



19" TFT LCD Display
USER MANUAL



Model: W902DB

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Instructions for Federal Communications Commission (FCC) Compliance

This device has passed the tests stipulated by Article 15 of FCC Compliance and conforms to the limitations and provisions for Class-B digital equipment. The restrictions are formulated to prevent the harmful interference with radio frequencies produced by or used by household appliances. This unit will emit electromagnetic waves during operation and therefore, it may interfere with the radio-frequency signal if it is not configured and operated as directed in the user manual. It is not guaranteed that this device will not cause interference with specific equipment--in particular when it is being powered on or off. In case this device interferes with TV sets or wireless networking equipment, the user may prevent the interference by using one or several of the methods stated below:

- Relocate the reception antenna of the equipment
- Increase the distance between this device and the equipment
- Connect the power plug of this device and that of the equipment into sockets for different lines
- Contact an experienced technician familiar with wireless networking equipment or TV sets

In order to satisfy the limitations regarding electromagnetic emissions and to prevent interference with TV sets and/or wireless networking equipment nearby, the accessories provided with this unit should be used. This device should not be modified without the authorization or confirmation of the manufacturer.

CE Statement

This is to state that this 19" LCD monitor complies with the following compulsory regulations:

- **Safety**

This appliance complies with LVD-73/23/EEC,93/68/EEC Low Voltage Direction (EN60950-1:2001) requirements:

- Electrical shock protection
- Energy risk protection
- Fire hazard protection
- Hazardous electromagnetic emissions protection
- Protection against hazardous substances produced during normal operation or malfunction
- Mechanical and moving parts hazards

- **EMC**

This device complies with the 89/336/EEC requirements.

Electromagnetic interference generated by this device is less than that produced by radios or other long-distance communication equipment. During normal operation, interference effects should be at an acceptable level; this device also incorporates a sound internal anti-interference design. When correctly configured and maintained, it should operate normally in typical home or office environments.

EMI: Radio interference characteristics are in conformity with EN55022:1998 + A1: 2000 + A2: 2003 Class B *Limit Value & Test Method for Radio Interference Characteristics for Information Technology Equipment*

A) Electromagnetic emissions

B) Conducted emission

EN61000-3-2:2000; Class A Harmonic Current Emission

EN61000-3-3:1995+A1:2001 Voltage Fluctuation & Flicker

EMS: Anti-interference levels are in conformity with EN55024:1998 +A1:2001 + A2: 2003 class B

Limit Value & Test Method for Anti- Interference Level for Information Technology Equipment

IEC61000-4-2:2001

Electrostatic (ESD)

IEC61000-4-3:2002+A1: 2002

Immunity to RF field strength

IEC61000-4-4:2001

Electrical fast transient

IEC61000-4-5:2001

SURGE

IEC61000-4-6:2001

CS

IEC61000-4-8:1993+A1:2000

Magnetic-immunity

IEC61000-4-11:2001

Voltage Dips/Interruptions

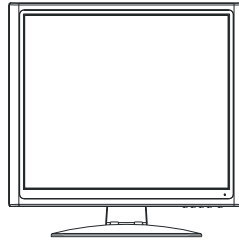
Safety Instructions

1. Please read this manual carefully before operating the device and keep it available for future reference.
2. To avoid the danger of the monitor falling and thereby possibly causing injury and/or serious damage to the monitor itself, do not place it on unstable carts or desks. Be careful to avoid placing any pressure on the LCD screen during handling.
3. Do not place this monitor in areas that are wet or where water or other liquids may come in contact with it, such as bathrooms, kitchens, wet floors, near washing machines or by swimming pools.
4. Remove the power plug from the electrical socket before cleaning. No water-containing cleaning agent should be used to clean the screen, but only cleaning agents formulated specifically for cleaning LCD screens. Do not put any liquid cleaning agent directly on the screen, but put it on a soft cloth first and then gently apply the cloth to the screen.
5. In order to guarantee reliable operation and adequate heat dissipation, do not cover or block vent holes on the monitor. Do not put the monitor close to heat sources. Do not place the monitor on furniture such as a bookshelf, unless sufficient ventilation is available.
6. A 3-pin grounding plug is provided for this monitor. In order to guarantee normal operation and safety of this unit, this plug should be used with a matching grounded power socket.
7. Please follow all warnings and instructions that accompany the monitor.
8. Please pay special attention to power supply overloads, as electrical shock or fire may occur.
9. Do not place anything on the power cord. Do not hang the power cord over an area where people or objects may pass.
10. In case the monitor is not used for an extended period, turn off power to avoid the possibility of short circuits caused by lightning.
11. In order to avoid electrical shock or fire risks, do not insert any object through any openings in the monitor's enclosure. Do not allow any liquid to come in contact with the monitor.
12. In case of any abnormal noise or odor caused by incorrect operation, turn off power immediately and contact a professional technician. Do not attempt to repair this monitor by yourself, as electrical shock may occur when opening the back cover or accessing internal components.
13. If any of the following conditions occurs, turn off power and contact a repair service provider:
 - 1) the power cord is damaged or worn;
 - 2) liquid has spilled into the monitor, or the monitor has experienced immersion or wetting;
 - 3) the monitor has fallen;
 - 4) the monitor's performance shows obvious changes;
 - 5) the monitor fails to work normally when correct procedures are followed. In that case, please make any adjustments in accordance with instructions supplied with the monitor; do not attempt any changes to established procedures, as further damage may occur, making successful repair of the monitor more difficult.
14. In case parts need to be replaced, you must use identical parts or those supplied by our certified manufacturers. Any other parts used without our authorization may result in electrical shock or fire risk.

