User Manual

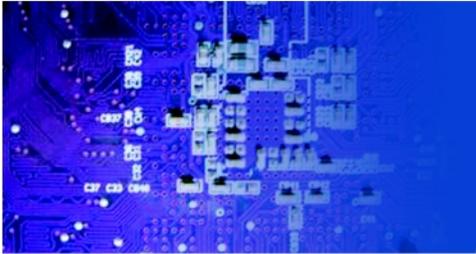M3716 1U 17" rack mount monitor keyboard drawer
with included 16 port Cat6 KVM switch

ACNODES

M3716
17" 1U rack mount LCD keyboard drawer
with 16 port Cat6 KVM Switch

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CHAPTER 1

1.1   Important Safeguards

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 modifi- cation, 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**

Legal Information

First English printing, October 2010

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

1   Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.

2   Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned

    environment with temperatures not exceeding 40° Celsius (104° Fahrenheit).

3   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.

4   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.

5   Arrange the equipment's power cord in such a way that others won't trip or fall over it.

6   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.

7   Observe all precautions and warnings attached to the equipment.

8   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.

9   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.

10 Only qualified service personnel should open the chassis. Opening it yourself could damage the equip- ment and invalidate its warranty.

11 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:
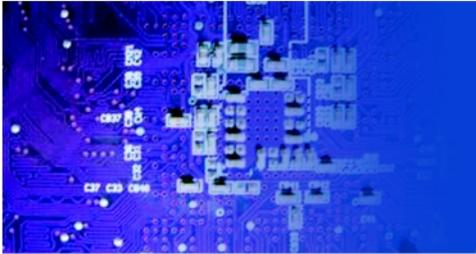
M3716
17" 1U rack mount LCD keyboard drawer
with 16 port Cat6 KVM Switch

1.3 Specifications

Display size:
17 inches

Panel type:
Active Matrix TFT LCD

Resolution capabilities:
Maximum Resolution up to 1280 x 1024 (SXGA)

Brightness:
White 300 cd/m2

Contrast ratio:
1000:1

Supported colors:
16.2M Colors (6-bit with FRC)

Viewing angle:
Right-Left view 60° ~ 70°(Typ)
Up-Down View 45° ~ 60°(Typ)

Display Area:
338 mm x 270 mm

Response Time: Response time:
Rising Time 1.3ms

LCD MTBF:
50,000 hours

VGA Signal Input:
Analog H/V, Co1.3Diagrammposite, SOG

Resolution:
64x400 / 720x400: 70Hz
640x480 / 800x600 / 1280x1024: 60/70/72/75Hz
1024x768 / 1152x864 / 1280x720: 60/70/75Hz

Video Input:
15-pin D-sub VGA input
Horizontal synchronization: 64 - 80 KHz (Typ.)
Vertcal Synchroniation: 60-75 Hz (Typ.)

Plus & Play DCC:
EDID 1.3

Power Input:
Auto-sensing 100 to 240VAC, 50/60Hz power

LCD power consumption:
Max. 48Watts, standby 5 Watts

Drawer Design:
1U low profile clamp-type module design
Self-lock fixed-position slide rail
Adjustable rear mounting rails up to 34-inches deep

Security Handle Lock:
Hard-plastic molded handle with 2 x positions lock

Keyboard & Mouse:
104-keys keyboard with touch pad / track-ball (optional) PS/2 or USB

Package Dimension:
442 x 650 x 44 mm / 17.4 x 25.6 x 1.73 inches

Gross Weight:
35lbs

Certification:
CE / FCC

Operation temperature:
0 ~ 50°C / 32 ~ 122°F

Storage temperature:
-5 ~ 60°C / -4 ~ 140°F

Humidity:
5~90%, non-condensing

Shock:
10G acceleration (11ms duration)

Vibration:
5~500Hz 1G RMS random vibration

Touch screen:
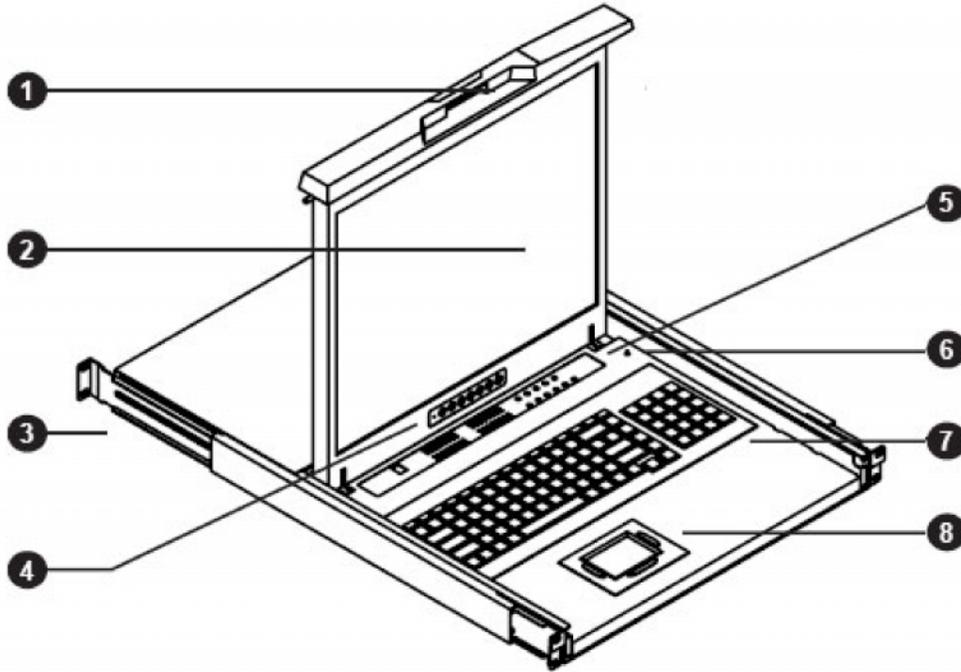Resistive / Capacitive touch screen, USB or RS-232

DC power input:
12 / 24 / 48VDC power input

3

ACNODES

1.4 **Diagram**

1. Carry handle to release the 2-pt lock
2. LCD interchangeable module kit
3. "One Man" Installation Slides
4. LCD membrane

