



# LCD Tablet Monitor User's Manual

**19 Inch wide**  
**20 Inch wide**  
**22 Inch wide**



# IMPORTANT SAFEGUARDS

1. Read all of these instructions.

2. Save these instructions for later use.



3. Unplug this monitor from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

4. Do not use attachments not recommended by the monitor manufacturer as they may cause hazards.

5. Do not use this monitor near water, e.g., near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.



6. Do not place this monitor on an unstable cart, stand, or table. The monitor may fall, causing serious injury to a child or adult, and serious damage to the appliance.



7. Slots and openings in the cabinet and the back or bottom are provided for ventilation, to ensure reliable operation of the monitor, and to protect it from overheating.

These openings must not be blocked or covered. The openings should never be blocked by placing the monitor on a bed, sofa, rug, or other similar surface. This monitor should never be placed near or over a radiator or heat register. This monitor should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.



8. This monitor should be operated only from the type of power source indicated on the marking label. If you are not sure of the power supplied to your home, consult

your monitor dealer or local power company.



9. This monitor is equipped with a 3-wire grounding-type plug. That is, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the purpose of the grounding-type plug.



10. Do not allow anything to rest on the power cord. Do not locate this monitor where the cord will be abused by people walking on it.

11. Follow all warnings and instructions marked on the monitor.



12. For added protection for this monitor during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the monitor and/or the computer due to lightning and power line surges.

13. Do not overload wall outlets and extension cords as this can result in fire or electric shock.

14. Never push objects of any kind into this monitor through cabinet slots, as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the monitor.



15. Do not attempt to service this monitor yourself, as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.

16. Unplug this monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. When the power cord or plug is damaged or frayed.

b. If liquid has been spilled into the monitor.

c. If the monitor has been exposed to rain or water.

d. If the monitor does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore normal operation.

e. If the monitor has been dropped or the cabinet has been damaged.

f. When the monitor exhibits a distinct change in performance, this indicates a need for service.



17. When replacement parts are required be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

18. Upon completion of any service or repairs to this monitor, ask the service technician to perform routine safety checks to determine that the monitor is safe to operate.

## FEDERAL COMMUNICATIONS COMMISSION 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 to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or TV technician for help.

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

## CANADIAN NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

## AVIS CANADIEN

Cet appareil numérique de la Class B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

## European Union Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms (in brackets are the equivalent international standards):

- EN55022 (CISPR 22) – Electromagnetic Interference
- EN55024 – Immunity Test for ITE Product
- EN60950 (IEC950) – Product Safety
- EN61000-3-2 (IEC555-2) – Power Line Harmonics

As an ENERGY STAR® Partner, AHA I&C Co., Ltd. has determined that this product meets the Energy Star® guidelines for energy efficiency.

**WARNING: FOR CONTINUED SAFETY, REPLACE POWER ADAPTOR ONLY WITH  
MANUFACTURER'S RECOMMENDED MODELS**

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# *Introduction*

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## PRODUCT FEATURES

- The monitor is designed for Pen-Input.
- The convenient and user-friendly on-screen display allows for easy and accurate adjustments of screen size, position and screen color.
- The monitor complies with the VESA Display Data Channel (DDC) specification for Plug and Play compatibility. Advanced microcircuitry makes setup and configuration fast and effortless.
- The monitor features Advanced Color Controls for fine-tuning to meet your own personal tastes or application requirements. Use the on-screen controls to adjust the color temperature, RGB gain value for the best possible screen color and intensity.
- Press the menu button and activate the Self-Diagnosis menu to determine whether your monitor is functioning normally, not receiving a signal or is receiving a signal that is out of scanning range.
- Activate the higher refresh rates of the monitor to stabilize the screen and eliminate the annoying flicker that contributes to eye-strain and headaches.
- The monitor supports the optimal display performance with 1280x1024 at 75Hz.
- With the POWER LIGHT function added, you can enjoy the bright screen for movie or any other multimedia utilization.
- The monitor is used Adjustable Stand (25° ~ 64°).

# Package Overview

This manual explains how to correctly install, operate and get the best performance from your monitor. Please read this user's guide carefully before installing your monitor, then keep it near your monitor for quick reference.



LCD Tablet Monitor



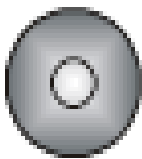
Power cord



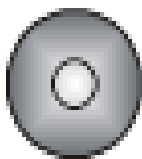
Adaptor



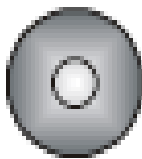
User's Manual



Application Software  
(Pen-InputDriver)



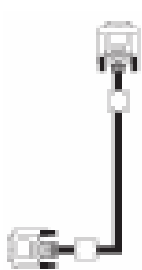
Application Software  
(eduplus 5.0)



Application Software  
(Pen Soft)



AAA Battery



15 pin signal cable



DVI Cable (Optional)



USB cable



Pen  
(For Pen-Input Screen)



Pen Refill x 2

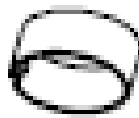


Figure of  
Pen Tweezers

If any item is missing or damaged, please contact your dealer.

