

USER MANUAL

1U LCD Keyboard Drawer 17", 19" Screen Size



Model

NVP700 / 900 Series

- Use of a true optical mouse
- 1U 17", 19" screen size



Model

NVP1617 / 1619 Series

- 1U 17", 19" screen size
- Desktop size Keyboard

Contents

Chapter 1	Getting Started	
	1.1	Important Safeguards.....1
	1.2	Regulatory Notice.....2
	1.3	Package Contents.....3-4
	1.4	Before Installation.....5
	1.5	Unpacking.....5
	1.6	Optional Accessories.....5
	1.7	Peripheral Products.....6
	1.8	Structure Diagram.....7
	1.9	How to Install "One Man" Installation Slides.....8-9
	1.10	How to Use the Slides.....10
	1.14	NVP700 / 900 (Single console) - Use NE-6 to connect to server via PS/2 interface.....11
	1.15	NVP700 / 900 (Single console) - Use NE-6 to connect to KVM via PS/2 interface.....11
	1.16	NVP700 / 900 (Single console) - Use NE-6 to connect to server via USB interface.....12
	1.17	NVP700 / 900 (Single console) - Use NE-6 to connect to KVM via USB interface.....12
Chapter 2	Operation	
	2.1	On-screen Display Operation.....13
	2.2	On-screen Menu.....14
Chapter 3	Standard Specification	
	3.1	Specifications.....15
	3.2	Keyboard & Mouse.....16

Contents

Chapter 4	Optional Specification	
	4.1 KVM Options.....	17
	4.2 DVI-D Input Option.....	17
	4.3 BNC + S-Video Option.....	17
	4.4 Audio Option.....	18
	4.5 Touchscreen Options.....	19
	4.6 DC power Options.....	19
Chapter 5	Troubleshooting	20
Chapter 6	Dimensions	21

1.1 Important Safeguards

Chapter 1

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
 - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - Repair or attempted repair by anyone not authorized by us.
 - Any damage of the product due to shipment.
 - Removal or installation of the product.
 - Causes external to the product, such as electric power fluctuation or failure.
 - Use of supplies or parts not meeting our specifications.
 - Normal wear and tear.
 - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.



1.2 Regulatory Notice

Chapter 1

Legal Information

First English printing, October 2002

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

Safety Instructions

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40° Celsius (104° Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the drawer is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labeled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

Regulatory Notices Federal Communications Commission (FCC)

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.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. 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.

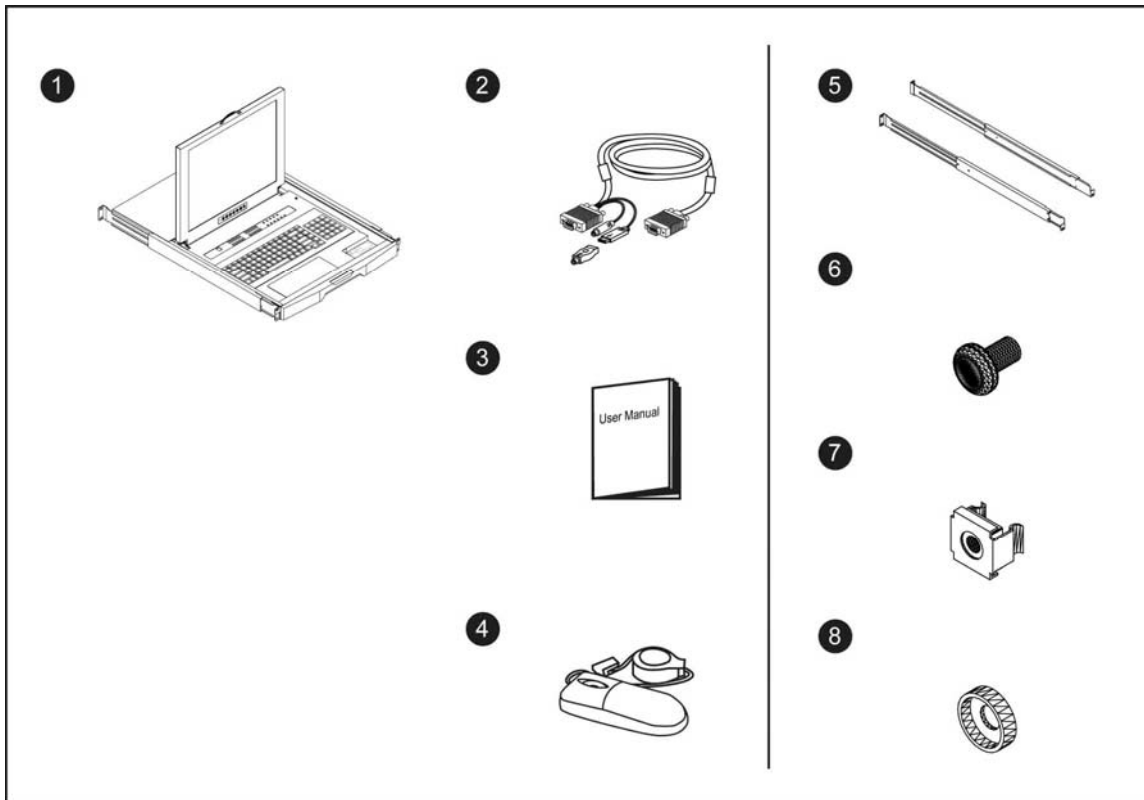
However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a85 circuit different from that to which the receiver is connected.

