

# USER' S GUIDE

## **LCD MONITOR**

S-5  
(S-50TP)

## **IMPORTANT SAFETY INFORMATION**

- Read all of these instructions carefully, and save them for reference. Follow all warnings and instructions marked on the product.
- Unplug the monitor from the system unit before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- Use only attachments recommended by the manufacturer; unapproved attachments may be hazardous.
- Do not use the monitor near water, for example near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- Do not place the monitor on an unstable cart, stand or table. If the monitor falls, it could injure a person or cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- The monitor is equipped with a three-wire grounded plug, a plug with a third (grounding) pin. This is a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.
- Do not allow anything to rest on the power cord. Do not locate the monitor where people may walk on the cord.

- To protect the monitor during a lightening storm or when it is left unattended and unused for long periods of time, unplug it from the system unit. This will prevent damage to the monitor from lightening and power surges.
- Do not overload power outlet and extension cords. Overload can result in fire or electric shock.
- Never push any object into the slot in the monitor cabinet. It could touch dangerous voltage points or short out parts resulting in a fire or electric shock. Never spill liquid on the monitor.
- If your monitor don' t operate normally, in particular if any unusual sounds or smells come from it, immediately unplug it and contact an authorized technician.
- Do not attempt to service the monitor yourself; openings or removing covers can expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- Unplug the monitor from the system unit and refer servicing to qualified service personnel under the following conditions:
  - When the power cord or plug is damaged or frayed.
  - If liquid has been spilled into the monitor.
  - If the monitor has been exposed to rain or water.
  - If the monitor does not operate normally and you are following the operating instructions. Adjust only those controls covered by the operating instructions; improper adjustment other controls may result in damage and may require extensive work by a qualified technician to restore the monitor to normal operation.
  - If the monitor has been dropped or the cabinet has been damaged.
  - When the video monitor exhibits a distinct change in performance.
- To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100 – 240 VAC, Min. 1.2A.

## **FCC Class B Radio Frequency Interference Statement**

**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.

### **NOTICE**

Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **Doc compliance notice**

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

“ Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux areils numeriques de class B prescrites dans le reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.”

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# 1 INTRODUCTION

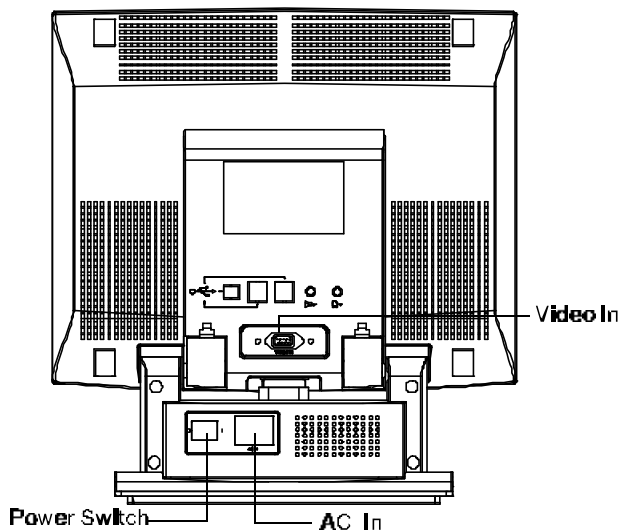
## 1.1 General Information

The **S-50TP** is a 15.0-inch intelligent LCD monitor with ultra high resolution of up to 1024 x 768. The microprocessor-based design was implemented with the user in mind.

We invite you, the proud new owner of this fine monitor, to read this user's manual before operating, in order to get the most out of this product.

## 1.2 Features

- ✧ 15.0" Large Size XGA TFT LCD Panel
- ✧ 0.297mm(H) x 0.297mm(V) Pixel pitch TFT LCD Panel
- ✧ Low Radiation
- ✧ Lower Power Consumption
- ✧ Ergonomic Style ID
- ✧ Max. 262,144 colors
- ✧ Max. 1024x768 NI Resolution
- ✧ VESA DDC 1/2B compliant
- ✧ VESA DPMS compliant
- ✧ Multi-scan function
- ✧ Low response time
- ✧ High contrast ratio
- ✧ Wide viewing angle
- ✧ Auto sizing function



*Figure 1*

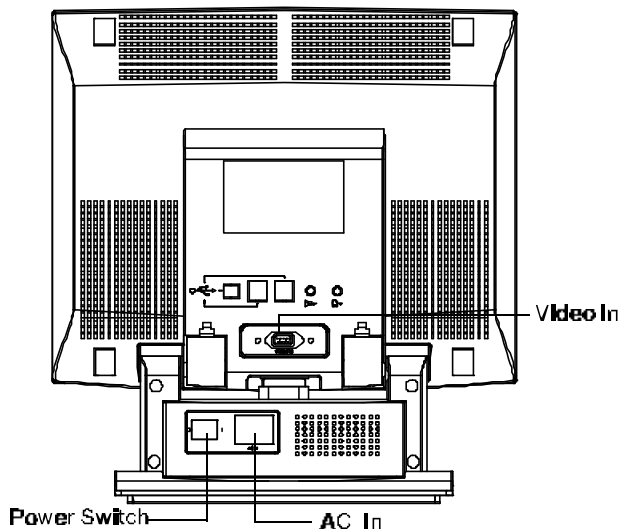
### 1.3 Check List

Before using this monitor, please make sure that all the items listed below are present in your package:

- LCD monitor
- Power cable
- This manual
- Video cable

## 2 SETUP

### 2.1 LCD Monitor setup



*Figure 2*

#### 2.1.1 Power Cable Connection

Plug the power cable into the wall outlet, the other end of the power cable into the AC socket.

#### 2.1.2 Signal Cable Connection

Connect the VGA cable to the back of **S-50TP** monitor.

#### 2.1.3 Power On

Turn on the power of both your **S-50TP** monitor and your computer.



## 3 USER INTERFACE CONTROL

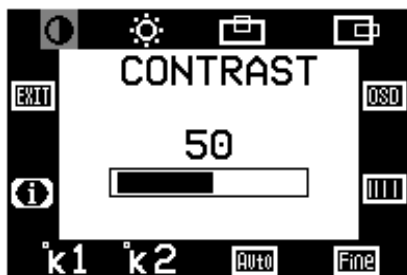
There are some switches, power LED and OSD menu on the **S-50TP**. These are to provide the users an easy way to adjust video and audio. A description of these functions is as follows:

### 3.1 OSD Controls

**To make any adjustment:**

1. Press (MENU / EXIT) key to show the OSD menu or disable OSD menu.
2. Select the item in the menu that you wish to adjust by turning flywheel.
3. Press (ENTER) key to make this item adjustable.
4. Adjust the item that you selected by turning the flywheel.

#### 3.1.1 Main Menu



1. **CONTRAST** (●) :  
Adjusts the contrast control.
2. **BRIGHTNESS** (☀) :  
Adjusts the brightness control.
3. **V-POSITION** (▮) :  
Shifts the picture ups or down.
4. **H-POSITION** (▮) :  
Shifts the picture left or right.
5. **OSD POSITION** (OSD) :  
Fine-tuning of image sharpness (especially for resolution <1024\*768)
6. **COARSE TUNE** (▮▮▮) :  
Horizontal coarse tuning for optimizing image display

7. **FINE TUNE** (**Fine**) :

Shifts the pixel clock phase when video jitter happens or focus is not perfect. Video jitter may cause by the difference of VGA card or the big change in weather.

8. **AUTO SIZE** (**Auto**) :

Adjust the screen position and clock phase automatically.

9. **COLOR** (**k1, k2**) :

**Step 1:** Select R, G, or B to begin adjusting by turning flywheel.

**Step 2:** Use the (ENTER) key to make this item adjustable.

**Step 3:** Adjust the item by turning flywheel.

Red Control ( R ) Increases/Decreases the red video gain level.

Green Control ( G ) Increases/Decreases the green video gain level.

Blue Control ( B ) Increases/Decreases the blue video gain level.

10. **INFORMATION** (**i**) :

Displays the Video mode, polarity and frequency for the current mode.

Such as:

```
1024×768
H: 60.1KHz
V: 75.1 Hz
HPOL: ⊕
VPOL: ⊕
```

11. **EXIT** (**EXIT**):

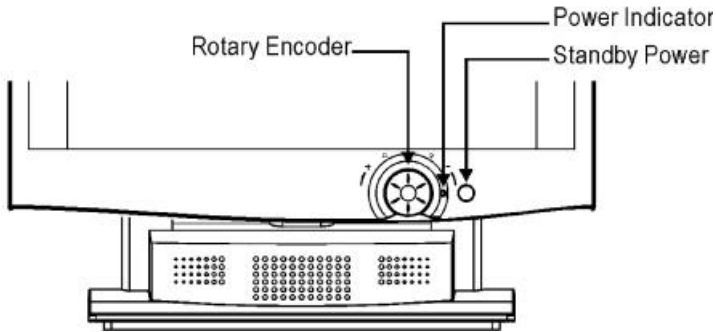
Exit from OSD menu.

### 3.1.2 Recommend Solution and Mode S-50TP

We recommend that user choice one of the following modes. Show as follows:

Resolution	Hor-frequency	Ver-frequency
640*350	31.467(+)	70.082(-)
720*400	31.467(-)	70.082(+)
640*480	31.409(-)	59.487(-)
640*480	37.861(-)	72.809(-)
640*480	37.500(-)	75.000(-)
800*600	35.156(+)	56.250(+)
800*600	37.879(+)	60.317(+)
800*600	48.077(+)	72.188(+)
800*600	46.875(+)	75.000(+)
1024*768	48.363(-)	60.004(-)
1024*768	56.476(-)	70.069(-)
1024*768	60.023(+)	75.029(+)

## 3.2 Front Panel Controls



*Figure 3*

### 3.2.1 Menu /Enter Button

Press this button to show OSD menu or select the item you want to adjust.


### 3.2.2 Brightness Hot Key Function

Turn the flywheel counterclockwise to adjust the brightness directly.

### 3.2.3 Contrast Hot Key Function

Turn the flywheel clockwise to adjust the contrast directly.

### 3.2.4 Power Button ( )

Press (  ) to turn the power on or off.

## 3.3 Power LED

The green light of power LED indicates the power is switched on and the power cord is properly connected.

The blank light indicates it's in power-off condition.

The amber light indicates it's in no signal applied or improper connection of the signal cable.

## 4. PLUG AND PLAY

### 4.1 DDC Function

The Display Data Channel “ DDC ” will allow the display to inform the host system about its identity and depending on the level of DDC used, communicate additional levels of display capability.

DDC 1: One uni-directional data channel.

DDC 2: One bi-directional data channel.

**S-50TP** can support display type DDC1/2B.

## 5. DISPLAY POWER MANAGEMENT

This monitor meets the power management standards as set by the Video Electronics Standards Association (VESA) and /or the United States Environmental Protection Agency (EPA). This feature is designed to conserve electrical energy by reducing power consumption.

This function is activated by an operating system or Windows utility program which turns off the monitor display and also turns off or changes the color of the monitor’ s power LED.

### 5.1 Mode Condition List

Mode	Power				
	H-SYNC	V-SYNC	Video	Indicator	Consumption
<b>Normal</b>	Yes	Yes	Activated	Green	<45W
<b>Stand-by</b>	No	Yes	Blanked	Amber	<3W
<b>Suspend</b>	Yes	No	Blanked	Amber	<3W
<b>OFF</b>	No	No	Blanked	Blanked	<3W
<b>Out of Range</b>	Yes	Yes	Blanked	Green	<3W

**Notice 1:** “ Out of range ” mean H SYNC >60KHz ,

H SYNC<29KHz,V SYNC>75Hz or V SYNC<48Hz.

