USER'S MANUAL

18.1-inch SXGA TFTLCD Color Monitor

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MODEL: XEN-1810E

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LIFE SUPPORT APPLICATIONS

These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury **XENON**. customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify **XENON** for any damage resulting from such improper use or sale.

The information presented in this document may form a part of quotation or contract under the agreement of both parties. Otherwise, this datasheet is subjected to be changed without notice.

1. QUICK START

- Connect the 15-pin D-sub connector to the VGA port of PC.
- Connect the opposite side of VGA cable to TFTLCD monitor.
- Connect the RCA jack or SVHS cable to your DVD player, camcorder or VCR
- Plug in the Audio cables to the proper connecter of your monitor.
- Plug in the external antenna or CATV cable to the Antenna connector.
- Plug in the power cord to AC/DC adapter power inlet and 110V / 220V consent.
- Plug in the 12V DC output to TFTLCD monitor.
- Adjust the TFTLCD monitor tilt.
- Turn on the external signal sources and TFTLCD monitor.
- Adjust the display. (SXGA, 1280x1024 pixels, 24bit color)

2. U.S. FCC CLASS B NOTICE

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 radiates radio frequency energy, if it is not installed or used by the instructions, it 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, that could be determined by tuning the equipment on and off, the user is encouraged to try to connect the interference with the following option:

- Re-orient or relocate the reception of antenna.
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected to.
- Consult the dealer or an experienced Radio / Television technician for help.

3. PRODUCT OVERVIEW

XEN-1810E , XENON's 18.1" SXGA TFTLCD Monitor, accepts standard analog RGB signal, TV signal, Video signals (VCR, DVD and Camcorder) from various video sources which are available in the marketplace. XEN-1810E supports SXGA and lower resolutions at the frame frequency up to 75Hz. Lower resolution modes can be expanded to full screen through the expansion algorithm. The user interface includes Audio, Display, Scaling, Control, Smart Setting, and additional features.

This monitor contains XENON's high-end LCD controller, TV tuner, USB board, which have high performance and user friendly interfaces. Fancy design monitor makes your desk simple and luxury.

The LCD monitor neither emits harmful rays nor requires space. Moreover, it conforms to VESA DPMS (Display Power Management Signaling) requirement, therefore energy consumption is remarkably little. Actual power consumption of LCD monitor is less than 55 watts during the operation, in contrast CRT monitor. These features guarantee you with safe, clean, and healthy environment.

XEN-1810E supports VESA DDC 1/2 requirements, therefore it is truly Plug-and-Play for all PCs. No hardware or software change needed. Simply unplug your CRT cable, and plug it into XEN-1810E .

4. USAGE NOTICE

Warning

Please do not open or disassemble the products, because it may cause electric shock. Please be advised all the warnings, precautions, and maintenance advice as recommended in this user's manual in order to maximize the life of your monitor.

Do:

- Turn off the monitor before cleaning its surface.
- Periodically wipe its surface with a soft and dry cloth.
- Use the quality and safety-approved AD/DC adapter.
- Disconnect the power plug from the AC outlet when the product is not in use for long time.

Do not expose the monitor to:

- Extremely hot, cold, and humid environments during operation.
- Area susceptible to dust.
- Direct sunlight
- Abrasive cleaners, waxes, and solvents

5. DRIVER INSTALLATION

5.1. Frame Frequency (or Refresh Rate) Setting

XEN-1810E is designed to run under the frame frequency (or refresh rate) up to 75Hz. It is highly recommended for you to change the frame frequency of your PC to 60Hz, because TFTLCD monitor shows best performance in frame frequency 60Hz.
To change it, you can use the installation diskette included in the package.
When you install the XEN-1810E to your PC, very rarely, you may have a trouble due to mismatch of PC and monitor. In this case, you can't see any image in the display. (Black display) It is caused by the difference of display setting between XEN-1810E and your previous monitor. You can solve the trouble by changing the display setting as following:

- Restart PC
- Press **F8** key when DOS message appears.
- There will be a menu in DOS mode, then select **Safe Mode** using up/down key or numeric key
- Press **Enter** key. Then PC runs in **Windows Safe Mode**.
- Start installation procedure using **Add New Hardware Wizard** or **Display Properties Dialog** as described in the following section.

