# **NV Series User Manual**





USB Hub DB-15 2console KVM
NVCE800H / NVCE1600H



**USB Hub DB-15 KVM** 



NV800H / NV1600H



#### 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

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

- 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 equipment 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.

#### 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:

_	- <b>J</b> - /
	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.

■ Removal, installation, and set-up service charges.

#### Regulatory Notices Federal Communications Commission (FCC)

☐ Any other causes which does not relate to a product defect.

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 a circuit different from that to which the receiver is connected.

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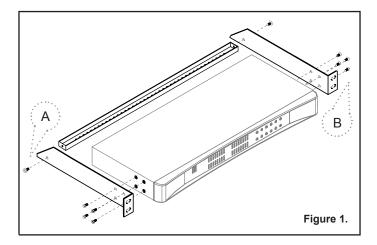
## **Before Installation**

- It is very important to mount the equipment in a suitable cabinet or on a stable surface.
- Make sure the place has a good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

# **Unpacking**

The equipment comes with the standard parts shown in package content. Check and make sure they are included and in good condition. If anything is missing, or damaged, contact the supplier immediately.

## Installation for standalone KVM



Screw A: 2 pcs

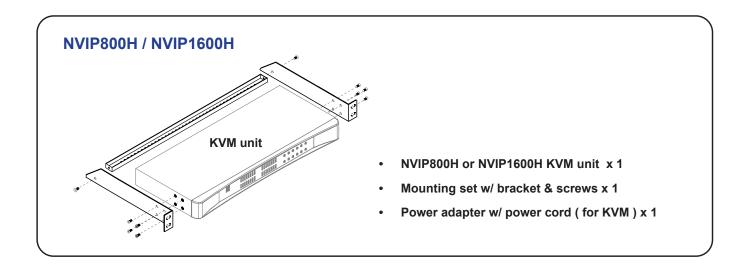
M3.2 x 4.5 mm

Screw B: 8 pcs

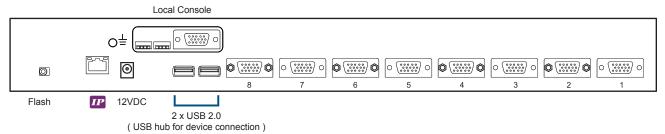
M4 x 10 mm

- Install each bracket using screws provided shown in **Figure 1**.
- Fix the KVM into the rack

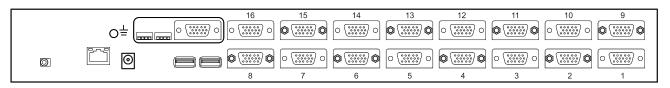




## NVIP800H

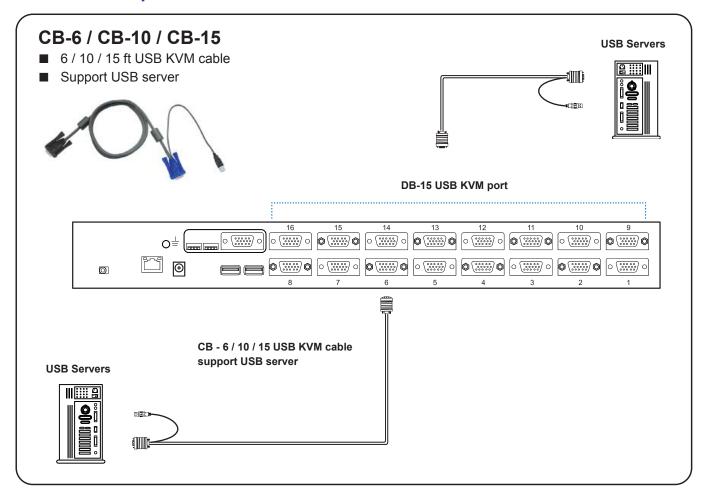


## **NVIP1600H**

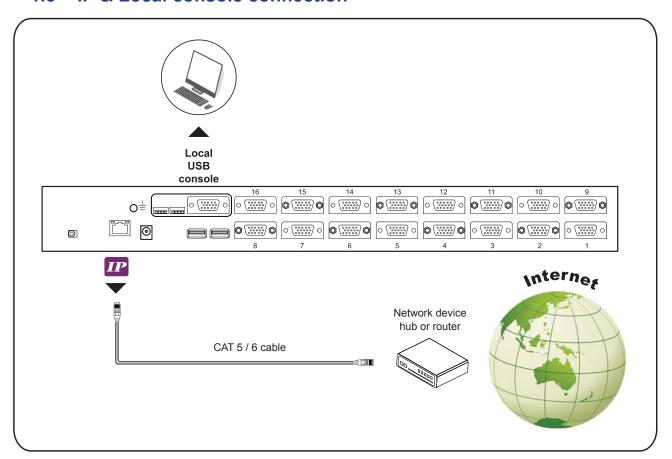




Daisy-chain feature for this model is NOT available.



