

MV141
TFT LCD MONITOR
User's Manual



*** Note :**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against radio frequency interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception (this can be determined by turning this 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 to an outlet on a circuit different from that to which the receiver is connected.*

CAUTION :

To comply within the limits for an FCC Class B computing device, always use the shielded signal cord supplied with this unit.

CAUTION TO THE USER :

The Federal Communications Commission warns that changes or modifications to the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, the user should contact the dealer or an experienced radio/television technician for additional suggestions. The user may find the Federal Communications Commission booklet, How to Identify and Resolve Radio-TV Interference Problems, helpful. This booklet is available from the U.S. Government Printing Office, Washington, D.C., Stock No. 004-000-00345-4.

**NOTICE OF COMPLIANCE WITH CANADIAN INTERFERENCE-
CAUSING EQUIPMEN REGULATIONS****DDC COMPLIANCE NOTICE :**

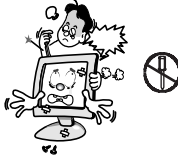
This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.



Please read the cautions carefully before using this product



Do not scratch the screen of the LCD monitor with sharp materials such as nails and pens.



The interior part of the monitor is composed of electric elements. If the monitor is broken, do not try to disassemble it, because it is necessary to contact appropriate technical services in order to have the product repaired.



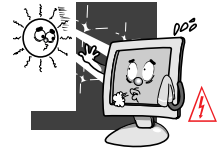
Take care of the LCD monitor so that it is not damaged by the external impact.



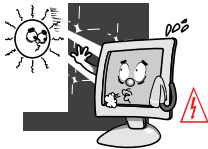
Take care not to use damaged cords and keep this product out of reach of children and persons who are not involved in using the product.



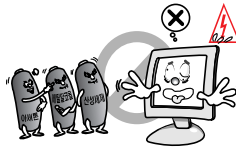
Disconnect the power cable when the monitor is not used during a long period of time while you are away from home.



Do not use this product near the windows receiving direct sunlight or direct natural light.



Choose a fresh and dry area and protect the monitor from extreme conditions of temperature and humidity, dust and smoke. Adequate temperature = 0-40°C. Adequate humidity = 30-80 RH



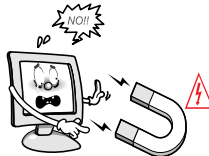
The LCD monitor screen can be damaged in the case that you clean the surface by using acetone, ethyl alcohol or acid detergent.



Do not install the monitor in a sloping place that is not safe due to the fact that the product can fall down and be broken, thus doing harm to other persons.



Check the power voltage before connecting to the AC power cable.



Take care so that the monitor is not in contact with magnetic materials, metals and inflammable substances.

Note

This product uses the TFT LCD panel produced using state-of-the-art technology. The TFT LCD panel consists of millions of pixels and there is much probability of occurrence of bad pixels. Due to this reason, red, blue and green pixels may seem to shine and some black pixels may be visible. But this does not mean that the quality of this product is bad. You can use this product without worrying about the worsening of product performance.



Product features

► Introduction

Thank you for buying our TFT LCD monitor.

Our monitor is a high-resolution monitor that has features of electromagnetic wave blocking, reduction in electricity consumption, and efficient use of space. In view of the fact that this user's manual is prepared for helping you to adequately use the product, it is recommendable to read the user's manual before using the product.

► Product features

- 1) This product has a 15-inch flat surface (Color Active Matrix TFT LCD) with a pixel size of 0.297 mm (H) x 0.297 mm (V) for displaying an ultra-precision, high-resolution image.
- 2) This product uses TFT (Thin Film Transistor) LCD panel and supports a maximum of 1024 x 768.
- 3) This product is a monitor whose deflection frequency is automatically transformed up to 30 - 80 kHz horizontally and up to 56 - 75 Hz vertically.
- 4) This product is compatible with IBM PC and Apple Macintosh (a different adapter is necessary for Apple Macintosh).
- 5) This product has a power-saving function less than 40 W in ON mode, less than 3 W in stand-by mode, less than 3 W in pause mode and less than 3 W in OFF mode in comparison with other monitors.
- 6) This product weighs just 1.7 kg.
- 7) This product supports DDC and allows you to use 'Plug and Play'.



Note

In the case of some system requirements, it may not be compatible with Plug and Play.



Registered as a device whose electromagnetic wave-blocking capacity is adequate (B Class).

This product is registered as a device whose electromagnetic wave-blocking capacity is adequate and can be used in all places (including homes).



Installation of the product

► Checking the product

Please check if the product contains the following items. If there are some items missing, please contact the technical services.

