ENVISION®

www.envisiondisplay.com

User's Manual

Enrich your world

G2219

TABLE OF CONTENTS

Before operating the monitor, please read this manual thoroughly. This manual should be retained for future reference.

FCC Class B Radio Frequency Interference Statement
WARNING: (FOR FCC CERTIFIED MODELS)

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:
1. Reorient or 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.

NOTICE:

1. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibilities of the user to correct such interference.

WARNING:

To prevent fire or shock hazard, do not expose the monitor to rain or moisture. Dangerously high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the monitor on an unstable cart, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.
- Unplug the unit during a lightening storm or when it will not be used for long period of time. This will protect the monitor from damage due to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor by yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel.
- To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100 - 240V AC, Min. 5A.
- The wall socket shall be installed near the equipment and shall be easily accessible.

SPECIAL NOTES ON LCD MONITORS

The following symptoms are normal with LCD monitor and do not indicate a problem.

NOTES

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image when the same image has been displayed for a long time. The monitor will slowly recover from this.
- When the screen becomes black or flashing, or cannot illuminate any more, contact your dealer or service center to replace parts. Don't repair the screen by yourself!

BEFORE YOU OPERATE THE MONITOR

FEATURES
- 558mm diagonal TFT Color LCD Monitor
- Crisp, Clear Display for Windows
- *Recommened Resolutions: 1680 X1050 @60Hz*
- Ergonomic Design
- Space Saving, Compact Case Design

CHECKING THE CONTENTS OF THE PACKAGE

The product package should include the following items:

1. LCD Monitor
2. Owner's Manual
3. Power Cord
4. Signal Cable
5. DVI Cable

INSTALLATION INSTRUCTIONS

SWIVEL BASE

Install   Remove
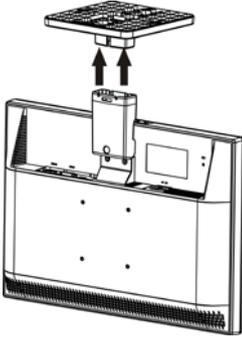
Figure 1   Installing and Removing the Swivel Base

POWER CORD
Power Source:

1. Make sure that the power cord is the correct type required in your area.
2. This LCD monitor has an External universal power supply that allows operation in either 100/120V AC or 220/240V AC voltage area (No user adjustment is required.)
3. Connect the AC-power cord into your LCD monitor's power input socket, The AC-power cord may be connected to either a wall power outlet or the power outlet socket on your PC, depending on the type of power cord supplied with your LCD monitor.

CONTROLS AND CONNECTORS

SIGNAL CABLE

Connecting the Signal Cable: Plug the Signal Cable one end to LCD monitor's "DSUB-Input" socket, the other end to the computer's VGA port and tighten the two screws on the cable connector.

Connecting the Power Cord: Plug the AC-power cord into the External Adapter. Then plug the DC-jack power cable into DC-IN Inlet.

Connecting the DVI Cable: Connect one end of the 24-pin DVI cable to the back of the monitor and connect the other end to the computer's DVI port.

Caution: If the AC outlet is not grounded (with three holes), install the proper grounding adapter (not supplied).
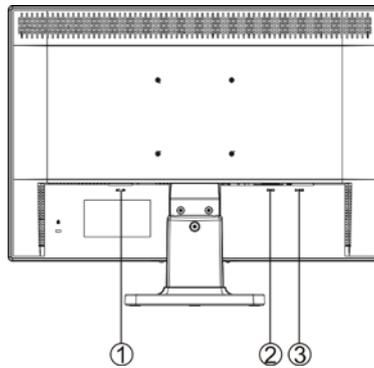
Figure 2   Connecting Cables

1.	Power input socket
2	DVI input socket
3.	D-SUB input socket

ADJUSTING THE VIEWING ANGLE

- For optimal viewing it is recommended to look at the full face of the monitor, then adjust the monitor's angle to your own preference.
- Hold the stand so you do not topple the monitor when you change the monitor's angle.
- You are able to adjust the monitor's angle from -5° to 20°.
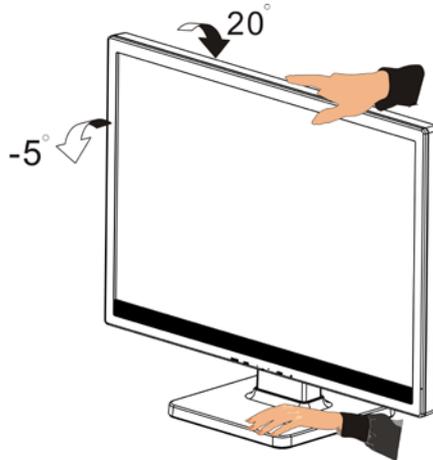
Figure 3

NOTES

- Do not touch the LCD screen when you change the angle. It may cause damage or break the LCD screen.
- Careful attention is required not to catch your fingers or hands when you change the angle.