# < 1.3 > IP & Local console connection



## **IP Console**

Resolution Support	Frequency ( Hz )
1600 x 1200	60
1280 x 1024	60
1024 x 768	60 / 70 / 75

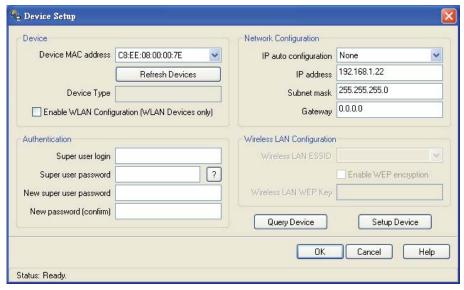
## < 1.4 > IP console setting

After the cable connection, please take the following steps to configure the IP KVM:

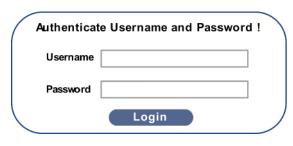
1. Download IPKVMsetup.exe from the link:

www.austin-hughes.com/support/utilities/cyberview/IPKVMsetup.exe

2. Double click IPKVMsetup.exe to configure the IP KVM by device setup as below.



- 3. Click Refresh Device to search the connected IP KVM
- 4. Select the M.A.C. address, which you want to setup, then click Query Device
- 5. Enter Super user login. The default is super
- 6. Enter Super user password. The default is pass
- 7. Enter the new super user password
- 8. Re-enter the new password
- 9. Change the desired IP address / Subnet mask / Gateway, then click Setup Device to confirm the setting to IP KVM
- 10. The default address is as below:--
- The single IP KVM model, such as NVIP1600H http://192.168.1.22
- 11. Open Internet Explorer (I.E.), version 6.0 or above
- 12. Enter the IP KVM address into the address bar
  - For Single IP http://192.168.1.22
- Enter username ( default is super )
   Password ( default is pass )



14. After successful login to IP KVM, the user will enter the main page of IP KVM



The setting is enough for intranet.

If the users access KVM GUI via internet, please ask MIS for assistance and download IP KVM user manual from the link :

www.austin-hughes.com/support/usermanual/cyberview/UM-CV-IP.pdf

## < 1.5 > Important Preconfiguration for IP console

**USB Hub DB-15 IP KVM** 



You must complete the following tasks after the IP console setting is performed.

# (1) TARGET SERVER SETUP \*\*Servers connected to KVM

#### Resolution

The IP KVM remote console recognizes several varieties of video display formats with resolutions up to 1600 x 1200 @60Hz. (Refer to the User Manual for a list of supported video formats). Minimize bandwidth by setting the target server's video resolution to the minimum setting required for your remote monitoring application.

The following video modes are recommended:

- (i) 1024 x 768 @ 60Hz
- (ii) 1280 x 1024 @ 60Hz

On a Windows target server system, select Control Panel > Display > Settings. Modify the screen resolution value as necessary.

#### Mouse

Use generic mouse drivers for optimum mouse control during remote sessions. Set the mouse pointer speed to a middle setting with no acceleration or snap-to effects.

On a Windows target server system, select Control Panel > Mouse > Pointer Options Set the pointer speed to medium and disable Enhanced pointer precision

For Linux GUIs, set the mouse acceleration to exactly 1 and the threshold to exactly 1.



If your keyboard keeps repeating keys when it is plugged into the KVM. Please follow either one below :

#### (a.)

Enable key release timeout if you experience duplicated keystrokes during poor network performance.

- login to IP KVM remote console
- go to Interfaces KVM settings > Keyboard / Mouse
- click the Key Release Timeout
- adjust Timeout after if necessary

#### (b.)

Reduce video bandwidth usage if you experience duplicated keystrokes during poor network

- login to IP KVM remote console
- go to Interfaces KVM Settings > User Console > Transmission Encoding,
- select Manually
- adjust Compression to [ 0-none ] and Color depth to [ 8-bit 256 col ]

## < 1.5 > Important Preconfiguration for IP console

### (2) REMOTE CLIENT COMPUTER SETUP

The remote client computer must have a web browser ( such as Microsoft Internet Explorer, Mozilla Firefox, and Netscape Navigator ) and a Java Virtual Machine ( version 1.4 or higher ) installed. Enable Java on the web browser.



#### **JAVA Update for IP KVM**

Due to the latest update from Java security, customer may face the "JAVA Block" message while accessing the remote console over IP as below:

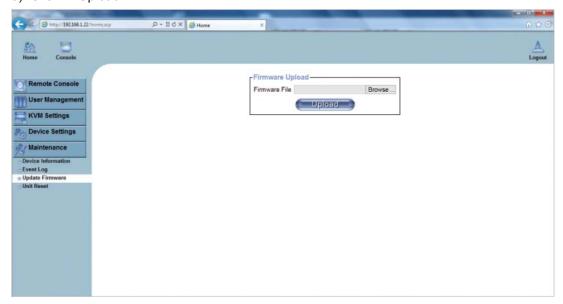


If it said so, please download the latest IP KVM firmware ( version aust-i11-150608 ) from the link below : http://www.austin-hughes.com/resources/software/kvm-switch

Then follow the attached steps to update the firmware.

