D-Tech
Display Technology Co., Ltd.

15" TFT LCD MONITOR

510f

Owner's Manual

Before operating the unit,
please read this manual thoroughly
and retain it for future reference.

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FCC Information

FCC Part 15.105

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 experience radio / TV technician for help

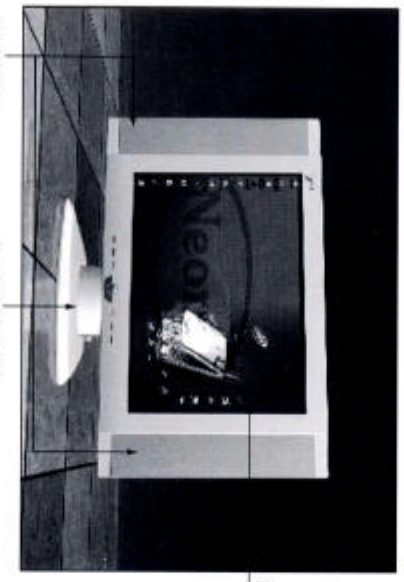
FCC Part 15.21

Changes or modifications not expressly approved by the party responsible for compliance Could void the user`s authority to operate the equipment

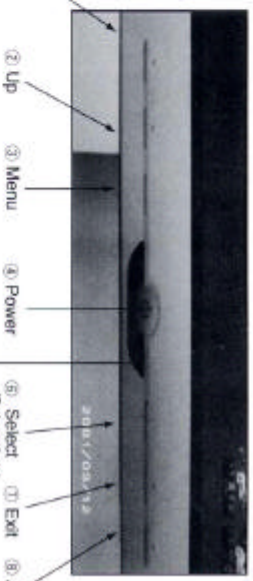
Introduction

Thank you for your purchasing our high resolution TFT LCD Monitor. It is recommended that you read this Owner's Manual thoroughly before setting the product.
Please keep this booklet of Owner's Manual in such place where you can find it safely and easily.

View from the front



Front keys



③ Power Indicator

① Darkening the screen/Moving the cursor in OSD
② Brightening the screen/Moving the cursor in OSD
③ OSD Mode/To see whole pages of Menu
④ Power on/off
⑤ Power indicator(DPMS/Standby/Power on)
⑥ Menu / Icon select in OSD
(At the video mode, "Select / Auto" key)
⑦ Exit from OSD
⑧ Screen is adjusted to the best condition automatically.
(At the video mode, "AV" key)

At the DPMS mode : LED lens flouresces steadily with ambour colour.
At the Standby mode : LED lens is flickering with ambour colour.
When the PC and Monitor are powered on, LED lens flouresces steadily with green colour.

View from the Back

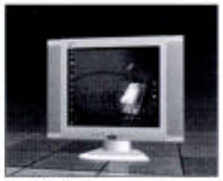
- Ventilator (Be cautious not to block the ventilation holes)
- Hole for wall Mounting tools
- Detachable Base (This part can be replaced with various detachable tools for wall mount)
- Connecting points for receiving signals from extrnal equipments and PCs. (Composite Video or S-Video)

While CDT has been used for traditional PC Monitor as the tool for picture display, Flat Panel Display based on digital technology is used for TFT LCD Monitor.
Most TFT LCD Monitor of early days were designed as laptop fashion but recent trend is to common design for laptop as well as desktop, which enables the PC users to enjoy themselves with PC and displayer more conveniently.

1. Convenient and easy Control.
2. VIDEO / AUDIO signals receivable (option).
3. Slim and space saving design.
4. Laptop / Desktop / Wall Mount.
5. Industrial robot and VESA installable.
6. View angles are controllable(+30℃~5℃).
7. Low energy consumption.(refer to pg 19)
8. Less influence from the objects surrounding.
   No radiation of harmful electronic waver,noise, heat and magnetic power.

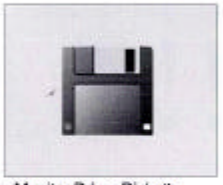
Components

- Check following accessaries included in the pack and / or wrapping bag.


- 15" LCD

- Power AC Adapter / AC Cord

- Signal Cable

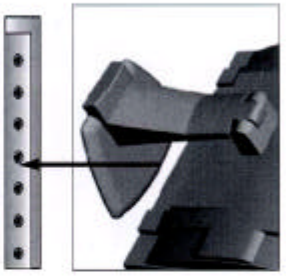

- Monitor Driver Diskette

Precautions for installation

- Install the product at the safe place to prevent the product and people from damages and/or harmful situation.
- The product should be covered when it is not used and preferred to be kept in the well ventilated place to prevent any dangers like fire as well as for the safe maintenance.
- Do not put wet materials,medicines,small metallic materials or heavy objects on the products to prevent any dangers,like fire, electrification, and damages of the product.
- Do not use the product under the direct sun light. :The picture can not be clear and may cause damages to the eyes.
- Do not install in damp,dusty, or wet places. :Danger of fire and electrification.
- Do not put candles,cigarettes, or other materials of excessive heat near the product . :Danger of fire.
- Do not use any other connectors, except for the recommended connecting cords and adapter : Danger of fire and damages of product

How to connect to th PC

- Connect to the outlet of 110V or 220V capacity.



❶ DC 12V : Connect the cable of the adapter in the pack, to 12V DC terminal and the other end of it to 110V or 220V outlet.

❷ S-VHS : Connect S-VHS cable to the S-VHS terminal. (Option)

❸ AV : Connect DVD or VCR. (Option)

❹ PC : Connect signal cable to the terminal and the other end of cable to PC. "No signal" will appear on the monitor, if it is improperly connected. In the case of using Macintosh branded PC, use the exclusive adapter.(except for G3 or higher)

OPTION

❺ EAR PHONE : Connect earphone to the terminal

❻~❼ AUDIO IN (L, R) : Connect audio signal cable to the terminals, Audio Input L, R, to get the audio signal from external equipments (Computer, DVD, VCR or Camcorder.)

❽ NOT USABLE

❾~❿ AUDIO OUT (L, R) :Jacks for audio output from Left and/or Right side speakers.

⓫ VIDEO OUT : Jack for Video output

How to install monitor driver

When the monitor driver is installed, the resolution and frequency of your monitor is automatically set to the most suitable mode for users and it provides the clearest picture.

< The Program for Installation of WINDOWS SOFTWARE >

This section shows how to install the monitor driver for Windows software (WINDOWS 95/98/2000).

Caution : Check if your monitor is compatible to the driver before you install it.
(If the Driver is not proper for your monitor, there can be the abnormal fluctuation of the frequency or bad resolution)

1) Automatic Installation

Put the diskette in the deck, and click 'install.exe'.
(By using "search" function)

Click the model no. of your monitor and then click "OK"

When "install diskette" apears on the screen, click "OK".
When the words "monitor is successfully installed" appears on the screen, click "OK"

When "Restart the system" is shown on the screen, Click "Yes" for completion of whole process.

2) Manual Installation

- On the screen of Windows Software, put the Mouse point somewhere on the screen and click "Registered Informations" by using right side button of your Mouse.

- Click "monitor" and click "change".
- Click "next" in the updated master window.
- After making a driver list, select the desired driver and click "next".
- After inserting the diskette, set the directory and click "ok."
  (If you are not sure of the driver route location, click "find"
- When the words "select model" appears on the screen, select the model number of your monitor and click "next".
- When the words "completed installation of selected driver" appears on the screen, click "finish", "close", "ok" by turn and then exit.

On screen display

■OSD FORMAT

■ TO BRIGHTEN THE SCREEN

Menu→Select → Press "Select" button
→Adjust the Brightness by pressing up(▲) down(▼) buttons
→Press "select" button.

NOTE • At Video(or S-Video) mode, "Select" button is replaced with "down(▼)" button and "Exit" button with "Up(▲)" button.
And so at Video(or S-Video) mode, the user should use "Select" and "Exit" buttons to control Brightness.

■ TO ADJUST THE CONTRAST

Menu→Select → Press "Select" button
→Adjust the Contrast by pressing up(▲) down(▼) buttons.
→Press "select" button.

■ ADJUSTMENT OF COLOUR

Menu→Select →Move the cursor to the favourable color temperature (6500K, 9300K, USER)
→Press the "select" button.

WHEN YOU CHOSE USER MODE
- Move the cursor to "user" and press the "select" button.
- Move the cursor to a colour among Red, Green, Blue by pressing up(▲) down(▼) buttons.
- Adjust the colour to your favourable condition.
- Press "select" button to finish the adjustment.

■ TO EXIT FROM OSD

Press the "EXIT" button on the front body of monitor.

■ INFORMATION ABOUT PC SIGNAL

Menu→Select → To see the whole pages one by one, press up(▲) down(▼) buttons.
- This is showing the resolution, vertical frequency of the signal which your monitor is receiving from PC.

■ CLOCK FUNCTION

- Sometimes disqualified video cards are sold in the market and when the user is using these disqualified video cards for PC, the signal released from PC is in irregularity. It causes the size of viewing area to be shringked and some part of the picture to be unclear in the monitor. These problems can be sorted out by user's control through "Clock Function".

Menu→Select → Press "Select" button
→ Move the cursor to CLK or PH
→ Press "Select" button
→ Press up(▲) down(▼) buttons.

① CLK : The size of viewing area can be adjusted.

② PH : The unclear part of the picture can be cleared.

■ ADJUSTMENT OF SCREEN POSITION

Menu→Select → Press "Select" button
→ Move cursor to a mode between H-Position and V-Position
→ Press "Select" button
→ Adjust the screen position by pressing up(▲) down(▼) buttons
→ Press "Select" button to finish the adjustment.

① Select to change the H-Position

② Select to change the V-Position

■ SELECTION OF LANGUAGE

Menu→Select →Move cursor to the desirable language (Eng / German / French / Italian / Spanish) by pressing up(▲) down(▼) buttons
→Press the "select" button.

■ OTHERS ABOUT OSD

Menu→Select OSD → Press "Select" button
→ Move the cursor to a OSD item by pressing up(▲) down(▼) buttons
→ Press "Select" button and then adjust it.

① Select and set the time for OSD to remain on the screen, by pressing up(▲) down(▼) buttons.

② Select and move the OSD position to upper or down by pressing up(▲) down(▼) buttons.

③ Select and move the OSD position to left or right by pressing up(▲) down(▼) buttons.

④ Select SHP and adjust the sharpness of the screen by pressing up(▲) down(▼) buttons.

- There are five possible locations, like centre, right-top, left-top, left bottom, right-bottom.

Selection of input video signals (option)

Your monitor can display the signals from PC as well as from Composite Video (or S-Video) optionally.
If you press AV button once, the mode changes to S-Video from PC mode.
At the 2nd press, it changes to Composite Video mode and then returns to PC mode at the 3rd press of AV button.

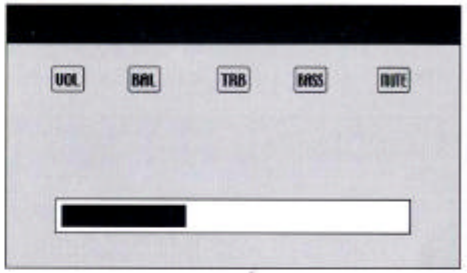
At the S-Video or Composite Video mode, if you press "Menu" button, OSD Items will appear on the screen.

1. At the video mode, if you press Menu button once, "Image quality will appear on the screen with 5 items for your choice, Brightness, Contrast, Colour, HUE (choice of screen back ground colour, Red or Blue), and Sharpness.

Menu → Select one of items → Press "Select" button and then adjust it by pressing up(▲) down(▼) buttons.

2. At the Video mode, if you press Menu button twice, "Audio" will appear on the screen with 5 items, Volume, Balance, Treble, Bass, Mute.

Menu → Select one of items → Press "Select" button and then adjust it by pressing up(▲) down(▼) buttons.



NOTE : So as to make your adjustment to be set,
- Press "select" button after you finish your adjustment
- Leave it without touching any buttons and it will be set automatically 10 seconds later.

Power saving mode

Because your Monitor is compliant to Energystar, It has the function of Power Saving Mode which enables to save power consumption greatly, when your monitor is connected to the computer system with DPMS (VESA).
Your Monitor will be in power saving mode and reduce the power consumption whenever the connected computer is in recess on the way of working.
So as to return to the working from power saving mode, press any key of your key-board or mouse.

	Noraml Operation	Power Saving function EPA		
		stand-by	suspend	Power Off
H-Sync	Active	Inactive	Active	Inactive
V-Sync	Active	Active	Inactive	Inactive
Video	Active	blank	blank	blank
LED colour	Green	Ambor / green flickering (1 sec. Inter.)	Ambor / green flickering (1 sec. Inter.)	Ambor
Power consumption	30 watts	3 watts	3 watts	3 watts

Standard signal timing chart

If the signals released from the computor are same as following matrix, standard pattern of signals, the picture is automatically set to the best conditon. If the released signal are not same, the picture will not appear on the screen but only the power indicator will work.
Thus it is important that you set the signals same as following matrix at first by refering to the Video Card Guide.

	Resolution	Frequncy			Polarity	
		Horizontal (KHz)	Vertical (Hz)	Transmission speed (Mb)	H	V
1	640×350	31.5	70.0	25.2	+	−
2	720×400	31.5	70.1	28.3	−	+
3	640×480M	31.5	59.9	25.2	−	−
4	640×480	31.5	59.9	25.2	−	−
5	640×480M	35.0	66.7	30.2	−	−
6	640×480	37.9	72.8	31.5	−	−
7	640×480	37.5	75.0	31.5	−	−
8	800×600	35.2	56.3	36.0	+	+
9	800×600	37.9	60.3	40.0	+	+
10	800×600	48.1	72.2	50.0	+	−
11	800×600	46.9	75.0	49.5	+	+
12	832×624M	49.7	74.5	57.3	−	−
13	1024×768	48.4	60.0	65.0	−	−
14	1024×768M	48.8	60.0	64.0	−	−
15	1024×768	56.5	70.1	75.0	−	−
16	1024×768M	60.2	74.9	80.0	−	−
17	1024×768	60.0	75.0	78.8	+	+

Precaution

Please pay attention to the precautions and follow them for the safety of users and to keep the best condition of the product.

Do not use damaged plugs or worn out outlets (Danger of electrification)

Be careful with the product not to be impacted critially

Under bad weather or when you are not using the product for a long period of time, take the plug out of the outlet to prevent danger of electrification

Do not try to disassemble, repair and / or renovate the product by yourself but consult the service centre or qualified technician

Be careful with the cord not to be bended or put under heavy objects to prevent danger of electrification or fire.

Do not leave the product in humid and watery places to prevent danger of electrification

Cleaning

When you want to clean the product, take the plug out of the outlet at first
Polish it with soft and clean cloths and then with damp cloths.
Do not use chemical cleaners, like benzene, alcohol or others.

Specification

LCD (panel)	Screen Size	15 Inch (Diagonal Length)
	Visible Screen Size	304.1(H)×228.1(V)(15.0 inch diagonal)
	Pixel Range	0.297(H)×0.297(W)
	Type	a-si TFT-LCD(Liquid Crystal Display)
	Visual Angle	Upper70/Lower70/Left55/Right60
Sync	Horizontal Frequency	30~60 KHz(Auto Set)
	Vertical Frequency	56~75 Hz(Auto Set)
Color Display	Displayable colour	16.7 M Colour
Input Signal	Input Signal	Analog 0.7Vpp Positive (75Ω)
Video (optional)	Video Signal	NTSC / PAL / SECAM
	Audio Signal	MONO / STEREO
	Video Type	CVBS, S-VHS, COMPOSITE VIDEO
Sync Signal	Separate Sync Signal	TTL LEVEL POSITIVE OR NEGATIVE
	Composite Sync Signal	TTL LEVEL POSITIVE OR NEGATIVE
	Green Video + Composite	Composite sync : Vp-p Negative (Video 0.7Vp-p positive)
Power / Voltage	Voltage Use	Raw 100-240V, 60Hz/50Hz DC 12V/3A
Energy Consumption	Regular Energy Consumption	Maximum 33W
	Safe Mode Consumption	Under 3W
Movement Condition	Temperature	-20℃-40℃
	Humidity	10%~95%
Size	Excluding BASE	440×55×298
	Including BASE	518×280×466
Weight	Net	5.7 kg(11 lbs)
	Gross	6.8 kg(15.4lbs)

The above specification can be changed for quality improvement at manufacturer's discretion.

ETL Inc.
#584 Sangwhal-ri, Kanam-myon,
Yoju-kun, Kyounggi-do,
469-885, Korea

Display Technology Co., Ltd.
15" TV MONITOR
Model : 510f

D-Tech
Display Technology Co., Ltd.

■ **HEADQUATER**
OFFICE
223-28 Sangdaewon-dong, Jungwon-gu,
Seongnam-si, Kyounggi-do, 462-705 Korea
TEL : +82-31-744-8811
FAX : +82-31-747-6718

■ **FACTORY**
203-1, Sangbong-ri, Seolseong-myun,
I chon-si, Kyounggi-do, 467-882 Korea
TEL : +82-31-643-0070~4
FAX : +82-31-643-0075

■ **EUROPE OFFICE**
AGENA Electronics GmbH
Alte Schmeize 20, D-65201 Wiesbanden-
Schierstein, Germany
TEL : +49-(0)611-207-75
FAX : +49-(0)611-207-95