5. Membrane switch (KVM option)
6. Micro switch for screen auto power off
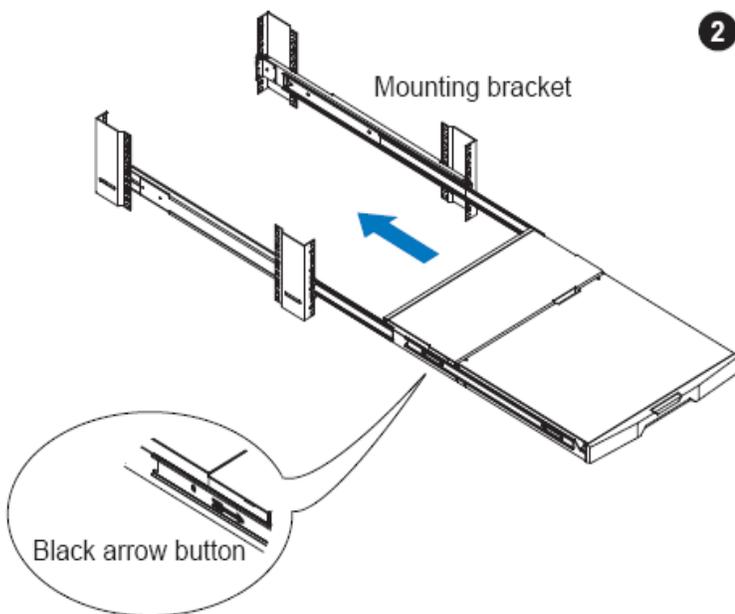7. Keyboard interchangeable module kit
8. Mouse interchangeable module kit

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17" 1U rack mount LCD keyboard drawer
with 16 port Cat6 KVM Switch

1.5   How to Install "One Man" Installation Slides into rack

❶
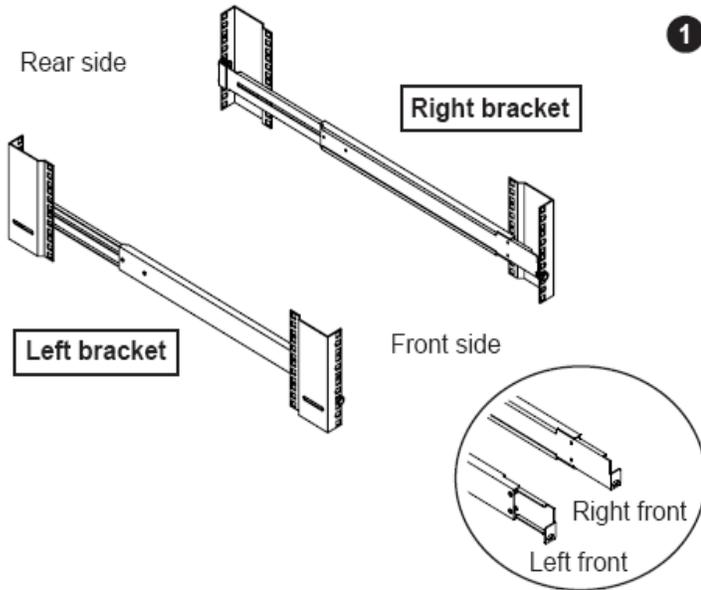
Attach the left and right mounting bracket to rack 19"
mounting rails.

Adjust the rear mounting bracket to fit your rack.

 M6 screw and cup washer x 6 piece included.

Caution : Leaving the screws slightly loose, until

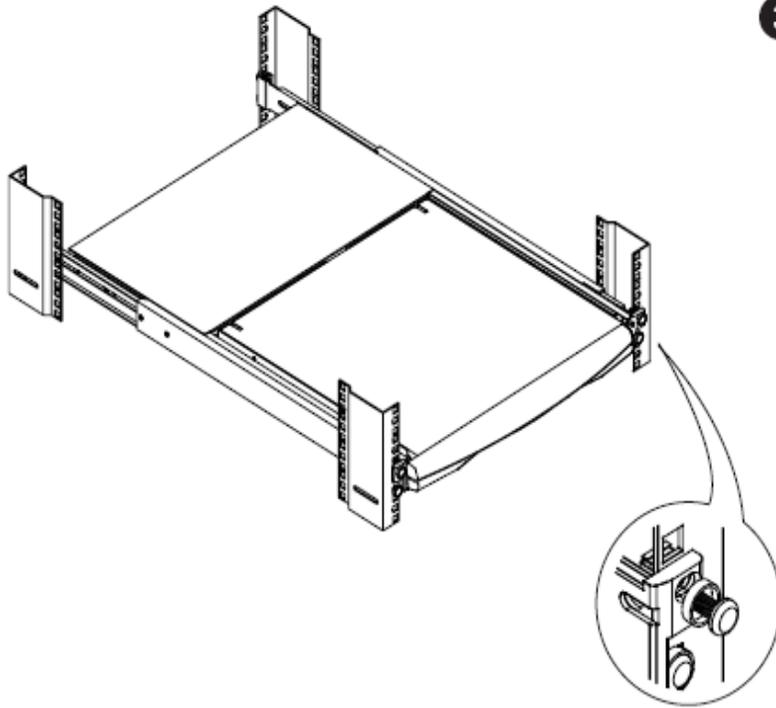you complete the installation in step 4

❷

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

1.6　How to Install "One Man" Installation Slides

3

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.