#### **Firmware Update Steps**

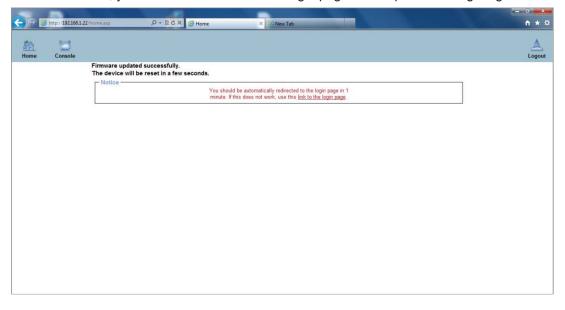
- 1) Download the latest IP KVM firmware (version aust-i11-150608) from the link http://www.austin-hughes.com/resources/software/kvm-switch
- 2) Login the IP KVM
- 3) Click < Update Firmware >
- 4) Click < Browse > to select the firmware file
- 5) Click < Upload >



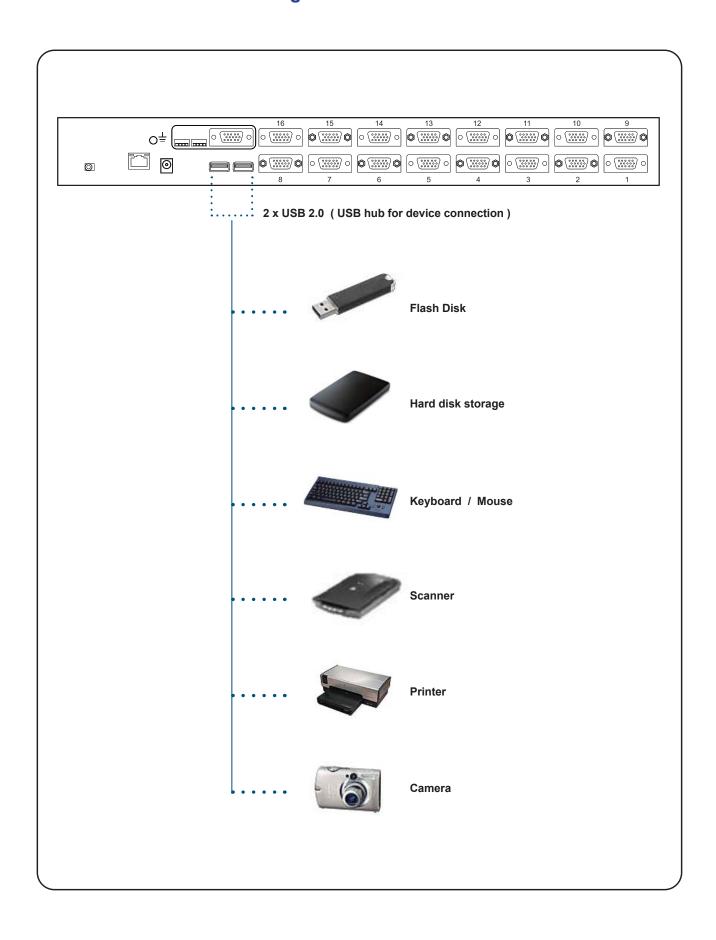
## 6) Click < Update >



After the firmware has been updated, IP KVM will reset automatically. After one minute, you will be redirected to the Login page and requested to login again.

