NUVICO®

PREMIUM SECURITY
LCD Monitor

LP-17 / LP-19

INSTALLATION MANUAL

FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT

NOTE : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial 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 A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS CANADIEN

Cet appareil numérique de la Class A 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) 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
- EN61000-3-2 (IEC555-2) - Power Line Harmonics

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

CONTENTS

INTRODUCTION

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

First, please check that the contents of the box corresponds with the following checklist :

- TFT LCD Monitor
- Power Cord
- RCA Cable
- 15 Pin Signal Cable
- Installation Manual
- AC Adapter
- Remote Controller

If any item is missing or damaged, please contact your distributor Please keep the box and packing materials so that you may properly store or transport your monitor.

PRODUCT FEATURES

- 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.

REMOTE CONTROL

R1 POWER

· Turns the set on from stand-by or odd to Stand-by mode.

R2 INPUT SOURCE

· Select the signal source from the multiple input sources.

R3 MUTE

· Turns the sound on and off

R4 NUMBER Button

· Unavailable.

R5 LAST CH

· Unavailable.

R6 INFORMATION

· Information display.

R7 PICT Mode

· Recalls your preferred picture settings.

R8 SLEEP

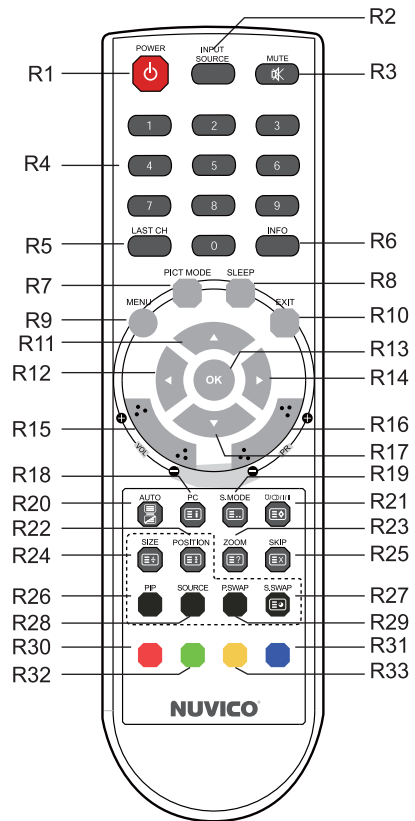· Sets the sleep timer.

R9 MENU

· Display a main menu.

R10 EXIT

· Turns the OSD window off and moves from sub Menu to top menu in the OSD window.

R11 / R17 UP/DOWN ▲ / ▼ Button

· Adjust the main or camera menu setting.

R12 / 14 LEFT/RIGHT ◄ / ► Button

· Adjust the main or camera menu setting.

R13 OK

· Select menu items.

R15 VOL +/-

· Adjust the sound level

R16 PR +/-

· Unavailable.

R18 PC

R19 S MODE

· Choose different preset sound mode or your owncustomized sound.

R20 AUTO

· Choose automatically the proper horizontal Position andvertical position & size of the screen image.

R21 ▢/◫/I/II

· Unavailable.

R22 POSITION

· Select the position of PIP display.

R23 ZOOM

· Select the ZOOM or FULL mode.

R24 SIZE

· Select the size of PIP display.

R25 SKIP

· Unavailable.

R26 PIP

· Activate or cancel the PIP function.

R27 S. SWAP

· Change the sound source of the main or sub display.

R28 SOURCE

· Select the signal source of the sub display.

R29 P. SWAP

· Change the picture of the main or sub display.

R30, R31,R32,R33

· Unavailable.

Inserting batteries into the Remote Control unit

To load the batteries turn the remote control handset over and open the battery compartment. Insert the batteries (2x 1.5v type R03 or AAA). Make sure that the polarity matches with the (+) and (-) marks inside of the battery compartment.

Note : To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.

SETUP

◈ CONNECTING THE 15 PIN SIGNAL CABLE AND POWER CORD

① Turn off the DVR and monitor.

② Connect the 15 pin signal cable to the appropriate VGA port located at the back of your DVR and the security monitor panel.