4
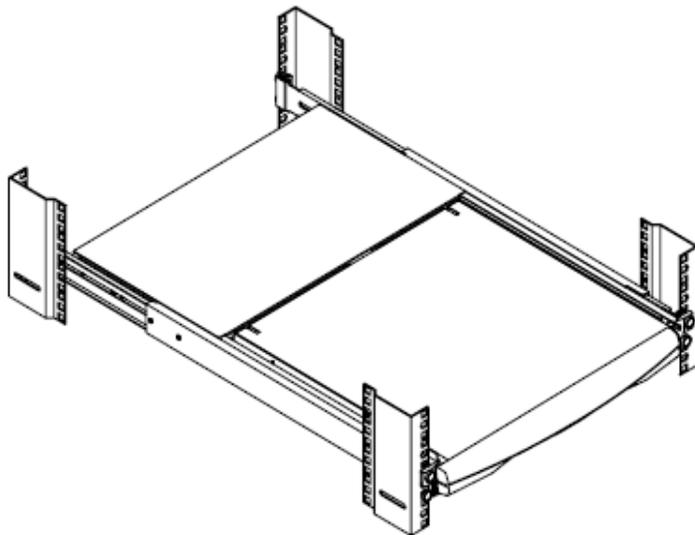
...lete the installation

...ten all 8 piece of M6 screw to complete the installation

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with 16 port Cat6 KVM Switch

1.7   How to Use the Slides
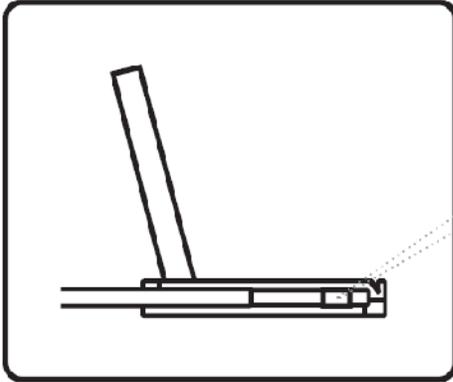
Figure 1.

? A black arrow release button is located on the outside of each slide. (shown in Figure 1).
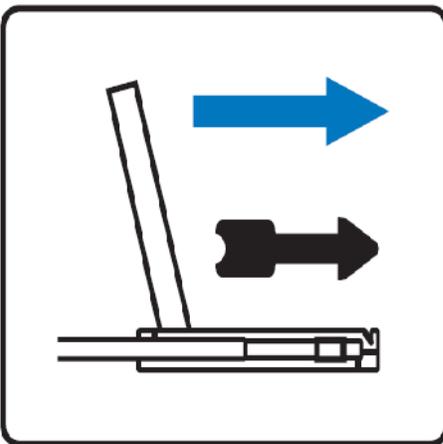
Figure 2.

Pull and hold the black arrow button on either side of the LCD keyboard drawer to unlock. (shown in Figure 2).
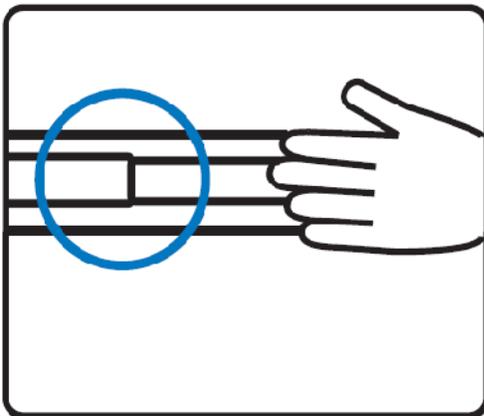
Figure 3.

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

Caution : Keep your fingers away from the slide stop

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with 16 port Cat6 KVM Switch

1.8 Keyboard and Mouse

STANDARD:
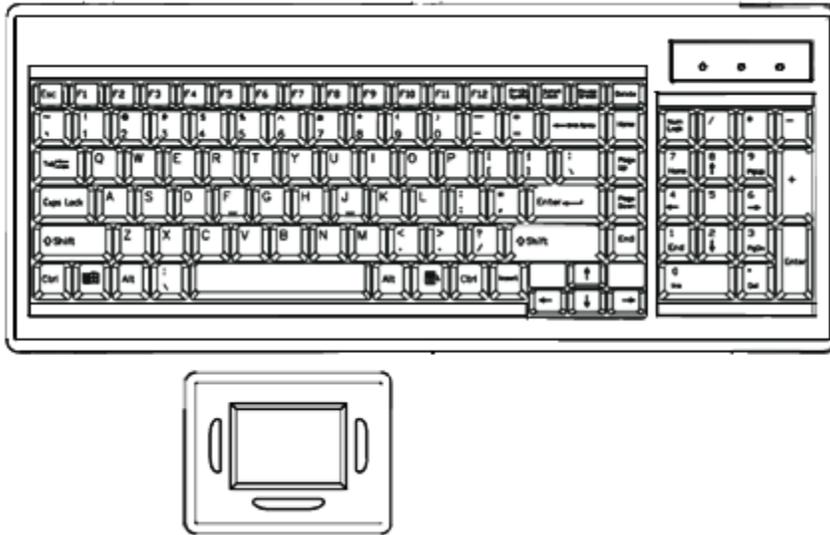
OPTIONAL:
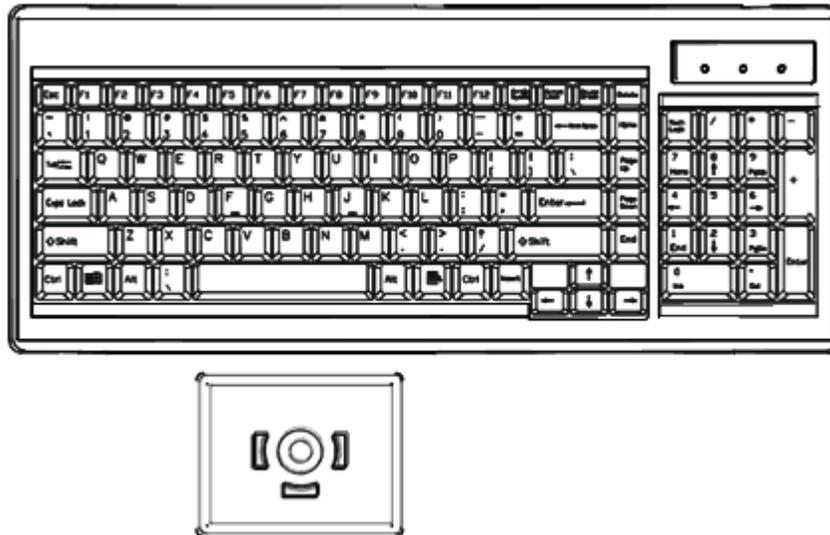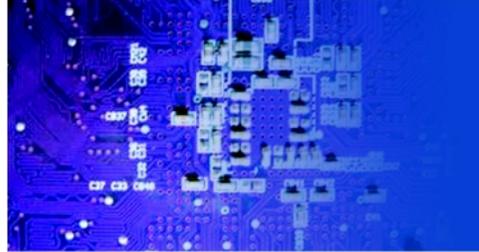
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1.9   **Optional Accessories**