OPERATING INSTRUCTIONS

GENERAL INSTRUCTIONS

Press the power button to turn the monitor on or off. The other control buttons are located on the side of the monitor (See Figure 4). By changing these settings, the picture can be adjusted to your personal preferences.
- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor. The power indicator will light up.

Figure 4   External Control Button

EXTERNAL CONTROLS

1.	SOURCE
2.	Auto Adjust button / Exit
3.	-/Eco mode
4.	+/DCR
5.	MENU /ENTER
6.	Power button

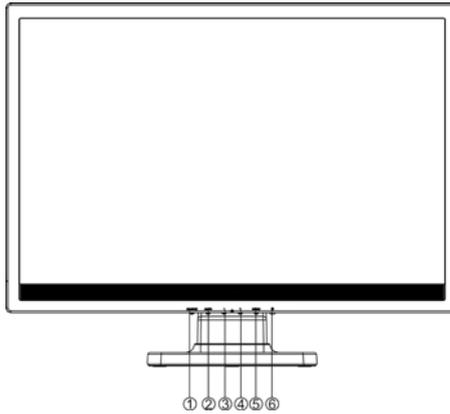## FRONT PANEL CONTROL

- **Power Button:**
  Press this button to switch ON/OFF of monitor's power.

- **Power Indicator:**
  Green — Power On mode.
  Orange —Off mode.

- **MENU / ENTER :**
  Active OSD menu or function adjust confirm or Exit OSD menu when in Contrast /Brightness OSD status.

- **SOURCE:**
  Press this button to switch ON/OFF of DCR.

- -/Eco mode **:**
  Press the Eco key continuously to select the Eco mode when there is no OSD .

- +/DCR **:**
  Press DCR key continuously to active or disable DCR function when there is no OSD.

- **Auto Adjust button / Exit:**
  1. When OSD menu is in active status, this button will act as EXIT-KEY (EXIT OSD menu).
  2. When OSD menu is in off status, press this button to activate the Auto Adjustment function.
     The Auto Adjustment function is used to optimized the HPos, VPos, Clock and Focus.

OSD Lock Function:
To lock the OSD, press and hold the MENU button while the monitor is off and then press power button to turn the monitor on. To un-lock the OSD - press and hold the MENU button while the monitor is off and then press power button to turn the monitor on.

NOTES
- Do not install the monitor in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.
- Save the original shipping carton and packing materials, as they will come in handy if you ever have to ship your monitor.
- For maximum protection, repackage your monitor as it was originally packed at the factory.
- To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.
- Do not scratch the screen with hard things, it may cause permanent damage.
- Don't leak liquid into monitor which will result in the damage of component.

HOW TO ADJUST A SETTING

1. Press the MENU-button to activate the OSD window (Figure 5).
2. Press 〈 or 〉 to navigate through the functions. Once the desired function is highlighted, press the MENU-button to activate it. If the function selected has a sub-menu, press 〈 or 〉 again to navigate through the sub-menu functions. Once the desired function is highlighted, press MENU-button to activate it.
3. Press 〈 or 〉 to change the settings of the selected function.
4. To exit and save, select the exit function. If you want to adjust any other function, repeat steps 2-3.

Figure 5   The OSD Message

ADJUSTING THE PICTURE

The descriptions for function control LEDS

Main Menu Item	Main Menu Icon	Sub Menu Item	Sub Menu	Description
Luminance		Brightness		Backlight Adjustment
		Contrast		Contrast from Digital-register.
		Eco	Standard	Standard Mode
			Text	Text Mode
			Internet	Internet Mode
			Game	Game Mode
			Movie	Movie Mode
			Sports	Sports Mode
		Gamma	Gamma1	Adjust to Gamma1
			Gamma2	Adjust to Gamma 2
			Gamma3	Adjust to Gamma 3
		DCR	Off	Disable dynamic contrast ratio
			On	Enable dynamic contrast ratio

Main Menu Item	Main Menu Icon	Sub Menu Item	Sub Menu	Description
Image Setup		Clock		Adjust picture Clock to reduce Vertical-Line noise.
		Focus		Adjust Picture Phase to reduce Horizontal-Line noise
		H.Position		Adjust the verticalposition of the picture.
		V.Position		Adjust the horizontal position of the picture.
Color Temp.		Warm		Recall Warm Color Temperature from EEPROM.
		Normal		Recall Normal Color Temperature from EEPROM.
		Cool		Recall Cool Color Temperature from EEPROM.
		sRGB		Recall SRGB Color Temperature from EEPROM.
		User	Red	Red Gain from Digital-register
			Green	Green Gain Digital-register.
			Blue	Blue Gain from Digital-register