③ Connect the DVI cable to the appropriate DVI port located at the back of your DVR and the security monitor panel. (Optional)

④ Connect the audio cable to the audio output port located at the back of your DVR. (Optional)

⑤ Plug the DC jack into the DC in port located on the back of the monitor.

⑥ Plug the power cord into the AC receptacle of the Adapter.

⑦ Plug the other end of the power cord into the AC outlet.

Power Cord

Audio Cable (Optional)   DVI Cable (Optional)

15 Pin Signal Cable(Optional)
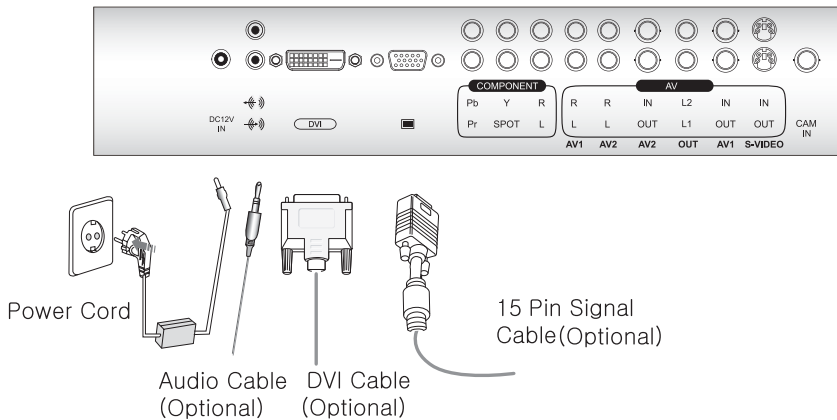
◈ CONNECTING THE OTHERS
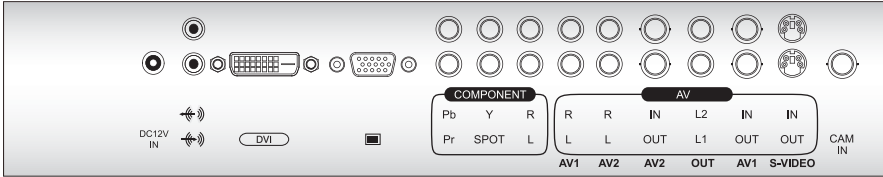
DC12V IN	DC input
◄(»)	Line in
◄(»)	Line out
DVI	DVI-D input
▣	Analog signal input (15 pin)
COMPONENT	Component input
AV1	AV input 1 (stereo), AV output 1 (Mono)
AV2	AV input 2 (stereo), AV output 2 (Mono)
S-VIDEO	S-Video input/output
CAM IN	Camera input

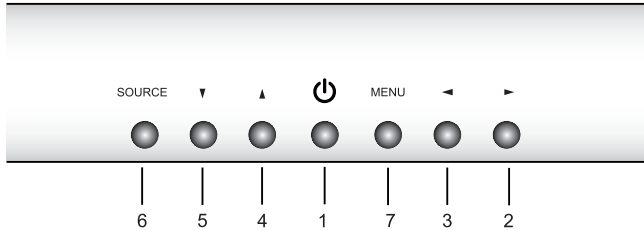| NOTICE	Audio input for video source Video source should be mached as below • Audio 1 : AV1, S-video, CAM IN • Audio 2 : AV2

OPERATION & ADJUSTMENT

◈ CONTROL PANEL

SOURCE ▼ ▲ ⏻ MENU ◄ ►

6   5   4   1   7   3   2

1 **POWER**

Switches the monitor on
and off.

2 **Right Arrow - Volume**

Primary Function: Used to
INCREASE the volume.
Secondary Function: Allows for
Horizontal scrolling in the OSD
Main Menu, and to INCREASE
the value of the selected sub-
menu function.

3 **Left Arrow - Volume**

Primary Function: Used to
DECREASE the volume.
Secondary Function: Allows for
Horizontal scrolling in the OSD
Main Menu, and to DECREASE
the value of the selected sub-
menu function.