1.3 Package Contents

Chapter 1

For NVP700 / 900 Series

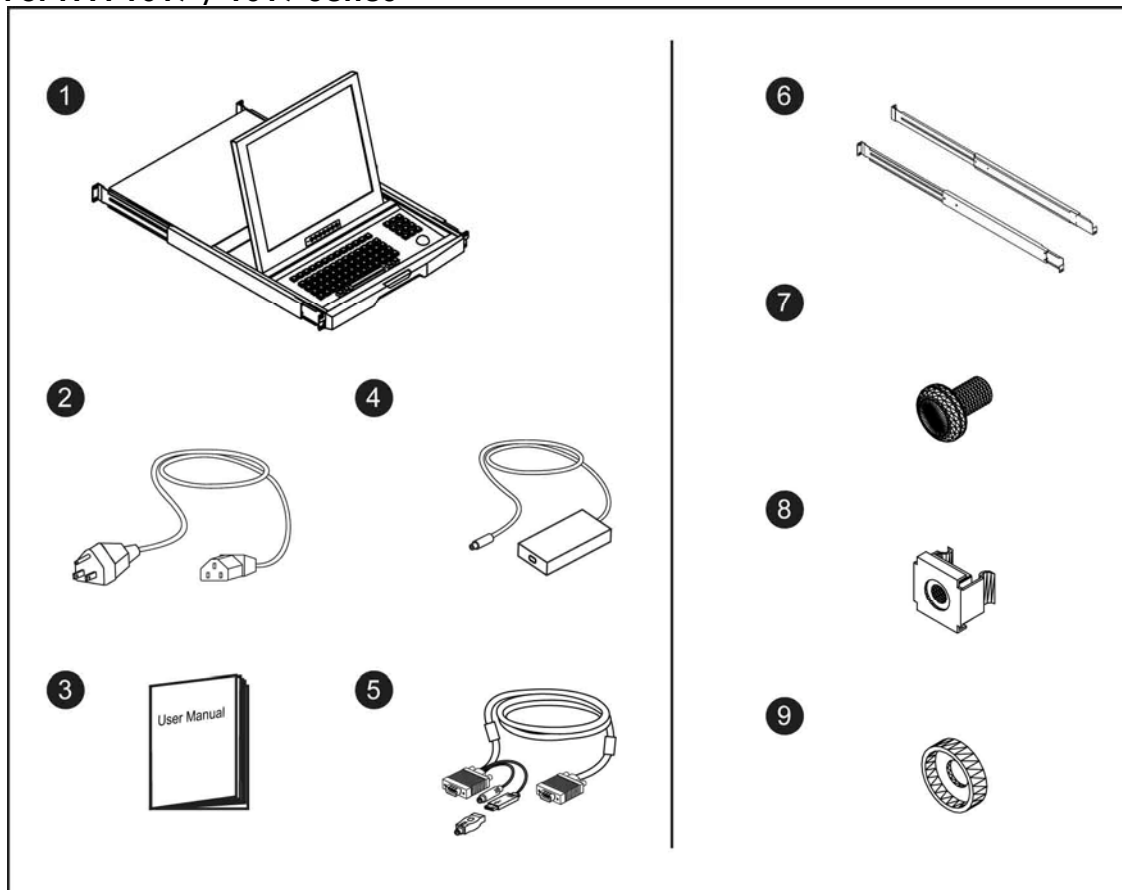


- 1 LCD keyboard drawer x 1 pc
- 2 **NE-6** Combo 4-in-1 KVM cable x 1 pc
- 3 User manual x 1 pc
- 4 **WOM-01** Mini USB optical mouse x 1 pc
- 5 Mounting bracket x 2 pcs
- 6 M6*15mm screw x 8 pcs
- 7 M6 cage nut x 8 pcs
- 8 Cup washer x 8 pcs

1.3 Package Contents

Chapter 1

For NVP1617 / 1619 Series



- 1 LCD keyboard drawer x 1 pc
- 2 Power cord x 1 pc
- 3 User manual x 1pc
- 4 Auto switch power adapter x 1pc
- 5 **NE-6** Combo 4-in-1 KVM cable x 1 pc
- 6 Mounting bracket x 2 pcs
- 7 M6*15mm screw x 8 pcs
- 8 M6 cage nut x 8 pcs
- 9 Cup washer x 8 pcs

1.4 Before Installation

Chapter 1

- It is very important to locate the LCD Keyboard Drawer in a suitable environment.
- The surface for placing and fixing the LCD Keyboard Drawer should be stable and level or mounted into a suitable cabinet.
- Make sure the place has good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.
- Position LCD Keyboard Drawer with respect to related facilities.

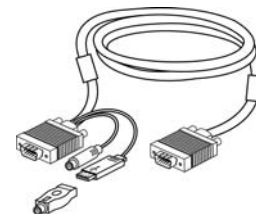
1.5 Unpacking

The LCD keyboard drawer comes with the standard parts shown on the package contents. Check and make sure they are included and in good condition. If anything is missing, or damage, contact the supplier immediately.

1.6 Optional Accessories

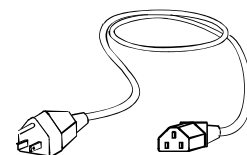
1. Combo 4-in-1 KVM cable

- 1.1 NE-6 6 feet
- 1.2 NE-10 10 feet
- 1.3 NE-15 15 feet



3. Power Cord

- 3.1 IEC power cord
- 3.2 NEMA 5-15 power cord (US)
- 3.3 BS 1363 power cord (UK)
- 3.4 CEE 7/4 power cord (German)
- 3.5 AS 3112 power cord (Australia)



3. Wireless USB optical mouse

- 3.1 WOM-02



Remarks:

- WOM-02 is for NVP700 / 900 series only.

