

Lenovo ThinkSystem Analog 1x8 KVM Switch Product Guide

The ThinkSystem Analog 1x8 KVM Switch is an analog keyboard-video-mouse (KVM) console manager that provides enhanced local access, management, and security capabilities to Lenovo servers environments.

The switch has eight target ports and supports one local user. Local video resolution can be up to 1920 x 1080. Two level tiering allows you to manage up to 64 servers connected to multiple console switches from one local console. The following figure shows the ThinkSystem Analog 1x8 KVM Switch.



Figure 1. ThinkSystem Analog 1x8 KVM Switch

Did you know?

The ThinkSystem Analog 1x8 KVM Switch is an ideal low-cost entry point for local management of your servers. Each switch supports mouse, keyboard and display connectivity to up to 8 servers, and the switch uses low-cost and flexible CAT-5 cables for convenience and durability.

Part number information

Ordering information is shown in the following table.

Table 1. Ordering information

Part number	Feature code	Description
1754A1T	1754-HC5 B38H	ThinkSystem Analog 1x8 KVM Switch
4X97A11106	B38E	ThinkSystem USB Conversion Cable for Analog KVM
4X97A11108	B38G	ThinkSystem VGA to DVI Conversion Cable

The ThinkSystem Analog 1x8 KVM Switch includes the following items:

- 8-port console switch
- Rack mounting hardware to mount the switch in a 1U rack space
- VGA-to-DVI adapter (passive), for use in tiered console configurations
- Power cable, 1 meter length, C13-C14 connectors
- Publications flyer

The Analog 1x8 KVM Switch allows you to share one workspace (keyboard, mouse, and display) across many target servers. The target servers are connected to the console switch via CAT-5 cables and a USB Conversion Cable at the target end.

The ThinkSystem USB Conversion Cable for Analog KVM, 4X97A11106, is a 2 meter cable that connects to each target server and provides a USB, VGA and 3.5mm audio cable connector, as shown in the following figure.

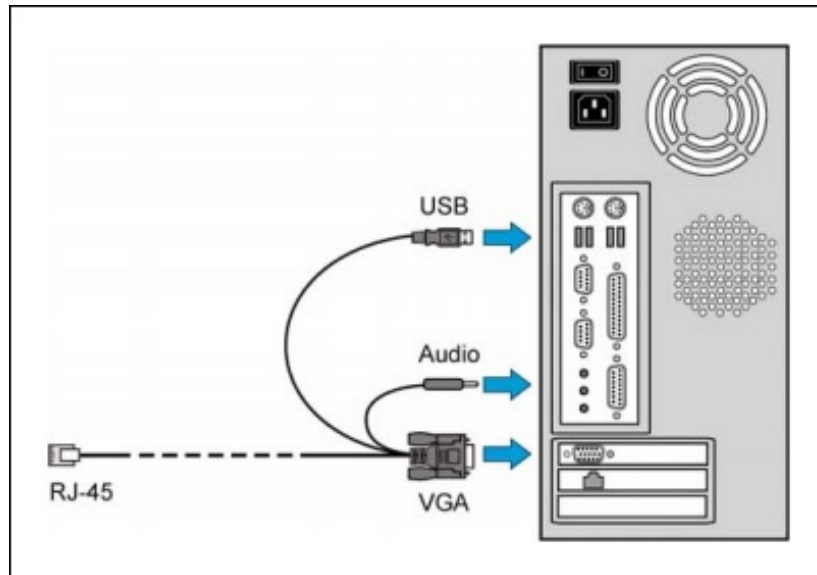


Figure 2. ThinkSystem USB Conversion Cable for Analog KVM, 4X97A11106

If the target server has a DVI-D video port instead of VGA, use the ThinkSystem VGA to DVI Conversion Cable, 4X97A11108, in conjunction with the ThinkSystem USB Conversion Cable.

For details on when to use the VGA to DVI Conversion Cable, see this support tip:
<https://datacentersupport.lenovo.com/us/en/solutions/ht510707>

Note: The passive VGA-to-DVI adapter that is included with the console switch is not supported to connect a server to the switch.

The VGA to DVI cable is shown in the following figure.



Figure 3. ThinkSystem VGA to DVI Conversion Cable, 4X97A11108

The switch provides a DVI port and two USB ports for local keyboard, video and mouse (KVM) connections. If the cable you have to connect the display has a VGA connector instead of a DVI connector, use the ThinkSystem VGA to DVI Conversion Cable, 4X97A11108, to convert the DVI port to a VGA port.

Connections

The following figure shows the connections on the rear of the Analog 1x8 KVM Switch.