Please keep the box and packing materials so that you may properly store or transport your monitor.

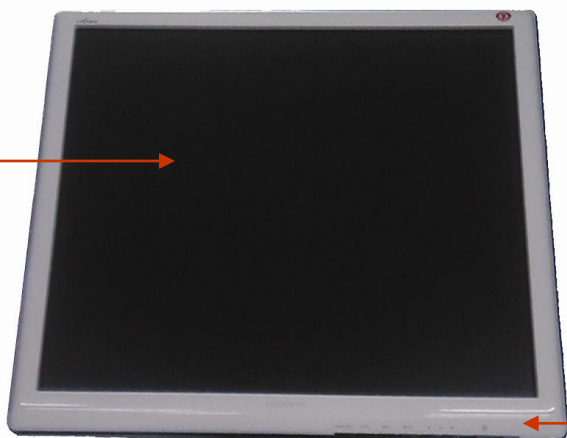
# *Installation*

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## Display Overview

- Front View

LCD Display



Panel Controls

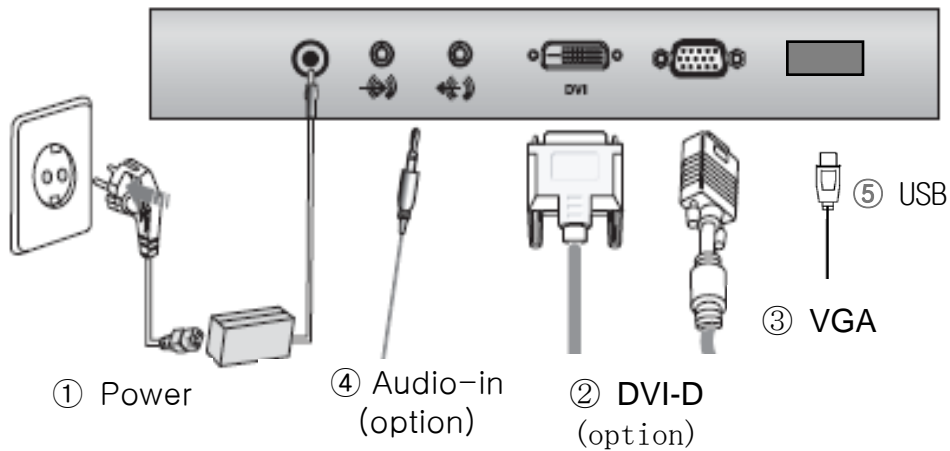
- Rear View



Stand

## Connecting the Display

To setup this display, please refer to the following figure and procedures.



- 1. Be sure all equipments are off.**
- 2. Connect one end of the power adapter to the power connector; plug one end of the AC power cord into the power adapter, and then the other end into an electrical outlet (①).**
- 3. Connect the VGA signal cable to the 15-pin connector of your host computer and tighten the screws (③).**
- 4. Connect the Audio-In cable from audio input port of your display to the Audio-out port of your computer (④).**
- 5. Connect the USB signal cable to the USB connector of your host computer (⑤).**
- 6. Connect the DVI-D signal cable to the DVI-D connector of your host computer(②).**
- 7. Turn on your computer and display.**

### *Notice:*

*To ensure the LCD display can work well with your computer, please configure the display mode of your graphic card to make it less than or equal to 1280 x 1024 resolution and make sure timing of the display mode is compatible with the LCD display.*

*We have listed the "Compatibility Modes" of this LCD display in appendices for your reference.*



# OPERATION & ADJUSTMENT

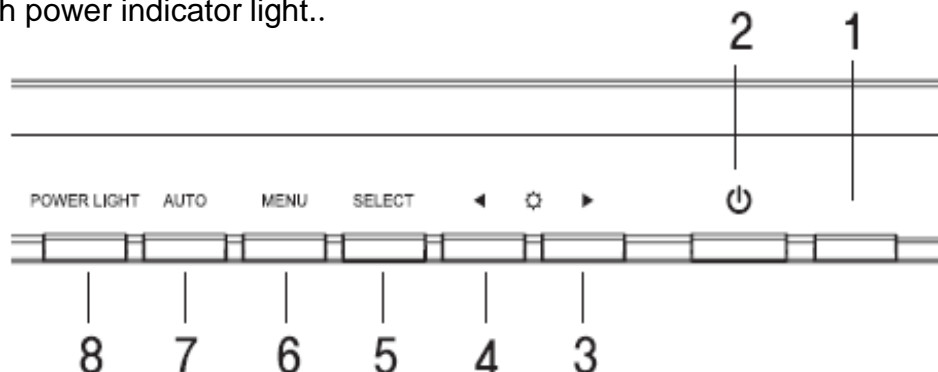
## Front Panel Controls

### 1. POWER Indicator

Shows both normal operation and power management status with power indicator light..