1.7 Peripheral Products

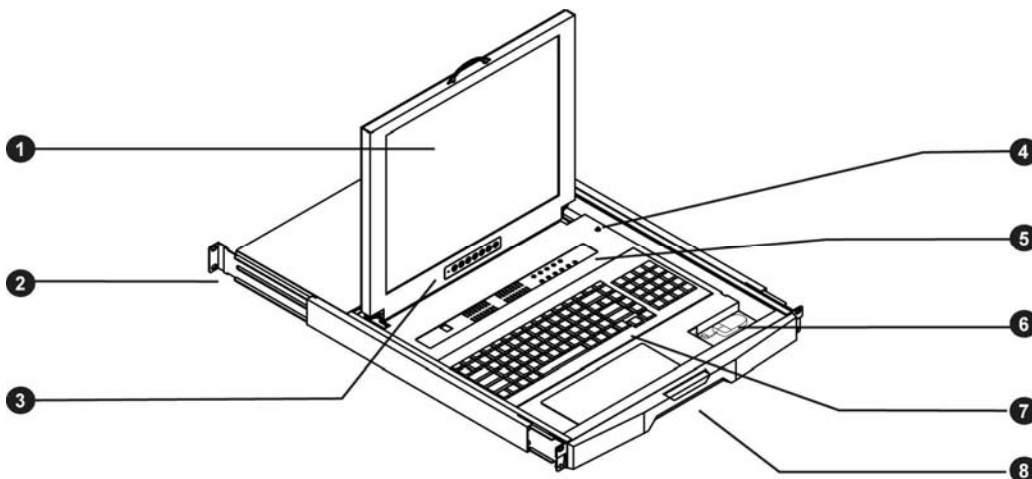
Chapter 1

Item	Model No.	Description
Matrix Cat6 KVM	MC0116 / MC0216 / MC0316 MC1116 / MC1216 / MC2116 MC0132 / MC0232 / MC0332 MC1132 / MC1232 / MC2132	Matrix Cat6 16 port KVM Matrix IP Cat6 16 port KVM Matrix Cat6 32 port KVM Matrix IP Cat6 32 port KVM
Matrix DB-15 KVM	M018/ M028 / M038 M118 / M128 / M218 M0116 / M0216 / M0316 M1116 / M1216/ M2116	Matrix DB-15 8 port KVM Matrix IP DB-15 8 port KVM Matrix DB-15 16 port KVM Matrix IP DB-15 16 port KVM
Combo Cat6 KVM	NVC800 / NVCCE800 / NVCIP800 NVC1600 / NVCCE1600 / NVCIP1600 NVC3200/ NVCCE3200 / NVCIP3200	Combo Cat6 8 port KVM Combo Cat6 16 port KVM Combo Cat6 32 port KVM
Combo DB-15 KVM	NVS801 / NVCE800 / NVIP-802 NVS1601 / NVCE1600 / NVIP-1602	Combo DB-15 8 port KVM Combo DB-15 16 port KVM
PS/2 DB-15 KVM	NV401A / NV801A / NV1601A	4 / 8 / 16 port PS/2 DB-15 KVM

1.8 Structure Diagram

Chapter 1

For NVP700 / 900 Series



1 LCD interchangeable module kit

2 "One Man" Installation Slides

3 LCD membrane

4 Microswitch

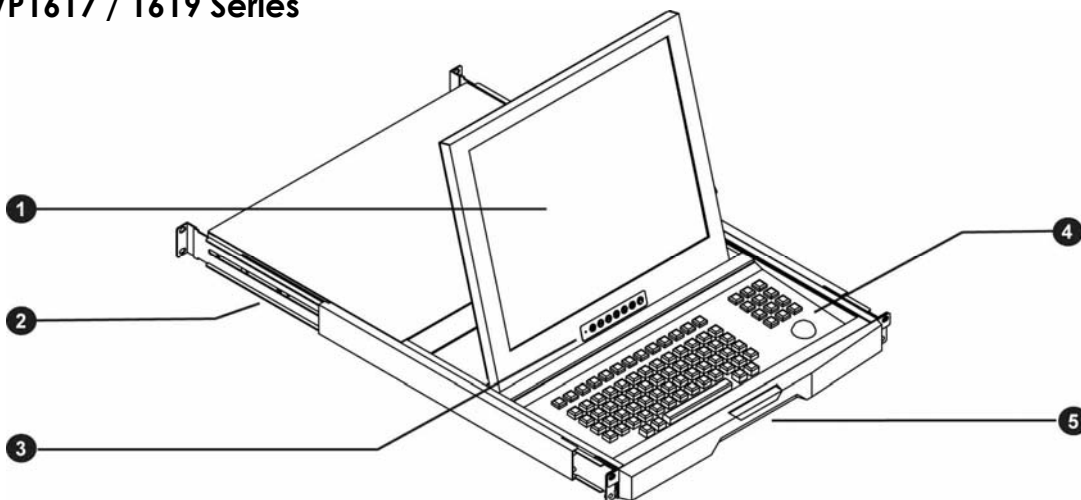
5 Membrane switch (KVM option)

6 Mini USB optical mouse

7 104 key notepad keyboard with full numerical pad

8 Carry handle to release the 2-pt lock

For NVP1617 / 1619 Series



1 LCD interchangeable module kit

2 "One Man" Installation Slides

3 LCD membrane

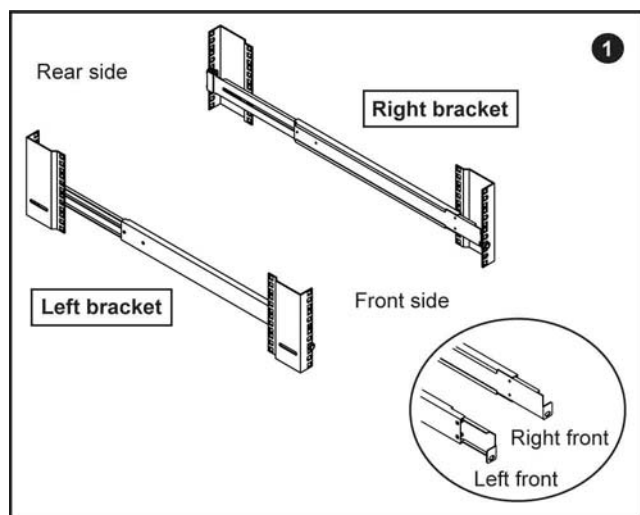
4 Full "Unix style" keyboard with numerical pad

5 Carry handle to release the 2-pt lock

1.9 How to Install "One Man" Installation Slides

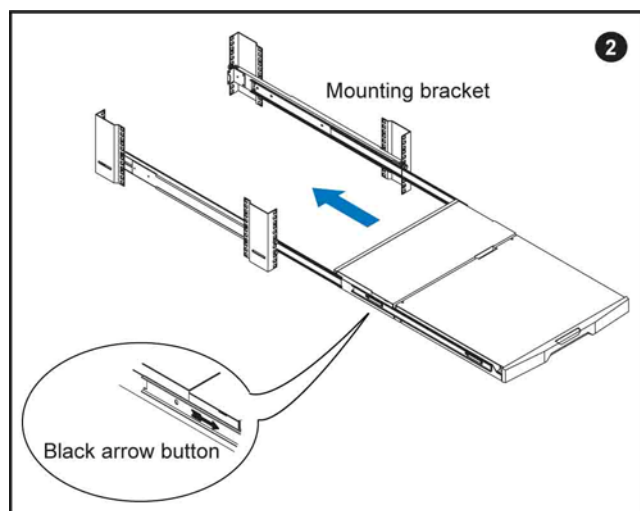
Chapter 1

Install into rack



- Attach the left and right mounting bracket to rack 19" mounting rails.
- Adjust the rear mounting bracket to fit your rack.
- M6 screw and cup washer x 6 pcs included.