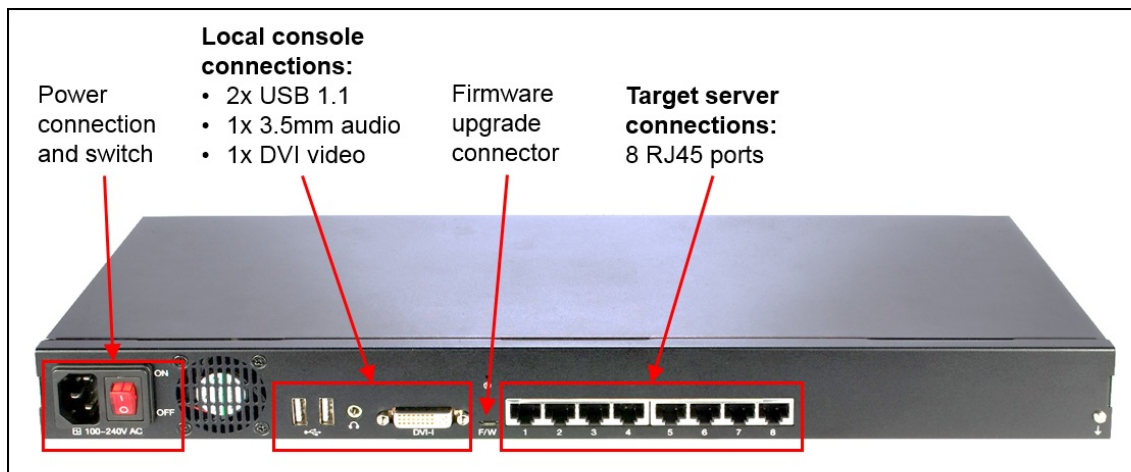


Figure 4. Connections on the rear of the ThinkSystem Analog 1x8 KVM Switch

The following figure shows the front of the Analog 1x8 KVM Switch.

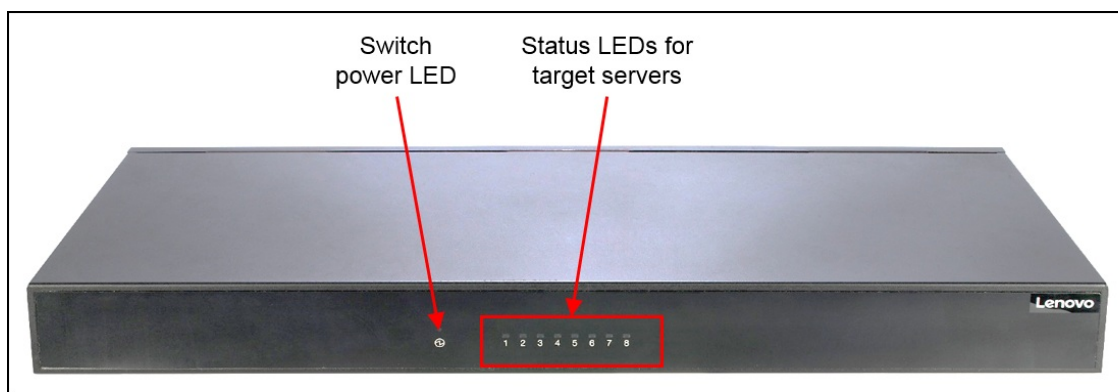


Figure 5. Status LEDs on the front of the ThinkSystem Analog 1x8 KVM Switch

Specifications

The ThinkSystem Analog 1x8 KVM Switch has the following specifications:

- Based on the Raritan MasterConsole Digital MCD-108 Cat5 KVM switch
- Supports 1 local user (USB mouse & keyboard, DVI video port, audio port)
- Allows connectivity up to 8 directly connect servers via Cat-5 cables and USB Conversion Cable
- Supports two-tier configurations so that up to 64 servers can be managed from 1 local user interface
- Front panel LEDs allow for instant monitoring of server statuses
- On-screen display (OSD) interface enables fast and easy switching (default hot-key for the OSD is pressing Scroll Lock three times)
- Servers can be labeled with meaningful names for quick identification and selection
- OSD menus can be operated with keyboard hot keys
- Password security ensures only authorized access to managed servers
- “Keep-alive” technology maintains non-stop server operation, even in the event of power loss
- AutoSkip function to bypass inactive channels; AutoScan computers at variable rates
- Upgradeable firmware (via front USB port)
- Maximum video resolution:
 - VGA: 1920 x 1200 @ 75Hz
 - DVI: 1920 x 1080 @ 60Hz
- Reliability is greater than 300,000 Hours MTBF
- Input power: 100-240 Vac, 1.5 A

Comparison with the LCM8 switch

The following table compares the Analog 1x8 KVM Switch to the LCM8 console switch.