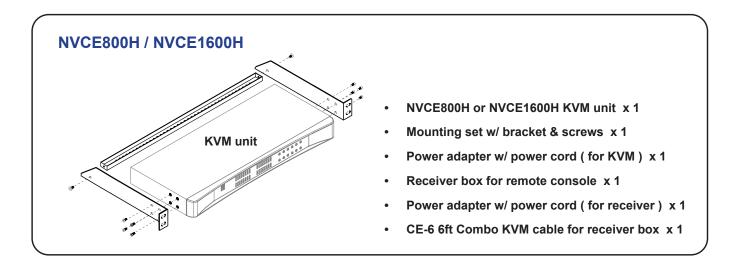


- Completed

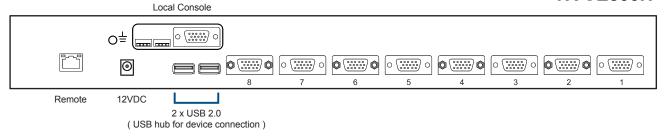


# < 1.7 > Specifications

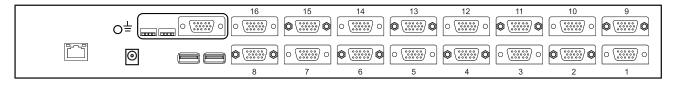
	NVIP800H I	NVIP1600H		
■ KVM Port				
Number of ports :	8 or 16			
Connector:	DB-15 combo connector	DB-15 combo connector		
Connectivity:	Combo 2-in-1 VGA + USB	KVM cable, 6, 10 or 15 feet		
■ Local Console				
Graphic connector:	1 x DB-15			
Input device :	2 x USB type A for keyboar	rd & mouse		
USB hub :	2 x USB type A for sharing	other peripheral devices among the computers		
Resolution support :	4:3 - max. 1600 x 1200,	16:10 - max. 1920 x 1200		
■ IP Remote Console				
Connector:	RJ45 Ethernet			
User management :	15-user login, 1 x active us	ser		
Network protocol:	DHCP / BOOTP / DNS			
Security:	SSL v3, RSA, AES, HTTP			
Browser:	IE, Firefox, Safari, Netscap	pe		
Resolution support :	4:3 - max. 1600 x 1200			
Compatibility				
Hardware :	HP / IBM / Dell PC, Se SUN / Mac	-,		
OS Support :	Windows / Linux / Unix			
■ Power				
Input :	Auto sensing 100 to 240VA	Auto sensing 100 to 240VAC, 50 / 60 Hz		
Option DC:	12V / 24V / 48V / 125V DC	input		
Consumption :	Max. 18W			
■ Regulatory				
Safety :	FCC & CE certified			
Environment :	RoHS2 & REACH complia	nt		
■ Environmental	Operating	Storage / Non-operating		
Temperature :	0 to 55°C degree	-20 to 60°C degree		
Humidity:	20~90%, non-condensing	5~90%, non-condensing		
Altitude :	16,000 ft	40,000 ft		
Shock:	-	10G acceleration (11ms duration)		
Vibration :	-	5~500Hz 1G RMS random		
■ Product Information	□ Product Information			
Dimension (W x D x H):	443 x 171 x 44 mm / 17.4 x 6.7 x 1.73 inch 3 kg / 6.5 lb			
Net weight :				
■ Packing Information				
Dimension (W x D x H):	500 x 400 x 90 mm / 19.7 x 15.7 x 3.5 inch			
Gross weight :	5 kg / 11 lb			



#### NVCE800H

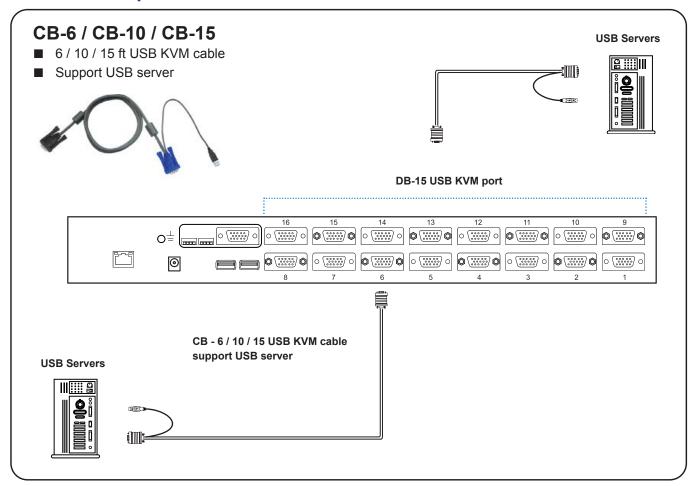


#### NVCE1600H



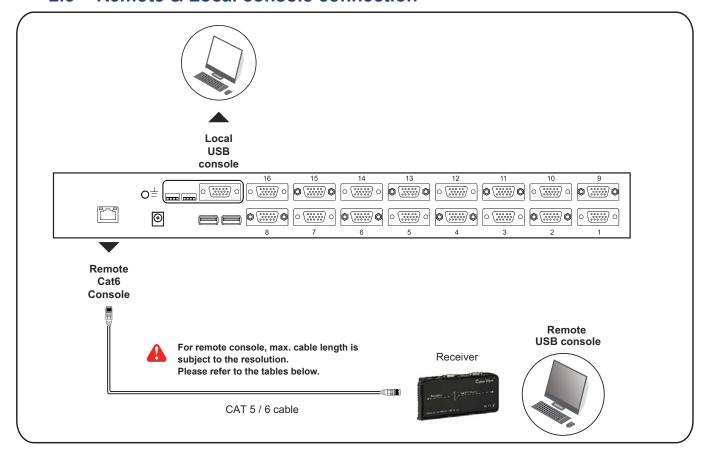


Daisy-chain feature for this model is NOT available.