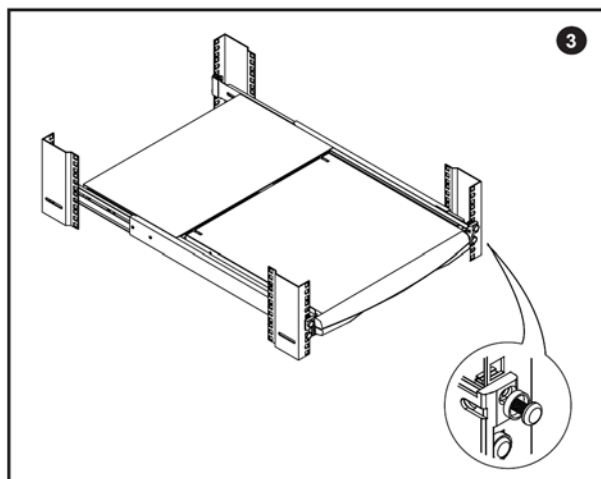
Caution: Leaving the screws slightly loose, until you complete the installation in step **4**



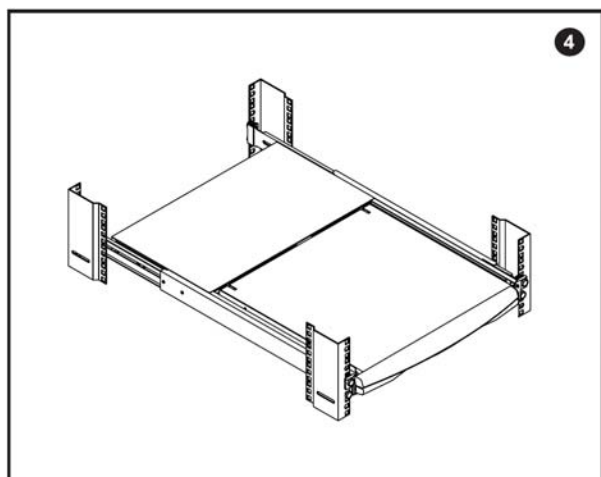
- Pick up the LCD keyboard drawer.
- Insert the LCD keyboard drawer into the mounting bracket.
- Pull and hold the left & right black arrow buttons on the rails.
- Return the LCD keyboard drawer to park position.

1.9 How to Install "One Man" Installation Slides

Chapter 1



- Attach front left and right mounting ears of the LCD keyboard drawer to vertical mounting rails.
- M6 screw and cup washer x 2 pcs included.



Complete the installation

- Tighten all 8 pcs of M6 screw to complete the installation.

1.10 How to Use the Slides

Chapter 1

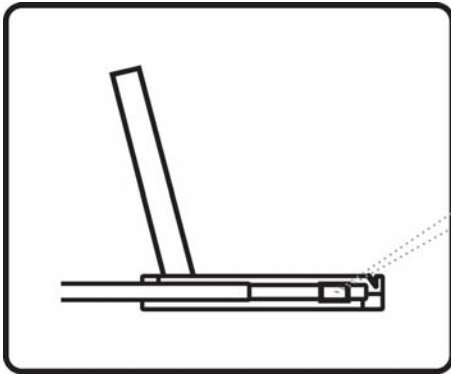


Figure 1

- A black arrow release button is located on the outside of each slide. (shown in **Figure 1**).

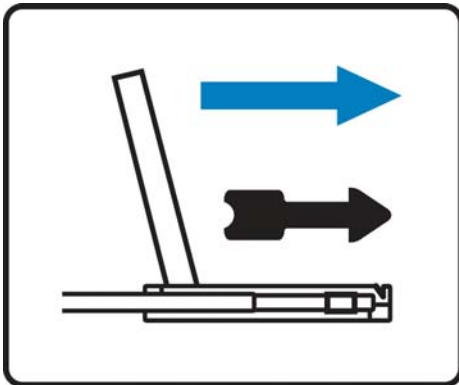


Figure 2

- Pull and hold the black arrow button on either side of the LCD keyboard drawer to unlock. (shown in **Figure 2**).

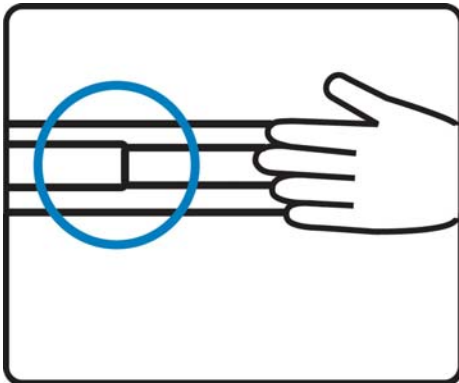


Figure 3

- Push the LCD keyboard drawer into the rack. (shown in **Figure 3**).