1. TFT LCD monitor
2. User's manual (including product warranty).
3. AC to DC adapter.
4. Power cable
(the power cable can be different according to use environment).
5. Floppy diskette.

► Cautions when installing the product

1. Install the product in a safe place.
2. Install the product in a place without either moisture or dust.
3. Do not install the product near direct sunlight or heating devices.

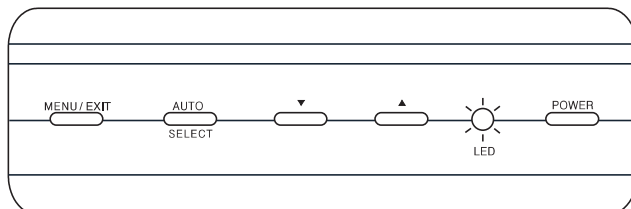
► Installation

1. Turn off the power connected to the monitor before connecting to an external device.
2. Power connection
Connect the adapter to the DC jack connected to the signal cable of the monitor and connect the power cable.
3. Signal connection
This signal input terminal is a D-SUB connector. Connect the signal cable to the signal input of the computer.
4. Turn on the power of the monitor.
5. Turn on the power of the system that you want to use.
6. Continue with the operation when the screen appears. You can adjust the desired status of the screen using control buttons at the bottom of the monitor.
7. If you want to finish the operation, turn off the system power and then turn off the power of the monitor.

Names and operation of control buttons

Names and operation of control buttons

This monitor has several control buttons. They can be used according to the user preference.



Function of the buttons

◆ Power button (POWER)

If you press the power button, the indicator lamp is turned on, and the operation of the monitor is initiated. If you do not want to start the operation of the monitor, press the power button again.

◆ Power indicator lamp (green)

Considering that this product has a power-saving function, if the power cable is connected, the power indicator lamp is shown as follows.

MODE	ON	STAND BY	SUSPEND	OFF
Power indicator lamp	Green	Green (blinks every second)		
Screen	Active	Blanked	Blanked	Blanked

◆ MENU

If you press the menu button, the OSD (On-Screen Display) menu window appears.

◆ (◀/▶)

You can choose the desired item using the button ◀(decrease)/ ▶(increase) in the OSD menu, or you can modify the selected values.

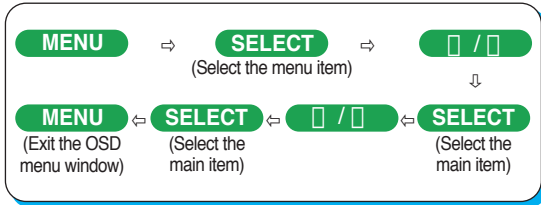
◆ AUTO/SELECT button

If you press AUTO/SELECT button in the screen status, it is automatically adjusted for the optimal size and optimal position, and if you press the button, it functions as a selection button.



Selection and operation of the OSD menu

You can select the OSD menu in the OSD window using all the control buttons at the bottom of the screen. To change the current settings or adjust them for the desired settings, follow the following steps.



1. Press the Menu button to open the OSD menu window.
2. Press the ◀/▶ button to move the item of desired main menu.
3. If you highlight the desired menu item, press the Select button.
4. Press the ◀/▶ button to move the desired sub-menu item.
5. If you highlight the sub-menu item, press the Select button.
6. Press the ◀/▶ button to modify the current value.
7. Press the Select button to save the modified value.
8. To close the OSD menu window, press the Menu button or choose 'Exit (Salir)' in the sub-menu window.

Note

The OSD window will disappear within a few seconds if there is no input in the OSD window. It does not appear when there is no input signal.

The menu that can be configured by the user in this product uses the pull-down menu. The main menus are as follows.

1. Color

Adjusts brightness, contrast, sharpness and saturation.

2. Image

Adjusts the position and sharpness of the screen.

3. Function

Adjusts the position, sharpness and saturation of the screen.

4. OSD menu

Adjusts the language used, the position of the menu screen, the display time of the menu screen and the saturation of the menu screen.

5. Miscellaneous

Configures a certain screen status and initializes the menu value.

Note

Each menu has its corresponding items.

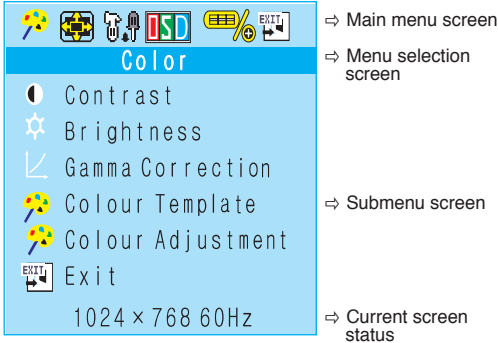
You can modify the value after selecting the desired item according to the selection method and OSD menu operation in the previous chapter.