5.2. Installation of TFTLCD Monitor Display Driver in Windows 95 / 98

5.2.1. Installation instruction of the 'Add New Hardware Wizard'.

- Start Windows 95 or 98.
- Insert the diskette labeled TMA.INF into a floppy drive.
- Click the **Start** button. Click the **Setting** and **Control Panel** menu item.
- From the **Control Panel** folder, select the **Add New Hardware** icon.
- Follow the instructions. When you are asked to 'Select the type of hardware you want to install' select **Monitors**.
- Press the **Have disk** button from the next dialog.
- Select the **'A' drive** from the dialog. Press **OK**. The wizard will automatically install the Display Drivers.
- Follow the additional instructions given by the wizard.

5.2.2. Installation instruction using the 'Display Properties Dialogs'

- Click the **Right mouse button** on the empty Desktop area.
- Select the **Settings property** dialog. Press the **Advanced Properties** button.
- From the **Advanced Display Properties** dialog, select the **Change** buttons.
- Press the **Have disk** button from the next dialog.
- Select the **'A' drive** from the dialog. Press **OK**. The wizard will automatically install the Display Drivers.
- Follow the additional instructions given by the wizard.

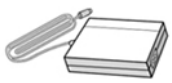
5.2.3. Installation instruction using Play-N-Play

- Connect VGA cable and turn on the monitor power first.
- Turn on the computer
- After Windows 95/98 starts, there will be a Windows dialog box indicating **New Hardware Found**. If this message does not appeal, please install the monitor driver using '5.2.2.' or '5.2.3.' procedure.
- Select the button **Driver Disk Provided by Manufacturer**, and select **OK** button to go to next window labeled **Have Disk**.
- Insert XEN-1810 Windows Driver floppy diskette into floppy drive, and press **OK**.
- Among the device selection menu, select **XEN-1700E**, and press **OK**.
- Windows will automatically install XEN-1810 driver.

6. PACKAGE CHECKLIST

18.1" TFT LCD Monitor

User's Manual



AC/DC Adapter

Drive diskette

Power Cord

Audio Cable(Optional)

VGA Cable

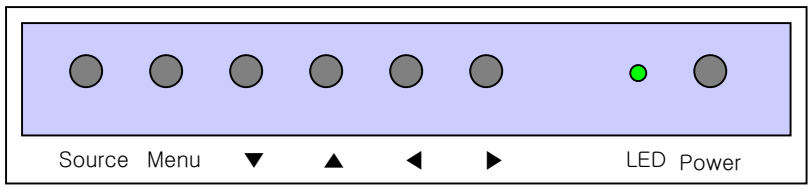
RCA Cable (Optional)

ANT Jack (Optional)

S-VHS Cable (Optional)

Remocon (TV Optional)