The LCM8 switch is described in the LCM8 and LCM16 Local Console Managers product guide: <https://lenovopress.com/tips0788-lcm8-and-lcm16-local-console-managers>

Table 2. Comparison of features

Feature	Analog 1x8 KVM	LCM8
Part number	1754A1T	1754A1X
Number of local concurrent users	1	1
Local user connections: KVM	DVI + USB	VGA + USB
Remote user connections	No	Optional, with LCM Digital Activation Key
Maximum number of target systems: Direct	8	8
Maximum number of target systems: Daisy-chained	None	128
Maximum number of target systems: Tiered configuration	64	128
Maximum video resolution	1920x1080	1600x1200 (4:3) 1680x1050 (wide)
Support for USB Conversion Option	Yes	Yes
Support for Virtual Media Conversion Option	No	Yes
Virtual Media	No	Yes
Two Factor Authentication (TFA) device support	No	Yes
Password protection	Yes	Yes
Serial port	No	Yes
Ethernet port	No	Yes
Keep Alive feature in Conversion Option	Yes	Yes
Firmware upgrades to the console switch	Yes	Yes
100-240V, 50/60 Hz Input power	Yes	Yes

Tiered consoles

You can connect up to eight additional Analog 1x8 KVM Switches to a single Analog 1x8 KVM Switch to enable access to additional servers. Such a configuration is called a two-tiered setup, where the eight second-tier switches are connected to the base switch using a combination of a USB Conversion Cable and a passive VGA-to-DVI adapter. The passive VGA-to-DVI adapter is included with the console switch. Up to a total of 64 target servers can be managed from one central location.

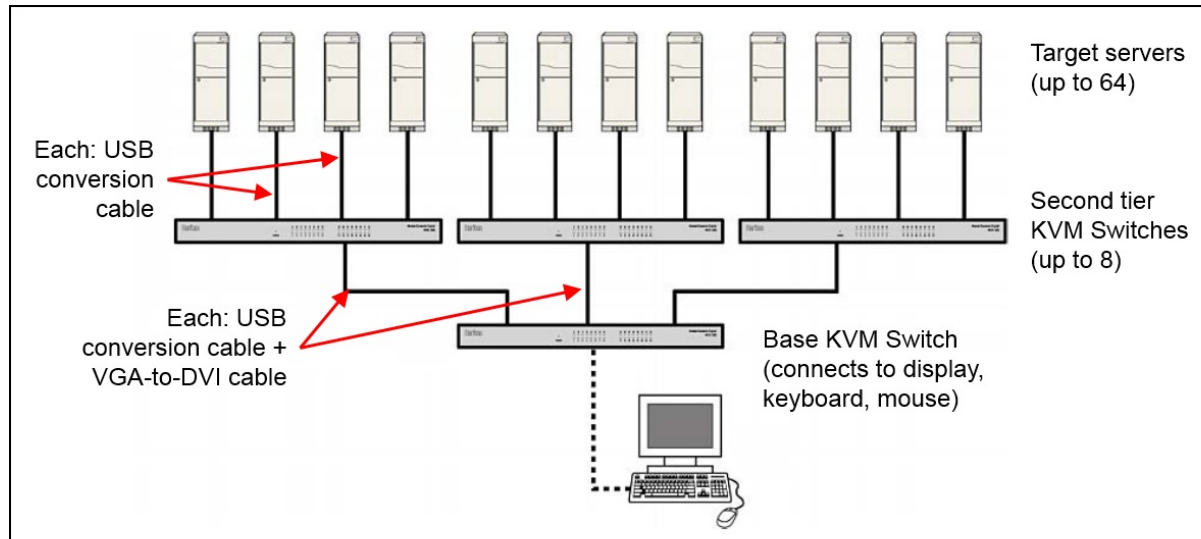


Figure 6. Two-tiered configuration

Physical specifications

The ThinkSystem Analog 1x8 KVM Switch has the following specifications:

- Height: 44 mm (1.73 inches): 1 rack unit (1R)
- Width: 440 mm (17.3 inches)
- Depth: 150 mm (5.9 inches)
- Weight: 1.96 Kg (4.3 lb)

Operating environment

The switch is supported in this environment:

- Temperature:
 - Operating: 0° to 50°C (32° to 132°F)
 - Non-operating: -20° to 60°C (-4° to 140°F)
- Relative humidity:
 - 0% to 80%

Warranty

The ThinkSystem Analog 1x8 KVM Switch has a three-year limited warranty.

Server support

The ThinkSystem Analog 1x8 KVM Switch is supported with any server with either a VGA or DVI video port. Use on a server with a DVI port requires the VGA to DVI Conversion Cable.

Rack support

The ThinkSystem Analog 1x8 KVM Switch occupies 1U of rack space in a rack cabinet. The KVM switch includes a mounting bracket to mount the unit in the rack.

Related publications and links

For more information, refer to these documents and websites:

- Rack & Power Infrastructure Options page
<https://lenovopress.com/lp0766-rack-power-infrastructure-options>
- Lenovo Press Product Guides for console switches and console kits:
<https://lenovopress.com/servers/options/kvm>
- ThinkSystem Analog 1x8 KVM Switch User's Guide
- Lenovo server options product page
<https://www.lenovo.com/us/en/data-center/options/>
- Raritan MCD product page
<https://www.raritan.com/mcd>

Related product families

Product families related to this document are the following:

- [KVM Switches & Consoles](#)

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This document, LP1057, was created or updated on June 29, 2020.

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