1. Combo 4-in-1 KVM cable
      1.1 6 feet
      1.2 10 feet
      1.3 15 feet

3. Power Cord
      3.1 IEC Power Cord
      3.2 5-15 Power Cord US
      3.3 1363 Power Cord (UK)
      3.4 CEE 7/4 Power Cord (German)
      3.5 AS 3112 Power Cord (Australia)

2.1   On Screen Display Option   CHAPTER 2

17" & 19" LCD membrane
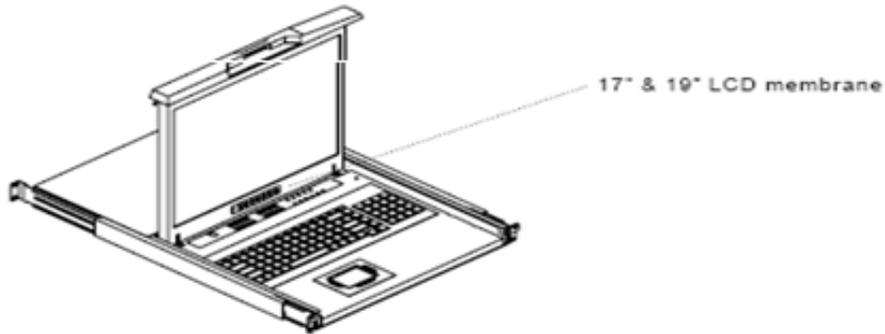
Membrane Switch	Function
○ ● (green) ● (orange)	Power light Green = On Orange = Power saving
⊖	Power on / off LCD
M ▤	Display the OSD menu
⇕ ⇓ ⇔ ⇨	Scrolls through menu options and adjusts the displayed control (To auto adjustment by pressing the button ⇕ for 5 seconds)
↰	Exit the OSD screen Toggle analog, digital & video connection (DVI-D and video options only)

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2.2 On Screen Menu


```
Ver: G56SN20SSTD701                    1024 x 768  59.8Hz

                    Image

        Brightness  [████      ]        50

        Contrast    [████      ]        50

        Color Temp   User

        Red         [██████████]        255

        Green       [██████████]        255

        Blue        [██████████]        255

Adjust: ◄ ►      Select: ▲ ▼      Set: ●/⊟      Exit: ↺
```
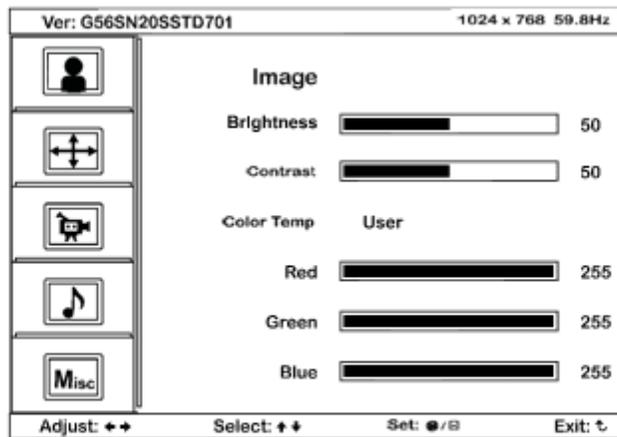
OSD Configuration Page

Image:
To enter into the brightness, contrast, color temp, red, green, and blue

Geometry:
To enter into the auto adjust, H position, V position, phase and clock

Video:
To enter into the colour, tint, sharpness, noise reduction, DCDi and TV Setup

Audio:
To enter into volume, bass, treble, balance, AVL and mute

Misc:
To enter into the language, OSD position, graphic mode, ratio, reset and timer
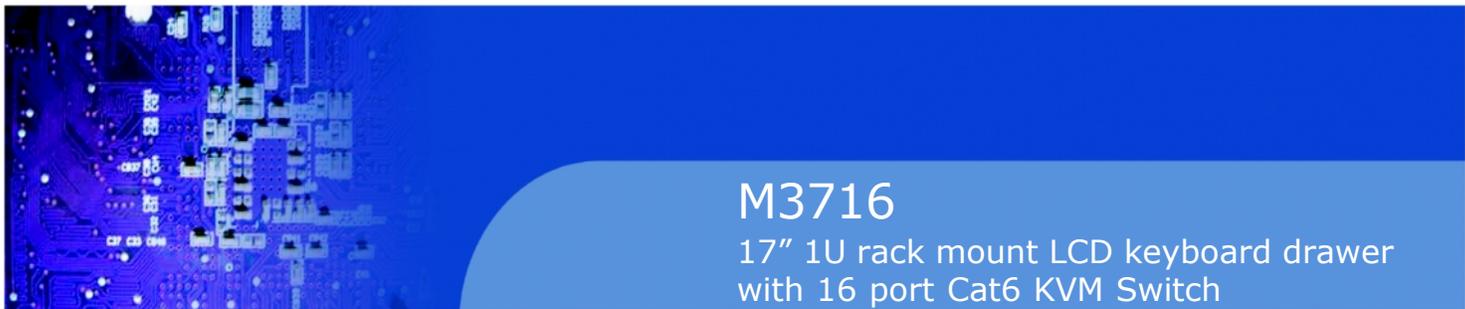
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3.1   DC Power Options   CHAPTER 3

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%
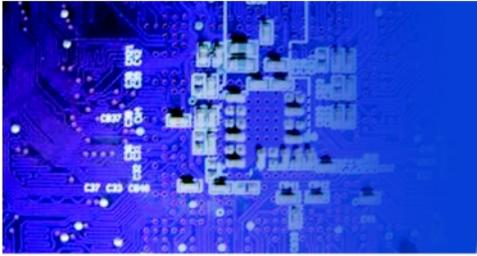
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CHAPTER 4

