Advanced Color TFT LCD Monitor

USER'S MANUAL

19 inch SXGA TFTLCD Color Monitor

FCC 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:

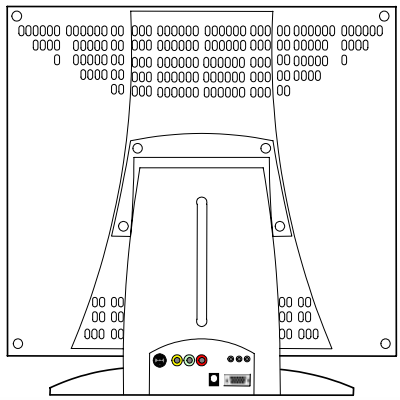
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

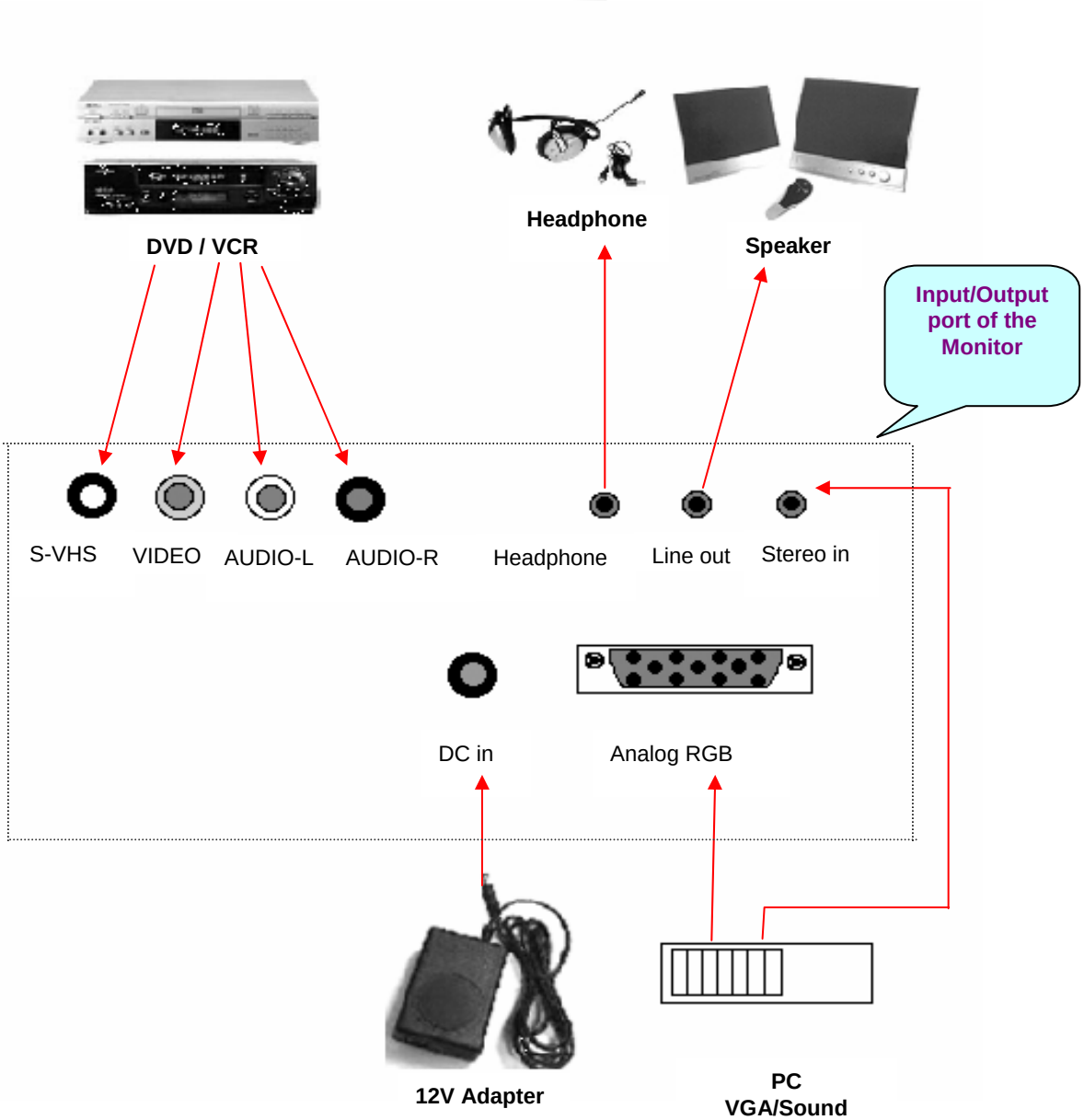
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

