

**19" TFT Analog LCD Monitor
CGA / EGA / VGA – 15/24/31K
CTV#474**



Operation Manual

Introduction

This monitor is an open frame LCD Panel monitor. It features the VESA plug & play system which allows the monitor to automatically adjust itself to match the frequency of the user's device.

Features

- High brightness.
- Fast response time.
- Power saver.
- Low electromagnetic wave and power saver.
- Safety certifications.

Power Saver

- The power control system is installed inside the LCD monitor.
- If the monitor has not been used for a certain period of time, the system will turn the monitor to low voltage mode to save power. Any button press will return the monitor to original state.
- Your input device e.g. your computer controls the power saver mode. You can adjust these settings via your computer
- The LCD monitor is compatible with EPA Energy Star and N Tek if used with a VESA DPMS computer.
- To save power, turn off the power of the LCD monitor when it is not in use.

Plug and Play

- The VESA plug and play function eliminates the complicated and time-consuming installation process.
- As this is a plug and play monitor. Your computer system can easily identify and automatically adjust the monitor.
- The LCD monitor uses Display Data Channel (DDC) to send Extended Display Identification Data (EDID) to the computer system, so the computer system can be set to monitor auto adjust.

Setting up your LCD monitor

- Choose a position where the reflection of the light is minimal and away from a window for maximizing the quality of the screen image.
- It is important to keep 30cm between the LCD monitor to minimize eye strain.
- Position the LCD monitor slightly above your horizontal vision as you are sitting.
- Tilt either forward or backward for the most comfortable angle to view the monitor. This LCD monitor supports connection to a computer or a work station.

Screen Adjustment

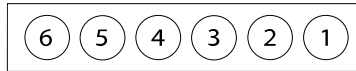
To enter adjust mode, please refer to the OSD control.

- Turn the computer and LCD monitor on.
- Press “Auto” button to start auto adjust.
- This will start the auto adjust process. Which will take 10 seconds approx. You may notice the image changing and occasionally flashing (this is normal).
- Your LCD monitor provides a self testing function, through which you can check whether the LCD monitor functions are working properly.
- If your LCD monitor is properly connected, but there is no image showing and the indicator lights up in orange, please follow the below steps:
 - Shutdown the computer and the LCD monitor.
 - Unplug the signal connector from the back of the computer.
 - Turn the LCD monitor on.
 - If the image connector is disconnected or damaged, a “No signal” sign will pop up on the monitor.



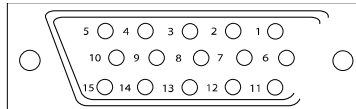
- Turn off the LCD monitor and reconnect the signal cable, and then turn the computer and LCD monitor on.
- If the LED of the LCD monitor is an orange colour after completing the steps above, please check your VGA card and computer system. Your monitor should be operating properly.

OSD control



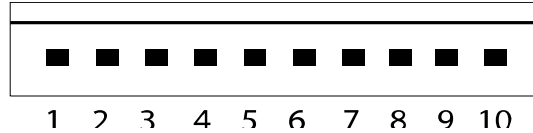
1.	Power Switch	Power On/Off.
2.	LED	Power Indicator
		Green = normal
		Red = power saving
		Off = power off.
3.	Menu	Automatically optimize positions, phase and clock when OSD is not shown.
4.	Up	This control is used for selection or adjustment when OSD is show.
5.	Down	This control is used for adjustment when OSD is shown.
6.	Auto/Esc	Enter OSD access sub-menu and selection.

VGA Signal Connector



Pin 1	Analog red input.
Pin 2	Analog green input.
Pin 3	Analog blue input.
Pin 4	Ground.
Pin 5	Digital ground.
Pin 6	Analog red ground.
Pin 7	Analog green ground.
Pin 8	Analog blue ground.
Pin 9	Ground.
Pin 10	Sync ground.
Pin 11	Ground.
Pin 12	SDA (DDC Data).
Pin 13	H. Sync or H + V Sync.
Pin 14	V. sync.
Pin 15	SCL (DDC CLK).

