

# CAT5 KVM SWITCH USER MANUAL

MODELS 503907  
& 503914



*Shown: Model 503914 16-Port*



INT-503907/503914-UM-0808-01

Thank you for purchasing this INTELLINET NETWORK SOLUTIONS™ Cat5 KVM Switch, Model 503907 (8-port) or Model 503914 (16-port). Designed for computer/server management, this rackmount device provides dual-console access for up to 64 (8-port) or 128 (16-port) computers using cost-effective Cat5e/6 cabling.

With dual-console control, administrators can work at a second location if the need arises, and share the same video and keyboard/mouse control with the local console. And not only are Cat5e/6 cables more flexible and less expensive, they can provide connection distances of up to 100 meters (330 feet), allowing the management of a data center from locations throughout a building.

The instructions in this user manual make installation and operation relatively simple, so you'll soon be enjoying the benefits of these additional features:

- USB and PS/2 interface support on PC side
- PS/2 interface support on console side
- Pop-up on-screen display (OSD) menu
- Dedicated port to cascade up to 8 units, controlling up to 128 computers when cascading to 16-port model 503914 or 64 computers when cascading to 8-port model 503907
- Bank/channel selection and operation using keyboard hotkeys and OSD menu
- Uses computer connection dongles (not included) for each port (Model 503921 for PS/2; Model 503938 for USB)
- Remote console connection via Remote Console Unit (503983)
- Local console connection with PS/2 connectors
- Local console can activate or deactivate the remote console
- Numerical LED display and LED indicators for easy bank/port status monitoring
- Auto-Scan period programmable via OSD menu option
- Password protection
- Auto-logout timeout support
- Includes 19" rackmount brackets
- Lifetime Warranty

## Setup/Installation

**CAUTION:** Before connecting to the Cat5 KVM Switch, all PS/2 computers should be powered off unless the PS/2 interface has already been initialized and operating; otherwise, the switch system might not be properly set up. USB computers do not have this limitation.

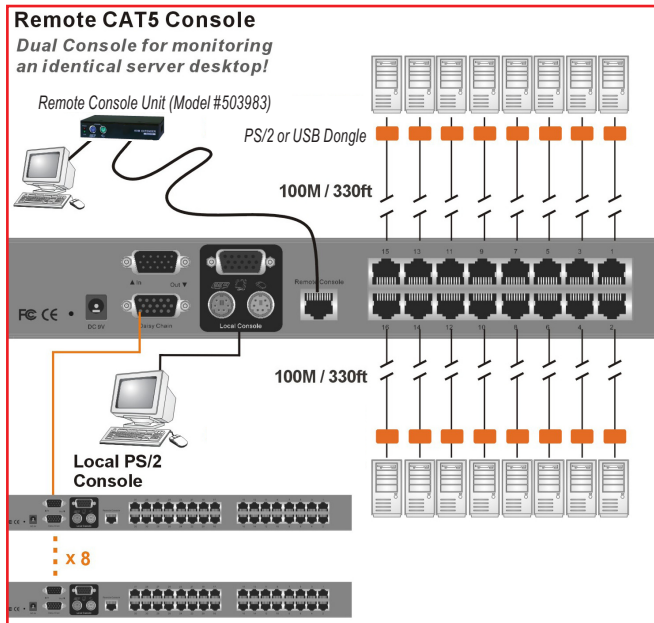
1. Connect the shared keyboard, mouse and monitor to the console connectors on the rear of your (master) Cat5 KVM Switch. Power on the switch by connecting and plugging in the power adapter cord.

**NOTE:** If using a single Cat5 KVM Switch in a non-cascaded application, go directly to Step 4. To daisy-chain switches, continue to Step 2. You can daisy-chain up to 8 levels of Cat5 KVM Switches, with as many as 64 (8-port) or 128 (16-port) computers connected.