Introduction

General Specifications

This high-quality monitor is based on a liquid crystal display (LCD) with exceptional resolution and features multi-frequency intelligent scanning.



Caution: In order to maintain this monitor in optimal working condition, please read this manual carefully before use.

Monitor Characteristics

- 19" viewable-area screen
- Wide viewing angle (subject to panel specification)
- Color temperature settings: 9300K, 6500K, sRGB, user-defined
- Low power consumption
- Automatic power switching: AC 100~240V, 50/60Hz.
- User Adjustment: Brightness, Contrast, Picture, Color Temperature, Setup, Recall, Source Select, Exit
- Choice of eight languages: English, German, French, Spanish, Italian, Russian, Traditional Chinese and Simplified Chinese.

Package includes:

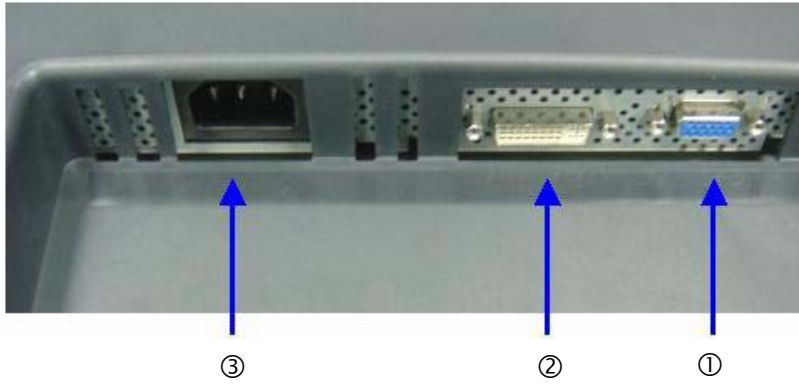
- LCD monitor
- Power cord
- VGA cable
- Instruction manual
- DVI cable (optional)

Caution: Please keep the original packing materials including cartons and foams for possible future use in shipping or moving the monitor.

Precautions

- Please turn off power before cleaning this monitor. Use a soft cloth with clean water and wipe the LCD screen surface lightly.
- This monitor operates at a high voltage and is potentially hazardous. Only qualified technicians are permitted to assemble or disassemble the device or access internal components.

Installation



Terminal Connection

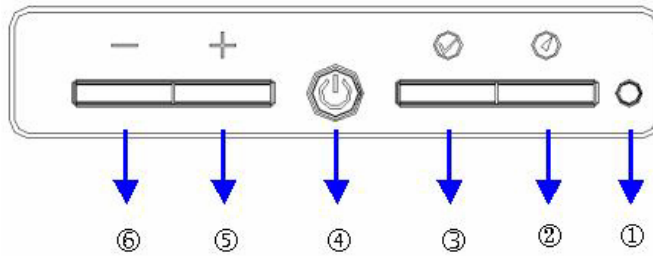
NO.	Terminal	Function
①	VGA-In	To PC VGA
②	DVI-In	DVI Input
③	AC-In	AC power input 100~240V, 50/60Hz

Pre-installation Check

Please check the label on the nameplate on the back cover first. Input voltage between 100V and 240V should be used with this monitor. Also please make sure this monitor and your main system (computer) is powered off before attaching any connectors.