# < 2.3 > Remote & Local console connection

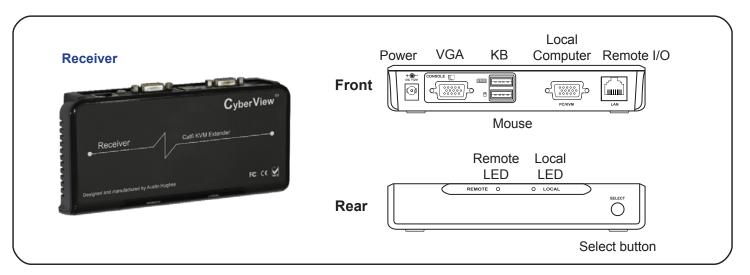
## **USB Hub DB-15 2-console KVM**



#### **Remote Console**

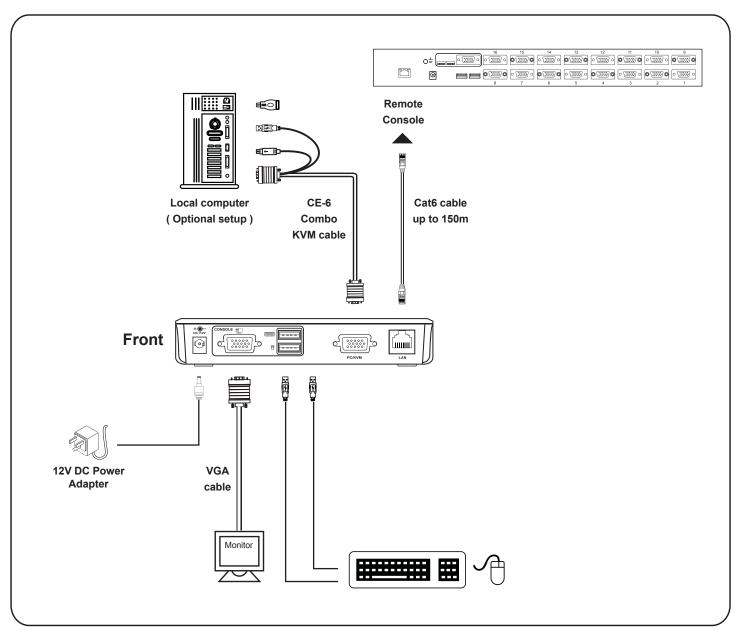
Resolution Support	Frequency (Hz)	Max. Cat6 Cable Length ( M )
1920 x 1080	60	50
1920 x 1200	60	50
1600 x 1200	60	100
1440 x 900	60	100
1280 x 1024	60	150
1024 x 768	60 / 70 / 75	150

#### How to use a receiver to connect a remote console

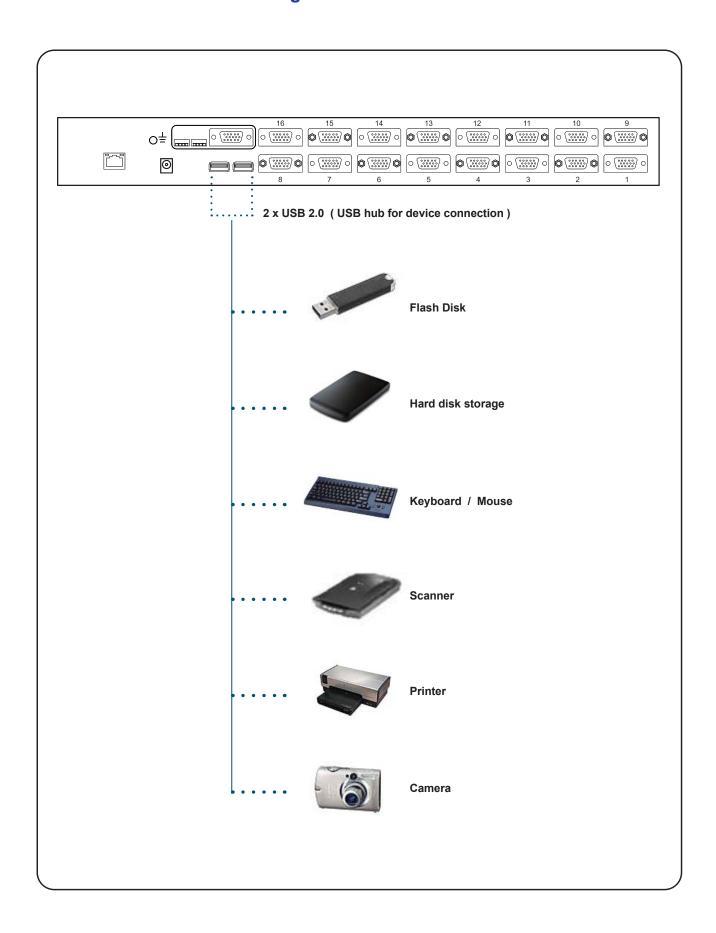




The receiver provides a hotkey function for remote console. Please refer to P.23



# < 2.4 > Built-in USB Hub Usage & Connection USB Hub DB-15 2-console KVM



## < 2.5 > Specifications

CV-1602H NVCE800H **KVM Port** 8 or 16 Number of ports: Connector: DB-15 combo connector Connectivity: Combo 2-in-1 VGA + USB KVM cable, 6, 10 or 15 feet ■ Local Console Graphic connector: 1 x DB-15 Input device: 2 x USB type A for keyboard & mouse USB hub: 2 x USB type A for sharing other peripheral devices among the computers 4:3 - max. 1600 x 1200, 16:10 - max. 1920 x 1200 Resolution support: ■ Remote Console Connector: 1 x DB 15-pin, VGA Input device: 2 x USB type A for keyboard & mouse Remote I/O: RJ45 via Cat5 / Cat5e / Cat6 cable up to 150m Compensation: Auto adjust for cable length Resolution support: 4: 3 - max. 1600 x 1200 16: 9 - max. 1920 x 1080 16:10 - max. 1920 x 1200 Compatibility / IBM / Dell PC, Server and Blade Server Hardware: HP SUN / Mac Windows / Linux / Unix / Mac OS OS Support: Power Input: Auto sensing 100 to 240VAC, 50 / 60 Hz 12V / 24V / 48V / 125V DC input Option DC: Max. 12W Consumption: Regulatory Safety: FCC & CE certified Environment: RoHS2 & REACH compliant Environmental Storage / Non-operating Operating Temperature: 0 to 55°C degree -20 to 60°C degree Humidity: 20~90%, non-condensing 5~90%, non-condensing 16,000 ft Altitude: 40,000 ft Shock: 10G acceleration (11ms duration) Vibration: 5~500Hz 1G RMS random Product Information Dimension (W x D x H): 443 x 171 x 44 mm / 17.4 x 6.7 x 1.73 inch

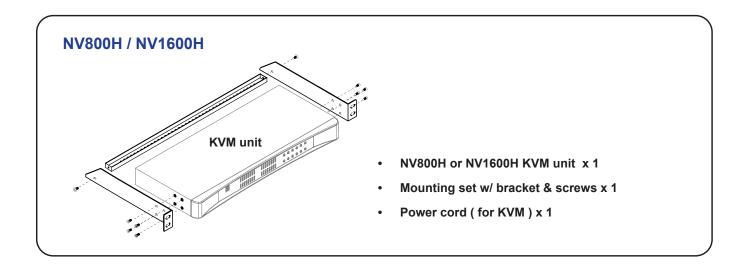
Net weight: 3 kg / 6.5 lb

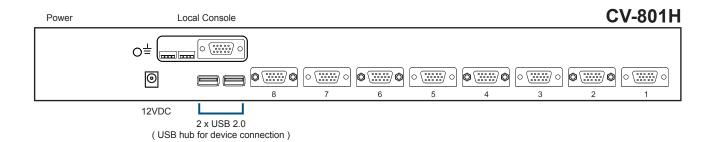
Packing Information

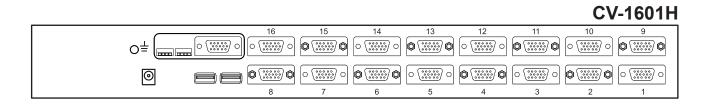
500 x 400 x 90 mm / 19.7 x 15.7 x 3.5 inch Dimension (W x D x H):

Gross weight : -CV-751<u>-USBKVM-Q218V1</u> 5 kg / 11 lb P.15

www.austin-hughes.com

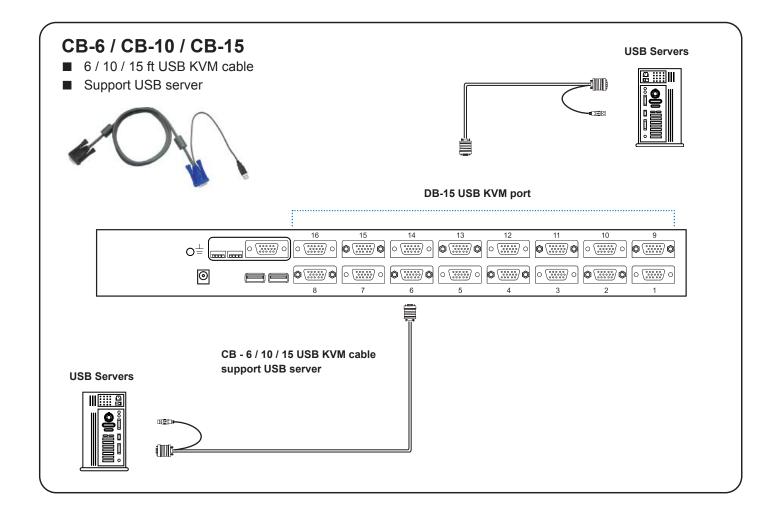


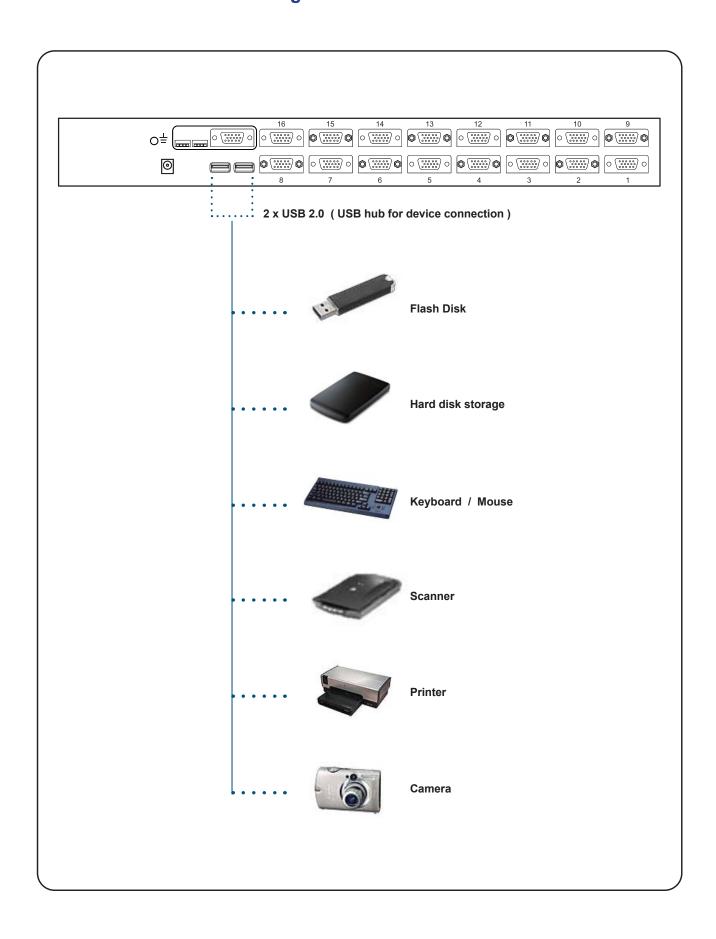




A

Daisy-chain feature for this model is NOT available.





## < 3.4 > Specifications

Gross weight:

**NV800H NV1600H** KVM Port Number of ports: 8 or 16 Connector: DB-15 combo connector Connectivity: Combo 2-in-1 VGA + USB KVM cable, 6, 10 or 15 feet **Local Console** Graphic connector: 1 x DB-15 Input device: 2 x USB type A for keyboard & mouse USB hub: 2 x USB type A for sharing other peripheral devices among the computers 4:3 - max. 1600 x 1200, 16:10 - max. 1920 x 1200 Resolution support : Management Multilingual OSD: English, France, German, Spanish, Italian, Russian, Simplified Chinese, Japanese Hotkey combination: Scroll-lock, Cap-lock, Num-lock, Alt, Ctrl & Win Password enable & disable, up to 8 users profile for port access Security: PC Selection: Front button, OSD menu & hotkey Compatibility Hardware: / IBM / Dell PC, Server and Blade Server SUN / Mac Windows / Linux / Unix / Mac OS OS Support: Power Input: Auto sensing 100 to 240VAC, 50 / 60 Hz 12V / 24V / 48V / 125V DC input Option DC: Consumption: Max. 10W Regulatory FCC & CE certified Safety: Environment: RoHS2 & REACH compliant Storage / Non-operating Operating Environmental 0 to 55°C degree -20 to 60°C degree Temperature: Humidity: 20~90%, non-condensing 5~90%, non-condensing Altitude: 16,000 ft 40,000 ft Shock: 10G acceleration (11ms duration) 5~500Hz 1G RMS random Vibration: **Product Information** Dimension (W x D x H): 443 x 171 x 44 mm / 17.4 x 6.7 x 1.73 inch Net weight: 3 kg / 6.5 lb **Packing Information** Dimension (W x D x H): 500 x 400 x 90 mm / 19.7 x 15.7 x 3.5 inch

5 kg / 11 lb

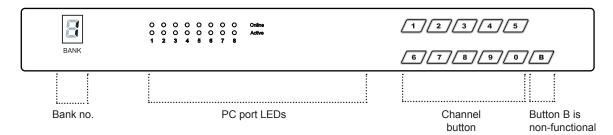
## 4.1 KVM Button

## **Power ON**

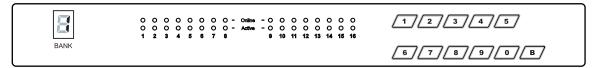
- Turn off all servers and KVM switches
- Make sure all cables / connectors are properly connected
- Recommend Power ON sequence is monitor, KVM switch finally computer

## **Front Panel - Port LED Indications**

# 8 ports



## 16 ports



Bank no.	7-Segment BANK LED indication ( Bank 1 only )
PC port LEDs	Online: Blue LED on indicating a PC is connecting to the port
	Active: Green LED on indicating a selected channel
Channel button	Press to select channel from 01 to 16

The password is enabled by default, the default password is "00000000" eight zeros (**Do not use "0" on number pad**)

#### **■** Enable password

- Press the KVM hotkey Scroll Lock + Scroll Lock + U
- 2. Logout the KVM by pressing the hotkey Scroll Lock + Scroll Lock + P
- 3. In SUPERVISOR level, enter "00000000" eight zeros in user name & password field (Do not use "0" on number pad)
- 4. In USER level, press **Space bar** + **Enter** in user name & password field Remark: Automatic logout after 10 minutes of inactivity

#### ■ Set your own user name & password

- 1. Login the KVM in SUPERVISOR level by pressing "00000000" eight zeros in user name & password field
- 2. Call KVM OSD menu by pressing the KVM hotkey Scroll Lock + Scroll Lock + Space Bar
- 3. Press **F1** to the MAIN MENU
- 4. Select "USER SECURITY"
- 5. Set password in SUPERVISOR & USER level
  - a. In the left-top row "S" (SUPERVISOR), press Enter to set your own user name & password
  - b. In the row 1 to 8 (USER), press Enter to set your own user name & password
- 6. Press Enter to save the setting or press Esc to cancel the editing without any change
  - Remark: a. Blank has underscore, while SPACE doesn't have
    - b. Press any alphanumeric key to move to next input item. SPACE is treated as a valid character

