NACO190D **TFT LCD MONITOR**

USER'S MANUAL





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.

Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules

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0. Connection To the Monitor



1. Installation

- Connect the signal(VGA) cable to the VGA port of computer. Tighten the two thumbscrews by turning clockwise.
- NACO190D will provide DVI cable for the customer in retail package.
- You can adjust the connection for your PC environment.
- Plug the DC cord of the AC adapter to the power connector and the plug the end of AC adapter to and electrical outlet socket(110V/220V)
- Connect DC cord of adapter (12V DC) to the monitor...

2. Features

- NACO190/D is 19" SXGA LCD monitor and support up to 75Hz.
- You can adjust brightness, contrast, horizontal & vertical positions by OSD menus and use auto adjust function for instant adjustment.
- High-qualified LCD Controller inside
- Compact space saving design and power saving mode
- 100% compatible with Windows PC environment without the installation of driver CD or software program.

3. Plug and Play Function

NACO 190D can be installed and connected automatically to any computer systems without driver CD or software programs. Monitor will recognize the optimized value of video mode by DDC(Display Data Channel) method that makes the graphic card of computer to communicate with the monitor. NACO 190D supports VESA DDC 1/2B.

4. Safety Precautions

We strongly recommend that you carefully read this User's Manual before operating your LCD monitor. FOLLOW INSTRUCTIONS in this manual.

Please read and comprehend all using directives before use this machine.

Power

- Use the type of power indicated on the marking label.
 Adapter
- Only use an adapter designed of the LCD monitor.
 Plugs
- Do not remove any of the prongs of the monitor's three-pronged power plug.
- Disconnect the power plug from the AC outlet if you will not use it for an indefinite period of time Power and extension cords
- Use the proper power cord with ground conductor
- Do not overload wall outlets or power cords. Ensure that the total of all units plugged into the wall outlet does not exceed 7 amperes.
- Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

Care and maintenance

Slots and openings in the cabinet are provided for ventilation. Do not block or cover these openings.

Do not push objects of any kind into cabinet slots or openings. The screen surface is easily scratch d.

Do not use paper towels to clean the display. Avoid touching it with your fingers, pens, or pencil Turn off the AC adapter and the monitor over long periods when not in use.

5. Contents Of the Retail Package





VGA Cable

Power cord

DVI Cable

6. OSD (On-Screen-Menu)



Buttons	Function	Status	Hot key
Power	Turns the power ON or Off	ON/OFF	
LED	Indicate working Status	Blue (ON) / Flashing(OFF)	
UP	Launches OSD Menu or Add values	Moves to OSD Menu	Adjust Contrast
DOWN	Launches OSD Menu or down values	Moves to OSD Menu	Adjust Brightness
ENTER	Selects OSD Menu		
MENU	ON / OFF OSD menu		
Auto	Auto adjustment		

7. OSD Controls

7.1 Color





7.2 PICTURE

s 🛱 t f 💷 % 🅎						
PICTURE						
	H.Position					
Ē	V.Position					
4∼	Sharpness					
// :	Phase					
	Clock					
320	Exit					
	1280 x 1024 60Hz					

$\mathsf{MENU} \rightarrow \textcircled{\texttt{Select PICTURE}} \rightarrow \mathsf{UP} \, / \, \mathsf{DOWN} \, \mathsf{KEY}$

- 1) I Adjust Horizontal Position
- 2) 📺 Adjust Vertical Postion
- 3) 📐 Adjust Sharpness
- 4) 🕅 Adjust Phase
- 5) IIII Optimizing Image and eliminates Noise

7.3 FUNCTION



7.4 OSD MENU



$\mathsf{MENU} \rightarrow \fbox{P} \mathsf{PSelect FUNCTION} \rightarrow \mathsf{UP} \ / \ \mathsf{DOWN} \ \mathsf{KEY}$

- 1) I Runs Auto-Adjust Function for optimizing
- 2) 🗾 Automatically adjusts screen position
- Automatically adjusts phase
- 4) Automatically adjusts image and eliminates noise
- 5) 🕥 Automatically adjusts color status

 $\mathsf{MENU} \rightarrow \fbox{\texttt{MENU}} \mathsf{Select} \mathsf{OSD} \mathsf{MENU} \rightarrow \mathsf{UP} \mathsf{/} \mathsf{DOWN} \mathsf{KEY}$

- 1) 🕎 Select Language
- 2) III Adjust OSD Horizontal Postion
- 3) Adjust OSD Vertical Postion
- 4) 🔛 Select OSD Auto Timer
- 5) AA Select transparent status of OSD menu

7.5 MISCELLANEOUS





3) (1) Go to Factory Setting

8. Troubleshooting

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The monitor does not respond after you turn on the system.

Make sure that the monitor is turned on. Turn off the power and check the monitor's power cord, AC adapter, and signal cable for proper connection.

Appear the " No Input the Signal"

Check the connecting of the audio cable between the monitor and the computer.

Appear the "Input Not the Supported"

Input signal are insuperable, refer the "Video Modes"

The appearance is not at the screen center.

Use "AUTO ADJUST" or manually adjust "PHASE" and "CLOCK", refer the Controls section.

The characters on the screen are too dim or too bright

Choose fit color temperature, use "AUTO COLOUR ADJUST or manually adjust "RGB ADJUSTMENT, refer the Controls section.

Interference appear at the view of "CLOSE WINDOWS"

Use the "AUTO ADJUST" or manually adjust the values of "PHASE" and "CLOCK", refer the Controls section. Check the resolutin status is not up to 75Hz and adjust it by 60Hz and then you can get the optimized images by using Clock and Phase functions

9. Specifications

Model

19 inch SXGA TFTLCD Monitor

19" Color Active Matrix TFT LCD

Dispaly

Type Color Pixel Screen Size Resolution (Max) Contrast Ratio Brightness

Video

Frequency

Horizontal: 56 ~ 75KHz Vertical: 31.5 ~ 80Hz

16.7M Color

500:1

250 cd/m²

0.294 x 0.294 mm

376.3 (H) x 301.1 (V) mm 1280 x 1024 at 60 to 75Hz

Compatibility

Plug and Play	VESA DDC 1/2B
Compatibility	VESA / IBM / MAC
Power	VESA Standard, DPMS

Operation Environment

Power Consumption

Temperature

Humidity

Operation Mode: 35 watt max. Stand-by: 4 watt max. Operation Mode : 0 °C ~ 40 °C Stand-by: -20 °C ~ 60 °C Operatjion Mode: 10% ~ 85% R.H. Stand-by: 90% R.H. Max.

User's Mode

OSD Key

Auto / Menu / Down / Up / Enter / Power

Dimension & Weight

Dimension	Retail Box: 507 (W) x 227 (D) x 530 (H) mm
Weight	7.1kg(Net) / 9.4kg(gross)

10. Video Mode

" Below values are set by Manufacturer

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 x1024	60Hz	64KHZ	108MHZ	VESA Standard
SXGA	1280 x1024	75HZ	80KHZ	135MHZ	VESA Standard