7. FRONT BUTTON



Standard OSD Function

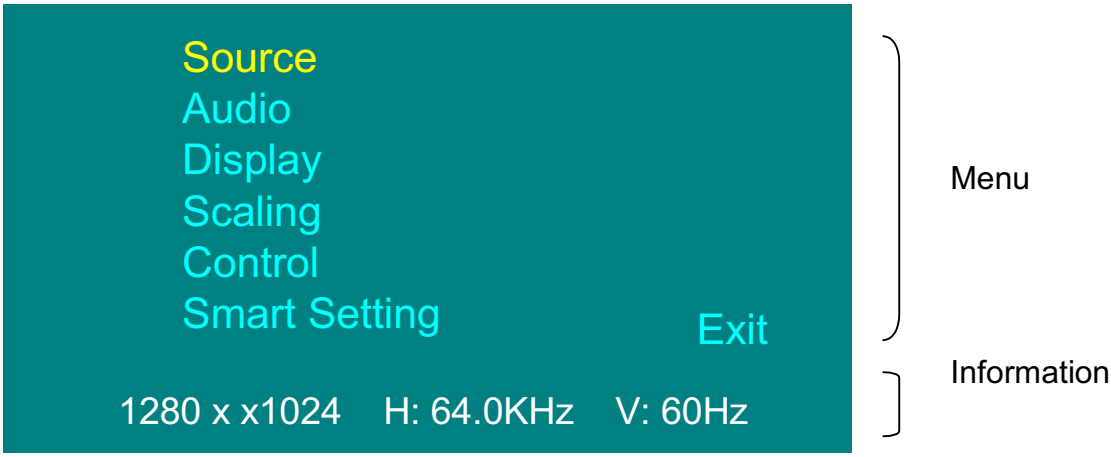
Button	Function	Status	Hot key
Power	Power ON/OFF	ON/OFF	
LED	Indicates operation status	Green(ON) /Red(No signal)	
Auto	Auto Adjustment	Auto Adjustment	
Menu	Activate menu Exit menu	Brightness/Contrast/Color Etc….	
Exit	Exit menu	Exit Menu	
Select	Select menu	Select menu	
Down/Up	Move menu / Adjust menu	Down/Up	Down : Adjust Brightness Up : Adjust Contrast (Activate Hot Key)

Optional OSD Function

Button	Function	Status	Hot key
Power	Power ON/OFF	ON/OFF	
LED	Indicates operation status	Green(ON) /Red(신호무)	
Source	Select signal source	Analog RGB / S-Video / Composite video / TV	Rotate signal source
Menu	Activate menu Select menu	Analog RGB / S-Video / Composite video / TV	
▼ ▲ ◀ ▶	Cursor control TV Channel select Volume control Increment / Decrement value		▼ ▲ : TV Channel ◀ ▶ : Volume control

8. OSD OPERATION

8.1. Main Menu

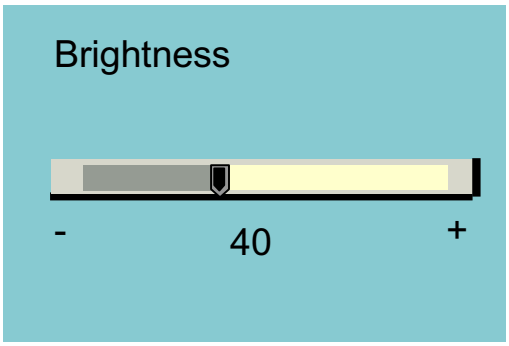


- Source: Select signal source
- Audio: Audio source select and setting
- Display: Image quality setting
- Scaling: Image size control
- Control: Capture image or OSD control
- Smart setting: Auto adjustment
- Information: Displays current video mode and frequency

8.2. Image Control

Brightness (Common)

Procedure Menu > ▼ ▼ (Display) > Menu>Menu (Brightness)

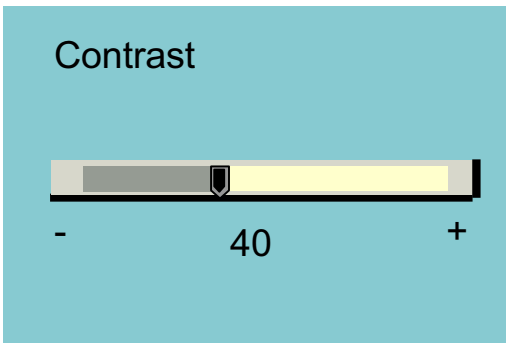


◀ Dark

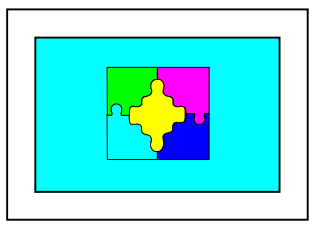
▶ Bright

Contrast (Common)