4.1   KVM Specifiacations

KVM Feature:
System management with simultaneous multi-user access
Access server independently & simultaneously
8 characters password protection
Auto scan-mode and Hot-pluggable
Resolution: up to 1600x1200
SSL v2/v3 encryption for secure transmission
On-board Membrane KVM switch to select server
Cascades up to 8 level/128 servers/128 servers on DB-15
KVM switch

Matrix KVM Switch Type:
1 user console (1 x local)
2 user consoles (1 x local/i x remote)

Cascade Port:
1 x DB-15 proprietary cascade port

User Console Type:
Local: 1 x 6' combo free 4-in-1 proprietary cable
Remote: over Cat6 cable (up to 1000 feet) with receiver

KVM Port Layout:
16 RJ-45 Cat6 KVM ports
1 remote user port (RJ-45 port), Optional

KVM Cable:
Included 8 x USB/VGA dongles
Option for additional dongles
USB/VGA, PS2/VGA, USB/DVI

Drawer Design:
1U low profile clamp-type module design
Self-lock fixed-position slide rail
Adjustable rear mounting rails up to 34-inches deep

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4.2   **Connections**

STANDARD:
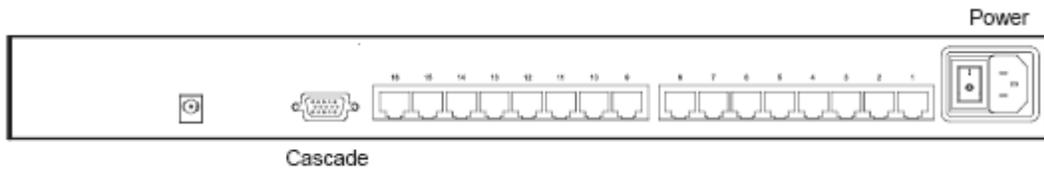
OPTION FOR
1 REMOTE
CONSOLE:
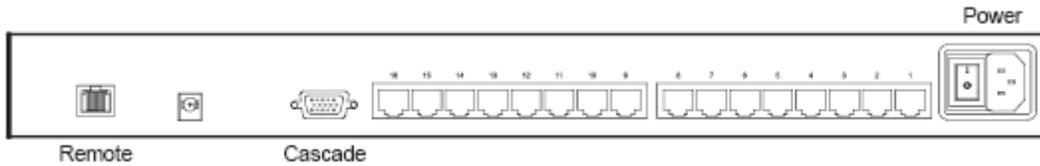
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4.3   Connection KVM modules
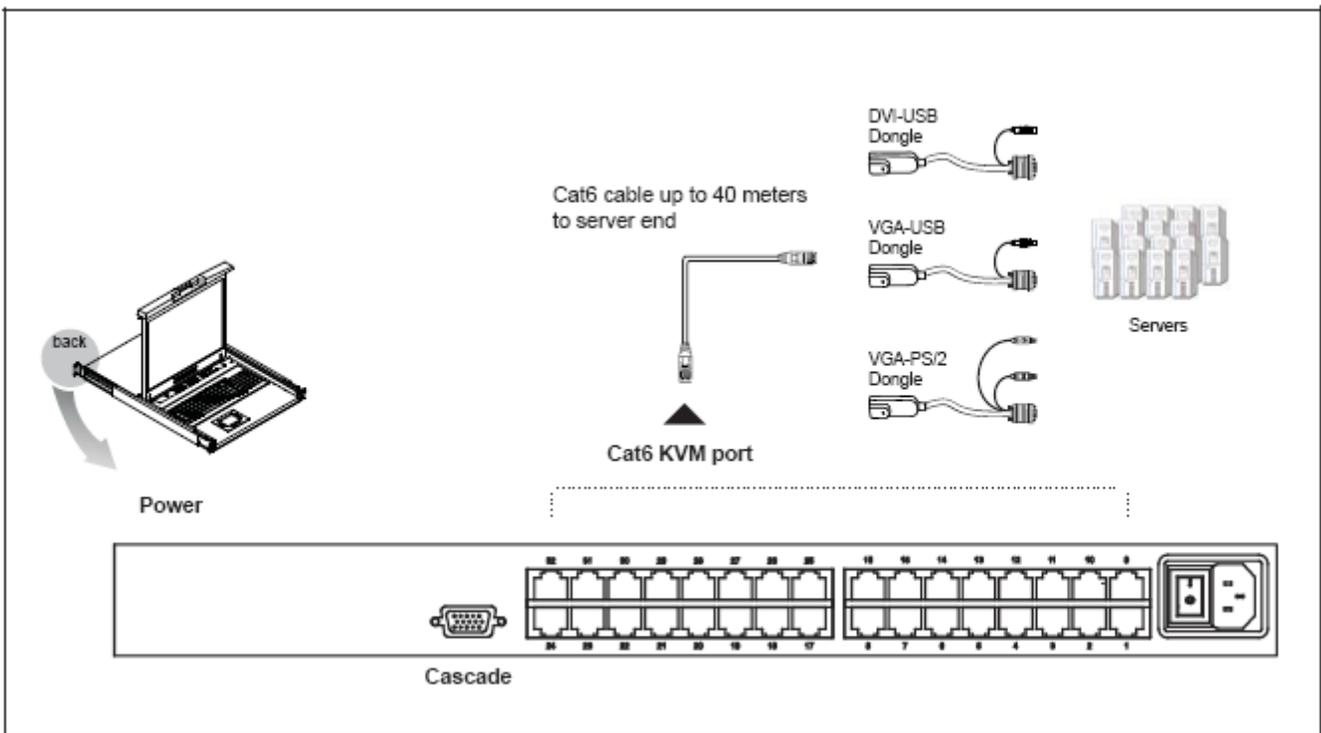
4.4 Cascade KVM Modules

