GT170M
LCD Monitor

USER’S GUIDE

The information contained in this document is subject to change without notice. This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be reproduced, translated to another language or stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission. Windows is a registered trademark of Microsoft Inc. Other brand or product names are trademarks of their respective holders.

TABLE OF CONTENTS

FOR YOUR SAFETY

For Your Safety ----------6

GENERAL NOTES

1. Introduction----------8

1.1 General Information
1.2 Features
1.3 Check List

2. Installation ----------9

2.1 Installing the base
2.2 Installing the monitor
2.3 Self test pattern
2.4 Adjusting picture

3. Operation of the monitor ----------11

3.1 Power on/off switch
3.2 Power LED indicator
3.3 OSD control keys
3.4 Safety mode
3.5 Timing guide
3.6 Plug & Play
3.7 Power management
3.8 Volume adjust

4. Specifications ----------17

5. Simple Troubleshooting ----------18

FOR YOUR SAFETY

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.

Hg LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS. FOR MORE INFORMATION, CONTACT THE ELECTRONIC INDUSTRIES ALLIANCE AT WWW.EIAE.ORG. FOR LAMP SPECIFIC DISPOSAL INFORMATION CHECK WWW.LAMPRECYCLE.ORG.

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

1. Unplug the monitor from the power source when you clean the monitor. Do not use liquid cleaners or aerosol cleaners. Use a cloth to clean it. If that doesn't do, please use LCD screen cleaners.
2. Do not use attachments not recommended as they may cause hazards.
3. Please grasp the plug to unplug the connector from the wall outlet. Do not pull the power cord to unplug it.
4. Do not place anything on the power cord or step on it
5. Do not place the monitor near water such as bathtub, washbowl, sink, laundry tub, swimming pool etc.
6. The slots are designed for ventilation they keep the monitor both workable and protect it from overheating. For the same reason, please do not place the monitor on a bed, sofa, carpets or other similar surface. Do not place the monitor near or over a heat source, or place in a enclosed structure/area.
7. Keep the monitor at least 2 inches (5 cm) away from the wall or other goods.
8. This monitor can only use the power source indicated on the label. If you have questions, please consult your dealer.
9. As a safety measure, this monitor is equipped with a three-wire ground style plug. If you can not insert the plug into outlet, contact your electrician to install the correct outlet, or use an adapter to ground the appliance safely. Do not bypass the safety purpose of the grounding-type plug.
10. Please make sure that the outlet and power cord can support the total electricity use of the products.
11. Place the monitor in safe place where the cord will not be easily tripped over.
12. Follow all the warnings and instructions illustrated in the manual.
13. Don't overload the wall outlets and extension cords as this can result in fire or electric shocks.
14. Do not remove or open the cover to service this monitor yourself. It may expose you to dangerous voltage or other hazards. Please refer all servicing to qualified service personnel.
15. Unplug this monitor from the outlet and refer servicing to qualified service personnel under the following conditions.
    A. The power cord is frayed or damaged.
    B. The monitor has been dropped or the cabinet has been damaged
    C. When the monitor displays a distinct change in performance, this indicates a need for service.
16. The power cord is the main device to disconnect the power.
17. Unplug the power cord when you do not use the monitor for a long time.
18. Place the monitor in a well ventilated area and protect it from strong light, overheating and moisture.
19. This monitor must be stored in a room in between the temperature of –20°C ~ +55°C. Storing outside this range may cause permanent damage.

GENERAL NOTES

1.Introduction

1.1 General Information

This monitor is a high-performance intelligent multi-scanning color monitor utiliizing active matrix TFT LCD display that uses amorphous silicon TFT as a switching device. With very low radiation, anti-glare surface treatment and small footprint, it is very suitable for home and office applications.

1.2 Features

LCD TFT 17" monitor
Built-in multimedia speakers
Multi-language OSD interface
Auto adjusting imaging
White and black reference voltage auto-calibration
Compliant with EPA energy star, VESA DPMS
Plug & Play

1.3 Check List

Check the list before operating this monitor. Please make sure that all of the following items are included.

LCD monitor
Base + mounting screw
AC adapter
Power cord
VGA Signal cable
DVI cable
Audio cable
User's manual

If any of the above listed items are missing, please contact your dealer for technical support or customer service.

2. Installation

The following chapters explain how to install the base and connect the monitor to your personal computer.

2.1 Installing the Base

Follow these steps to install the base:

1. Lay the monitor face down.
2. Assemble the base to the arm with screw.
3. Tighten the screw with a coin.

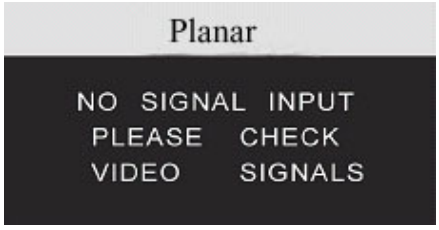
2.2 Installing the Monitor

Before starting, make sure that the computer and monitor's power are both turned off. Please follow the steps to install your LCD monitor:

1. Signal cable connection: Plug one end of the signal cable into computer and lock the two bolts. Then plug the other end into the monitor and lock the two bolts. Make sure connections are secure.
2. Power cord connection: connect the AC adapter with the DC power cord. Next connect the AC adapter output to the power input of the monitor. Then connect the DC power cord to an electrical outlet outlet.
3. Audio cable connection: Insert one end of the audio cable to the audio output of the PC audio card and the other to the audio input of LCD monitor.
4. Power on: turn on both the monitor and computer. After the monitor is powered on, the LED lights up green, If the LED starts flashing red, please check the video signal cable. If LED is off, please press power on switch.

2.3 Self Test Pattern

If there is no horizontal or vertical signal, your monitor will display the self test pattern to indicate no signal input. After a few seconds, the monitor will enter into waiting and saving power mode. The LED will be red and flashing. Once the monitor receives the video signal, it will return to normal mode.



2.4 Adjusting Picture

In order to obtain the best visual display, you must adjust it, please refer to chapter 3 “Operation of the monitor”.

3. Operation of the monitor

3.1 Power On/Off Switch

This is a light-touch digital-control key. It is used to turn the monitor on or off.

3.2 Power LED Indicator

When the monitor is working, the power LED is green. If the monitor is in saving power mode, the power LED will be red and flashing. If you turn off the computer, the power LED is off. When the LED is off, the monitor is off, but the power adapter is on. For added safety, you should unplug the power adapter when you don't use the monitor for an extended period of time.

3.3 OSD Control Keys

3.3.1 Auto Key

This key is used to complete auto adjusting function in VGA mode.

3.3.2 +/- Key

These two keys will complete the right (increase) or left (decrease) adjustment and choose the menu function. The volume can be set by +/- key directly.

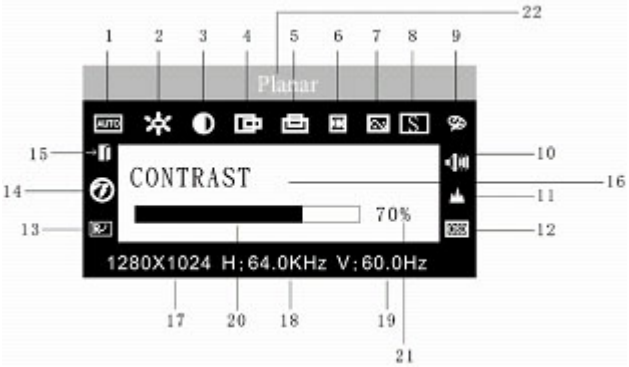
3.3.3 Enter Key

Activates the OSD menu and acts as an enter function.

3.3.4 OSD Menu

The function list of the menu:

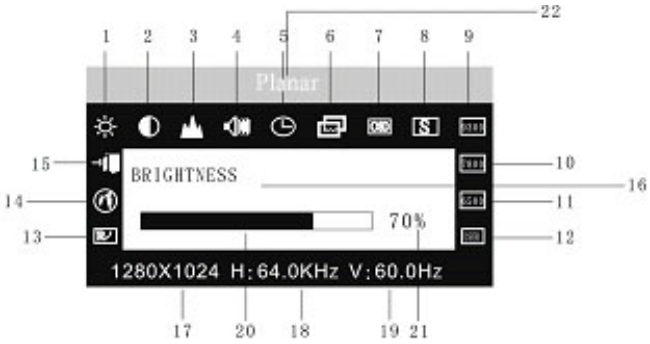
1. Auto adjustment
2. Brightness
3. Contrast
4. H-position
5. V-position
6. Clock
7. Phase
8. Signal source
9. Color adjustment
10. Volume
11. Sharpness
    DVI Model



12. OSD position/transparency
13. Recall
14. Languages
15. Exit
16. Selected function name
17. Resolution
18. H-frequency
19. V-frequency
20. Progressive bar of adjustment
21. Percentage of adjustment
22. Planar LOGO

3.3.5 Meaning of the Menu in DVI Mode

1. Brightness
2. Contrast
3. Sharpness
4. Volume
5. OSD menu display time
6. Transparency
7. OSD position
8. Signal source
9. 9300k
10. 7800k
11. 6500k
12. User
13. Recall
14. Language
15. Exit
16. Selected function name
17. Resolution
18. H-frequency
19. V-frequency
20. Progressive bar of adjustment
21. Percentage of adjustment
22. Planar LOGO



3.3.6 Function Table

Display contents		Function
AUTO	AUTO ADJUSTMENT	Automatically adjust to obtain the best setting
	BRIGHTNESS	Adjust the brightness
	CONTRAST	Adjust the contrast
	H-POSITION	Move the screen toward left or right
	V-POSITION	Move the screen upward or downward
	CLOCK	Adjust the frequency of pixel
	PHASE	Adjust the phase of pixel clock
	SHARPNESS	Adjust the sharpness of the picture
	COLOR	Adjust the colors of the picture
9300	9300K COLOR TEMPERATURE	Set 9300k color temperature
7800	7800K COLOR TEMPERATURE	Set 7800k color temperature
6500	6500K COLOR TEMPERATURE	Set 6500k color temperature
USER	USER MODE	Set user mode
W-B	AUTO COLOR BALANCE	Auto color balance
	VOLUME	Adjust the volume
	OSD DISPLAY TIME	Adjust the OSD display time
OSD	OSD ADJUSTMENT	Adjust the parameter of OSD
OSD	OSD H-POSITION	Move the menu toward left or right
OSD	OSD V-POSITION	Move the menu upward or downward
	OSD TRANSPARENCY	OSD transparency setting
S	Signal source	Exchange signal mode between VGA and DVI
R	RECALL	Reset factory setting
	LANGUAGE	Language selection
→	EXIT	Exit the menu

3.3.7 Special Functions

Auto Adjustment (AUTO)

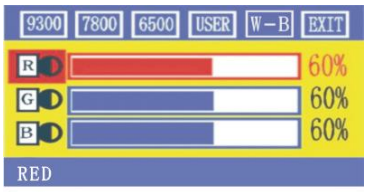
When you choose this function, the monitor will enter into automatically adjustment mode. After a few seconds, the monitor will be in the best visual display mode.

AUTO ADJUSTMENT...

Color Adjustment ( ):

When the function is selected, the monitor will come into the sub-menu, there are five functions that can be selected:

9300k, 7800k, 6500k, USER,W-B. Selecting USER you will enter user mode and you can make adjustment to R/G/B obtain your satisfying color. Selecting W-B the monitor will adjust the white-black color reference voltage optimal color balance.



R/G/B Adjustment (R G B):

When in “User’s mode”, the monitor will automatically enter into R/G/B adjustment mode, push the ENTER key ,the relative options will flash, then adjust it by pressing “+/-“ key. push ENTER again to exit.

Language ( ).

There are six languages to select:

POL.: Polish
ENG.: English
FRE.: French
DEU.: German
ITA.: Italian
ESP.: Spanish

Position of OSD Menu (OSD):

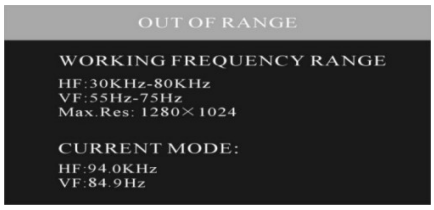
When you select the item, you can adjust H-position and V-position of OSD menu and transparence.

Sharpness Adjustment ( ):

Adjust the sharpness of the picture on the screen.

3.4 Safety Mode

When the video signal exceeds the frequency range of the monitor, the monitor MCU will stop horizontal and vertical scanning in order to protect the monitor the following image will be displayed on the screen. After a few seconds, the monitor will enter turn-off mode. You must restart the computer and reset the frequency range.



3.5 Timing guide

No.	Mode	Resolution	V-Frequency (Hz)	H-Frequency (KHz)	Available Input Signal
1	VGA	640 x 480	60	31.5	Analog RGB,Digital DVI
2			72	37.9	Analog RGB
3			75	37.5	Analog RGB
4	SVGA	800 x 600	60	37.9	Analog RGB,Digital DVI
5			72	48.1	Analog RGB
6			75	46.9	Analog RGB
7	XGA	1024 x 768	60	48.4	Analog RGB,Digital DVI
8			70	56.5	Analog RGB
9			75	60	Analog RGB
10		1280 x 960	60	60	Analog RGB
11		1152 x 864	75	67.5	Analog RGB
12	SXGA	1280x1024	60	64	Analog RGB,Digital DVI
13			75	80	Analog RGB

3.6 Plug & Play

This monitor meets the standard of VESA DDC. When using video card with VESA DDC1/2B, it will auto-scan video frequency, output power, function and other data to the PC when computer is on. It will go into the proper video mode and frequency.

3.7 Power Management

This monitor complies with EPA energy star requirement and meets VESA DPMS standard. The following is the description of the power indicator for the power saving mode.

Mode	Power Indicator	Power Consumption
On	Green	<40 W
Stand by/suspend	Red flashing	<5 W
Off	Off	<2W

3.8 Volume Adjust

Adjust the volume by OSD menu and software of the PC.

4. Specifications

Model	GT170M
Panel	17″
Resolution	1280 x 1024
Active area	338mm x 270mm
Pixel pitch	0.264mm x 0.264mm
Contrast	700:1
Brightness	300 cd/m^2
Response time	8ms
Display colors	16.2 M
Viewing angle CR≥10	H:150°V:135°
H-Frequency	57~82 KHz
V-Frequency	55~77 Hz
Plug & Play	Yes
Input signal	Analog / Digital
Video Input connector	15 pins D-Sub /DVI
Audio input connector	1 Stereo input
Built-in speakers	2 x 2 W
Power input connector	Power jack
Maximum power cons.	<40 W
Stand-by power cons.	<5 W
Off mode power cons.	<2 W
Power supply for adapter	100 V-240 VAC 50/60Hz
Power supply for monitor	12 VDC 4.12 A
Power saving control	Yes
Norms	UL, CE, CB, FCC Class B Part 15
Atmosphere pressure	86kpa~104kpa
Storage temperature and humidity	-20°C~+55°C，5%-95%
Operating temperature	5°C~40°C
Humidity	10%~85%
Unpacking dimension	393 x 150 x 390 mm
Packing dimension	455 x 165 x 440 mm
Net weight	4.8 kg
Gross weight	6.0 kg

Note: These specifications are subject to change without notice.

5. Simple Troubleshooting

Symptom	Solution
No picture / no LED	Check if the power cord, the monitor and the power plug are well connected. Check also if the monitor is off.
No picture / Red LED flashing	Check if the PC video card and signal cable are well connected and check if signal cable is properly connected with monitor.
Picture is blurry, to big or small	In OSD menu select "AUTO" to make the monitor adjust automatically.
Picture is too dark	Push "+/-" key to adjust contrast and brightness.
Overheating	Keep 5 cm away from other goods for ventilation. Don't put anything on the monitor.
Picture distortion and flicker	Check the PC setting, select the proper resolution and adjust refresh frequency.
Short of color	Check if the signal cable pins are twisted or broken.
Noise Signals at Turning off	There may be noise signals turning off the monitor. This is caused by electrical release and is normal.