
	Vertical Frequency	60KHz-75KHz
	Video Signal	Analog RGB, DVI*2
	Connector	15pin D-SUB, USB*1, DVI-D*2, AUDIO*3
Power	Power Consumption	<55W
	Stand by Power	<1W
	Input Power	AC:100V-240V 50/60Hz, 0.7A
Multimedia Speakers		2W x 2*3
Operating Environment		Operation: 10 to 40°C, humidity: 20-80%(non-condensing)
		Storage: -10 to 50°C, humidity: 10-90%(non-condensing)

※ The above specifications are subject to change without prior notice to improve performance.

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*3 : For Audio Model Only.