Operation

Front Panel Buttons



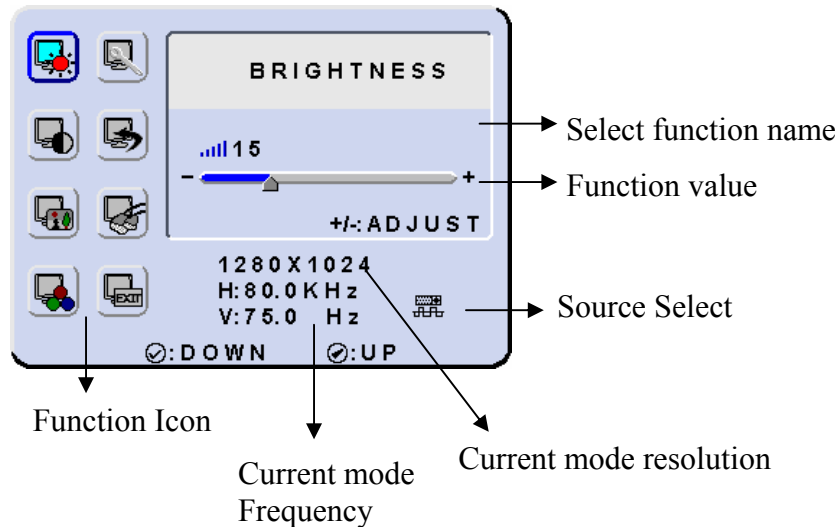
No.	Symbol	Function
①		Power indicator
②	⊙	1. Auto-adjust 2. Select the next OSD icon up
③	⊙	1. Show the main OSD menu 2. Select the next OSD icon down
④	⏻	Turn the power on or off
⑤	+	1. Increase a function's value 2. Move to the next function right 3. Select a Sub-menu function
⑥	-	1. Decrease a function's value 2. Move to the next function left 3. Select a Sub-menu function

Adjust Screen (auto-save)

1. Press the ⊙ button to perform AUTO adjust.
2. Press the ⊙ button to display the main OSD menu.
3. Select the desired function menu, by pressing the ⊙ or ⊙ button.
4. Push the + or - button, to increase or decrease the value and change the setting.
5. Adjust the value or return to/exit the main OSD menu by selecting RETURN/EXIT icon.
6. The OSD menu will disappear automatically after 8 seconds of inactivity.

OSD Menu

Main OSD Menu



OSD Sub-menu: Please refer to page 9 for a complete list of OSD icons.

NO INPUT SIGNAL !

1. If this warning appears, please check the connector. If it is bent or damaged, the signal cable may be affected.
2. If the monitor is in "sleep" mode to save power, please move the mouse or press any key to "wake" and return it to working mode.
3. Please check relevant diagrams, and make sure the monitor has been properly configured.
4. Please check the signal cable. If the type is incorrect, please use the cable that came with the monitor.

SIGNAL OVER RANGE!

This warning indicates that the input signal frequency does not match those supported by this monitor. For this model, horizontal frequency must be in the range of 30 ~ 80 KHz and vertical frequency in the range of 55~75Hz. Please make sure your input signal is within these ranges.

OSD Icon Overview

	Brightness	Adjusts brightness
	Contrast	Adjusts the ratio of white to black
	Picture	Select the picture mode
	Clock	Adjusts vertical noise and correct horizontal size
	Phase	Adjusts horizontal flicker
	H-Position	Adjusts horizontal position
	V-Position	Adjusts vertical position
	Return	To return the previous item
	Color Temp.	Sets the screen to use 9300K, 6500K, sRGB, or a user-defined value
	Red	Adjusts red gain
	Green	Adjusts green gain
	Blue	Adjusts blue gain
	Setup	Setup the OSD
	OSD H-Position	Adjust OSD horizontal position
	OSD V-Position	Adjust OSD vertical position
	OSD Transparent	Adjust degree of OSD transparency
	Language	Selects the display language
	Recall	Reset user changed values and restores to factory setting
	Source Select	Select source from Analog D-sub and Digital DVI
	Exit	Exits the main OSD menu

Specification / Technical Data

Resolution	1280 x 1024
Scan Frequency	H: 30~80 KHz V: 55~75 Hz 640x350, 720x400, 640x480, 800x600, 832x624, 1024x768 1152x864, 1152x870, 1280x960, 1280x1024
Power Input	AC 100~240V, 50/60 Hz Current: 1.2A
Power Consumption	40W (Max) / Stand by under 1.4W
Dimension (W x D x H) D: Thickness (Unit: mm)	470 x 110 x 475
Weight (w/ Stand): Kg	5.1
Export carton with monitor & Accessories	
Dimension W x D x H (Unit: mm)	490 x 125x 495
Gross Weight (Unit: Kg)	6.5
Input Signal	Analog RGB 0.7Vp-p /75 ohm, TTL Sync, Digital RGB TMDS
Operation Environment	Temperature: 0~40°C Humidity: Less than 80% Altitude: To 10,000 feet
Plug & Play	DDC 2B
Power Management	VESA DPMS
Terminal	D-Sub 15 VGA, AC Power Jack, DVI Jack
Control Button on front frame	Power, Auto Adjustment, Menu, Up (+), Down (-)