4 **Up Arrow - Auto Adjustment**

Primary Function: Automatically
adjusts the display to the most
optimal setting possible.
 Secondary Function: Allows for
 Vertical scrolling in the OSD
Main Menu.

5 **Down Arrow**

 Primary Function: Unavailable
 Secondary Function: Allows
for Vertical scrolling in the
OSD Main Menu.

6 **SOURCE**

Used to select from different input
sources. Press the UP or DOWN
arrow to scroll through the
available sources, and press LEFT
or RIGHT arrow to confirm
selection.

7 **MENU**

Primary Function: Launches
the OSD main menu.
Secondary Function: Used to
exit out of OSD Main menu or
Sub-menu.

◈ KEY PROCESS

< MENU >

① Press MENU to launch the OSD(On-Screen Display) Main Menu.

② Use LEFT or RIGHT arrow to scroll horizontally, and UP or DOWN arrow to scroll vertically through the available functions and options.

③ Make the desired adjustment using the LEFT or RIGHT arrows, then press MENU to exit out of current menu.

④ Press MENU again to confirm all changes and to exit out completely.

< SOURCE >

① Press SOURCE to launch the OSD(On-Screen Display) Menu.

② Use UP or DOWN arrow to scroll vertically through the available input sources.

③ Press LEFT or RIGHT arrow to confirm selection.

◈ ADJUSTMENT PROCEDURE

< PC Mode >

```
┌─────────────────────┐
│  Perform the Auto   │
│      tracking       │
└─────────────────────┘
           │
           ▼
      Is the H.SIZE proper? ──No──▶ Adjust the CLOCK control.
           │                                │
          Yes                               ▼
           │                        Perform the AUTO POSITION.
           ▼
   Is the noise displayed on
        the screen? ──No──▶ End
           │
          Yes
           ▼
   Adjust the CLOCK FINE
   until the screen is
        cleared.
           │
           ▼
   Is the noise displayed on
      the screen yet? ──▶ End
           │
          Yes
```