Caution : Keep your fingers away from the slide top

1.11 NVP700 / 900 (Single console)

Chapter 1

- Use NE-6 to connect to server via PS/2 interface

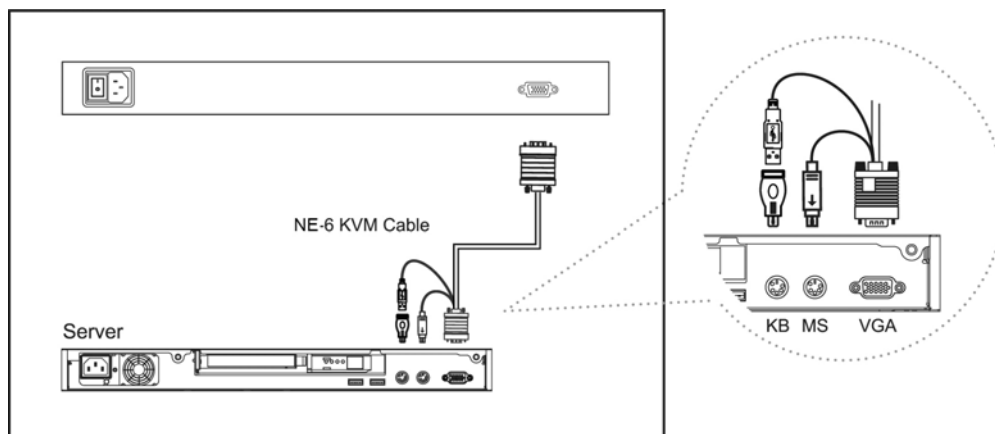


Figure 4. Example of connecting NE-6 4-in-1 Combo KVM cable to server via PS/2 interface

1.12 NVP700 / 900 (Single console)

- Use NE-6 to connect to KVM via PS/2 interface

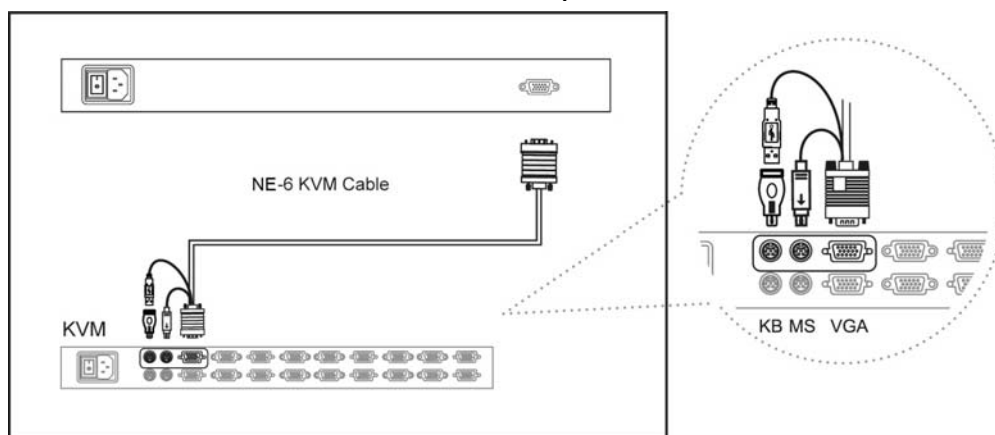


Figure 5. Example of connecting NE-6 4-in-1 Combo KVM cable to KVM via PS/2 interface

Remarks:

- NVP1617 / 1619 series are external power versions only.
- The above connection is only for the LCD keyboard without KVM switch built-in.
- For the LCD keyboard drawer with KVM switch built-in, please refer to attached KVM switch user manual.



Caution: The LCD keyboard drawer is hot-pluggable, but components of connected devices, such as the servers and KVM switch, may not be hot-pluggable. Plugging and unplugging cables while servers and KVM are powered on may cause irreversible damage to the servers, KVM and LCD keyboard drawer. Before attempting to connect anything to the LCD keyboard drawer, we suggest turning off the power to all devices before connecting them. Apply power to connected devices again only after the LCD keyboard is receiving power. The company is not responsible for damage caused in this way.

1.13 NVP700 / 900 Series (Single console)

- Use NE-6 to connect to server via USB interface

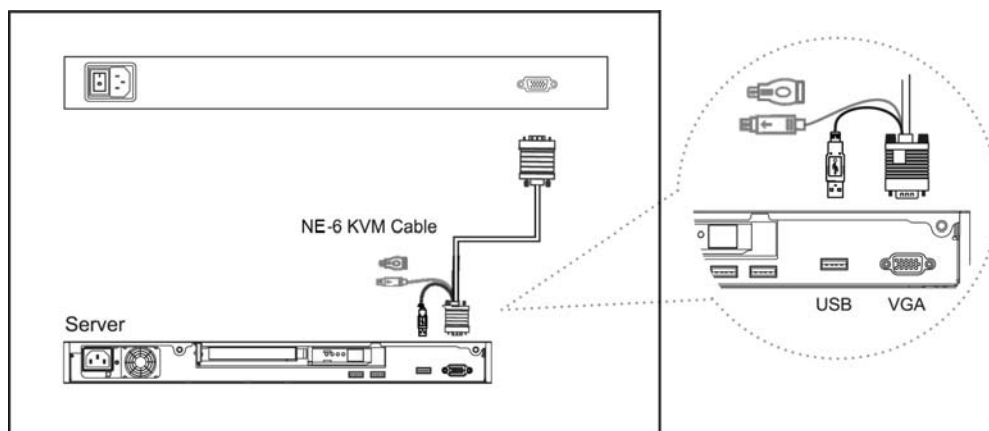


Figure 6. Example of connecting NE-6 4-in-1 Combo KVM cable to server via USB interface