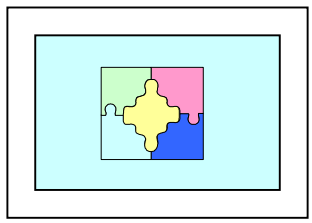
Procedure Menu > ▼ ▼ (Display) > Menu > ▼ >Menu (Contrast)



◀ Distinct

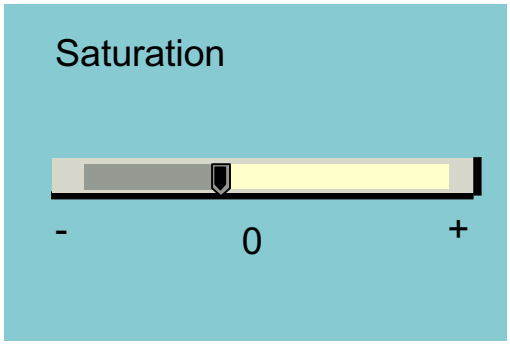


▶ Vague

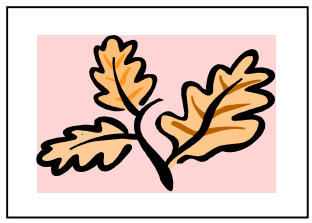


Saturation (TV / CVBS / S-Video)

Procedure Menu > ▼ ▼ (Display) > Menu > ▼ ▼ >Menu (Saturation)



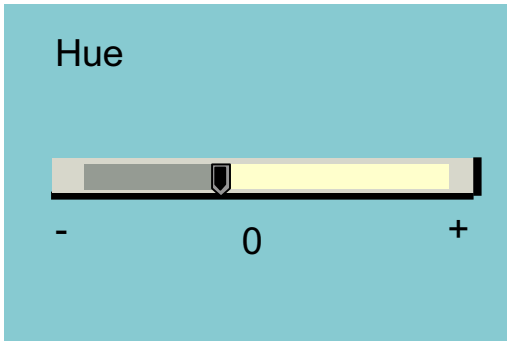
◀ Decrement ▶ Reddish



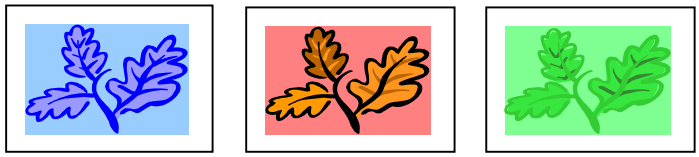
* Saturation means the color tone in accordance with the difference of color concentration under red color criterion.

Hue (TV / CVBS / S-Video)

Procedure Menu > ▼ ▼ (Display) > Menu > ▼ ▼ ▼ >Menu (Hue)



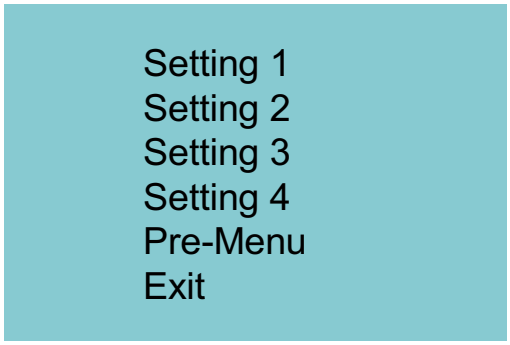
◀ Bluish ▶ Greenish



* Hue means that it is a difference of color toward Blue or Red color direction.