### 2. POWER

Switches the monitor on and off.



### 3 ► (\*)

Moves cursor to the right or low window in the OSD window and increases the value of any selected function. While the OSD screen is off, you can adjust the brightness directly.

### 4 ◀ (\*)

Moves cursor to the left or high window in the OSD window and decreases value of any selected function. While the OSD screen is off, you can adjust the volume directly.

### 5. SELECT

Moves from top menu to sub menu in the OSD window and opens the function window for the selected icon.

### 6. MENU

Turns the OSD window on. Turns the OSD (On-Screen Display) window off and moves from sub menu to top menu in the OSD window.

### 7 AUTO (\*)

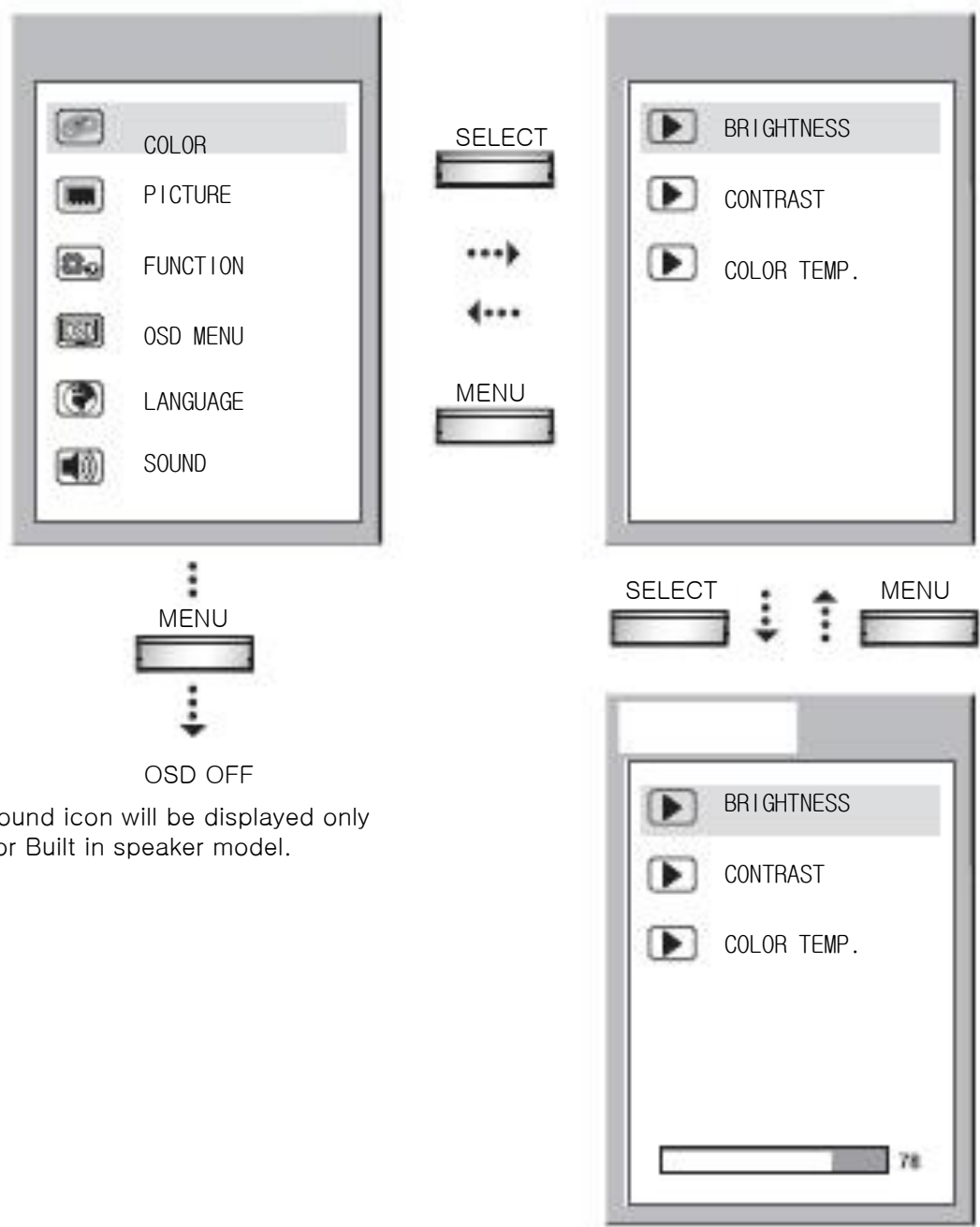
Launches the AUTO TRACKING function directly.

### 8 POWER LIGHT (\*)

While the OSD screen is off, you can adjust the screen brightness according to each situation.

(\*): Hot Key

KEY PROCESS



\* Sound icon will be displayed only for Built in speaker model.

# HOT KEY



- ◆ When there is no OSD, if you press this AUTO button, you can use the best display performance fit for a current mode.

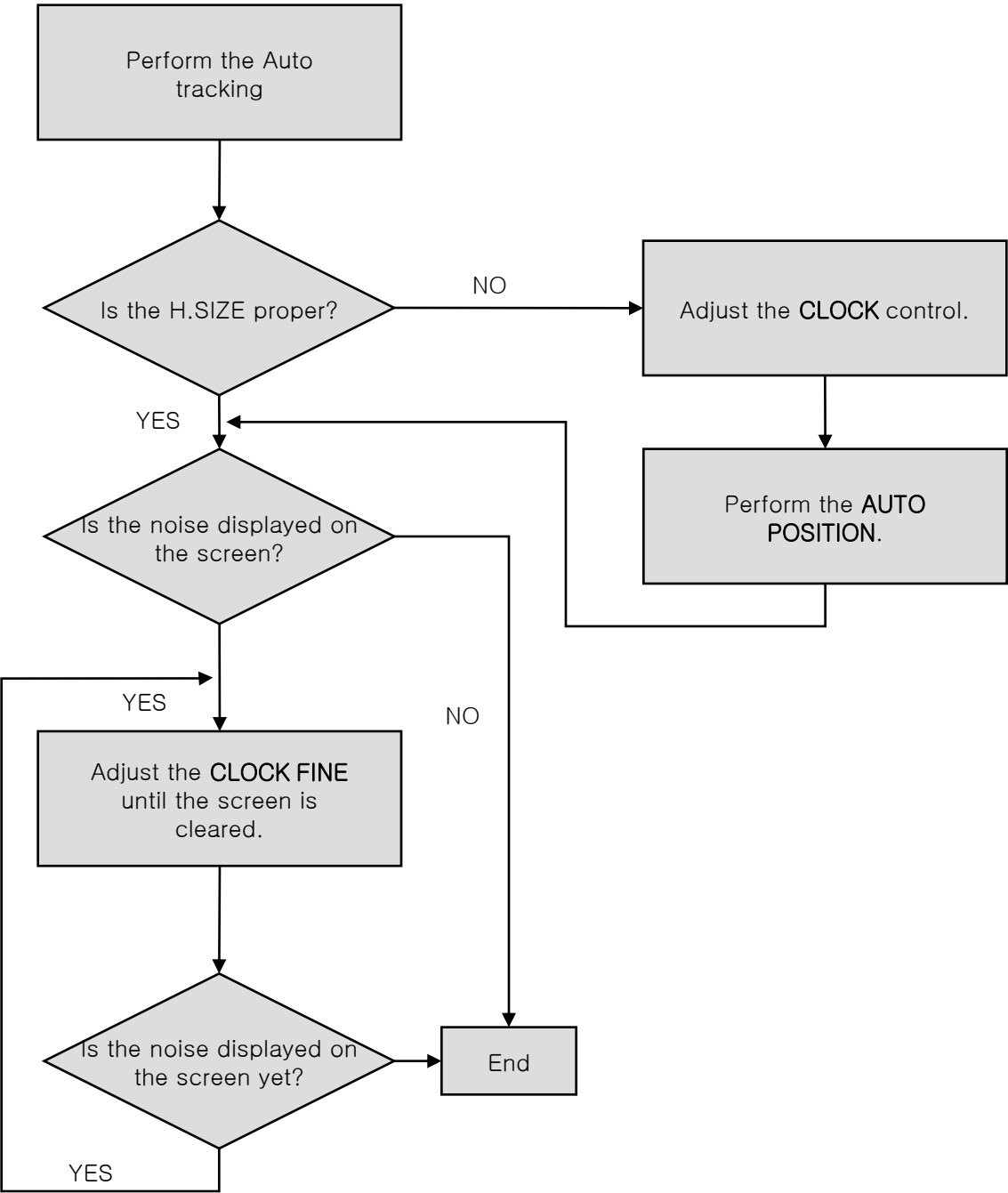


- ◆ When there is no OSD, if you press this BRIGHTNESS button, you can adjust the brightness directly.
  - ◀: decreases brightness
  - ▶: increases brightness



- ◆ The screen will be brightened progressively by 10%. If you carry out general PC works such as document edition on the Movie mode,you may shorten the life span of LCD panel. Thus,it is recommended to verify the selected mode before use.

# ADJUSTMENT PROCEDURE



# OSD FUNCTIONS WITH USING PC



<b>BRIGHTNESS</b>	Adjust the brightness of image..
<b>CONTRAST</b>	Adjust the contrast of image, the difference between light and dark areas on the screen.
<b>COLOR TEMP.</b>	Choose different preset color temperatures or set your own customized color parameters.



<b>H. POSITION &amp; V. POSITION</b>	Adjust the position of the display horizontally (left or right) and vertically (up or down).
<b>CLOCK</b>	Adjust the width (horizontal size) of the screen image.
<b>PHASE</b>	Remove any horizontal noise and clear or sharpen the image of characters.



<b>SIGNAL SOURCE</b>	Selects input signal in order. DIGITL /ANALOG
<b>AUTO ADJUST</b>	Choose automatically the proper horizontal position and vertical position & size of the screen image.
<b>POWER LIGHT</b>	Select powerlight mode(PC/Game/Movie)
<b>RESET</b>	Reset the screen to the Factory Preset Display Settings
<b>INFORMATION</b>	Display horizontally and vertically frequency of monitor.

## OSD MENU



### OSD H & V POSITION

Adjust the OSD position horizontally (left or right) and vertically (up or down).

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### OSD TIME

Adjust the display OSD Menu.

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### TRANSLUCENT

Adjust the OSD. Transparency.

## LANGUAGE



### LANGUAGE

Select language for OSD

## SOUND



### MUTE

Turn the audio sound on or off.

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### VOLUME

Increase or decrease audio volume.

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# SELF DIAGNOSIS

If there is no image, the Self Diagnosis screen will be displayed.  
Self Diagnosis function checks if the status of the monitor screen is No Signal, Out of range or None support.



No Signal screen is displayed when the DSub signal connector is connected but the status of the monitor is on DPMS mode.



Out of Range screen is displayed when the applied frequency is under or over normal range.

- ◆ Normal range  
(Non-interlaced mode only)  
H : 30 - 80 KHz  
V : 56 - 77 Hz



Check cable screen is displayed when the signal cable is disconnected.

Panel	Size	19-inch
	Panel Type	TFT Active Matrix
	Pixel Pitch	0.2835 × 0.2835 mm
	Viewing Angle	80° (Right/Lef/UP/DOWN)
	Contrast Ratio	1000 : 1 contrast ratio
	Brightness	300cd/m2 brightness
	Response Time	5msec
	Color Filter	RGB vertical stripe
Synchronization	Horizontal	30~80 KHz
	Vertical	56~77 Hz
Video Bandwidth		140 MHz
Resolution	Max	1440×900@75Hz
	Optima	1440×900@75Hz
Colors		16.7M Colors
Display Area		408.24(H)×255.15(V)
PC Input Signal	Sync	H/V separate(TTL)
	Video	15 pin mini D-sub (RGB analog)
Speaker	Max. Output	3W ( Left 3W + Right 3W)(optional)
Special features		Pen-input Screen
Display screen		Anti-Scratch Protective Glasses
PLUG & PLAY		VESA DDC Compatible
Power Source		100 - 240 vac
Power Consumption		35 Watt
Dimension-W x H x D	457(W)×377(H)×202(D) mm(with stand)	
	457(W)×309(H)×62(D) mm(without stand)	
Weight-net/gross		4.3 Kg / 6.0 Kg
Power Saving		EPA. VESA DPMS. NUTEK Compliant
Operating Temperature		10~40°C /50~104°F
Tablet	Technology	Electromagnetic/Handwriting Tablet
	Resolution	660 DPI
	Pressure Sensitivity	512 levels
	Accuracy	±0.5mm (±0.02" )
	Max. Reading Height	8mm
	Data Report Rate	125 reports/ per second
	Data Interface	USB Port
	OS support	Window 98 / Me / 2000 / XP
	Power Voltage	+ 5 Voltage
	Power Consumed	0.03A (0.15 Watts)
	Battery Life	2,000 hours



# SPECIFICATIONS

20 INCH

Panel	Size	20-inch(43.2cm) diagonal
	Panel Type	TFT Active Matrix
	Pixel Pitch	0.258 mm×0.258 mm
	Viewing Angle	178° (Right/Lef/UP/DOWN)
	Contrast Ratio	1.000 : 1 contrast ratio
	Brightness	300cd/m2 brightness
	Response Time	16msec
	Color Filter	RGB vertical stripe
Synchronization	Horizontal	30~81 KHz
	Vertical	56~75 Hz
Video Bandwidth		140 MHz
Resolution	Max	1680×1050@60Hz
	Optima	1680×1050@60Hz
Colors		16.7M Colors
Display Area		337.9 mm×270.3 mm
PC Input Signal	Sync	H/V separate(TTL)
	Video	15 pin mini D-sub (RGB analog)
		DVI-D(optional)
Speaker	Max. Output	2W ( Left 1W + Right 1W)(optional)
Special features		Pen-input Screen
Display screen		Anti-Scratch Protective Glasses
PLUG & PLAY		VESA DDC Compatible
Power Source		DC 12V. 3.33A
Power Consumption		35 Watt
Dimension-W x H x D	383(W) x 376(H) x 159 mm(with stand)	
	383(W) x 321(H) x 65 mm(without stand)	
Weight-net/gross		4.6Kg / 6.0 Kg (10.1 / 13.2 lbs)
Power Saving		EPA, VESA DPMS, NUTEK Compliant
Operating Temperature		10~40°C /50~104°F
Tablet	Technology	Electromagnetic/Handwriting Tablet
	Resolution	660 DPI
	Pressure Sensitivity	512 levels
	Accuracy	±0.5mm (±0.02" )
	Max. Reading Height	8mm
	Data Report Rate	125 reports/ per second
	Data Interface	USB Port
	OS support	Window 98 / Me / 2000 / XP
	Power Voltage	+ 5 Voltage
	Power Consumed	0.03A (0.15 Watts)
	Battery Life	2.000 hours

# SPECIFICATIONS

22 INCH

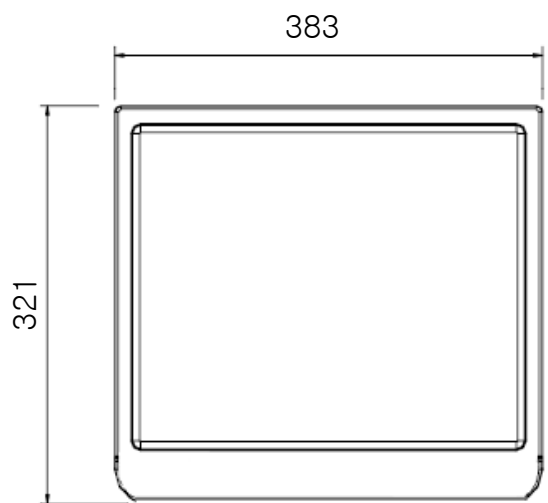
Panel	Size	22-inch(55.88cm) diagonal
	Panel Type	TFT Active Matrix
	Pixel Pitch	0.282×0.282 mm
	Viewing Angle	160° (Right/Lef/UP/DOWN)
	Contrast Ratio	1,000 : 1 contrast ratio
	Brightness	300cd/m2 brightness
	Response Time	5msec
	Color Filter	RGB vertical stripe
Synchronization	Horizontal	30~80 KHz
	Vertical	56~77 Hz
Video Bandwidth		165 MHz
Resolution	Max	1680×1050@60Hz
	Optima	1680×1050@60Hz
Colors		16.7M Colors
Display Area		473.76mm X 296.1mm
PC Input Signal	Sync	H/V separate(TTL)
	Video	15 pin mini D-sub (RGB analog)
		DVI-D(optional)
Speaker	Max. Output	3W ( Left 3W + Right 3W)(optional)
Special features		Pen-input Screen
Display screen		Anti-Scratch Protective Glasses
PLUG & PLAY		VESA DDC Compatible
Power Source		DC 12V. 5A
Power Consumption		50 Watt
Dimension-W x H x D	523(W) x 420(H) x 159 mm(with stand)	
	523(W) x 367(H) x 66 mm(without stand)	
Weight-net/gross		6.5Kg / 8.7 Kg
Power Saving		EPA, VESA DPMS, NUTEK Compliant
Operating Temperature		10~40°C /50~104°F
Tablet	Technology	Electromagnetic/Handwriting Tablet
	Resolution	660 DPI
	Pressure Sensitivity	512 levels
	Accuracy	+0.5mm (+0.02" )
	Max. Reading Height	8mm
	Data Report Rate	125 reports/ per second
	Data Interface	USB Port
	OS support	Window 98 / Me / 2000 / XP
	Power Voltage	+ 5 Voltage
	Power Consumed	0.03A (0.15 Watts)
	Battery Life	2,000 hours

- The specification can be changed without any prior notice to improve the quality of the product.
- The LCD panel may have some defective pixels (e.g. slightly light or dark) due to a characteristic of the LCD panel. But there is no defect in your LCD product itself.

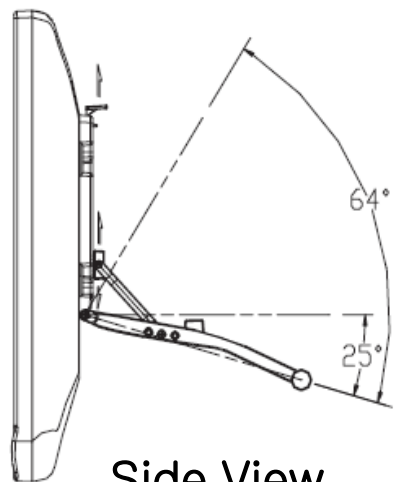
# FACTORY PRESET TIMINGS

•The LCD Monitor has only Non-interlaced modes without flicker.