13
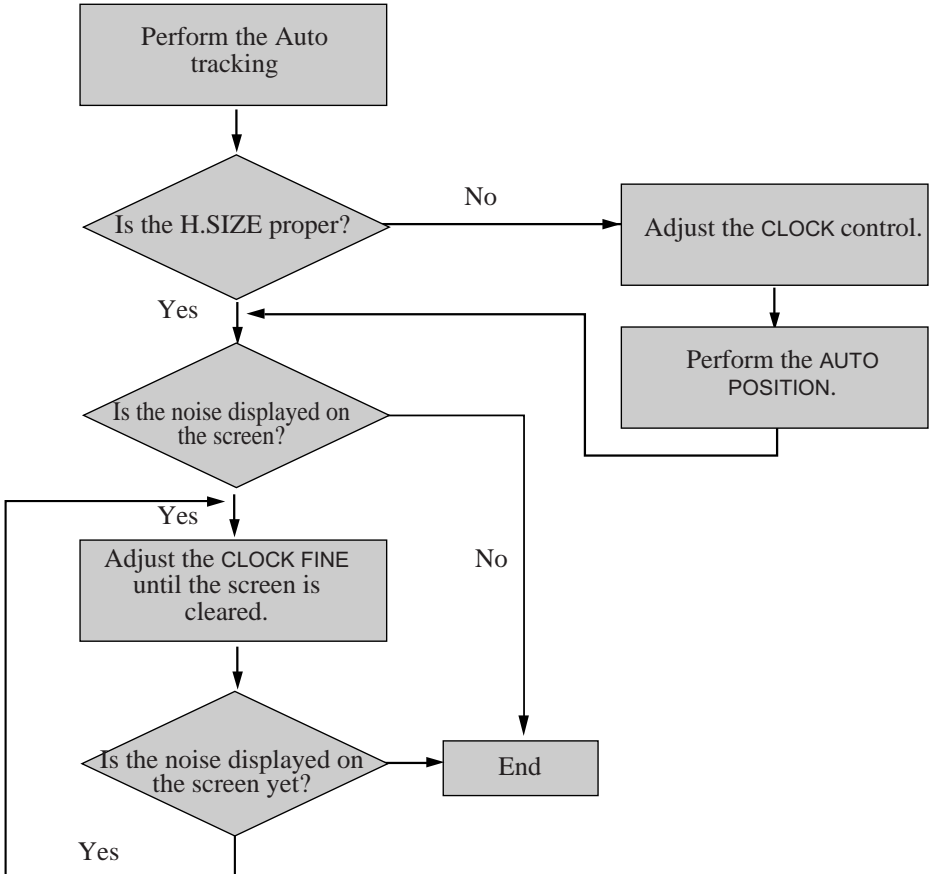
OSD FUNCTION

## ◈ PC/DVI Mode OSD Menu

P   C

1. Contrast
   Adjust the contrast of image, the difference
   between light and dark areas on the screen.
2. Brightness
   Adjust the brightness of image.
3. Color Mode
   Choose different preset color temperatures or set
   your own customized color parameters.
   (Normal/Warm/Cool/User)
4. Scale
   This function is currently unavailable for this
   model.
5. Auto
   Choose automatically the proper horizontal Position and
   vertical position & size of the screen image.
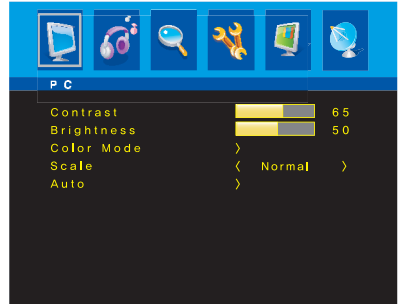
S o u n d

1. Bass
   When you select the user mode, adjust the bass
   sound.
2. Treble
   When you select the user mode, adjust the treble
   sound.
3. Balance
   Adjust the sound balance of the left and right
   speakers.
4. MTS
   This function is currently unavailable for this
   model.
5. Sound Mode
   Choose different preset sound mode or your own customized
   sound.(Standard/Movie/Music/User)

G e o m e t r y

1. H-Position
   Adjust the position of the display horizontally
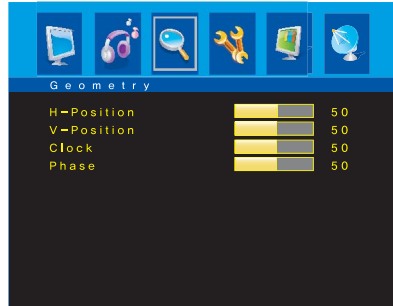   (left or right).
2. V-Position
   Adjust the position of the display vertically
   (up or down).
3. Clock
   Adjust the width (horizontal size) of the Screen
   image.
4. Phase
   Remove any horizontal noise and clear or sharpen
   the image of characters.

Geometry		
H−Position		50
V−Position		50
Clock		50
Phase		50

S y s t e m

1. Sleep Timer
   Select time to turn off the monitor.
   (Off/15/30/45/60 Minutes)
2. Language
   Select language for OSD.
3. OSD H-Position
   Adjust the OSD position of the
   display horizontally (left or right).
4. OSD V-Position
   Adjust the OSD position of the
   display vertically (up or down).
5. OSD Timeout
   Adjust the display OSD Menu.
   (5~60 Second)
6. OSD Transparency
   Adjust the OSD. Transparency
7. Information
   Display horizontally and vertically frequency of monitor.
8. Memory Recall
   Reset the screen to the Factory Preset Display Settings.
9. Light Sensitivity
   If the sensed light level is below the set level, the monitor is turned off.
   Choices range from "Low" (for darker environments) to "High" (for brighter environments).
   Default is "Off".
10. Camera Menu
   This function is currently unavailable for this model.

System		
Sleep Timer	< Off >	
Language	< English >	
OSD H−Position		50
OSD V−Position		50
OSD Timeout		60
OSD Transparency		60
Information	>	
Memory Recall	>	
Light Sensitivity	< Middle >	
Camera Menu	< Off >	

P I P

1. Multi Window
   Activate or cancel the PIP function.
2. Sub Source
   Select the input source the PIP screen.
3. Size
   Select the PIP display size.
   (Small/Middle/Large/Double 1/Double 2)
4. Position
   Adjust the PIP display position.
   (R-Up/R-Down/L-Down/L-Up)
5. Border Color
   Select the border color of the PIP display.
   (Black/Blue)
6. Sound Swap
   Select the sound source.
   (Main/Sub)
7. Picture Swap
   Change the main picture and the sub pictures of the PIP.