Color Temperature (Common)

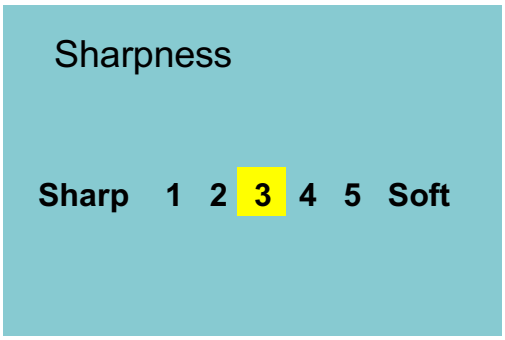
Procedure Menu > ▼ ▼ (Display) > Menu > ▼ ▼ ▼ ▼ ▼ >Menu (Color Temperature)



Setting 1: Bluish white
Setting 2: Default
Setting 3: Reddish white
Setting 4: More reddish white

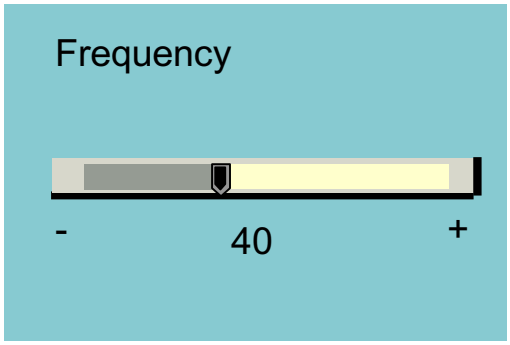
Sharpness (Common)

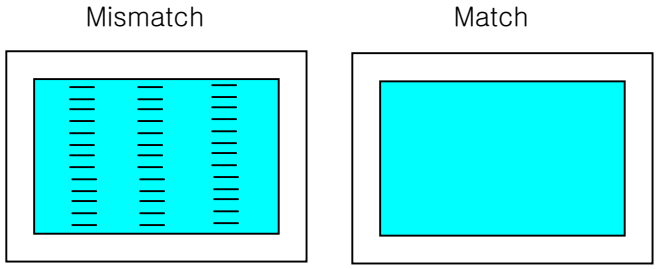
Procedure Menu > ▼ ▼ (Display) > Menu > ▼ ▼ ▼ ▼ ▼ ▼ >Menu (Sharpness)



Frequency (Analog RGB)

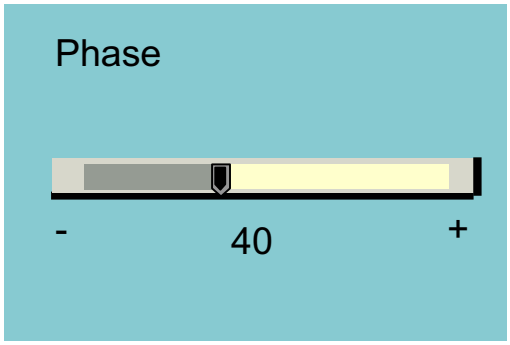
Procedure Menu > ▼ ▼ (Display) > Menu > ▼ ▼ >Menu (Frequency)

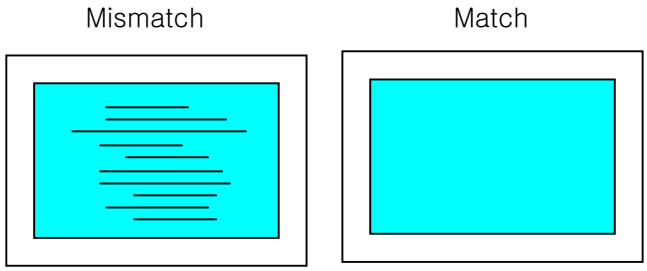




Phase (Analog RGB)

Procedure Menu > ▼ ▼ (Display) > Menu > ▼ ▼ ▼ >Menu (Phase)





8.2. Audio Control

Audio Source (Common)

Procedure Menu > ▼ (Audio) > Menu >Menu (Audio source)

Audio - Others (Common)

Procedure Menu > ▼ (Audio) > Menu > ▼ (Bass)
Menu > ▼ (Audio) > Menu > ▼ ▼ (Treble)
Menu > ▼ (Audio) > Menu > ▼ ▼ ▼ (Mute On/Off)