CONTENTS

0. CONNECTIONS





1. QUICK START

- Connect the 15-pin D-sub connector to the VGA port of PC.
- Connect the opposite side of VGA cable to TFT LCD monitor.
- Plug in the Audio cables to the proper connecter of your monitor.
- Plug in the power cord to AC/DC adapter power inlet and 110V / 220V consent.
- Plug in the 12V DC output to TFT LCD monitor.
- Turn on PC and TFT LCD monitor.
- Adjust the display. (SXGA, 1280x1024 pixels, 24 bit color)

2. PRODUCT OVERVIEW

This 19” SXGA TFT LCD Monitor, accepts standard analog RGB signal.
This monitor supports SXGA and lower resolutions at the frame frequency up to 75Hz. Lower resolution modes can be expanded to full screen through the expansion algorithm. The user interface includes Audio, Display, Scaling, Control, Auto Adjust, and additional features.

This monitor contains high-end LCD controller, which have high performance and user friendly interfaces. Fancy design monitor makes your desk simple and luxury.

The LCD monitor neither emits harmful rays nor requires space. Moreover, it conforms to VESA DPMS (Display Power Management Signaling) requirement, therefore energy consumption is remarkably little. Actual power consumption of LCD monitor is less than 48 watts during the operation, in contrast CRT monitor. These features guarantee you with safe, clean, and healthy environment.

3. PLUG & PLAY

This monitor supports VESA DDC 1/2B requirements, therefore it is truly Plug-and-Play for all PCs. No hardware or software change needed. It finds optimum setting value automatically without any diskette installation by DDC process.

- DDC Process

Abbreviation of ‘Display Data Channel’.

The format of data exchange between Monitor & VGA Card.

4. USAGE NOTICE

Warning

Please do not open or disassemble the products, because it may cause electric shock. Please be advised all the warnings, precautions, and maintenance advice as recommended in this user's manual in order to maximize the life of your monitor.

Do:

- Turn off the monitor before cleaning its surface.
- Periodically wipe its surface with a soft and dry cloth.
- Use the quality and safety-approved AD/DC adapter.
- Disconnect the power plug from the AC outlet when the product is not in use for long time.

Do not expose the monitor to:

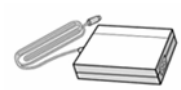
- Extremely hot, cold, and humid environments during operation.
- Area susceptible to dust.
- Direct sunlight
- Abrasive cleaners, waxes, and solvents

5. PACKAGE CHECKLIST

* After open the box, check if all the package is included. If there is missing package, contact the purchase Shop.

19” TFT LCD MONITOR

User’s Manual



AC/DC Adaptor

Power Cord

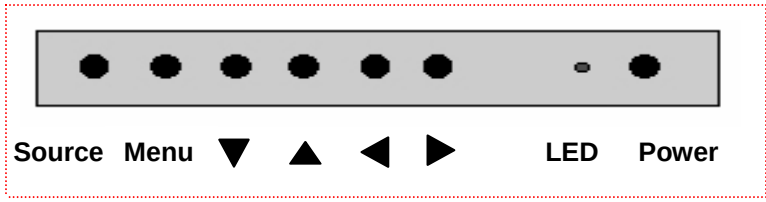
Audio Cable

VGA Cable

RCA Cable

S-VHS Cable

6. FRONT BUTTON & FUNCTION



(1) POWER
Turn On/ Turn Off the Monitor

(2) LED
Operation Status of the Monitor. (Green : ON / Red : No Signal)
Orange (Flickering) : Suspend Mode or Disconnect of VGA Cable

(3) SOURCE
Rotate signal source (Analog RGB/S-Video/Composite Video)