Main Menu Item	Main Menu Icon	Sub Menu Item	Sub Menu	Description
Color Boost		Full Enhance	on or off	Disable or Enable Full Enhance Mode
		Nature Skin	on or off	Disable or Enable Nature Skin Mode
		Green Field	on or off	Disable or Enable Green Field Mode
		Sky-blue	on or off	Disable or Enable Sky-blue Mode
		AutoDetect	on or off	Disable or Enable AutoDetect Mode
		Demo	on or off	Disable or Enable Demo
Picture Boost		Frame Size		Adjust Frame Size
		Brightness		Adjust Frame Brightness
		Contrast		Adjust Frame Contrast
		H. position		Adjust Frame horizontal Position
		V.position		Adjust Frame vertical Position
		Bright Frame	on or off	Disable or Enable Bright Frame

Main Menu Item	Main Menu Icon	Sub Menu Item	Sub Menu	Description
OSD Setup		H.Position		Adjust the verticalposition of OSD
		V.Position		Adjust the horizontal position of OSD
		Timeout		Adjust the OSD Timeout
		Transparence		Adjust the transparence of OSD
		Language		Select the OSD language
Extra		Input Select	Auto	Select to Auto Detect input signal
			DVI	Select Digital Sigal Source as Input
			D-SUB	Select Analog Sigal Source as Input
		Auto Config		Auto adjust the picture to default
		Image Ratio		Select wide or 4:3 format for display
		DDC/CI		Turn ON/OFF DDC/CI Support
		Information		Show the information of the main image and sub-image source
Reset		Reset	yes or no	Reset the menu to default
Exit		Exit		Exit the main OSD

PLUG AND PLAY

14

Plug & Play DDC2B Feature

This monitor is equipped with VESA DDC2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities.

The DDC2B is a bidirectional data channel based on the I²C protocol. The host can request EDID information over the DDC2B channel.

THIS MONITOR WILL APPEAR TO BE NON-FUNCTIONAL IF THERE IS NO VIDEO INPUT SIGNAL. IN ORDER FOR THIS MONITOR TO OPERATE PROPERLY, THERE MUST BE A VIDEO INPUT SIGNAL.

This monitor meets the Green monitor standards as set by the Video Electronics Standards Association (VESA) and The Swedish Confederation Employees (NUTEK). This feature is designed to conserve electrical energy by reducing power consumption when there is no video-input signal present. When there is no video input signal this monitor, following a time-out period, will automatically switch to an OFF mode. This reduces the monitor's internal power supply consumption. After the video input signal is restored, full power is restored and the display is automatically redrawn. The appearance is similar to a "Screen Saver" feature except the display is completely off. The display is restored by pressing a key on the keyboard, or clicking the mouse.

TECHNICAL SUPPORT (FAQ)

Problem & Question	Possible Solution
Power LED is not on	*Check if the Power Switch is in the ON position *Power Cord should be connected
No Plug & Play	*Check if the PC system is Plug & Play compatible *Check if the Video Card is Plug & Play compatible *Check if the D-15 plug pin of Video Cable is bent
Picture is fuzzy	*Adjust the Contrast and Brightness Controls.
Picture bounces or a wave pattern is present in the picture	*Move electrical devices that may cause electrical interference.
The power LED is ON (orange) but there's no video or no picture.	*Computer Power Switch should be in the ON position. *Computer Video Card should be snugly seated in its slot. *Make sure monitor's video cable is properly connected to the computer. *Inspect monitor's video cable and make sure none of the pins are bent. *Make sure computer is operational by hitting the CAPS LOCK key on the keyboard while observing the CAPS LOCK LED. The LED should either turn ON or OFF after hitting the CAPS LOCK key.
Missing one of the primary colors (RED, GREEN, or BLUE)	*Inspect the monitor's video cable and make sure that none of the pins are bent.
Screen image is not centered or sized properly.	*Adjust pixel frequency (CLOCK) and FOCUS or press hot-key (AUTO).
Picture has color defects (white does not look white)	*Adjust RGB color or select color temperature.
Poor brightness or contrast	*When the brightness of the screen lowers after being used for a certain period and the function of the display is affected, send it to our authorized service center for repair.
Horizontal or vertical disturbances on the screen	*Use win 95/98/2000/ME/XP shut-down mode Adjust CLOCK and FOCUS or perform hot- key (AUTO-key).

CLOCK (pixel frequency) controls the number of pixels scanned by one horizontal sweep. If the frequency is not correct, the screen shows vertical stripes and the picture has not correct width.

FOCUS adjusts the phase of the pixel clock signal. With a wrong phase adjustment the picture has horizontal disturbances in light picture.