If you choose the menu, the icon corresponding to the chosen menu blinks, and the selected menu appears in the menu selection screen.

Menu

1. Color menu

If you press the menu button, the following screen appears.



Contrast

Adjusts contrast. 0 ~ 100



Brightness

Adjusts brightness. 0 ~ 100



Gamma correction

Adjusts the clarity of color. 0 ~ 31







Color template

Adjusts the color desired by the user.
19300. 6500. 5000. User.



Color adjustment

Adjusts colors (red, green and blue).

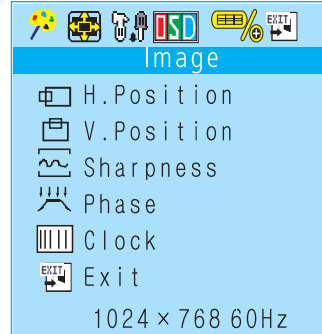
-  Red: Adjusts color saturation. 0 ~ 100
-  Green: Adjusts color saturation. 0 ~ 100
-  Blue: Adjusts color saturation. 0 ~ 100
-  Exit: Exits the current setting.



Exit

Exits the current menu.

2. Image menu



Horizontal position

Adjusts the horizontal position of the current screen. 0 ~ 100



Vertical position

Adjusts the vertical position of the current screen. 0 ~ 100



Sharpness

Modifies sharpness of the screen. 0 ~ 50 0 ~ 31



Phase

Adjusts the center of the current screen. 0 ~ 30



Clock

Increases or decreases the number of pixel to adjust the horizontal size.

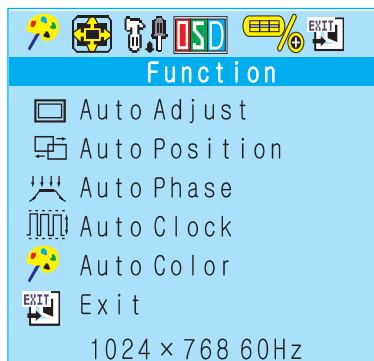



Exit


Exits the current menu.


Menu


3. Function menu




 **Auto-Adjust**
Configures Auto-Position, Auto-Phase, Auto-Clock and Auto-Color at the same time.

 **Auto-Position**
Adjusts the position of the screen automatically.

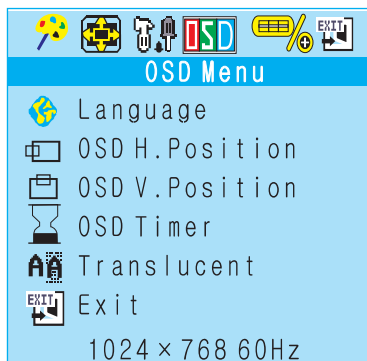
 **Auto-Phase**
Adjusts the center of the screen automatically.


 **Auto-Clock**
Adjusts the pixel size of the screen automatically.

 **Auto-Color**
Adjusts the colors of the screen automatically.

 **Exit**
Exits the current menu.


4. OSD menu




 **Language**
Configures the language used in the OSD menu. The languages are as follows: English, German, French, Italian, Spanish, Chinese Simplified, Chinese Traditional and Japanese.

 **OSD horizontal position**
Adjusts the horizontal position of the OSD menu screen. 00 ~ 110

 **OSD vertical position**
Adjusts the vertical position of the OSD menu screen. 00 ~ 110

 **OSD timer**

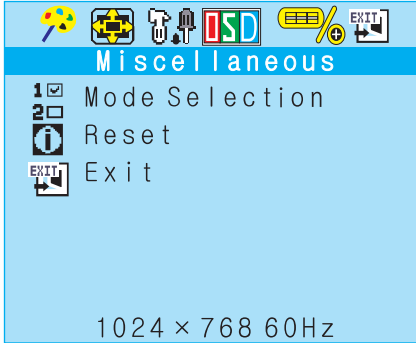
- On: The OSD menu screen disappears after a certain time period.
- Off: The OSD menu screen does not disappear even after a certain time period. Press the Menu button in order for the OSD menu screen to disappear.

 **Translucent**

- On: Switches the OSD menu screen to the translucent mode.
- Off: Disables the translucent mode.