- Cascade up to 8 level, 256 servers
- Interconnection with Combo DB-15 KVM
- Cascading multiple KVM with cable
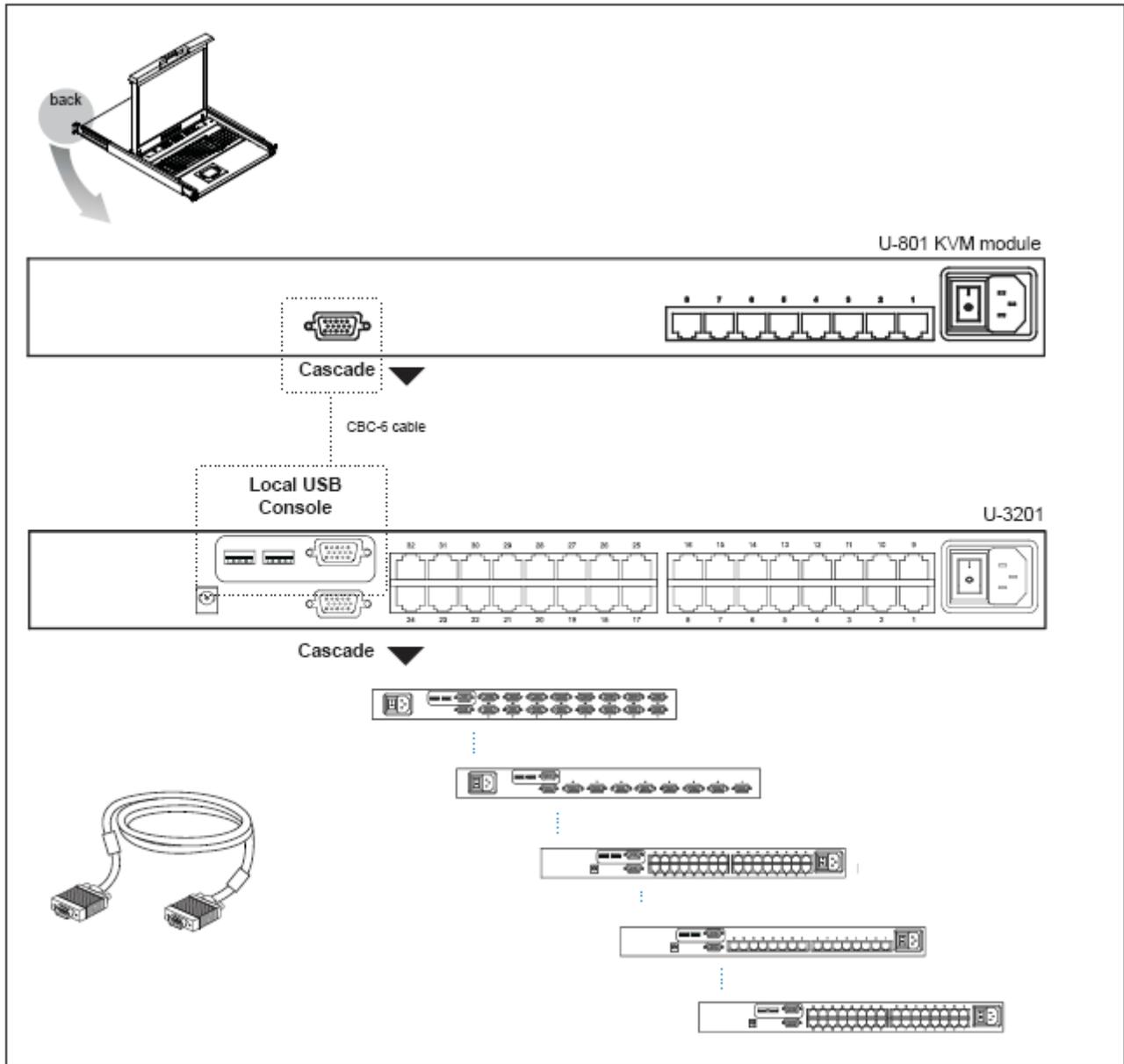
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4.5   Receiver Box (Optional)
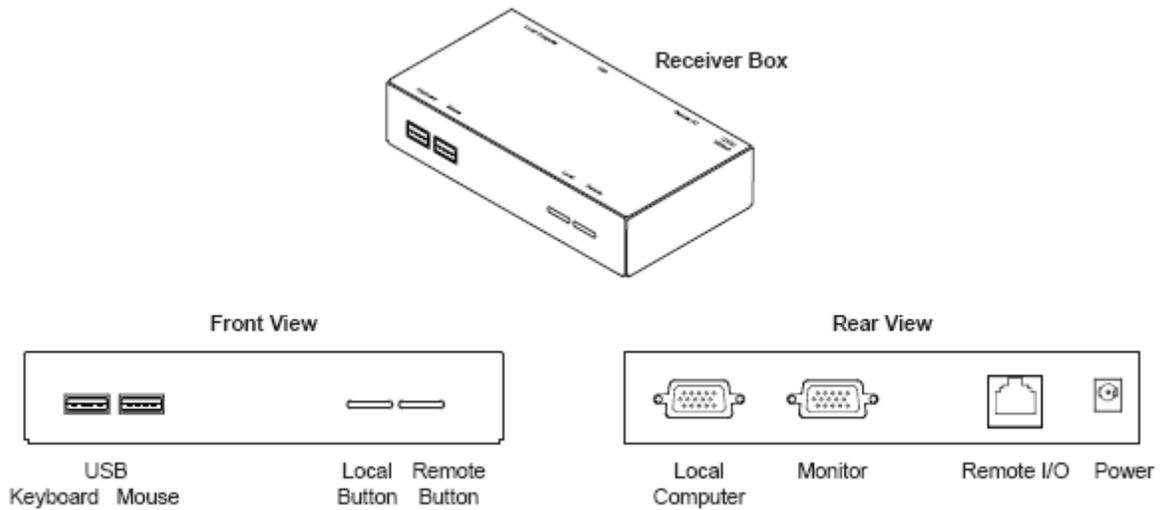
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17" 1U rack mount LCD keyboard drawer
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4.6 Receiver Connection (Optional)
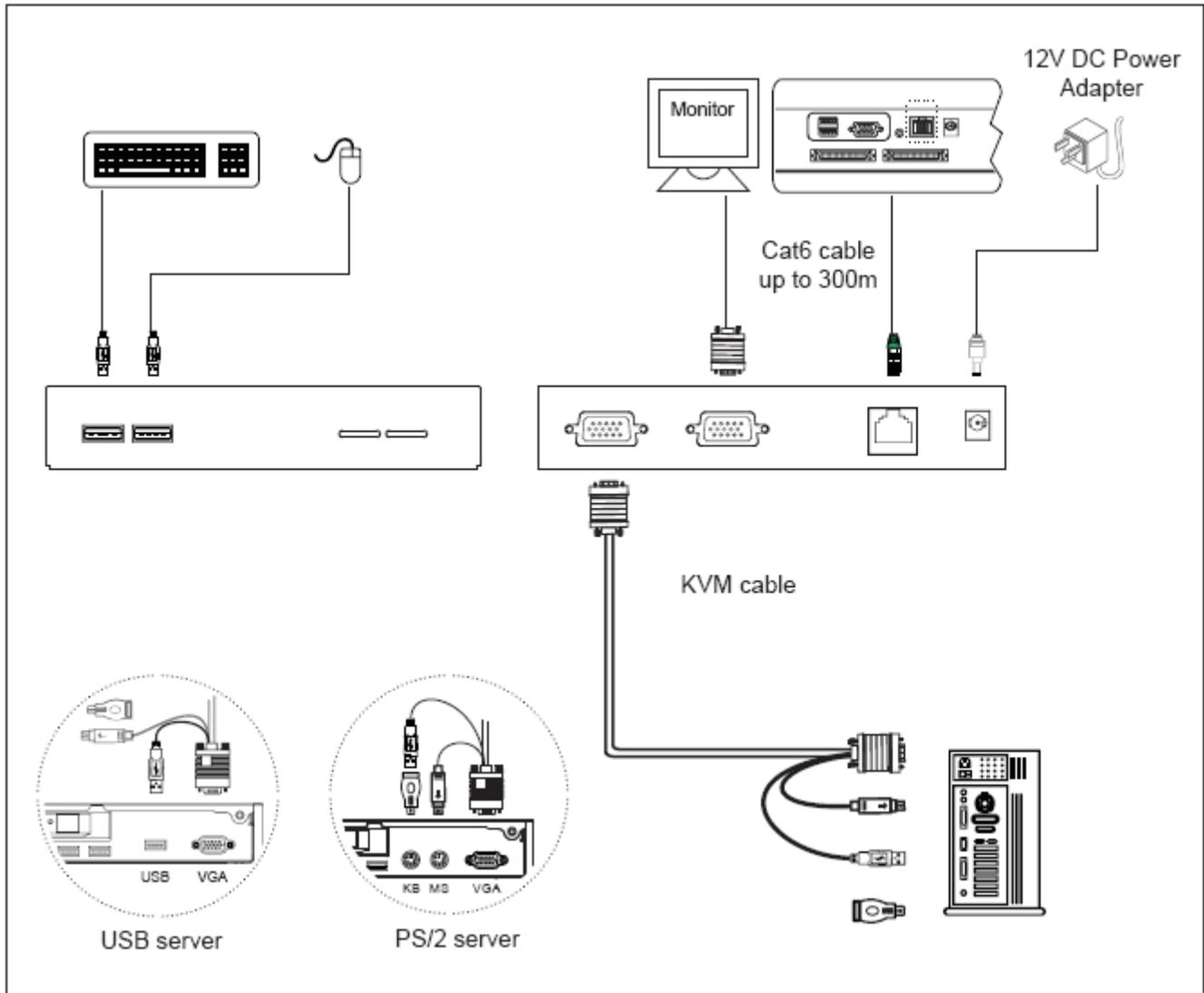
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4.7   Front Panel-Port LED Indications

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

16 ports
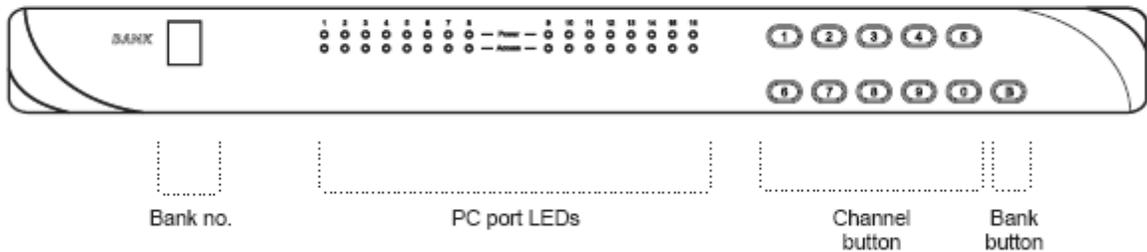
Bank no.	7-Segment BANK LED indication
PC port LEDs	*Power* : Blue LED on indicating a PC is connecting to the port
	Access : Green LED on indicating a selected channel
	Remote : Red LED on indicating the port is selecting by a remote console
Channel button	Press to select channel from 01 to 32
Bank button	Select the bank from 1 to 8

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4.8　**Password**

The password is disabled by default (i.e. There is no password required when you power on the KVM switch for the first time).

Enable Password
1. Press the KVM hotkey Scroll Lock + Scroll Lock + U
2. Logout the KVM by pressing the hotekey Scroll Lock + Scroll Lock + P
3. In SUPERVISOR level, enter "00000000" eight zeroz in the 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 and 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 tot he MAIN MENU
4. Selec "USER SECURIY"
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 imput 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 he KVM hotkey Scroll Lock + Scroll Lock + Space Bar
3. Press F1 to the MAIN MENU
4. Selec "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 rown 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 imput item. SPACE is treated as a valid character.