2. Use the enclosed daisy-chain cable (HD15 male to female) to connect the female Daisy Chain Out port of the master (first) switch to the male Daisy Chain In port of the second switch. Connect the power adapter cord to the second switch to power it on.
3. If you have yet another switch to be daisy-chained, just repeat Step 2 to connect them. You can daisy-chain up to 8 units of KVM switches. Plug a terminator onto the Daisy Chain Out port of the last unit. (No terminator required if only using a single unit.)
4. With the Cat5 KVM switch — or daisy-chained switches — powered up and initialized, use an INTELLINET NETWORK SOLUTIONS Dongle for Cat5 KVM Switch (Model 503938 for USB; Model 503921 for PS/2) to connect the computer(s) to a computer port or ports on the rear of the switch(es). **NOTE:** If using a PS/2 dongle, connect to the mouse port before the keyboard port for a proper initializing sequence.

5. Power up the connected computer(s). Each keyboard and mouse will be recognized and you can begin operating the switch(es).



## Operation

There are two ways to select a specific computer (on a specific switch, if you have daisy-chained switches): using hotkey sequences (see the Quick Reference Sheet on Page 9) or the OSD Main menu (below).

### Keyboard Hotkeys

A keyboard hotkey sequence consists of at least three specific keystrokes: ScrLk + ScrLk + Command key(s). If you prefer a preceding sequence other than two consecutive Scroll Locks:

1. Press ScrollLock + ScrollLock + H. Two beeps will signal readiness for new preceding sequence selection.
2. Press the key you would like to use as your preceding sequence:  
Optional keys are SCROLL LOCK, CAPS, ESC, F12 or NUM LOCK.  
A third beep indicates selection confirmation: You can now use the new preceding sequence to execute your hotkey commands

**NOTE:** Each keystroke within a hotkey sequence needs to be pressed within 2 seconds; otherwise, the hotkey sequence will not be validated.

## OSD (On-Screen Display) Menus

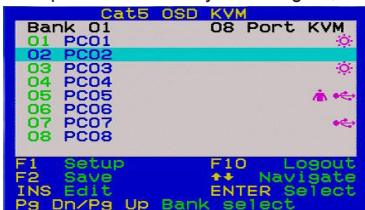
With the Cat5 KVM Switch(es) installed and powered on for the first time, an OSD login prompt will display. Since by default the password protection is disabled, you can just press Enter to bypass the prompt and access all the control features as ADMIN.



To activate the OSD menu, use the hotkey sequence ScrLk + ScrLk + Space Bar. To deactivate the menu, press ESC.

### Main Menu:

- To select a computer: Press the Up/Down arrow keys to navigate; press PgUp/PgDn to scroll; press Enter to select.
- To edit a computer name: Press Insert to edit; Enter to confirm; Esc to delete.
- To rotate through the Main, Video Setting, Setup and Status screens: Press F1.
- To save any modifications: Press F2 and "Saving parameters" will display.
- To log out: Press F10. **NOTE:** This will lock the keyboard and mouse for security; a password will be needed to log back in.



### Setup Menu:

- Auto Logout: specifies a time for auto logout (00–99 min.)
- OSD Timeout: specifies the time the OSD menu remains on screen.

- Autoscan Period: specifies the functions's delay time.
- Title Bar: specifies the bar's position: Left, Right, Disable.
- Hotkey: specifies the hotkey preceding sequence (SCROLL LOCK, CAPS, ESC, F12 or NUM LOCK).

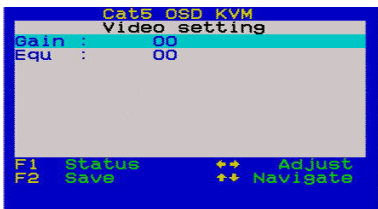


- Password: enables/disables password protection.
- Load Default: lets you load the default settings.
- Enable Remote Console / Disable Remote Console: toggles between these two options. If the remote console is off (disabled), an OSD reminder will display below the title bar.



### Video Setting Menu:

- Gain: lets you specify the gain level (00-50).
- Equ: lets you specify the equalization level (00-50).
- To adjust the VGA setting: Go to Main/Video Setting, then begin to adjust Gain and Equalization. You may need to try several combinations before you find a preferred setting.



### Status Menu:

This screen presents the unit-specific bank number, firmware version, KVM switch model and the maximum number of ports. In a daisy-chained application, it lists details of all banks. Press Enter to go to the Dongle Status screen.



### Dongle Status Submenu:

This screen presents the resident dongle firmware version on the switch and on various other dongles. You can also perform a manual upgrade of an individual dongle: Select the dongle and press Enter to confirm the upgrade. During the upgrade, a progress bar will display through completion.



```
Cat5 OSD KVM
Dongle status
Ver.      Model      120208
01  -
02  -
03  -
Enter again to confirm
05  -
06  -
07  -
08  -
Esc  Backward
Enter Upgrade      F4 AutoUps
Pg Dn Next page
Pg Up Prev page

Dongle upgrading
Channel : 01
Firmware date : 110408
+-----+
```

- F4: lets you toggle between Auto Upg(rade) and Manual Upg(rade).

### Port Switching

To switch ports using hotkeys, use this configuration sequence: ScrLk + ScrLk + a + b + y + z, where ab = bank no., yz = port no., so that ScrLk + ScrLk + 0 + 2 + 1 + 6 switches to Bank 2, Port 16.

To switch ports using the OSD, go to the Main menu and use the Up/Down arrow keys and/or PgUp/PgDn keys to find and highlight the computer you want to switch to, then press Enter.

### Log In/Out

The Log In and Log Out functions are dependent on the Password feature; that is, they are only useful when Password is enabled on the Setup menu. To maximize console security, of course, always enable Password and adopt a strict log in/out policy. Minimizing the Auto Logout timeframe can help restrict access, too.

### Troubleshooting Tip

If a keyboard and/or mouse locks up, unplug the component(s) and then re-connect after a few seconds to re-initialize. If the problem continues, unplug the dongle from that computer and then re-connect after a few seconds. (If a PS/2, re-connect to the mouse port first, then the keyboard port.) If neither of these procedures solves the problem, reboot the computer to completely reset the keyboard and mouse.

## Firmware Upgrade

This Cat5 KVM Switch allows the upgrade of firmware whenever needed to enhance compatibility with other devices or to update the switch's functions and performance. For the Cat5 KVM Switch itself, use a USB cable (type A or B) to connect a host computer to the Daisy Chain In port on the back panel of the switch. For the dongle, use the Auto Upgrade feature available on the Dongle Status submenu (see above).

## Quick Reference Sheet

The Quick Reference Sheet on Page 9 lists operation commands, hotkeys, OSD menu controls and front-panel buttons. Note the following:

- OSD menu control is only available when the OSD menu is activated on the screen. To activate: ScrLk + ScrLk + Space Bar. When the OSD menu is active, the mouse will be locked until the OSD menu is off.
- Note that a, b, y and z each denote a number key: (ab) = 1–16; (yz) = 1–8. For example, ScrLk + ScrLk + 03 + 06 is for Bank 3 Port 6. When using a single KVM switch, the default bank no. is 01: ScrLk + ScrLk + 01 + 12 = Port 12.
- The password is up to 8 characters long, and is required for access to your KVM switch once you enable password protection.

## Dongles for PC Connection(s)

The two INTELLINET NETWORK SOLUTIONS Dongles for PC connections (PS/2 and USB versions) and the KVM Extender (Remote Console Unit) are shown below.



Left: PS/2 Connection Dongle,  
Model 503921



Right: USB Connection Dongle,  
Model 503938



Left: Remote Console Unit, Model 503983



COMMAND	HOTKEYS	OSD CONTROL	DESCRIPTION
SELECT COMPUTER	SCRK+SCRK+(A)-(B)-(Y)-(Z) (AB = BANK NO.; XY = PORT NO.)	CURSOR KEYS TO NAVIGATE; ENTER TO SELECT.	SELECT THE ACTIVE BANK (SWITCH) AND PORT.
NEXT LOWER PORT	SCRK+SCRK+ARROW UP	CURSOR KEYS TO NAVIGATE; ENTER TO SELECT.	SELECT THE NEXT LOWER CONNECTED PORT WITHIN THE CURRENT ACTIVE BANK
NEXT HIGHER PORT	SCRK+SCRK+ARROW DOWN	CURSOR KEYS TO NAVIGATE; ENTER TO SELECT	SELECT THE NEXT HIGHER CONNECTED PORT.
NEXT LOWER BANK	SCRK+SCRK+PGUP	PGUP (W/ OSD MENU)	SELECT THE NEXT LOWER BANK (SWITCH) WHEN USING DAISY-CHAINED UNITS.
NEXT HIGHER BANK	SCRK+SCRK+PGDN	PGDN (W/ OSD MENU)	SELECT THE NEXT HIGHER BANK (SWITCH) WHEN USING DAISY-CHAINED UNITS.
DEFINE HOTKEY PRECEDING	SCRK+SCRK+H+(Y) (Y=SCROLL LOCK, CAPS SEQUENCE	MAN MENU/SETUP/HOTKEY (SCROLL LOCK, CAPS, ESC, F12 OR NUM LOCK)	SELECT THE HOTKEY PRECEDING SEQUENCE AMONG 5 ALTERNATIVE KEYS.
LOAD FACTORY DEFAULT	—	MAN MENU / SETUP / LOAD DEFAULT	RESTORE SETTINGS TO THE FACTORY DEFAULTS.
CHANGE COMPUTER NAME	—	CURSOR KEYS TO NAVIGATE; ENTER (INS) TO SELECT/EDIT.	CHANGE THE COMPUTER NAME (MAX. LENGTH: 8 ALPHANUMERIC CHARACTERS).
SHOW OSD MENU	SCRK+SCRK+SPACE BAR	—	ACTIVATE THE OSD MENU ON THE CONSOLE SCREEN.
AUTOSCAN	SCRK+SCRK+S	—	AUTOSCAN THROUGH EVERY CONNECTED CHANNEL FOR QUICK SCREEN BROWSING OF EACH CHANNEL.
STOP AUTOSCAN	ANY KEY	—	TERMINATE AUTOSCAN ACTIVITY.
AUTOSCAN PERIOD	—	MAN MENU / SETUP / AUTOSCAN PERIOD	SPECIFY DELAY TIME WITHIN A RANGE OF 5 – 99 SECONDS (DEFAULT = 10 SEC.)
AUTO LOGOUT TIMEOUT (ENABLE/ DISABLE)	—	MAN MENU / SETUP / AUTO LOGOUT	SPECIFY THE TIME OUT FOR AUTO LOGOUT. SCREEN / KEYBOARD/MOUSE LOCKED AFTER TIMEOUT PERIOD FOR SECURITY. (DEFAULT = 0 = DISABLE)
OSD MENU TIMEOUT	—	MAN MENU / SETUP / OSD TIMEOUT	SPECIFY THE TIMEOUT FOR OSD MENU. (DEFAULT = 60 SECONDS; 0 = DISABLE)
OSD TITLE BAR ON/OFF	SCRK+SCRK+T	—	ENABLE/DISABLE THE OSD TITLE BAR. (DEFAULT = ON)
OSD TITLE BAR POSITION (LEFT/RIGHT/ DISABLE)	—	MAN MENU / SETUP / TITLE BAR	SELECT THE OSD TITLE BAR POSITION ON YOUR SCREEN.
SET UP PASSWORD (DISABLE/ENABLE)	—	MAN MENU / SETUP / PASSWORD	ENABLE/DISABLE PASSWORD PROTECTION. (DEFAULT = DISABLE; PASSWORD LENGTH: 8 CHARACTERS MAX.)
REMOTE CONSOLE ON/OFF	SCRK+SCRK+Z	MAN MENU / DISABLE OR ENABLE REMOTE CONSOLE	ENABLE/DISABLE THE REMOTE CONSOLE (DEFAULT=ON)

# Specifications: Model 503907, 8-Port

## Standards

- USB 1.1

## General

- PC connections: 8
- PC port connectors:
  - 8 x RJ45 connectors
  - Requires a connection dongle per port (not included)
  - Requires a Cat5, Cat5e or Cat6 network cable per port (not included)
  - PS/2 connection dongle: Model 503921
  - USB connection dongle: Model 503938
  - Maximum connection distance: 100 m (330 ft.)
- Console connections: 2 (1 x local, 1 x remote)
- Local console port connectors:
  - 2 x PS/2 mini-DIN 6 female (keyboard, mouse)
  - 1 x HD15 female (video)
- Remote console port connection
  - 1 x RJ45 connector
  - Requires one remote console unit (model 503983), not included
  - Requires one Cat5, Cat5e or Cat6 network cable per port (not included)
  - Maximum connection distance: 100 m (330 ft.)
- Computer selection:
  - Via hotkeys
  - Via on-screen display (OSD)
- Cascading function:
  - Cascade up to 8 KVM switches via special daisy chain port
  - Compatible models: 503914 (16-port), 503907 (8-port)
- Video resolution: maximum 1600 x 1200
- Video bandwidth: maximum 165 MHz
- FCC Class B, CE, RoHS

## LEDs

- 1 Live indicator LED per channel
- 1 Active indicator LED per channel

## Environmental

- Metal housing
- Dimensions: 220 (L) x 300 (W) x 44.5 (H) mm (8.6 x 11.8 x 1.7 in.);
- Weight: 3.6 kg (7.9 lbs.)
- Operating temperature: 0 – 40°C (32 – 104°F)
- Operating humidity: 0 – 90% RH, non-condensing
- Storage temperature: -20 – 60°C (-4 – 140°F)

## Power

- External power adapter: DC 9 V, 2 A
- Power consumption: 7 Watts

## Package Contents

- Cat5 KVM Switch
- 19" rackmount brackets
- User manual

# Specifications: Model 503914, 16-Port

## Standards

- USB 1.1

## General

- PC connections: 16
- PC port connectors:
  - 16 x RJ45 connectors
  - Requires a connection dongle per port (not included)
  - Requires a Cat5, Cat5e or Cat6 network cable per port (not included)
  - PS/2 connection dongle: Model 503921
  - USB connection dongle: Model 503938
  - Maximum connection distance: 100 m (330 ft.)
- Console connections: 2 (1 x local, 1 x remote)
- Local console port connectors:
  - 2 x PS/2 mini-DIN 6 female (keyboard, mouse)
  - 1 x HD15 female (video)
- Remote console port connection
  - 1 x RJ45 connector
  - Requires one remote console unit (model 503983), not included
  - Requires one Cat5, Cat5e or Cat6 network cable per port (not included)
  - Maximum connection distance: 100 m (330 ft.)
- Computer selection:
  - Via hotkeys
  - Via on-screen display (OSD)
- Cascading function:
  - Cascade up to 8 KVM switches via special daisy chain port
  - Compatible models: 503914 (16-port), 503907 (8-port)
- Video resolution: maximum 1600 x 1200
- Video bandwidth: maximum 165 MHz
- FCC Class B, CE, RoHS

## LEDs

- 1 Live indicator LED per channel
- 1 Active indicator LED per channel

## Environmental

- Metal housing
- Dimensions: 220 (L) x 300 (W) x 44.5 (H) mm (8.6 x 11.8 x 1.7 in.);
- Weight: 3.6 kg (7.9 lbs.)
- Operating temperature: 0 – 40°C (32 – 104°F)
- Operating humidity: 0 – 90% RH, non-condensing
- Storage temperature: -20 – 60°C (-4 – 140°F)

## Power

- External power adapter: DC 9 V, 2 A
- Power consumption: 7 Watts

## Package Contents

- Cat5 KVM Switch
- 19" rackmount brackets
- User manual



# INTELLINET™

NETWORK SOLUTIONS

BRINGING NETWORKS TO LIFE

INTELLINET NETWORK SOLUTIONS™ offers a complete line of active and passive networking products.

Ask your local computer dealer for more information or visit

**[www.intellinet-network.com](http://www.intellinet-network.com)**

Copyright © INTELLINET NETWORK SOLUTIONS

All products mentioned are trademarks or registered trademarks of their respective owners.