8.3. Scaling

Fill Screen / Fill To Aspect Ratio (Common)

Procedure Menu > ▼ ▼ ▼ (Scaling) > Menu >Menu (Fill Screen)
Menu > ▼ ▼ ▼ (Scaling) > Menu > Menu (Fill To Aspect Ratio)

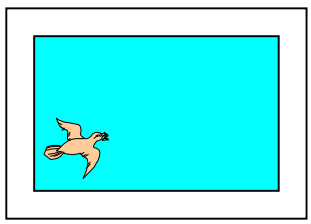
Fill Screen	Maximize the image
Fill to Aspect Ratio	Picture aspect ratio to 4 : 3

Zoom (Common)

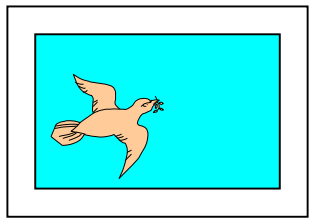
Procedure Menu > ▼ ▼ ▼ (Scaling) > Menu > Menu > ▼ ▼ ▼(Zoom)

Function Magnify the image size to x64

▼ Zoom out



▲ Zoom in



8.4. Control

Capture Frame (Common)

Procedure Menu > ▼ ▼ ▼ ▼ (Control) > Menu >Menu (Capture Frame)

Function User captures moving picture.

Reset to Factory Default (Common)

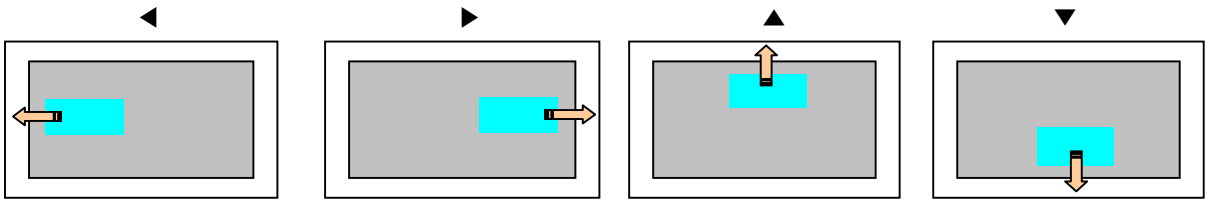
Procedure Menu > ▼ ▼ ▼ ▼ (Control) > Menu > ▼ >Menu (Reset to Factory Default)

Function User setting becomes invalid, and return to factory default setting.

OSD Position (Common)

Procedure Menu > ▼ ▼ ▼ ▼ (Control) > Menu > ▼ ▼ >Menu (OSD Position)

Function Moves the OSD window location



OSD Background Mode (Common)

Procedure Menu > ▼ ▼ ▼ ▼ (Control) > Menu > ▼ ▼ ▼ >Menu (OSD Background Mode)

Function Changes the background color of OSD window. (Translucent / Opaque)

9. Troubleshooting

Warning

Please do not open the XEN-1810E, because it may cause electric shock to the customer. Also, XENON's warranty program may not support the damages, which user causes. When problem persists in spite of trying the following troubleshooting advice, please contact dealer or XENON's repair center listed in the back side of this manual.

Trouble and countermeasure

LED doesn't lit / No image

Check if the display is in power saving mode.
Check if the display is switched on or the power cable is properly connected.

Image is unstable (Flicker, Interference, Noise, etc.)

Check if signal cable is secured
Check if frame (vertical) frequency of video signal is lower than 75Hz because this monitor can not run over 75Hz. In this case, please change the setting of 'Display Control Panel' of Windows to 60Hz, that displays the best performance.

Dull image

Adjust the Frequency or Phase.
Adjust the frame (vertical) frequency to 60Hz.
Remove any video signal distributor.

Dark or saturated image

Adjust the Brightness or Contrast.