 **Exit**
Exits the current menu.


5. Miscellaneous



1 Mode selection

- 2** - 640 x 400: Optimizes the screen status for the status of 640 x 240.
- 720 x 400: Optimizes the screen status for the status of 720 x 400.

 Reset
Resets all the functions.

 Exit
Exits the current menu.

Description of operation messages

Cable not connected

It appears when there is no input signal from the computer.

If the message disappears, the monitor status is changed to energy-saving mode.

Cable Not Connected

Signal out of range

It appears when the input signal is out of range.

Signal Out of Range

Timing guide

► Timing guide

This product is a multi-frequency monitor.

It functions in horizontal frequencies from 30 kHz to 80 kHz and vertical frequencies from 56 Hz to 75 Hz. Due to its design based on microprocessor, it offers the functions of automatic synchronization and automatic size. This monitor is equipped with 10 programmed configurations that are shown in the timing table. The followings are the ten configurations.

Preset		Resolution		Frequency		Clock [MHz]	Polarity (H/V)
		Horizontal	Vertical	Horizontal	Vertical		
VGA	M1	720	400	31.5KHz	70Hz	28.322	- / +
VESA	M2	640	480	31.5KHz	60Hz	25.175	- / -
	M3	640	480	37.5KHz	75Hz	31.500	- / -
	M4	800	600	37.9KHz	60Hz	40.000	+ / +
	M5	800	600	46.9KHz	75Hz	49.500	+ / +
	M6	1024	768	48.4KHz	60Hz	65.000	- / -
	M7	1024	768	60.0KHz	75Hz	78.750	+ / +
	M8	1280	1024	64.0KHz	60Hz	108.000	+ / +
MAC	M9	1280	1024	80.0KHz	75Hz	135.000	+ / +
	M10	832	624	49.7KHz	75Hz	57.284	- / -

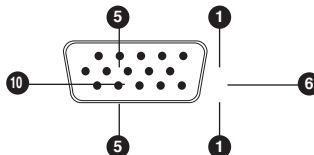
► Signal connection

This signal input terminal is a D-SUB connector. Connect the signal cable to the signal input of the computer.



Disconnect the power connected to the monitor before connecting the signal output of the system.

PIN NO	DESCRIPTION	PIN NO	DESCRIPTION
1	Red	9	No Connection
2	Green	10	Ground
3	Blue	11	Ground
4	No Connection	12	SDA
5	Ground	13	Horizontal-Sync
6	Red Ground	14	Vertical-Sync
7	Green Ground	15	CSL
8	Blue Ground		



Product specifications

Product specifications

LCD	Type	14" diagonal view able screen TFT Thin Film Transistor Active Matrix Panel
	Color filter	0.279mm(H) × 0.279mm(V) pixel pitch RGB vertical stripe
	Colors	262,144 colors
	Glass surface Screen status	Anti-glare coating
Angle of view	Left/Right	90° / 60°
Contrast ratio	Typ.	200 : 1
Brightness	Typ.	150 cd/m ²
Compatibility	PC	IBM XT, AT, 386, 486, Pentium or PS/2 and compatibles (from VGA up to 1024x768 @ 75Hz NI).
Refresh rate	Maximum	1024x768 @ 75 Hz NI (60 Hz for optimal display)
Connectors	Input Signal Power	15-pin D-SUB Jack type DC+12 V In
Voltage/Power	Input	AC 100-240 V, 50-60 Hz
	Output Consumption	DC 12 V 40 watts
Screen size	Maximum	285.696 mm(H) x 214.262 mm(V)
Features	Temperature	33°F ~ 104°F (0°C ~ 40°C) 20%RH-90%RH
	Humidity	(no condensation) Up
	Altitude	To 10,000 feet
Storage conditions	Temperature Humidity	-14°F ~ 104°F (-20°C ~ 40°C) 5%RH-90%RH(no condensation)
Dimension		319.4mm(W) × 272.7mm(H) × 140mm(D)
Weight	Set / Packing	1.7 kg / 2.5 kg

★ The design and specifications of the product are subject to change without previous notice to improve the quality of the product.



Before asking for repair service

▶ Before asking for repair service

You can contact our technical services or selling agency if you want to ask for repair service. Check the following before you ask for repair service.

▶ Screen shows no image.

- Check if the power cable is correctly connected.
- Check if the power of the monitor is turned off.
- Check if the system power is turned off.
- Check if the signal cable of the monitor is connected.

▶ Screen is too dark or bright.

- See color menu (see page 7).

▶ Screen is tilted left / right or upward/downward.

- See position menu.
- Run Auto-Tune function.

Date of purchase	
Purchased from	
	Telephone: