



Dominion KX II-101-V2

Quick Setup Guide

Thank you for your purchase of the Dominion® KX II-101-V2, the economical, full-featured, single-port digital KVM-over-IP device.

For details on using the KX II-101-V2, access online help from the application or the [Support page](#) on the Raritan website. Online help is your primary resource but a PDF version of the help is also available on the Support page.

Package Contents

Each KX II-101-V2 device ships with:

- 1 - KX II-101-V2 KVM over IP
- 1 - KVM cable
- 1 - Power adapter (AC/DC 5VDC with universal adapter)
- 1 - Mounting bracket kit
- 1 - Quick Setup Guide
- 1 - Release notes (if applicable)

Step 1: Configure the Target Server

Target Server Video Resolutions

For optimal bandwidth efficiency and video performance, a target server running a graphical user interface such as Windows, X-Windows, Solaris, and KDE should be configured with desktop backgrounds set to a predominantly solid, light-colored graphic.

Backgrounds featuring photos or complex gradients should be avoided.

Ensure that the server's video resolution and refresh rate are supported by the KX II-101-V2, and that the signal is non-interlaced.

See [KX II-101-V2 Online Help](#) for a list of support target server resolutions.

Mouse Modes

The KX II-101-V2 operates in several mouse modes: Absolute Mouse Synchronization™, Intelligent Mouse mode and Standard Mouse mode.

Note: Do not use an animated mouse while using Intelligent Mouse mode.

Mouse parameters do not have to be altered for Absolute Mouse Synchronization.

For both the Standard and Intelligent Mouse modes, mouse parameters must be set to specific values, which are described in this section.

Mouse configurations will vary on different target operating systems. Consult your OS documentation for additional details.

Following are the mouse settings for various operating systems.

These settings are configured on your target operating system unless otherwise indicated.

See the [KX II-101-V2 Online Help](#) for details on configuring these mouse settings.

Windows 7 and Windows Vista Mouse Settings

► Configure these mouse settings in Windows 7® and Windows Vista®:

Configure the motion settings:

- Set the mouse motion speed setting to exactly the middle speed
- Disable the "Enhanced pointer precision" option

Disable animation and fade effects:

- Animate controls and elements inside windows
- Animate windows when minimizing and maximizing
- Fade or slide menus into view
- Fade or slide ToolTips into view
- Fade out menu items after clicking

Windows XP, Windows 2003, Windows 2008 Mouse Settings

► Configure these mouse settings in Windows XP®, Windows 2003® and Windows 2008®:

Configure the Motion settings:

- Set the mouse motion speed setting to exactly the middle speed
- Disable the "Enhance pointer precision" option
- Disable the Snap To option

Disable transition effects:

- Deselect the "Use the following transition effect for menus and tooltips" option

Windows 2000 Mouse Settings

► Configure these Windows 2000® mouse settings:

Configure the Motion settings:

- Set the acceleration to None
- Set the mouse motion speed setting to exactly the middle speed

Disable transition effects:

- Deselect the "Use the following transition effect for menus and tooltips" option

Apple Mac Mouse Settings

Absolute Mouse Synchronization is required for proper mouse synchronization on KVM target servers running a Mac® operating system.

► To enter Absolute Mouse Synchronization:

- Choose Mouse > Absolute in the KVM client.

Linux Mouse Settings

► Configure these Linux® mouse settings:

- (Standard Mouse Mode only) Set the mouse acceleration to exactly 1 and set the threshold to exactly 1. Enter the following command: `xset mouse 1 1`. This should be set for execution upon login.

Sun Solaris Mouse Settings

► Configure these Sun® Solaris™ mouse settings:

- Set the mouse acceleration value to exactly 1 and the threshold to exactly 1
- Ensure that your video card is set to a supported resolution and that its output is VGA, not composite sync

IBM AIX Mouse Settings

► Configure these IBM AIX® mouse settings:

- Go to the Style Manager, click on Mouse Settings and set Mouse Acceleration to 1.0 and Threshold to 3.0

Step 2: Configure Network Firewall Settings

TCP Port 5000

Allow network and firewall communication on TCP Port 5000 to enable remote access to the KX II-101-V2.

Alternatively, configure the KX II-101-V2 to use a different TCP port, then allow communication on that port.

TCP Port 443

Allow access to TCP Port 443 (Standard HTTPS) so you can access KX II-101-V2 via a web browser.

TCP Port 80

Allow access to TCP Port 80 (Standard HTTP) to enable automatic redirection of HTTP requests to HTTPS.

Step 3: Connect the Equipment

Power

The KX II-101-V2 is powered by a 100-240V AC input and 5VDC output power adaptor that is included with the device.

For standard AC power, plug the included AC power adaptor into the Power port and plug the other end into a nearby AC power outlet.



Network

Connect a standard Ethernet cable from the network port labeled LAN to an Ethernet switch, hub or router.

The LAN LEDs that appear above the Ethernet connection indicate Ethernet activity.

The yellow one blinks while the KX II-101-V2 is in use, indicating IP traffic at 10 Mbps.

The green light indicates a 100 Mbps connection speed.



Target Server

Use either the PS/2 or USB to connect to the target.

Before connecting, configure your target server's video to a supported resolution.

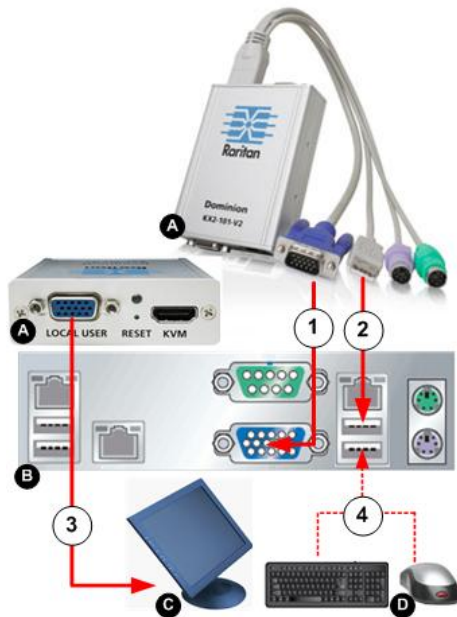
Use the USB connection if you are using virtual media or Absolute Mouse Mode.

The following items are in each of the connection diagrams that follow:

- A** - KX II-101-V2
- B** - Target server
- C** - Local monitor **Optional**
- D** - Local mouse and keyboard **Optional**

USB Configuration

Note: If you are using virtual media, you must use the USB connection.

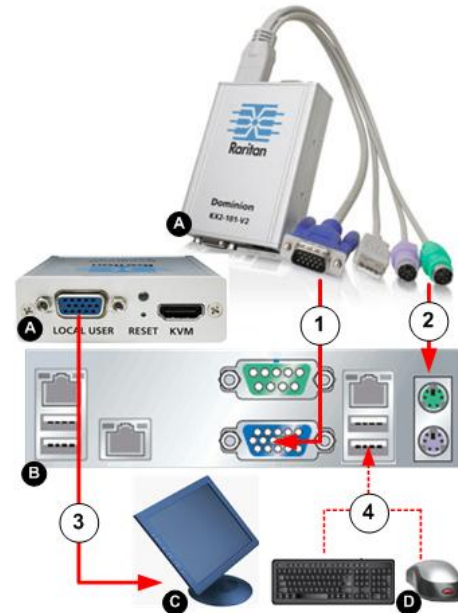


► To configure the KX II-101-V2 for use with a USB target server:

1. Use the attached video cable to connect the KX II-101-V2 to the target video port.
2. Connect the USB connector of the KVM cable to the KX II-101-V2 and to a USB port on the target server.
3. Connect a monitor to the KX II-101-V2 Local User Port if you need to use the local video. **Optional**
4. Connect the USB keyboard and mouse directly to the target. **Optional**

PS/2 Configuration

Note: If you are using virtual media, you must use the USB connection.



► To configure the KX II-101-V2 for use with a PS/2 target server:

1. Use the attached video cable to connect the KX II-101-V2 to the target video port.
2. Connect the PS/2 connector of the KVM cable to a PS/2 port on the target.
3. Connect a monitor to the KX II-101-V2 Local User Port if you need to use the local video. **Optional**

If you have a PS/2 keyboard and mouse, use a PS/2 to USB adapter (not included) to connect to the USB port of the target directly. **Optional**

Admin Port

Use the Admin port to do the following:

- Configure and manage the device with a terminal emulation such as HyperTerminal program on your PC.
- Configure and manage a power strip (requires an adapter, not included).
- Connect an external modem to dial into the device.



Use one DB9M to DB9F straight serial cable to connect from the KX II-101-V2 to the serial port on your PC or laptop.

The serial port communication settings should be configured as follows:

- 115,200 Baud
- 8 data bits
- 1 stop bit
- No parity
- No flow control

Local User Port

The Local User port serves as a pass-through to the target server video so that it connects directly to the monitor.



The local keyboard and mouse must be connected to target server directly.

For USB configurations, only the local video connects to the target server at the Local User port.

The keyboard and mouse connect directly to the target server using USB ports.

Step 4: Configure the KX II-101-V2

Note: You must use a crossover cable between the KX II-101-V2 and client if you are configuring the KX II-101-V2 through a web browser.

For the following steps, you must change the default password and assign the KX II-101-V2 its IP address at the Local Console.

All other steps can be performed from either the Local Console, or from the KX II-101-V2 Remote Console via a supported web browser using the KX II-101-V2's default IP address.

Java 1.7™ is required to use the Java-based KX II-101-V2 Virtual KVM Client and Multi-Platform Client (MPC)..

You can also use a terminal emulation program to configure the KX II-101-V2. See **Configure the KX II-101-V2 Using a Terminal Emulation Program (Optional)** (on page 5).

Change the Default Password

The first time you start the KX II-101-V2, you are required to change the default password.

► To change the default password:

1. Once the unit has booted, enter the default username *admin* and password *raritan*. Click Login.

2. Enter the old password *raritan*, then enter and reenter a new password.
Passwords can be up to 64 characters in length consisting of English, alphanumeric and special characters.
3. Click Apply. Click OK on the Confirmation page.

Assign the KX II-101-V2 an IP Address

► To assign an IP address to the KX II-101-V2:

1. Choose Device Settings > Network. The Network Settings page opens.
2. Specify a meaningful Device Name for your KX II-101-V2 device.
Up to 32 alphanumeric and valid special characters, no spaces between characters.
3. Next, configure the IPv4, IPv6 and DNS settings.

Configure the IPv4 Settings

1. In the IPv4 section, enter or select the appropriate IPv4-specific network settings:
 - a. Enter the IP Address if needed. The default IP address is 192.168.0.192.
 - b. Enter the Subnet Mask. The default subnet mask is 255.255.255.0.
 - c. Enter the Default Gateway if None is selected from the IP Auto Configuration drop-down.
 - d. Enter the Preferred DHCP Host Name if DHCP is selected from the IP Auto Configuration drop-down.
 - e. Select the IP Auto Configuration. The following options are available:
 - None (Static IP) - This option requires you manually specify the network parameters.
This is the recommended option because the KX II-101-V2 is an infrastructure device, and its IP address should not change.
Select this option if you want to ensure redundant failover capabilities should the primary Ethernet port (or the switch/router to which it is connected) fail. If it fails, KX II-101-V2 fails over to the secondary network port with the same IP address, ensuring there is not interruption.
 - DHCP - Dynamic Host Configuration Protocol is used by networked computers (clients) to obtain unique IP addresses and other parameters from a DHCP server.
With this option, network parameters are assigned by the DHCP server.
If DHCP is used, enter the Preferred host name (DHCP only). Up to 63 characters.
2. Next, configure IPv6 and/or DNS settings.

Configure the IPv6 Settings

1. If using IPv6, enter or select the appropriate IPv6-specific network settings in the IPv6 section:
 - a. Select the IPv6 checkbox to activate the fields in the section and enable IPv6 on the device.
 - b. Enter a Global/Unique IP Address. This is the IP address assigned to the KX II-101-V2.
 - c. Enter the Prefix Length. This is the number of bits used in the IPv6 address.
 - d. Enter the Gateway IP Address.
 - e. Link-Local IP Address. This address is automatically assigned to the device, and is used for neighbor discovery or when no routers are present. **Read-Only**
 - f. Zone ID. Identifies the device the address is associated with. **Read-Only**
 - g. Select an IP Auto Configuration option:
 - None (Static IP) - this option requires you manually specify the network parameters.

This is the recommended option because the KX II-101-V2 is an infrastructure device, and its IP address should not change.

Select this option if you want to ensure redundant failover capabilities should the primary Ethernet port (or the switch/router to which it is connected) fail. If it fails, KX II-101-V2 switches to the secondary network port with the same IP address, ensuring there is no interruption.

If None is selected, the following Network Basic Settings fields are enabled: Global/Unique IP Address, Prefix Length, and Gateway IP Address allowing you to manually set the IP configuration.
 - Router Discovery - use this option to automatically assign IPv6 addresses that have Global or Unique Local significance beyond that of the Link Local, which only applies to a directly connected subnet.
2. Next, configure DNS settings.

Configure the DNS Settings

1. Select Obtain DNS Server Address Automatically if DHCP is selected and Obtain DNS Server Address is enabled. When Obtain DNS Server Address Automatically, the DNS information provided by the DHCP server will be used.
2. If Use the Following DNS Server Addresses is selected, whether or not DHCP is selected, the addresses entered in this section is used to connect to the DNS server.

Enter the following information if the Following DNS Server Addresses is selected. These addresses are the primary and secondary DNS addresses used if the primary DNS server connection is lost due to an outage.

 - a. Primary DNS Server IP Address
 - b. Secondary DNS Server IP Address
3. When finished, click OK.

Your KX II-101-V2 device is now network accessible.

Connect to a Switch

Once KX II-101-V2 is network accessible, remove the crossover cable and connect the KX II-101-V2 to the switch using a Cat5 cable.

Configure Date/Time Settings (Optional)

Optionally, configure the date and time settings.

The date and time settings impact SSL certificate validation if LDAPS is enabled.

Use the Date/Time Settings page to specify the date and time for the KX II-101-V2. There are two ways to do this:

- Manually set the date and time.
- Synchronize the date and time with a Network Time Protocol (NTP) server.

► To set the date and time:

1. Choose Device Settings > Date/Time. The Date/Time Settings page opens.
2. Choose your time zone from the Time Zone drop-down list.
3. Adjust for daylight savings time by checking the "Adjust for daylight savings time" checkbox.
4. Choose the method to use to set the date and time:
 - User Specified Time - use this option to input the date and time manually. For the User Specified Time option, enter the date and time. For the time, use the hh:mm format (using a 24-hour clock).
 - Synchronize with NTP Server - use this option to synchronize the date and time with the Network Time Protocol (NTP) Server.
5. For the Synchronize with NTP Server option:
 - a. Enter the IP address of the Primary Time server.
 - b. Enter the IP address of the Secondary Time server.

Optional

Note: If DHCP is selected for the Network Settings on the Network page, the NTP server IP address is automatically retrieved from the DHCP server by default. Manually enter the NTP server IP address by selecting the Override DHCP checkbox.

6. Click OK.

Configure the KX II-101-V2 Using a Terminal Emulation Program (Optional)

You can use the Admin serial console with a terminal emulation program like HyperTerminal to set the following configuration parameters for the KX II-101-V2:

- IP address
- Subnet mask address

- Gateway address
- IP autoconfiguration
- LAN speed
- LAN interface mode

To use a terminal emulation program with the KX II-101-V2, you must first connect the included RS-232 serial cable from the Admin port on the KX II-101-V2 to a COM port on your PC.

For demonstration purposes, the terminal emulation program described in this section is HyperTerminal. You can use any terminal emulation program.

► **To use a terminal emulation program to configure the KX II-101-V2:**

1. Connect to the Admin port on the KX II-101-V2 and the COM1 port on the PC.
2. Launch the terminal emulation program you want to use to configure the KX II-101-V2.
3. Set the following port settings in the terminal emulation program:
 - Bits per second - 115200
 - Data bits - 8
 - Parity - None
 - Stop bits - 1
 - Flow control - None
4. Connect to the KX II-101-V2. The login page opens.
5. Type the administrator username and press Enter. You are prompted to enter your password.
6. Type the default administrator name *admin* and press Enter. You are promoted to enter your password.
7. At the Admin Port > prompt, type *config* and press Enter.
8. At the Config > prompt, type *network* and press Enter.
9. To configure new network settings, at the Network prompt, type *interface* followed by one of the following commands and its appropriate argument (option), then press Enter.

Command	Argument	Options
ipauto	none dhcp	none - Enables you to manually specify an IP address for the device. You must follow this option with the ip command and the IP address, as shown in the following example: <pre>interface ipauto none ip 192.168.50.12</pre> dhcp - Automatically assign an IP address to the device on startup. <pre>interface ipauto dhcp</pre>
ip	IP address	The IP address to assign to the device. To manually set

Command	Argument	Options
		an IP address for the first time, this command must be used with the ipauto command and the none option. See ipauto for information. After you have manually assigned an IP address once, you can use the ip command alone to change the IP address.
mask	subnet mask	Command column should be "interface" <pre>interface ip ...</pre> interface mask The subnet mask IP address <pre>interface gw The gateway IP address</pre> <pre>interface mode </pre> <pre>....</pre>
gw	IP address	The gateway IP address
mode	mode	The Ethernet mode. You have the following choices: auto - Automatically sets speed and interface mode based on the network. 10hdx - 10 MB/s, half duplex. 10fdx - 10 MB/s, full duplex 100hdx - 100 MB/s, half duplex 100fdx - 100 MB/s, full duplex

When you have successfully changed a setting, you see a confirmation message like the following:

```
Admin Port > config
Admin Port > Config > network
Admin Port > Config > Network > interface ipauto
none ip 192.168.50.126
Network interface configuration successful.
```

When you are finished configuring the KX II-101-V2, type *logout* at the command prompt and press Enter. You are logged out of the command line interface.

Step 5: Create and Install an SSL Certificate

Raritan strongly recommends you install your own SSL Certificate in each KX II-101-V2 device.

This security best practice reduces the number of Java™ warning messages, and avoids man-in-the-middle attacks.

It also prevents future Java versions and browser versions from blocking access to your KX II-101-V2 device.

For information creating and installing SSL certificates, see **KX II-101-V2 Online Help**.

Resetting the Device (Optional)

Use the reset feature only if you want to reset the device to its original factory settings.

Note: It is recommended that you save the audit log prior to performing a factory reset. The audit log is deleted when a factory reset is performed and the reset event is not logged on the audit log.

► To reset the device:

1. Power off the KX II-101-V2.
 2. Use a pointed object to press and hold the Reset button.
 3. While continuing to hold the Reset button, power the KX II-101-V2 device back on.
 4. Continue holding the Reset button for 10 seconds.
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Additional Information

For more information about the KX II-101-V2[®] and the entire Raritan product line, see Raritan's website (www.raritan.com). For technical issues, contact Raritan Technical Support. See the Contact Support page in the Support section on Raritan's website for technical support contact information worldwide.

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