#### ■ Change your password

- 1. Login the KVM in SUPERVISOR level by pressing your own user name & password
- 2. Call KVM OSD menu by pressing the KVM hotkey Scroll Lock + Scroll Lock + Space Bar
- 3. Press F1 to the MAIN MENU
- 4. Select "USER SECURITY"
- 5. Change password in SUPERVISOR & USER level
  - a. In the left-top row "S" (SUPERVISOR), press Enter to change your user name & password
  - b. In the row 1 to 8 (USER), press **Enter** to change your user name & password
- 6. Press Enter to save the setting or press Esc to cancel the editing without any change
  - Remark: a. Blank has underscore, while SPACE doesn't have
    - b. Press any alphanumeric key to move to next input item. SPACE is treated as a valid character

#### ■ Disable your password

- 1. Press the KVM hotkey Scroll Lock + Scroll Lock + U
- Logout the KVM by pressing the KVM hotkey Scroll Lock + Scroll Lock + P
- 3. You don't need user name & password to access the KVM OSD menu

#### ■ Forget your password

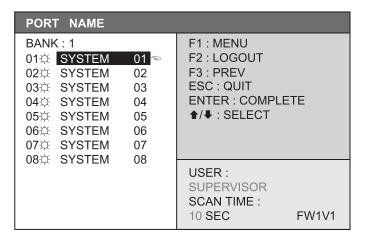
Please contact your supplier for further support

#### Remark:

- You must press the KVM hotkey within 2 seconds
- A beep sound will be heard for successful entering KVM hotkey

# 4.3 KVM OSD

# **OSD Menu**



#### **OSD** operation

next to the system name	The PC is powered on
next to the system name	The PC is selected
F1	Access F1 MAIN MENU
F2	Logout the OSD menu
F3	Previous menu
Esc	Cancel / Quit
Enter	Complete / Switch to selected port
<b>↑</b> / <b>↓</b>	Switch to previous or next port

F1 Main Menu	MAIN MENU $\approx X$		
	SELECT OPTION:  01 LANGUAGE  02 PORT NAME EDIT  03 PORT SEARCH  04 USER SECURITY  05 ACCESS LIST  06 HOTKEY		
	07 TIME SETTINGS 08 OSD MOUSE		
01 LANGUAGE	OSD language change		
02 PORT NAME EDIT	Define port name		
03 PORT SEARCH	Quick searching by port name		
04 USER SECURITY	Change password		
05 ACCESS LIST	Define user access authority		
06 HOTKEY	Change hotkey		
07 TIME SETTINGS	Modify scan display time interval		
08 OSD MOUSE	Modify OSD mouse speed		

Local Console Hotkey	Function		
Scroll Lock + Scroll Lock + Space Bar	Calling OSD menu		
Right-button mouse + Esc	Calling OSD menu		
Scroll Lock + Scroll Lock +	Switch to previous port		
Scroll Lock + Scroll Lock +	Switch to next port		
Scroll Lock + Scroll Lock + Port no.	Switch to specific port		
Scroll Lock + Scroll Lock + B	Turn the buzzer ON and OFF  * Default the buzzer is ON		
Scroll Lock + Scroll Lock + P	Logout the KVM if password security is ON. Show up the status windows		
Advance hotkeys (for Supervisor login only)			
Scroll Lock + Scroll Lock + S	Activate auto-scan mode for connected servers *Press any key to exit the auto-scan mode		
Scroll Lock + Scroll Lock + R	Reset all the KVM settings to factory default  *Except User Security settings		
Scroll Lock + Scroll Lock + U	Disable and enable password security *Default security is ON		
Scroll Lock + Scroll Lock + L	To enable / disable the screen saving function and 10 minutes auto-logout *Default the screen saving is OFF		

#### Remarks:

- Example of "Scroll Lock + Scroll Lock + Port no."
  - Port No.: 01 to 16
  - e.g. Port 4: Scroll Lock + Scroll Lock + 0 + 4
  - e.g. Port 16: Scroll Lock + Scroll Lock + 1 + 6
- You must press the hotkey within 2 seconds
- A beep sound will be heard for successful entering
- The numeric keypad is not supported, while in OSD screen, the arrow keys, and Enter keys are supports

Remote Console Hotkey	Function	
Scroll Lock + Scroll Lock + C	Toggle switch between remote & local port	
Scroll Lock + Scroll Lock + Q	Turn the buzzer ON & OFF *Default the buzzer is ON	
Scroll Lock + Scroll Lock + S	Activate auto-scan mode for remote & local port *The scan time interval is 5 seconds	
Scroll Lock + Scroll Lock + A	Auto-adjust the video signal	



Model	12V	24V	48V	125V
Input rating				
Input voltage:	12-Volt	24-Volt	48-Volt	110-Volt
Input range:	9 ~ 18V	18 ~ 36V	36 ~ 75V	66 ~ 160V
Input current				
- No load	50 mA	50 mA	50 mA	35 mA
- Full load	4950 mA	2450 mA	1220 mA	749 mA
Output rating				
Output voltage:	12-Volt	12-Volt	12-Volt	12-Volt
Output current:	4.16A	4.16A	4.16A	6.25A
Efficiency	84%	85%	85%	91%

## \*\*\* For DC power option:

(1) If the unit with LCD, earthing may be required



(2) DC power excludes AC power cord.

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