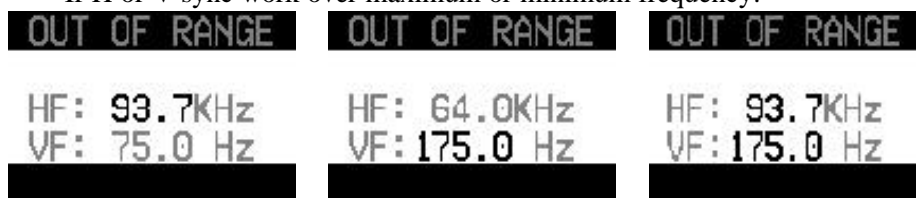
We recommend to switch off the monitor when it is not in use for quite a long time.

## 5.2 Warning Message

- If first time turn on power without H or V sync:



- If H or V sync work over maximum or minimum frequency:



- If resolution higher than maximum resolution:



## 6. TROUBLESHOOTING

**Problem :** No picture appears on the screen.

- If power LED is off, check if power cable is securely connected.
- If power LED is amber in color, check if video cable is securely connected. Also check if your computer is switched on.
- If power LED is green in color, check if H SYNC frequency is out of range.
- Adjust the brightness and contrast controls.

**Problem :** Picture is unstable (noise, jitter etc)

- Check the timing of your computer and see if they are compatible with **S-50TP**.

## 7. APPENDIX:

### TECHNICAL INFORMATION

#### Precautions

- Only a qualified service technician should open the monitor case. Components inside the monitor can cause serious electric shock. Do not attempt to remove the back cover of the monitor by yourself. Contact your monitor dealer or authorized service personnel if your monitor needs to be repaired.
- To prevent fire or shock hazard, do not expose this monitor to rain or moisture.

## Specifications

### LCD Panel:

1. Display Area : 304.1 (H) x 228.1(V) mm
2. Number of pixels : 1024 x 768
3. Pixel pitch : 0.297(H) x 0.297(V) mm
4. Contrast ratio : 300:1(typ. , perpendicular)
5. Viewing angle (more than the contrast ratio of 10:1)
  - Horizontal : 50° (typ. ,left side, right side)
  - Vertical : 40°,60° (typ. ,up side, down side)
6. Response time : 11ms (typ.), (white to black)  
19ms(typ.), (black to white)
7. Luminance : 250cd/m<sup>2</sup> (typ.)

### Video and Synchronization Signals:

1. Signal cable : 15-pin D-type connector
2. Video : Analog levels
3. Horizontal Sync : TTL Positive/Negative
4. Vertical Sync : TTL Positive/Negative
5. Pixel frequency : 78MHz(max)
6. Display colors : Limited by VGA card
7. Video signal input : 0.7 Vpp

### Display Data Channel:

Compatibility : VESA DDC 1/2B

### Scanning Frequency:

1. Horizontal : 60 KHz max.
2. Vertical : 75 Hz max.

### Power Supply:

AC INPUT : 100 ~ 240 Vac, 60/50Hz, 1.2A

### Environment:

1. Operating Temperature : 0°C to 40°C
2. Operating Humidity : 10% to 90%
3. Storage temperature : -20°C ~ 60°C

### Weight:

Approx. 4.1 kgs(NET)



**Regulatory:**

1. Optional FCC-B/UL/CSA
2. Optional TÜV-GS
3. Optional CE
4. Optional MPRII
5. Optional TCO

**Video Pin Assignments**

Pin No	Signal	Pin No	Signal
1	Red Input	9	NC
2	Green Input	10	GND
3	Blue Input	11	NC
4	NC	12	SDA
5	GND	13	Horizontal Sync
6	Red Return	14	Vertical Sync
7	Green Return	15	SCL
8	Blue Return		