1.14 NVP700 / 900 Series (Single console)

- Use NE-6 to connect to KVM via USB interface

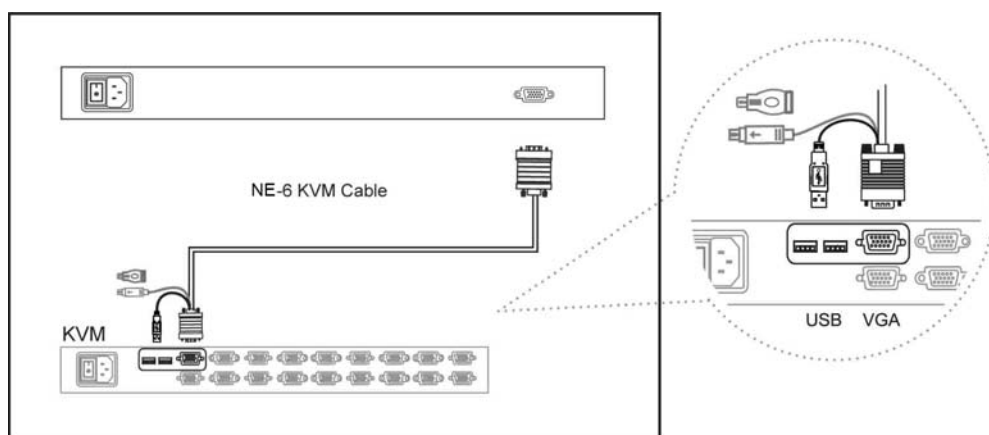


Figure 7. Example of connecting NE-6 4-in-1 Combo KVM cable to KVM via USB interface

Remarks:

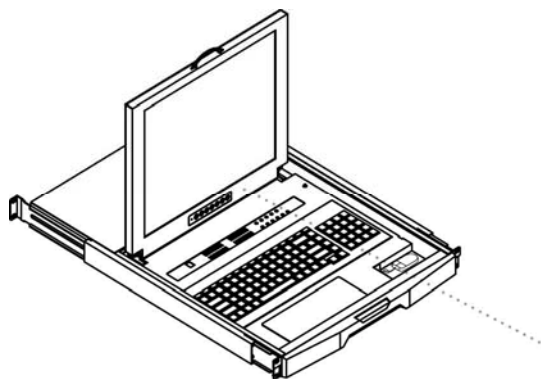
- NVP1617 / 1619 series are external power versions only.
- The above connection is only for the LCD keyboard without KVM switch built-in.
- For the LCD keyboard drawer with KVM switch built-in, please refer to attached KVM switch user manual.



Caution: The LCD keyboard drawer is hot-pluggable, but components of connected devices, such as the servers and KVM switch, may not be hot-pluggable. Plugging and unplugging cables while servers and KVM are powered on may cause irreversible damage to the servers, KVM and LCD keyboard drawer. Before attempting to connect anything to the LCD keyboard drawer, we suggest turning off the power to all devices before connecting them. Apply power to connected devices again only after the LCD keyboard is receiving power. The company is not responsible for damage caused in this way.

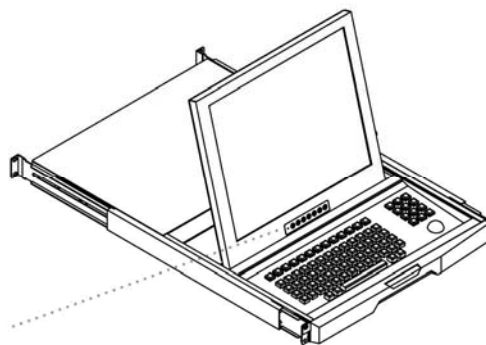
2.1 On-screen Display Operation

Chapter 2









NVP700 / 900

LCD membrane

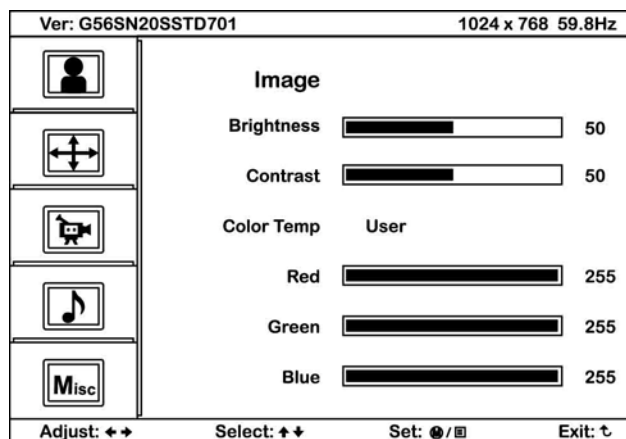


NVP1617 / 1619

Membrane Switch	Function
	Power light Green = On Orange = Power saving
	Power on / off LCD
	Display the OSD menu
	Scrolls through menu options and adjusts the displayed control (To auto adjustment by pressing the button  for 5 seconds)
	Exit the OSD screen Toggle analog, digital & video connection (DVI-D and video options only)

2.2 On-screen Menu

Chapter 2




OSD Configuration Page

	<p>Image: To enter into the brightness, contrast, colour temp, red, green, and blue</p>
	<p>Geometry: To enter into the auto adjust, H position, V position, phase and clock</p>
	<p>Video: To enter into the colour, tint, sharpness, noise reduction, DCDi and TV Setup</p>
	<p>Audio: To enter into volume, bass, treble, balance, AVL and mute</p>
	<p>Misc: To enter into the language, OSD position, graphic mode, OSD time, ratio, reset and timer</p>

3.1 Specifications

Chapter 3

Item	Description			
Form Factor	1U rack mounting on slide-out rails			
LCD Manufacturer				-
Series	NVP700	NVP900	NVP1617	NVP1619
Diagonal Size	17" TFT	19" TFT	17" TFT	19" TFT
Max. Resolution	1280 x 1024	1280 x 1024	1280 x 1024	1280 x 1024
Brightness (cd/m ²)	300	300	300	300
Color Support	16.7 M	16.7 M	16.7 M	16.7 M
Contrast Ratio (typ.)	1000:1	1000:1	1000:1	1000:1
Viewing Angle (H/V)	160° x 160°	160° x 160°	160° x 160°	160° x 160°
Display Area (mm)	338 x 270	376 x 301	338 x 270	376 x 301
Tr Response Time (ms)	1.3	1.3	1.3	1.3
LCD Panel MTBF (hrs)	50,000	50,000	50,000	50,000
VGA Signal Input	Analog RGB, 0.7Vp-p			
Sync. Type	Separate H/V, Composite, SOG			
Resolution	720 x 400, 70 Hz			
	640 x 480, 60 / 70 / 72 / 75 Hz			
	800 x 600, 60 / 70 / 72 / 75 Hz			
	1024 x 768, 60 / 70 / 75 Hz			
	1152 x 864, 60 / 70 / 75 Hz			
	1280 x 720, 60 / 70 / 75 Hz			
	1280 x 1024, 60 / 70 / 72 / 75 Hz			
Plug & Play DDC	EDID 1.3			
Console Port (Combo)	DB-15 connector for VGA / keyboard / mouse (Combo interface)			
Power Input	Auto-sensing 100 to 240VAC, 50 / 60Hz			
Power Consumption	Max. 48 Watt, Standby 5 Watt			
Compatibility	Multi-platform - Mix PCs, SUNs, IBMs, HPs & DELLs.			
Regulation Approval	FCC, CE			