PIP		
Multi Window	<	PIP >
Sub Source	<	PC >
Size	<	Large >
Position	<	R-Up >
Border Color	<	Black >
Sound Swap	<	Main >
Picture Swap	>	

Sequence

1. AV Program
   The default setting is set to 'OFF' This function is currently unavailable for this model.

Sequence

AV Program	< OFF	>
Interval		8
AV 1	< ON	>
AV 2	< OFF	>
Internal Camera	< OFF	>
SVIDEO	< ON	>
Main Source	< PC	>
Screen Format	< DOUBLE2	>
Restart	<	

◈ AV1/AV2/SVIDEO/COMPONENT Mode OSD Menu

P i c t u r e

1. Contrast
   Adjust the contrast of image, the difference
   between light and dark areas on the screen.
2. Brightness
   Adjust the brightness of image.
3. Tint
   Adjust the tint of image.
4. Color
   Adjust color of image.
5. Sharpness
   Adjust the display image quality
   (if the screen proceed to scaling up).
6. Color Tone
   Choose different preset color temperatures or set your
   own customized color parameters.
   (Normal/Warm/Cool)
7. Picture Mode
   Select the picture mode.
   (Standard/Movie/Dynamic/User)
8. Screen Format
   Select the aspect ratio.

S o u n d

1. Bass
   When you select the user mode, adjust the bass
   sound.
2. Treble
   When you select the user mode, adjust the treble
   sound.
3. Balance
   Adjust the sound balance of the left and right
   speakers.
4. MTS
   This function is currently unavailable for this
   model.
5. Sound Mode
   Choose different preset sound mode or your own customized
   sound.(Standard/Movie/Music/User)

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F u n c t i o n

1. 3D NR.

    Reduce the noise in the picture due to poor
   reception or poor picture quality.
    (Off/Low/Middle/High)

2. MADi

   Generation advanced color engine automatic
   picture enhancement gives.
    (2D/3D)

3. H-Size

   Adjust the width (horizontal size) of the Screen
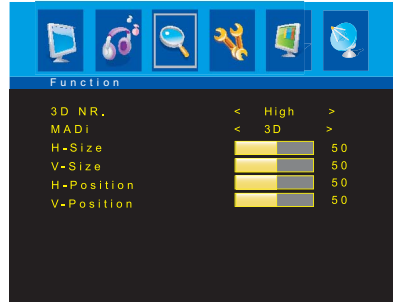   image.

4. V-Size

   Adjust the height (vertical size) of the Screen image.

5. H-Position

    Adjust the position of the display horizontally (left or right).

6. V-Position

    Adjust the position of the display vertically (up or down)

System

1. Sleep Timer
   Select time to turn off the monitor.
   (Off/15/30/45/60 Minutes)
2. Language
   Select language for OSD.
3. OSD H-Position
   Adjust the OSD position of the
   display horizontally (left or right).
4. OSD V-Position
   Adjust the OSD position of the
   display vertically (up or down).
5. OSD Timeout
   Adjust the display OSD Menu.
   (5~60 Second)
6. OSD Transparency
   Adjust the OSD. Transparency
7. Information
   Display horizontally and vertically frequency of monitor.
8. Memory Recall
   Reset the screen to the Factory Preset Display Settings.
9. Light Sensitivity
   If the sensed light level is below the set level, the monitor is turned off.
   Choices range from "Low" (for darker environments) to "High" (for brighter environments).
   Default is "Off".
10. Camera Menu
    This function is currently unavailable for this model.
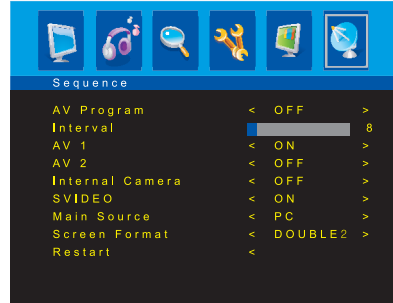
P I P