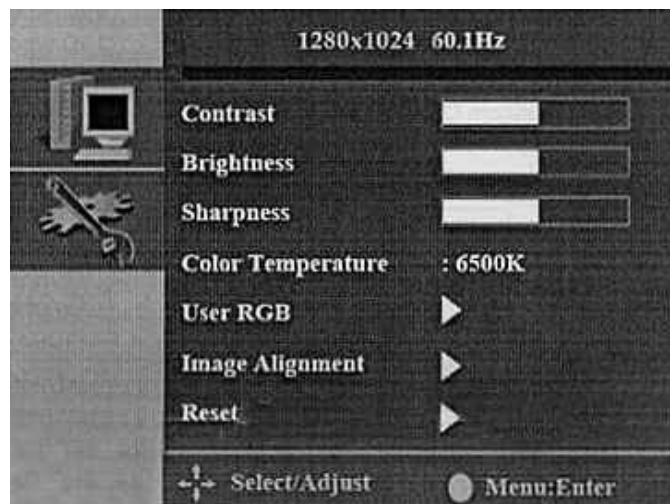
**CGA / EGA
Signal Connector**



Pin 1	CGA analog red input.
Pin 2	CGA analog green input.
Pin 3	CGA analog blue input.
Pin 4	Ground.
Pin 5	V. Sync
Pin 6	H + V Sync or H. Sync
Pin 7	No Connection
Pin 8	Ground
Pin 9	V Sync
Pin 10	H + V Sync or H. Sync

**Adjusting the
Image**

- Press the menu button to start the OSD feature.
- Click the “Up” or “Down” button to select the function to be adjusted.
- Click the “Menu” button to access into the function to be adjusted.
- Click the “Up” or “Down” button to change the current setting of the function selected.
- To exit the OSD menu or go back to a previous menu click the “Auto/Esc” button. Upon exiting the menu your changes will automatically saved.
- If after pressing the menu button, the OSD button will disappear, if no additional buttons are pressed for several seconds. If this occurs, any adjustments made, will still be automatically saved.
- Due to the automatic save feature, turning off the power is unwise while navigating the menu.



Please Note: Due to the advanced nature of this panel. Adjustments to clock, phase and image positioning are saved only for the signal timing you are currently using. Meaning if your input is CGA 640 x 215 @60Hz, and you adjust the clock setting. This will only affect this timing.

So when your change input to VGA 640 x 480 @60Hz for example the clock will be at its default (or last memory saved setting). This is to allow the user to get a picture perfect for every input he requires and avoid redoing settings each time the input is changed.

Except for these adjustments, clock, phase and image positioning, all other adjustments are universal for example changing the brightness setting will change the brightness setting for all inputs and timings.

To help the User remember; all settings that only affect the timing you're currently using are coloured pink and the universal settings are coloured white.

Menu Options

Main Menu		
IMAGE SETTINGS	Contrast	Adjust the contrast of the image.
	Brightness	Adjust the brightness of the screen.
	Gamma	Adjust the gamma level of the image.
Colour Temperature	9300K	Set up the colour temp. to be 9300 K white colour.
	6500K	Set up the colour temp. to be 6500 K white colour.
	5800K	Set up the colour temp. to be 5800 K white colour.
	User RGB	Adjust the Red, Green, Blue colour values separately
FEATURE CONTROLS	Auto Colour	Automatically adjusts the colour for you
	Screen Test	Performs a series of colour tests to show that the screen is working correctly.
	Language	Select a language for the menu to appear in (English, French, German [Deutsch], Italian, Spanish and Chinese and Japanese)
	Input Source	Provides information on your current input such as resolution and refresh rate.
	OSD Timer	Increase or decrease the length of time the "on screen display" menu will stay visible with any button pressing

Advanced Options

If you select the Image Alignment Option, you will get a second menu which deserves further explanation