Options

KVM Integration	Matrix & combo KVM with IP console and 2-console selection	-
Keyboard & mouse	Full size keyboard built-in touch-pad / trackball	Desk top size keyboard with touchpad / trackball
Graphic Input	DVI-D, S-Video & BNC input	
DC Power	DC power input with 12V, 24V, 48V selection	
Touchscreen	Resistive & capacitive	

Environmental

Operation	0° to 50°C Degree
Storage	-5° to 60°C Degree
Relative Humidity	5~90%, non-condensing
Shock	10G acceleration (11ms duration)
Vibration	5~500Hz 1G RMS random vibration

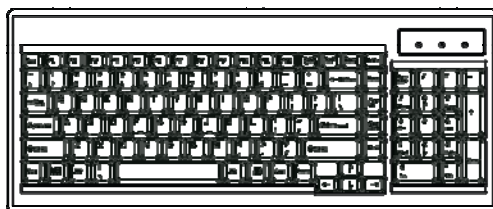
3.2 Keyboard & Mouse

Chapter 3

For NVP700 / 900 series

- Standard : **WOM-01** Wire mini USB optical mouse
- Optional : **WOM-02** Wireless optical mouse
- Multiple keyboard language selections

Supporting layouts



"e" Keyboard

Options:



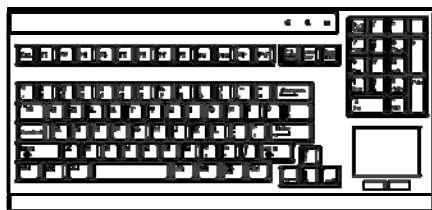
WOM-01
Wire mini USB optical mouse



WOM-02
Wireless USB optical mouse

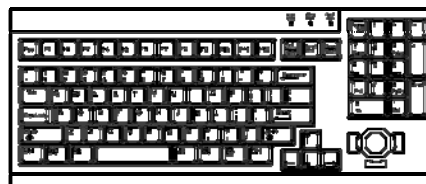
For NVP1617 / 1619 series

Supporting layouts  only



† Compact keyboard integrated with touch-pad mouse

Supporting layouts  only



d Compact keyboard integrated with trackball

4.1 KVM Options

Chapter 4

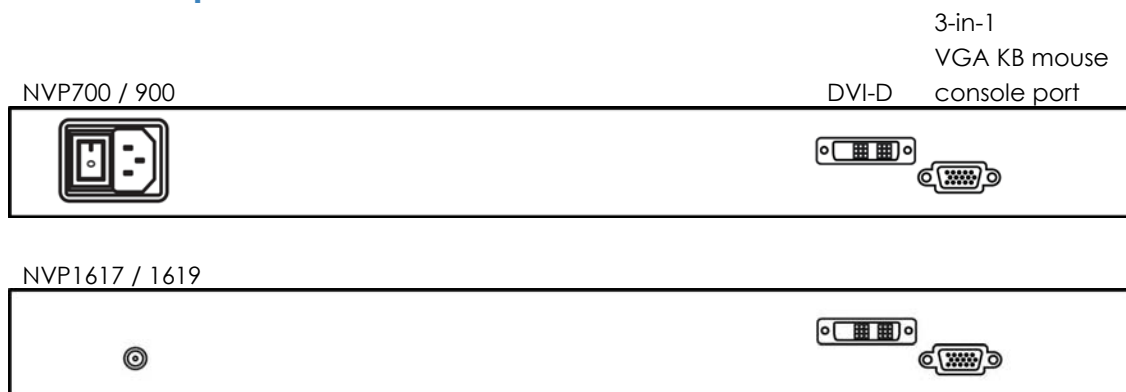
Our KVM is designed to seamlessly integrate into the rear of our full range of LCD drawer solutions:

- For KVM operation, please refer to "Integrated LCD KVM Switch" user manual
- Option with Multiple consoles Matrix KVM
- Option with high density & cost efficient Combo KVM integration with either 8 / 16 / 32 ports
- Option with low cost PS/2 KVM
- Please ask your supplier for full KVM details

Remarks:

- KVM options are for NVP700 / 900 only.

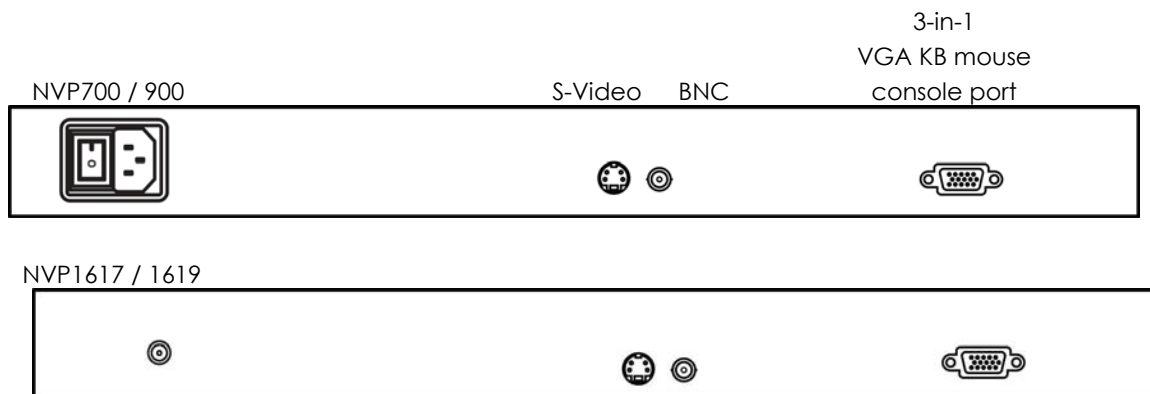
4.2 DVI-D Options



Remarks:

- Package includes 1 x 6ft DVI-D cable
- The depth will be extended from 700mm (27.6") to 750mm (29.5")

4.3 BNC + S-Video Option

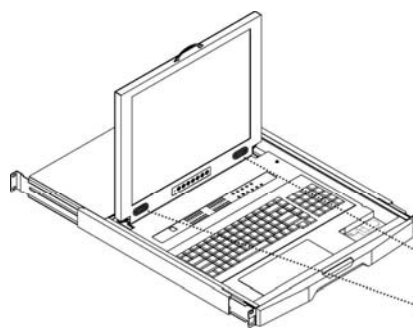


Remarks:

- Package includes 1 x 6ft S-Video cable

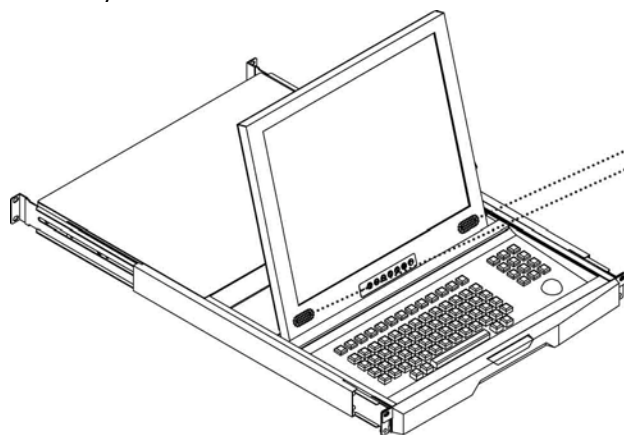
4.4 Audio Options

Chapter 4









NVP700 / 900

Speaker



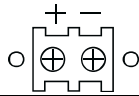
NVP1617 / 1619

	Power	Audio	3-in-1 VGA KB mouse console port
NVP700 / 900			
NVP1617 / 1619			

Remarks:

- Audio input is 35mm audio plug
- The speaker is sharing the same power with LCD

4.5 DC Power Options



Chapter 4

Model	12V	24V	48V
Input rating			
Input voltage:	12-Volt	24-Volt	48-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V
Input current			
- No load	50 mA	50 mA	50 mA
- Full load	4950 mA	2450 mA	1220 mA
Output rating			
Output voltage:	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A
Efficiency	84%	85%	85%

Remarks:

- Package does not include 1 x power cord and 1 x AC power adapter
- The depth of NVP1617 / 1619 series will be extended from 700mm (27.6") to 750mm (29.5")

4.6 Touchscreen Options



e-Resistive

Model	-17TRB / -17TRS	-19TRB / -19TRS
Screen size	17"	19"
Interface	USB / Serial	
Optical transmittance	80%±3%	
Surface hardness	≥3H (JIS K5400)	
Operating system	Windows 98 / 2000 / ME / XP / NT / CE, DOS, Linux	

e-Capacitive

Model	-17TCB / -17TCS	-19TCB / -19TCS
Screen size	17"	19"
Interface	USB / Serial	
Optical transmittance	93%±2%	
Surface hardness	>9H Surface hardness, withstand over 300 million touches	
Operating system	Windows 98 / 2000 / ME / XP / NT / CE, DOS, Linux	

Remarks:

- The height NVP700 / 900 & NVP1617 / 1619 will be increased from 1U to 1.5U
- USB touchscreen package includes 1 x 6ft USB cable, quick reference guideline and CD disc
- Serial touchscreen package includes 1 x 6ft serial cable, quick reference guideline and CD disc
- For detailed information, please refer to the attached CD disc
- As the touchscreen unit is not made of toughened glass, please handle it carefully.
- Touchscreen in other brands are available on request

5.1 Troubleshooting

Chapter 5

1. How do I adjust the resolution?

To change monitor resolution, click Start -> Control Panel -> Display. Select Setting tab to adjust the monitor resolution in Desktop Area. The available resolutions, "640 x 480", "800 x 600", "1024 x 768", "1152 x 864", "1280 x 1024", are determined by the display card in your computer.


2. Is interference signal appeared on LCD normal when shutting down the computer?

In rare cases, interference may appear on the monitor. This may be caused by signal rate of VGA card and is considered normal. The image quality can be improved by adjusting the phase or pixel rate automatically or manually.

3. The membrane power light is not ON

Press the power On / Off on LCD membrane to check if the monitor is in the ON mode.
Check the power cord is properly connected to the LCD keyboard drawer and power outlet.

4. Screen image is not centered or sized properly

Press the  button for two seconds to automatically adjust the image.
Adjust the H-position and V-position settings via On-screen menu.

5. Is the LCD keyboard drawer hot-pluggable?

The LCD keyboard drawer is hot-pluggable, but components of connected devices, such as the servers and KVMs, may not be hot-pluggable. We suggest turning off the power to all devices before connecting them. Apply power to connected devices again only after the LCD keyboard receives power.

6.1 Dimensions

Chapter 6

Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
NVP700 series	442 x 650 x 44 mm 17.4 x 25.6 x 1.73"	589 x 826 x 168 mm 23.2 x 32.5 x 6.6"	17 kg 37 lb	23 kg 51 lb
NVP900 series	442 x 700 x 44 mm 17.4 x 27.6 x 1.73"	589 x 856 x 168 mm 23.2 x 33.7 x 6.6"	18 kg 40 lb	24 kg 53 lb
NVP1617 series	442 x 700 x 44 mm 17.4 x 27.6 x 1.73"	589 x 856 x 168 mm 23.2 x 33.7 x 6.6"	18 kg 40 lb	24 kg 53 lb
NVP1619 series	442 x 700 x 44 mm 17.4 x 27.6 x 1.73"	589 x 856 x 168 mm 23.2 x 33.7 x 6.6"	19 kg 42 lb	25 kg 55 lb

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