(4) MENU
Activate OSD Menu
Select OSD Menu/ Save the changed value

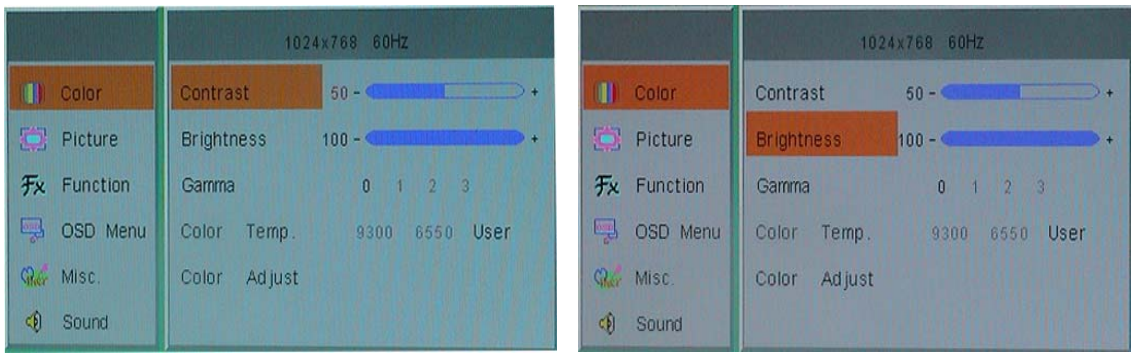
(5) CHANNEL(DOWN/UP) (▼▲)
Move menu (OSD Menu)

(6) VOLUME (◀▶)
Decrease/ Increase Menu value (OSD Menu)
Volume Control Hot Key

(7) Auto Adjust Hot Key (▲)

7. OSD OPERATION

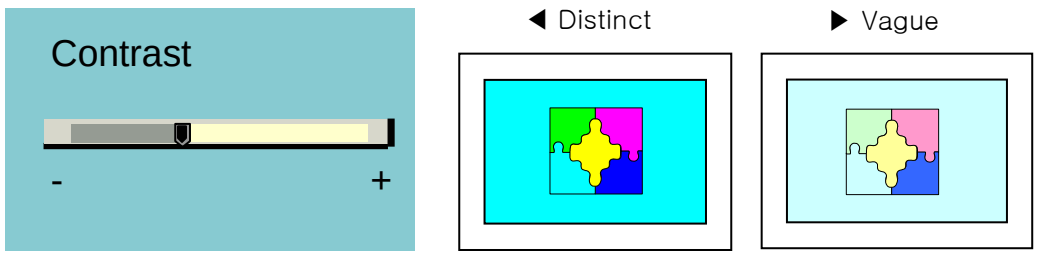
7.1 Color Control



This control allows you to make adjustment to Contrast & brightness of the display screen

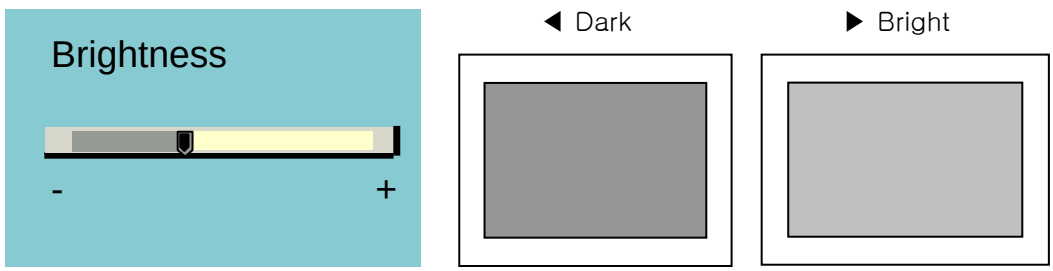
Contrast (Common)

Procedure Menu > Menu > Menu (select) > ◀ ▶ (Increase/Decrease Value) > Menu (Save the Value)



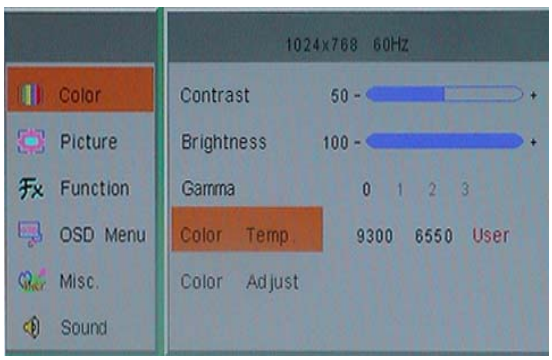
Brightness (Common)

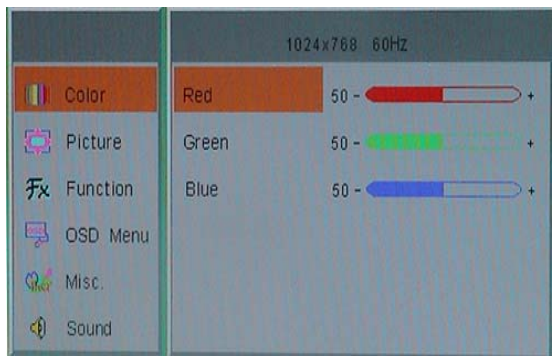
Procedure Menu > Menu > ▼ > Menu(Select) > ◀ ▶ > Menu (Save the Value)



Gamma Correct.