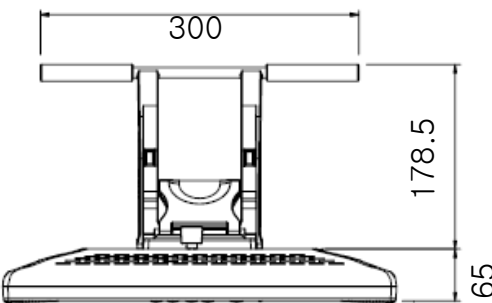
VESA MODES				
Mode	Resolution (dots Xlines)	H.Freq(KHz)	V.Freq(Hz)	Remark
VGA	640 X 480@60Hz	31.5	60	Non-interlaced
VGA	640 X 480@72Hz	37.9	72	Non-interlaced
VGA	640 X 480@75Hz	37.5	75	Non-interlaced
SVGA	800 X 600@56Hz	35.2	56	Non-interlaced
SVGA	800 X 600@60Hz	37.9	60	Non-interlaced
SVGA	800 X 600@72Hz	48.1	72	Non-interlaced
SVGA	800 X 600@75Hz	46.9	75	Non-interlaced
XGA	1024 X 768@60Hz	48.4	60	Non-interlaced
XGA	1024 X 768@70Hz	56.5	70	Non-interlaced
XGA	1024 X 768@75Hz	60.0	75	Non-interlaced
SXGA	1280 X1024@60Hz	64.0	60	Non-interlaced
SXGA	1280 X1024@75Hz	80.0	75	Non-interlaced
SXGA	1152 X 864@75Hz	67.5	75	Non-interlaced
SXGA	1280 X 960@60Hz	60.0	60	Non-interlaced
SXGA	1440 X 900@60Hz	55.9	60	Non-interlaced
WSXGA	1680 X 1050@60Hz	65.2	60	Non-interlaced
IBM MODES				
Mode	Resolution (dots Xlines)	H.Freq(KHz)	V.Freq(Hz)	Remark
EGA	640 X 350@70Hz	31.5	70	Non-interlaced
DOS	720 X 400@70Hz	31.3	70	Non-interlaced
MAC MODES				
Mode	Resolution (dots Xlines)	H.Freq(KHz)	V.Freq(Hz)	Remark
VGA	640 X 480@67Hz	35.0	67	Non-interlaced
SVGA	832 X 624@75Hz	49.7	75	Non-interlaced
SXGA	1152 X 870@60Hz	68.7	75	Non-interlaced
THE OTHERS				
Mode	Resolution (dots Xlines)	H.Freq(KHz)	V.Freq(Hz)	Remark
SXGA	1280 X1024@70Hz	74.4	70	Non-interlaced



