PHANTOM KVM SERVER MANAGEMENT

The Low Density Solution For High Density Environments

- Multi-User control of up to 63 servers on a single line

- Mixed multi-platform support- PS/2, SUN, USB, RS-232

- Zero U rack space - More room for servers

- Low density CAT5 cabling that ends cable clutter

- Scalable - Buy only what you need and add as you grow

- Flexible server/KVM console placement

- Control servers up to 110m/360ft away

- Advanced OSD management including multi-layer security

- Pure hardware solution - Software/network independent and BIOS level access

- No external power supply

- **3 Year Warranty**

MINICOM

*T*he Phantom is Minicom's cutting-edge CAT5 based KVM switching system for server management. It features multi-user control, mixed multi-platform support and comes in micro sized Specter units or PCI cards.

1 The High-Density Server Environment Challenge...

Corporate data requirements are increasing enormously.
To keep up with demand many more servers are being crowded into much less space. Regular bulky KVM switch boxes waste critical rack space and create cable clutter chaos, the cause of up to 70% of network failures.

2 The Zero U, Clutter Free Solution

Minicom has revolutionized the KVM industry with its Phantom line of KVM switches for server management, which features Minicom's unique Distributed Switching Technology (DST). DST frees up valuable rack space and eliminates cable clutter in situations where every cable counts, every U counts and every server counts.

3 Less Switch Space Means More Server Space

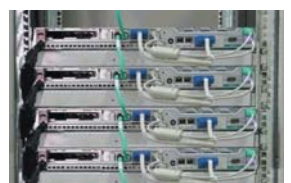*14U for Switches 20U for Servers*

34U for Servers

Phantom's DST divides the KVM switch into smaller sub-units: a Manager and multiple Remote units. The Remote units can be placed inside the servers [PCI Cards] or on the side or back of the rack [Specters] where they occupy no rack space! Now you can dedicate more of your rack to servers instead of wasting space on switches.

4 Keep Your System Up And Running By Eliminating Cable Clutter

Cable problems are the cause of over 70% of system failures. Regular KVM switch boxes require every server to be connected to the switch. This demands a tremendous amount of expensive and cumbersome cabling. With the Phantom's revolutionary DST, only the first server attaches to the switch, every additional server attaches only to the server next to it in a daisy chain formation. This reduces cable clutter and harnessing by up to 90%. Not only does this clean up your rack and reduce the chances of system failure it also simplifies installation and maintenance.

KVM Switch Box Cables

Phantom PCI Card Cables

5 Place Servers Where You Want Them, Not Where Your Cabling Forces You

Instead of the bulky coax cable used in regular KVM switches the Phantom features the thin, easy to manage CAT5 cable further reducing cable clutter. Because the CAT5 is field terminable you can also cut and crimp it for perfect length further eliminating cable clutter and saving space. Amazingly, you save money as CAT5 actually costs 1/8 the price of coax.

6 Flexible, Non Blocking Multi-User Control

With the Phantom two users can simultaneously access and control all the servers in the chain. What's more, the use of CAT5 cable extends control up to 110m/360ft. Now you can control your servers from any location in your facility. And it gives you a tremendous amount of flexibility in the design of your data center. This offers a solution for those larger installations that require more than one supervisor.

7 Mixed Multi-Platform Control

Most regular KVM switches can control only PS/2 type servers. Thanks to the Phantom's modular nature and its Remote options, the Phantom gives you multi-platform control. Use the Phantom to manage either IBM compatible computers/servers (PS/2 or USB ports), SUN servers or RS-232 devices. What's more the Universal Phantom Manager unit (UPM) can control all these devices mixed on a single line.

8 The System That Grows With You

With regular switch boxes you are limited to 8 or 16 servers before you need to cascade, taking up even more space and using even more bulky cable. The Phantom Manager acts like a 63 port KVM switch enabling you to connect up to 63 servers to each management unit. Even better, since the Phantom is scalable you buy only the exact number of Remote units you need and can add more individually as your data requirements grow.

9 Advanced Management Options

The Phantom also features advanced On Screen Display (OSD) management, the most efficient way for monitoring, accessing and controlling your data center. The OSD offers:

• Password controlled access.
• Multi-layer security including individual user profiles.
• Automatic numbering of servers including configuration storage.
• Assignment of meaningful names to servers.
• Auto-skip — limits selection to active computers.
• Adjustable Scan function.
• Flash upgrade.

Phantom OSD

You can also manage your Phantom system, via serial port, using Minicom's Control Software or any other software you might have.

10 Phantom - The Best Solution For Managing Low/High Density Server Environments:

• Small to Medium Sized Data Centers
• Server Farms
• Industrial Lines
• Production Lines
• IT Server Environments
• Corporate Server Rooms

No matter how many servers you have or what type they are, Phantom is the answer for your server management!