Procedure Menu > Menu > ▼ ▼ > Menu (Select) > ◄ ► > Menu (Save)





Color Temp. & Adjust

Procedure Menu > Menu > ▼ ▼ ▼ > Menu (Select) > ◄ ► > Menu (Save)

Function Select this control menu, then move to the desired color temperature among 9300K, 6500K or USER for custom setting. In User Mode, adjust R,G,B color control.

7.2 Picture

H.Position

Procedure Menu > ▼ > Menu > Menu (Select) > ◄ ► > Menu (Save)

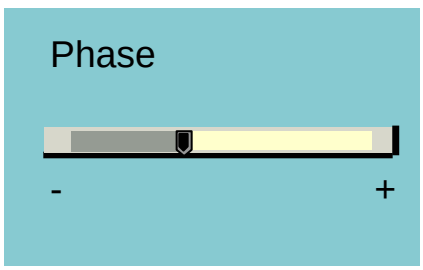
V.Position

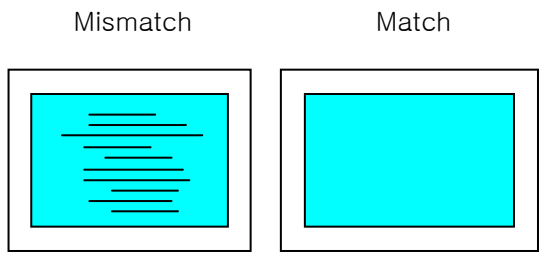
Procedure Menu > ▼ > Menu > ▼ > Menu (Select) > ◄ ► > Menu (Save)

Function Select this control menu, and then use ◄ and ► buttons to center the image horizontally on the screen.

Phase

Procedure Menu > ▼ > Menu > ▼ ▼ > Menu (Select) > ◄ ► > Menu (Save)





Colck

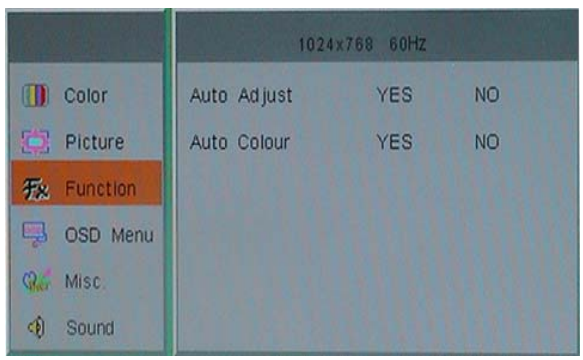
Procedure Menu > ▼ > Menu > ▼ ▼ ▼ > Menu (Select) > ◄ ► > Menu (Save)

Function Select this control menu, and then use ◄ and ► buttons to optimize screen quality by removing noise.

Sharpness

Procedure Menu > ▼ > Menu> ▼ ▼ ▼ ▼ > Menu (Select) > ◄ ► > Menu (Save)

7.3 Function



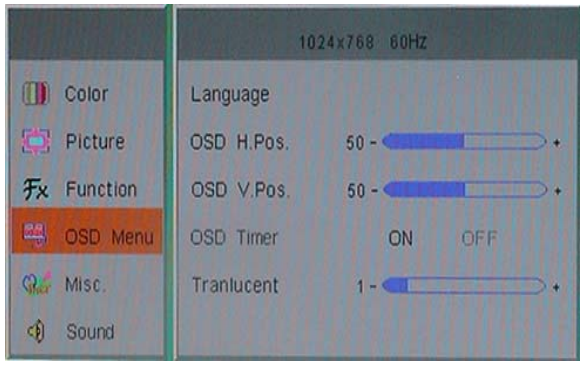
Auto Adjust & Auto Color

Procedure Menu > ▼ ▼ > Menu > Menu (Select) > ◄ ► Yes > Menu

Function This control will automatically make adjustments to the horizontal and vertical size, horizontal and vertical position, phase and color.

•**Hot Key** Auto Adjust can be operated by ▲ button.