For FOCUS and CLOCK adjustment use "dot-pattern" or Win 95/98 shut-down mode pattern .

ERROR MESSAGE & POSSIBLE SOLUTION

NO SIGNAL

1. Check that the signal-cable is properly connected , If the connector is loose, tighten the connector's screws.
2. Check the signal-cable's connection pins for damage.

INPUT NOT SUPPORT

Your computer has been set to unsuitable display mode ,set the computer to display mode given in the following table.

APPENDIX

SPECIFICATIONS

LCD Panel	Driving system	TFT Color LCD
	Viewable image size	558mm diagonal
	Pixel Pitch	0.282mm(H) × 0.282mm(V)
Input	Video	R,G,B Analog Interface
		Digital Interface
	Separate Sync.	H/V TTL
	H-Frequency	31kHz – 80kHz
	V-Frequency	56-75Hz
Display Colors		16.7M Colors
Dot Clock		165MHz
Max. Resolution		1680 x 1050@60Hz
Plug & Play		VESA DDC2B™
Power Consumption	ON Mode	≤49W(max)
	OFF Mode	≤2W
Input Connector		D-Sub 15pin
		DVI 24pin
Input Video Signal		Analog:0.7Vp-p(standard), 75 OHM, Positive
		Digital signal
Maximum Screen Size		Horizontal : 473mm Vertical : 296mm
Power Source		100~240VAC,47~63Hz
Environmental Considerations		Operating Temp: 0° to 50°C Storage Temp.: -20° to 60°C Operating Humidity : 20% to 90%
Dimensions		505.9(W)x407.7(H)x194.8 (D)mm
Weight (N. W.):		4.8kg

| External Controls:	Switch	• Auto Adjust Button • -/Eco mode • DCR/+ • Input Select • Power Button • MENU
	Functions	• Luminance • Image Setup • Color Temp. • Color Boost • Picture Boost • OSD Setup • Extra • Reset • Exit
Power Consumption (Maximum)		49Watts
Regulatory Compliance		CCC

FACTORY PRESET TIMING TABLE

STANDARD	RESOLUTION	HORIZONTAL FREQUENCY	VERTICAL FREQUENCY
VGA	640x480	31.469kHz	60 Hz
	640x480	37.861kHz	72 Hz
	640x480	37.500kHz	75 Hz
SVGA	800x600	35.156kHz	56 Hz
	800x600	37.879kHz	60 Hz
	800x600	48.077kHz	72 Hz
	800x600	46.875kHz	75 Hz
XGA	1024x768	48.363kHz	60 Hz
	1024x768	56.476kHz	70 Hz
	1024x768	57.515kHz	72 Hz
	1024x768	60.023kHz	75 Hz
SXGA	1280x1024	63.981kHz	60 Hz
	1280x1024	79.976kHz	75 Hz
	1280x960	60.000kHz	60 Hz
WXGA	1440x900	55.935kHz	60 Hz
	1440x900	70.635KHz	75Hz
WSXGA	1680x1050	65.290kHz	60Hz

CONNECTOR PIN ASSIGNMENT
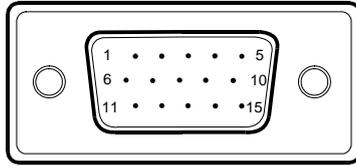
15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	Red	9.	+5V
2.	Green	10.	Detect Cable
3.	Blue	11.	Ground
4.	Ground	12.	DDC-Serial Data
5.	Ground	13.	H-Sync
6.	R-Ground	14.	V-Sync
7.	G-Ground	15.	DDC-Serial Clock
8.	B-Ground		
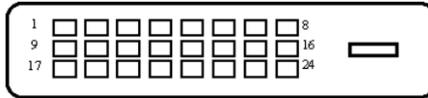
24 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	TMDS Data 2-	13.	TMDS Data 3+
2.	TMDS Data 2+	14.	+5V Power
3.	TMDS Data 2/4 Shield	15.	Ground(for+5V)
4.	TMDS Data 4-	16.	Hot Plug Detect
5.	TMDS Data 4+	17.	TMDS Data 0-
6.	DDC Clock	18.	TMDS Data 0+
7.	DDC Data	19.	TMDS Data 0/5 Shield
8.	N.C.	20.	TMDS Data 5+
9.	TMDS Data 1-	21.	TMDS Data 5-
10.	TMDS Data 1+	22.	TMDS Clock Shield
11.	TMDS Data 1/3 Shield	23.	TMDS Clock +
12.	TMDS Data 3-	24.	TMDS Clock -

ISO 14001 Certification

ISO 14001 certification is the pattern of certification of the environmental management system, is the core standard of ISO14000 series of standard on environmental management.