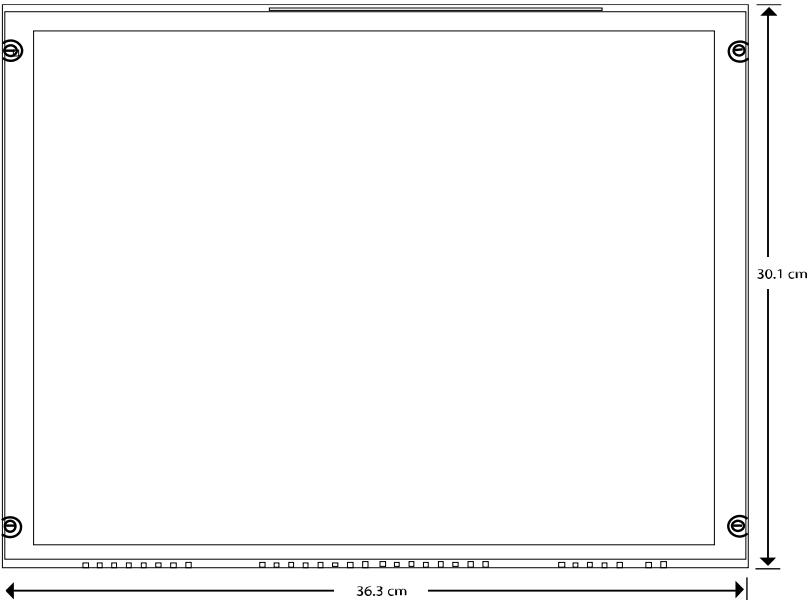
Automatic Options	
Auto align	The panel will automatically choose the best position and size for your input
Manual Options	
Position	position the image including up, down, left or right
H-size	(crushes the image horizontal, to fit on the size)
V-size	(crushes the image Vertical, to fit on the size)

Warning: Phase and Clock Settings should only be touched by an experienced user. Altering these values can make the image unwatchable on the screen

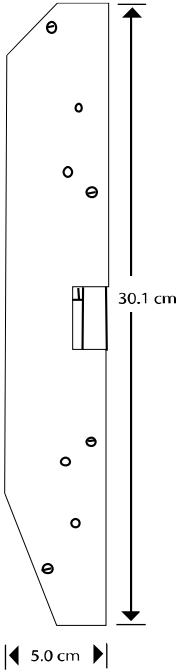
**Support
CGA/EGA/
VGA Timings**

Type	H. Frequency. (kHz)	V. Frequency (Hz)	Resolution
CGA	15.4	58.8	640x198 @ 58
CGA	15.1	57.6	640x215 @ 57
CGA	15.7	60	640x215 @ 60
CGA	16.0	61	640x215 @ 61
CGA	16.3	62	640x215 @ 62
CGA	16.6	63.4	640x215 @ 63.4
CGA	16.800	64	640x215 @ 64
CGA	15.6	50.3	640x265 @ 50
CGA	18.4	50	640x350 @ 50
EGA	21.8	58.9	640x350 @ 58
EGA	24.4	59.5	645x355 @ 59
EGA	23.5	52	720x378 @ 52
EGA	26.4	57.4	720x400 @ 57
VGA	31.469	70.087	640x400 @ 70
VGA	31.469	59.940	640x480 @ 60
VGA	37.861	72.809	640x480 @ 72
VGA	37.500	75.000	640x480 @ 75
SVGA	35.156	56.250	800x600 @ 56
SVGA	37.879	60.317	800x600 @ 60
SVGA	48.077	72.188	800x600 @ 72
SVGA	46.875	75.000	800x600 @ 75
XGA	48.363	60.004	1024x768 @ 60
XGA	56.476	70.069	1024x768 @ 70
XGA	60.023	75.029	1024x768 @ 75
SXGA	64	60.003	1280x1024 @ 60
SXGA	76.8	72.0	1280x1024 @ 72
SXGA	80	75.0	1280x1024 @ 75

Front View



Side View



Specifications

Specifications for this Model	
Screen Size	19" TFT
Pixel Pitch(mm)	0.294 x 0.294
Backlight	CCFL x 4
Cell Type	TN
Input Mode	CGA/EGA/VGA/SXGA
Scan Frequency Horizontal	15 ~ 80KHZ
Scan Frequency Vertical	48 ~ 75Hz
Colours	16.2M Colors
Aspect Ratio	5:4
Horizontal Viewing Angle	170 Degrees
Horizontal Viewing Angle	160 Degrees
Max Resolution	1280 x 1024
Bandwidth	130MHz Dot Clock
Contrast Ratio	700:1 Typ
Brightness	300cd/m squared
Power	100~240V 47/63Hz via 12VDC 4A adapter
Power Consumption	45W Max
Management	Vesa-Dpms 45 watts Power down mode </=3 Watts
Function Keys	5
PC Interface	Analog Interface
Signal Cable	Standard VGA cable w/15-pin D- sub connector.
Operating Temperature	0 degrees ~ 40 Degrees
Humidity	10 ~ 85%