10. Specifications

Model	XEN-1810E
Display	
Type	18.1” Color Active Matrix TFT LCD
Color	16.7Million (8bit/color)
Pitch	0.28 x 0.28 mm
Module size	359.0(H) x 287.2(V) mm
Back light	4 CCFLs
Resolution (max.)	1280 x 1024 pixels
Contrast ratio	250
Brightness	200 cd/m^2
Video	
Sync frequency	Vertical: 56 ~ 75Hz
	Horizontal: 31 ~ 80KHz
Input signal	Analog RGB 0.714 V_{P-P}, 15 Pin D-sub type
Viewing angle	Up/Down: 70º / 70º
	Right/Left: 70º / 70º
Compatibility	
Plug & Play VESA DDC 1/2B	
Compatibility	VESA / IBM / MAC
Power Management	VESA Standard, DPMS
Operating Conditions	
Power Consumption	Operating: 55 watt max.
	Stand-by: 4.8 watt max.
Temperature	Operating: 0 ºC ~ 40 ºC
	Storage: -20 ºC ~ 60 ºC
Humidity	Operating: 10% ~ 85% R.H.
	Non-Operating: 90% R.H. Max.
User control	
OSD	Source select / Menu / Volume / Channel / etc
Mechanical	
Tilt	Up: 25 º / Down: 5 º
Size	450 (W) x 440 (H) x 204 (D) mm, Net
	550 (W) x 600 (H) x 300 (D) mm, Gross
Weight	TBD
Option	USB / SVHS / Video (AV) / TV / Speaker / Mic. / Swivel 340 º

11. VIDEO MODE SUPPORT

The modes are detected when presented to the input and previous alignments for setup are automatically recalled. A true multi-sync monitor emulation is implemented.

The factory preset supported modes include:

Mode*1	Resolution	Refresh rate	H-freq.	Pixel freq.	Remarks*1
VGA	640 x 350	70Hz	31.47KHz	25.175MHz	VESA Standard
VGA	720 x 400	59.940HZ	31.469KHZ	25.175MHZ	IBM VGA 3H
VGA	640 x 480	60Hz	31.5KHz	25.175MHz	Industry Standard
VGA	640 x 480	72Hz	37.9KHz	31.500MHz	VESA Standard
VGA	640 x 480	75HZ	37.5KHZ	31.500MHZ	VESA Standard
SVGA	800 x 600	60Hz	37.9KHz	40.000MHz	VESA Guidelines
SVGA	800 x 600	72Hz	48.1KHz	50.000MHz	VESA Standard
SVGA	800 x 600	75HZ	46.9KHZ	49.500MHZ	VESA Standard
XGA	1024 x 768	60Hz	48.4KHz	65.000MHz	VESA Guidelines
XGA	1024 x 768	70Hz	56.5KHz	75.000MHz	VESA Standard
XGA	1024 x 768	75HZ	60KHZ	78.750MHZ	VESA Standard
SXGA	1280 x 1024	60Hz	64.0KHz	108.000MHz	VESA Standard
SXGA	1280 x 1024	75HZ	80KHZ	135.000MHZ	VESA Standard

Notes:

1. All mentioned modes are non-interlaced. The maximum and minimum frame rates are determined by the TFTLCD.
2. Factory preset modes are overwritten by additional user alignments for automatic recall. At all times it remains possible to recall the initial factory presets.

WARRANTY CARD

Product	XEN-1810E
S/N:	
Warranty Period	2 year
Purchase Date	
Customer	
Seller	

XENON Telecommunications Co., Ltd. or seller warrants that XEN-1810E, if properly installed and used, will be free from defects in material and workmanship, and will substantially conform to XENON Telecommunications' publicly available specification for a period of two (2) year after the purchase date whether purchased separately or as a part of computer system.

If XEN-1810E fails during the warranty period for reasons covered by this warranty program, XENON Telecommunications or seller will repair defective XEN-1700E by means of hardware and/or firmware.
XENON Telecommunications or seller will replace defective XEN-1810E with same product, if it is unable to repair.