Specifications

System

Number of Remote units	63
System cable	CAT5 FTP 2x4x24 AWG Solid Wire
Maximum Distance	110m/360ft
Resolution	Up To 1600x1200 @ 75Hz
Mouse Support	PS/2, Wheel mouse
Operating Systems	DOS, Windows (3x, 9x, 2000, NT4, ME, XP), LINUX, UNIX, HP UX QNX, SGI, FreeBSD, BeOS, Open VMS, NOVELL 3.12-6
Management	On Screen Display (OSD), RS-232 Control Software
Security	Password, multiple user Profiles
Scan	Automatically view all screens at adjustable intervals from 5-995 seconds
Operating Temperature	Up to 50°C / 122°F
Storage Temperature	-40°C to 70°C / -40°F to 158°F
Warranty	**3 years**

Manager Unit

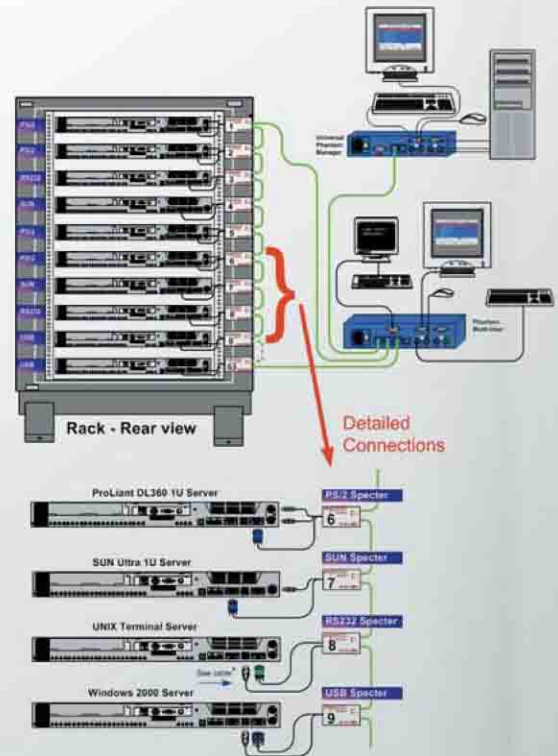| Type	PCI Card	UPM	MX II
Cables / Connectors	VGA I/O — HDD15M-HDD15M- HDD15F KB/Mouse — MiniDin8M- MiniDin6M- MiniDin6M Service — RJ11 System Out — RJ45	CPU Cable — 3 in 1 Screen — HDD15M KB — MiniDin6M Mouse- MiniDin6M System Out — RJ45 Service — RJ11 RS232 — DB9	CPU Cab e — 3 in 1 Screen — HDD15M KB — MiniDin6M Mouse- MiniDin6M System In/ Out — RJ45 Service — RJ11 RS232 — DB9 Second User — RJ45
Rack mountable	N/A	Yes	Yes
Dimensions	168x107mm/6.6 x 4.2in	41.5x204x180mm/1.6x8x7.1in	41.5x226x180mm/1.6x8.9x7.1in
Power Consumption	5VDC 400mA	100-240 VAC 600mA	100-240 VAC 800mA
Order Number	0SU42001	0SU52015	0SU52016

Remote Unit

Type	PCI Card	Specter PS/2	Specter II PS/2	Specter II SUN	Specter II USB	Specter II RS232
Cables / Connectors	VGA— HDD15M-HDD15M KB — MiniDin6M Mouse — MiniDin6M System In/Out RJ45	VGA — HDD15M KB — MiniDin6M Mouse — MiniDin6M System In/Out RJ45	VGA — HDD15M KB — MiniDin6M Mouse — MiniDin6M System In/Out RJ45	VGA — HDD15M KB/Mouse — MiniDin8M System In/Out RJ45	VGA — HDD15M KB/Mouse — USB System In/Out RJ45	Data — DB9F Power — USB System In/Out RJ45
Dimensions	131x102mm/ 5.2x4in	86x45x20mm / 3.4x1.8x0.8in				
Weight	150g / 0.33lb	260g / 0.57lb				
Shipping Weight	520g / 1.15lb	800g / 1.76lb				
Power Consumption	5VDC 200mA	From KB port 5VDC 250mA	From KB/Mouse port 5VDC 300mA	From KB/Mouse port 5VDC 300mA	From KB/Mouse port 5VDC 300mA	From USB port/PS/2 with adapter/ Ext. P.S with adapter 5VDC 300mA
Order No.	0SU41001	0SU51004	0SU51012	0SU51013	0SU51011	0SU51014

Phantom System - Management Options

Phantom Remote	Phantom Manager		
	PCI Card	Universal Phantom Manager (UPM)	Phantom MX II Manager
PCI Card	Single User	Single User	—
Specter PS/2	Single User	Single User	—
Specter II PS/2	–	Single or Multi-User	Multi User
Specter II SUN	–	Single or Multi-User	Mu ti-User
Specter II USB	–	Single or Multi-User	Multi User
Specter II RS-232	–	Single or Multi-User	Multi User

Phantom MX II

Multi-User Server Management Solution for High Density Rack Environments
Mixed Platform Example - PS/2, SUN, RS232, USB

Rack - Rear view

Detailed Connections

ProLiant DL360 1U Server — PS/2 Specter — 6
SUN Ultra 1U Server — SUN Specter — 7
UNIX Terminal Server — RS232 Specter — 8
Windows 2000 Server — USB Specter — 9

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Authorized Reseller:

5D020065 ver.3