Forget Your Password
Please contact your supplier for support

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

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with 16 port Cat6 KVM Switch

4.9   OSD Menu

```
┌─────────────────────────────────────────┐
│ PORT  NAME                                │
├────────────────────┬──────────────────────┤
│ BANK : 1           │ F1 : MENU            │
│ 01☼ SYSTEM    01☜  │ F2 : LOGOUT          │
│ 02☼ SYSTEM    02   │ F3 : PREV            │
│ 03☼ SYSTEM    03   │ ESC : QUIT           │
│ 04☼ SYSTEM    04   │ ENTER : COMPLETE     │
│ 05☼ SYSTEM    05   │ ♠/♣ : SELECT         │
│ 06☼ SYSTEM    06   │ PgUp/PgDn :          │
│ 07☼ SYSTEM    07   │ BANK SELECT          │
│ 08☼ SYSTEM    08   ├──────────────────────┤
│                    │ USER :               │
│                    │ SUPERVISOR           │
│                    │ SCAN TIME :          │
│                    │ 10 SEC        FW1V3  │
└────────────────────┴──────────────────────┘
```

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
♠/♣		Switch to previous or next port
PgUp/PgDn		Switch to previous bank or next bank
1 / 2 / 3 / 4		Display port 01 ~ 08 / 09 ~ 16 / 17 ~ 24 / 25 ~ 32 Remark: Display port 17 ~ 32 for 32 port model only

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4.10   Main Menu

```
MAIN  MENU                          ⤺ 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
```
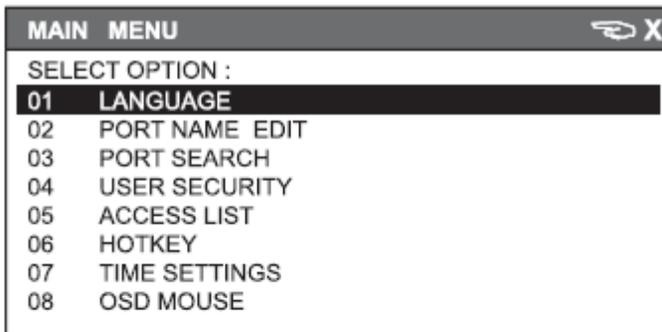
01	LANGUAGE	OSD language change
02	PORT NAME EDIT	Define port name
03	PORT SEARCH	Quick searching by port name
04	USER SECURITY	Change password
05	ACCESS LIST	Define user access authority
06	HOTKEY	Change hotkey
07	TIME SETTINGS	Modify scan display time interval
08	OSD MOUSE	Modify OSD mouse speed

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4.11   Local Console Hotkey

| Hotkey	Function
Scroll Lock + Scroll Lock + Space Bar	Calling OSD menu
Scroll Lock + Scroll Lock + ↑	Switch to previous port
Scroll Lock + Scroll Lock + ↓	Switch to next port
Scroll Lock + Scroll Lock + PgUp	Switch to previous bank
Scroll Lock + Scroll Lock + Bank no. + Port no.	Switch to specific port
Scroll Lock + Scroll Lock + PgDn	Switch to next bank
Scroll Lock + Scroll Lock + S	Auto scan for powered on PC
Scroll Lock + Scroll Lock + R	Reset to factory default setting
Scroll Lock + Scroll Lock + B	Enable / Disable beeper sound
Scroll Lock + Scroll Lock + F	Find port by name

Remarks:
Example of "**Scroll Lock + Scroll Lock +** Bank no. + Port no."
- Bank No. : 1 to 8
- Port No. : 01 to 16
- e.g. Bank 1 Port 4 : **Scroll Lock + Scroll Lock + 1 + 0 + 4**
- e.g. Bank 2 Port 16 : **Scroll Lock + Scroll Lock + 2 + 1 + 6**

4.12   Remote Console Hotkey

| Hotkey	Function
Scroll Lock + Scroll Lock + F1	Show up the Help OSD windows
Scroll Lock + Scroll Lock + F2	Select Hotkey *Default is Caps Lock
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
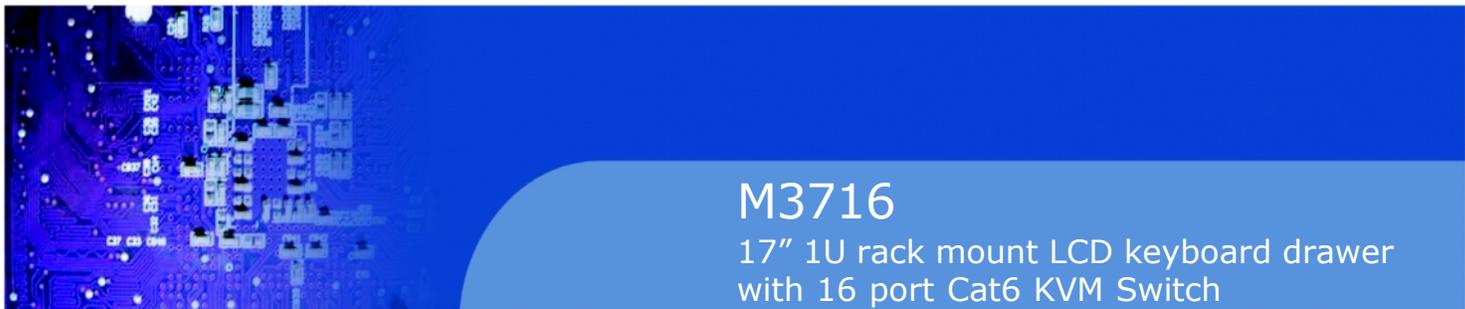
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4.13　KVM Cables

Matrix KVM cascade cable
2.1　3 feet

Cat5 cable
3.1　3 feet
3.2　6 feet
3.3　10 feet
3.4　15 feet
3.5　33 feet
3.6　66 feet

Combo KVM cascade cable
4.1　6 feet

DVI-USB Dongle
5.1　DVI-D

VGA-USB Dongle
6.1　USB

VGA-PS/2 Dongle
7.1　PS/2

Power cord
8.1　power cord
8.2　power cord (US)
8.3　power cord (UK)
8.4　power cord (German)
8.5　power cord (Australia)
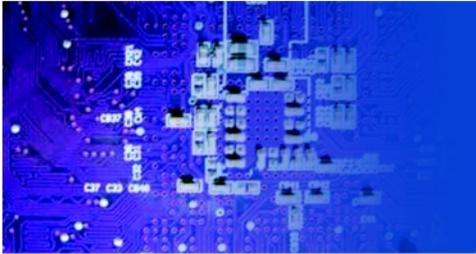
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4.14   Optional Items

Mouse:
Touch-pad/Track-ball

Remote User Console:
1/2 (opt) remote user console port

User Console:
1 (std) /2 (opt) user console port

Power supply:
12/24/48VDC power input unit

Dongle:
USB/VGA dongle
PS2/VGA dongle
USB/DVI dongle

Cascade cable:
6' cascade cable

Receiver (for remote user console):
Receiver with 1 x DB-15 4-in-1 KVM cable