*** Specifications subject to change without notice.

Energy-saving Modes

When this product is operated, it complies with relevant power-saving measures stipulated by the Energy Star and VESA (Video Electronics Standards Association) standards. When the monitor is left unused, it can also automatically eliminate unnecessary power consumption. If the user intends to use this feature, the monitor must be connected to a computer with a power management system that complies with VESA standards. There are three energy-saving modes that users may choose, as listed below (at this time, the computer must also be configured for these modes to take effect):

*** Waiting Mode**

The monitor enters the Waiting mode after the line signal is cut off. At this time, power consumption is less than 1.4W, the screen will turn dark, and the power indicator turns orange. If there is any input from the keyboard or mouse, the monitor will re-enter the working mode immediately.

*** Pause Mode**

The monitor enters the Pause mode after the field signal is cut off. At this time, power consumption is less than 1.4W, the screen will turn dark, and the power indicator turns orange. If there is any input from the keyboard or mouse, the monitor will re-enter the working mode immediately.

*** Close Mode**

The monitor enters the Close mode after both the line signal and field signal are cut off. At this time, power consumption is less than 1.4W, the screen will turn dark, and the power indicator is off. In case there is any input from the keyboard or mouse, the monitor will re-enter the working mode immediately.

* The user can view the status of the power-saving modes through the LED on front panel.

Mode	Signal			Power	
	Line Signal	Field Signal	Video Signal	Power indicator	Power Consumption
Normal	Y	Y	Y	Green	<40W
Waiting	N	Y	N	Orange	<1.4W
Pause	Y	N	N	Orange	<1.4W
Close	N	N	N	OFF	<1.4W

NOTE: It is better to remove the power cord from the electrical socket when the monitor is not in use for an extended period of time.

Timer Mode

Support Timing	VGA	VESA	MAC
640 x 350	70 Hz		
720 x 400	70 Hz		
640 x 480		60/75 Hz	67 Hz
800 x 600		56/60/72/75 Hz	
832 x 624			75 Hz
1024 x 768		60/70/75 Hz	75 Hz
1152 x 864		75 Hz	
1152 x 870			75 Hz
1280 x 960		60 Hz	
1280 x 1024		60/75 Hz	75 Hz

FAQ (Frequently Asked Question)

Question: What should I do if there is no picture?

- Make sure the video signal cable is connected to the port on your PC's display card and monitor.
- Make sure the computer and screen are both turned on.
- Make sure the pins on the connector head of the cable are not bent or broken.

Question: What should I do if orange LED lights are on but there is no picture?

- Make sure the video signal cable is connected to the port on your PC's display card and monitor.
- Check if the computer is in sleep mode.

Question: What should I do if green LED lights are on but there is no picture?

- Check if the output frequency of computer is outside the monitor's range. Refer to the timing mode chart.
- Check and adjust BRIGHTNESS, CONTRAST, BACKGROUND BRIGHTNESS using the OSD menus.

Question: What should I do if RGB NO INPUT SIGNAL is displayed on the screen?

- Make sure the video signal cable is connected to the port on your PC's display card and monitor.
- Check that your computer is operating normally.

Question: What should I do if SIGNAL OVER RANGE is displayed on the screen?

- Check your PC's display card specification, set vertical frequency to 55 ~ 75 Hz, and make sure resolution is at or below 1280 x 1024. Refer to the timing mode chart for further information.

Question: What should I do if the screen image is not clear?

- Confirm that the computer signal output is normal, and then press the AUTO ADJUST button. Select RECALL from the OSD menu to return the monitor back to factory default settings.
- Check the PHASE & Clock items.
- Set the screen resolution to 1280x1024 @ 75Hz.

Question: What should I do if the screen image size is incorrect?

- Check the Recall & AUTO ADJUST items of the OSD menu.
- Adjust horizontal and vertical position using the OSD menu.
- Make sure that your display card is compatible with the LCD specifications. (Please refer to relevant diagrams or manual and updated information as well).