1. Multi Window
   Activate or cancel the PIP function.
2. Sub Source
   Select the input source the PIP screen.
   * Refer to PIP table.(page 22)
3. Size
   Select the PIP display size
   (Small/Middle/Large/Double 1/Double 2)
4. Position
   Adjust the PIP display position.
   (R-Up/R-Down/L-Down/L-Up)
5. Border Color
   Select the border color of the PIP display.
   (Black/Blue)
6. Sound Swap
   Select the sound source.
   (Main/Sub)
7. Picture Swap
   Change the main picture and the sub pictures of the PIP.

P I P

Multi Window	<	PIP	>
Sub Source	<	PC	>
Size	<	Large	>
Position	<	R-Up	>
Border Color	<	Black	>
Sound Swap	<	Main	>
Picture Swap	>		

Sequence

1. AV Program
   The default setting is set to 'OFF' This function is currently unavailable for this model

```
Sequence
AV Program          <   OFF      >
Interval                          8
AV 1                <   ON       >
AV 2                <   OFF      >
Internal Camera     <   OFF      >
SVIDEO              <   ON       >
Main Source         <   PC       >
Screen Format       <   DOUBLE2  >
Restart             <
```

◈ PIP TABLE

		MAIN			
		D-SUB	DVI	AV*	COMPONENT
S	D-SUB	-	X	◎	X
U	DVI	X	-	◎	X
B	AV	◎	◎	-	◎
	COMPONENT	X	X	◎	-

◎ : Supported
X : Non Supported
AV* : AV1,AV2,CAM IN,SVIDEO

◈ 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
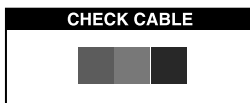is No Signal, Out of range or None support.

NO SIGNAL

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

OUT OF RANGE

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

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

SPECIFICATIONS

SPECIFICATIONS		LP-17	LP-19
Panel	Size	17.0 inch	19.0 inch
	Pixel Pitch	0.264mm ×0.264 mm	0.294mm ×0.294 mm
	Resolution	1280 × 1024	
	Viewing Angel	160°(H) / 160°(V)	
	Contrast Ratio	1000:1	
Picture	Response Time	5ms	
	3D Comb Filter	Yes	
	Video Format	NTSC/PAL (Auto Detect)	
Interface	VGA In	1	
	DVI In	1	
	Composite In/Out(BNC)	2/2	
	Spot Out (RCA)	1	
	S-Video In/Out	1/1	
	Component In	1	
	Audio In/Out	2/2	
GENERAL		LP-17	LP-19
Housing Type		Metal	
Rack Mount Kits		Optional	
Dimensions(W × D ×H)		373mm ×73mm ×385mm	411mm ×74mm ×377mm
Weight		6.5Kg	6.85Kg
Input Power		DC 12V, 3.33A	

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.	Check if power switch and computer power switch are in the on position. ↓ Check if the signal cable is correctly connected to the video card. ↓ Check if the pins of D subconnector are not bent. ↓ Check if the computer is in the power- saving mode.
POWER LED is not lit.	Check if power switch is in the on position. ↓ Check if the power cord is correctly connected.
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.	Keep the devices that may cause electrical interference away from the monitor. ↓ See the FCC information at the front cover of the manual.
Picture is blurred.	Adjust Contrast and Brightness.

Symptom	
Low sound.	Adjust the volume on the OSD Menu.
	Adjust the volume of the sound card in the computer.
VIDEO screen cannot be seen.	Check if VIDEO mode has been set.
	Check if the video terminal is properly connected.
No video.	Check if the video cable is correctly connected to the computer and set to the video mode.
Poor color in the video.	Adjust the Saturation or Hue on the OSD Menu in the video mode.
Grainy picture in the video.	Adjust the Sharpness on the OSD Menu in the video mode.

NUVICO®

Tel: 201-541-1605 Fax: 201-541-1620
Toll Free: 866-523-1700
E-mail: techsupport@nuvico.com
www.nuvico.com

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