7.4 OSD Menu



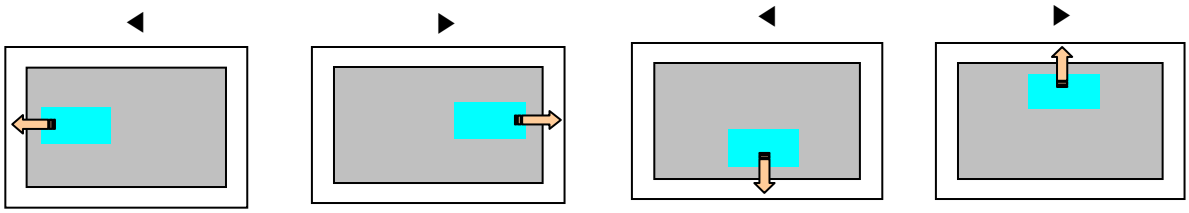
Language

Procedure Menu > ▼ ▼ ▼ > Menu > Menu (Select) > ◄ ► choose from English, Spanish (*ESPAÑOL*), German (*DEUTSCH*), Italian (*ITALIANO*), French (*FRANÇAIS*) > Menu

OSD H.V. Position

Procedure Menu > ▼ ▼ ▼ > Menu > ▼ > Menu (Select) > ◄ ► >Menu (OSD H.Position)
Menu > ▼ ▼ ▼ > Menu > ▼ ▼ > Menu (Select) > ◄ ► > Menu (OSD V.Position)

Function Moves the OSD window location

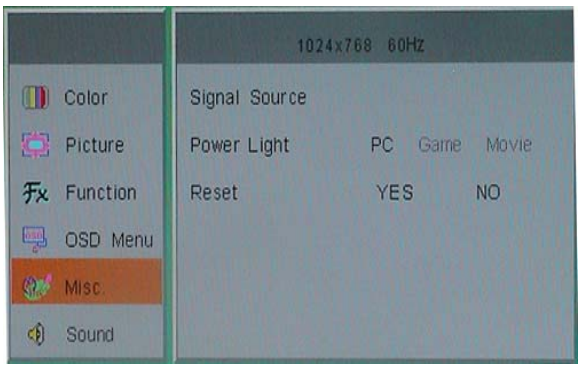


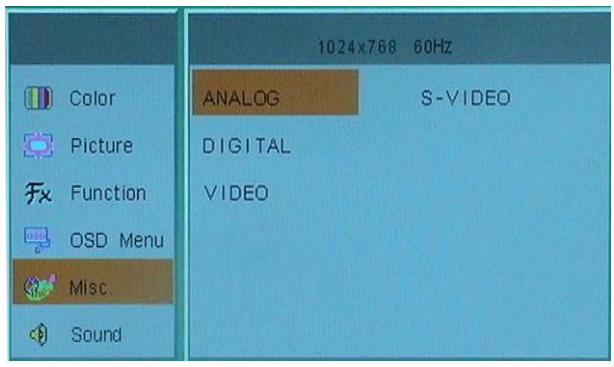
Translucent

Procedure Menu > ▼ ▼ ▼ > Menu > ▼ ▼ ▼ ▼ ▼ > Menu (Select) > ◄ ►>Menu (Save)

Function Changes the background color of OSD window. (Translucent / Opaque)

7.5. Miscellaneous





Signal Source

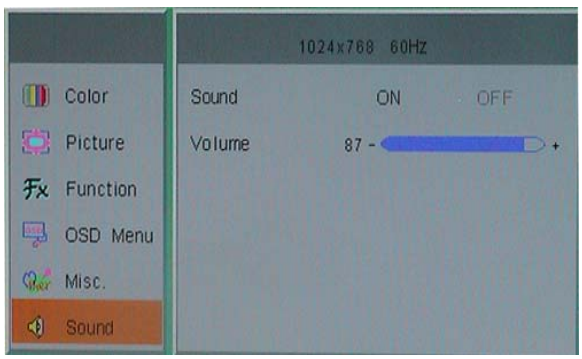
Procedure Menu > ▼ ▼ ▼ ▼ > Menu > Menu (Select) > Choose from Analog D-Sub, Video, S-Video > Menu

Reset

Procedure Menu > ▼ ▼ ▼ ▼ ▼ > Menu > ▼ ▼ > Menu (Select) > ◀ ▶ Yes > Menu

Function User setting becomes invalid, and return to factory default setting.