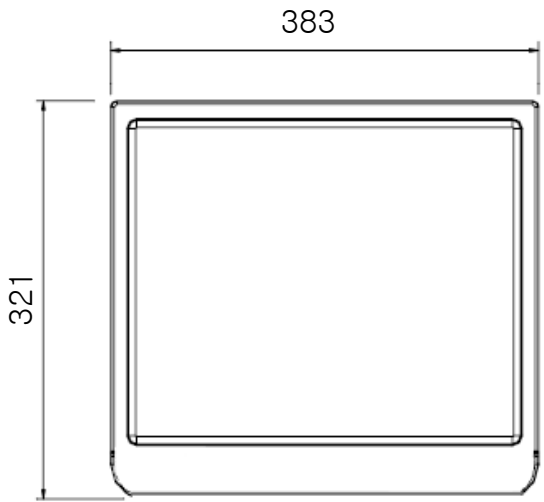
Front View



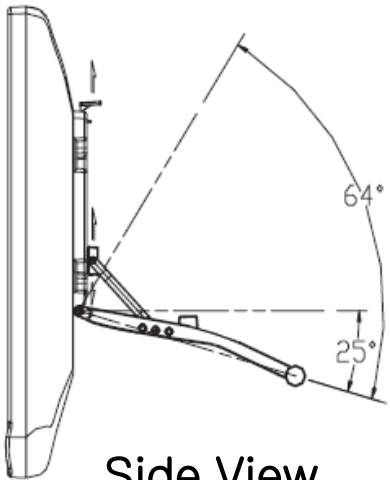
Side View



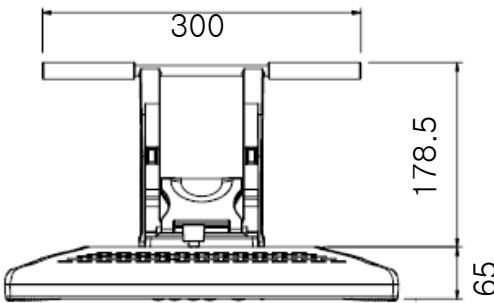
Top View



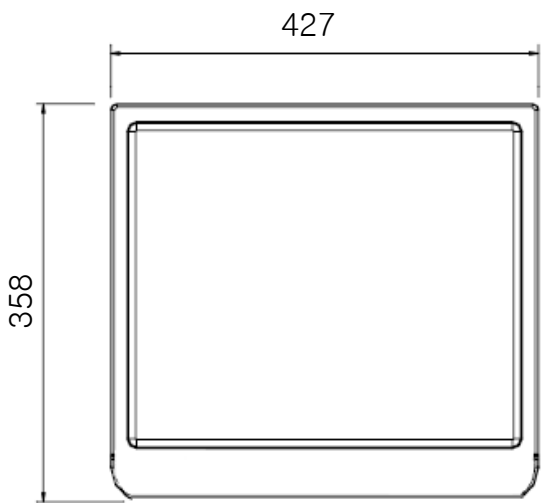
Front View



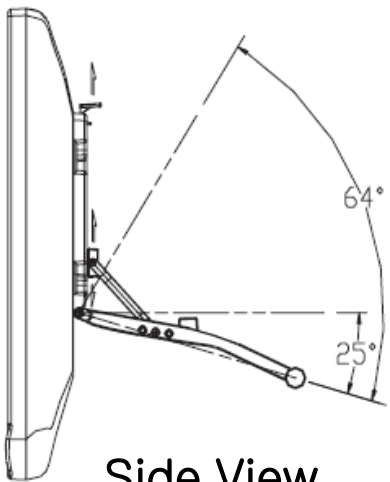
Side View



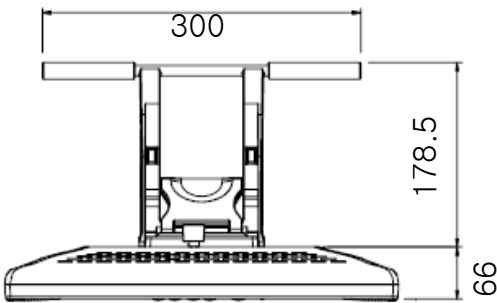
Top View



Front View



Side View



Top View

# *TROUBLESHOOTING*

Symptom	Check
Picture is jitterd.	Adjust Clock to set the screen position and adjust Clock fine until a noise isn't displayed.
No picture.	<p>Check if power switch and computer power switch are in the on position.</p> <p>↓</p> <p>Check if the signal cable is correctly connected to the video card.</p> <p>↓</p> <p>Check if the pins of D subconnector are not bent.</p> <p>↓</p> <p>Check if the computer is in the power- saving mode.</p>
POWER LED is not lit.	<p>Check if power switch is in the on position.</p> <p>↓</p> <p>Check if the power cord is correctly connected.</p>
Image is unstable.	Check if the signal cable is suitable to the video card.
Image is not centered, too small or too large.	Adjust Clock or H&V Center to get the proper image.
Picture bounces or a wave pattern is present in the picture.	<p>Keep the devices that may cause electrical interference away from the monitor.</p> <p>↓</p> <p>See the FCC information at the front cover of the manual.</p>
Picture is blurred.	Adjust Contrast and Brightness.
Do not become a pen operation.	<p>Confirms whether USB cable is connected properly at USB Port of the computer.</p> <p>Try to change the battery of the pen into new battery.</p> <p>Reinstalling does the driver.</p>



# *Pen-Input Driver&Software Installation*

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The driver are located on the enclosed CD-ROM for the these operating systems: Windows Me/2000/98/XP , Mac 9.0/9.1/9.2.

## **Pen-Input Driver & Software Installation Process:**

1. Before your start to install the tablet driver, please be sure the USB cable already connected to the PC and LCD display.
2. Insert "Application software" CD-ROM.
3. Select "AHA USB Tablet Manager".
4. Click "Next" button to make sure installing this driver
5. Click "Finish" button.
6. Select "Eduplus Setup"
7. Select "next" button.
8. Click "start" button
9. Click "Next" button to make sure installing this program
10. Click "Accept" button
11. Click "Next" button
12. Click "Install" button
13. Click "Finish" button
14. Select "Window Media Encoder"
15. Click "Setup"
16. Click "Next" button to make sure installing this program
17. Select "Accept" and click "Next" button
18. Click "Next" button
19. Click "Install" button
20. Click "Finish" button
21. Insert "Pensoft PRO" CD-ROM
22. Select "LANGUAGE" and "PLATFORM" that you need
23. Click "Go" button

24. Click "Next" button to make sure installing this program
25. Click "Accept" button
26. Click "Next" button
27. Click "Yes" button
28. Click "Install" button
29. Click "Finish" button
30. Restart the system.

### **Pen-Input Setting and Calibration:**

1. Open "Control Panel" of the system.
  2. Double click "USB Tablet" icon.
  3. Select the item you want to set up and change the setting values.
- These setting change are effective when these setting have been changed.

### **Pen-Input Usage Notice:**

1. When computer equipment changes, needs to calibrate the accuracy adjustment.
2. When Pen changes, needs to redetects the frequency of Pen.(Refer to "Troubleshooting").