7.6. Sound



Volume

Procedure Menu > ▼ ▼ ▼ ▼ ▼ ▼ > Menu > ▼ > Menu (Select) > ◀ ▶ > Menu (Save)

*** Hot Key** Volume can be controlled directly by ◀ ▶ button

8. Troubleshooting

Warning

Please do not open the monitor, because it may cause electric shock to the customer. Also, the warranty program may not support the damages, which user causes. When problem persists in spite of trying the following troubleshooting advice, please contact dealer or the repair center listed in the back side of this manual.

Trouble and countermeasure

LED doesn't lit / No image

Check if the display is in power saving mode.
Check if the display is switched on or the power cable is properly connected.

Image is unstable (Flicker, Interference, Noise, etc.)

Check if signal cable is secured
Check if frame (vertical) frequency of video signal is lower than 75Hz because this monitor can not run over 75Hz. In this case, please change the setting of Display Control Panel' of Windows to 60Hz, that displays the best performance.

Dull image

Adjust the Frequency or Phase.
Adjust the frame (vertical) frequency to 60Hz.
Remove any video signal distributor.

Dark or saturated image

Adjust the Brightness or Contrast.

9. Specifications

Model	19 inch SXGA TFTLCD Color Monitor
Display	
Type	19” Color Active Matrix TFT LCD
Color	16.7Million (8 bit/color)
Pitch	0.294 x 0.294 mm
Resolution (max.)	1280 x 1024(SXGA) at 60 to 75Hz (Optimum 60Hz)
Contrast ratio	500:1
Brightness	300 cd/m^2
Video	
Sync frequency	Vertical: 56 ~ 75Hz (Optimum 60Hz) Horizontal: 31.5 ~ 80KHz
Input signal	Analog RGB 0.714 V_{P-P}, 15 Pin D-sub type
Viewing angle	Up/Down: 170º Right/Left: 170º
Audio	
Speaker	2W x 2
Compatibility	
Plug & Play	VESA DDC 1/2B
Compatibility	VESA / IBM / MAC
Power Management	VESA Standard, DPMS
Operating Conditions	
Power Consumption	Operating: 48 watt max. Stand-by: 4.8 watt max.
Temperature	Operating: 0 ºC ~ 40 ºC Storage: -20 ºC ~ 60 ºC
Humidity	Operating: 10% ~ 85% R.H. Non-Operating: 90% R.H. Max.
User control	
OSD	Souce/ Menu/ Down/ Up/ Left/ Right/ etc.
Mechanical	
Size	Packed : 520 (W) x 268 (D) x 520 (H) mm
Weight	9.9 kgs

10. VIDEO MODE SUPPORT

The modes are detected when presented to the input and previous alignments for setup are automatically recalled. A true multi-sync monitor emulation is implemented.

The factory preset supported modes include:

Mode[*1]	Resolution	Refresh rate	H-freq.	Pixel freq.	Remarks[*1]
VGA	640 x 350	70Hz	31.47KHz	25.175MHz	VESA Standard
VGA	720 x 400	59.940HZ	31.469KHZ	25.175MHZ	IBM VGA 3H
VGA	640 x 480	60Hz	31.5KHz	25.175MHz	Industry Standard
VGA	640 x 480	72Hz	37.9KHz	31.500MHz	VESA Standard
VGA	640 x 480	75HZ	37.5KHZ	31.500MHZ	VESA Standard
SVGA	800 x 600	60Hz	37.9KHz	40.000MHz	VESA Guidelines
SVGA	800 x 600	72Hz	48.1KHz	50.000MHz	VESA Standard
SVGA	800 x 600	75HZ	46.9KHZ	49.500MHZ	VESA Standard
XGA	1024 x 768	60Hz	48.4KHz	65.000MHz	VESA Guidelines
XGA	1024 x 768	70Hz	56.5KHz	75.000MHz	VESA Standard
XGA	1024 x 768	75HZ	60KHZ	78.750MHZ	VESA Standard
SXGA	1280 x 1024	60Hz	64.0KHz	108.000MHz	VESA Standard
SXGA	1280 x 1024	75HZ	80KHZ	135.000MHZ	VESA Standard

Notes:

1. All mentioned modes are non-interlaced. The maximum and minimum frame rates are determined by the TFTLCD.
2. Factory preset modes are overwritten by additional user alignments for automatic recall. At all times it remains possible to recall the initial factory presets.