

User's Manual



KMini Smart IP Remote Controller

Version : 1.0

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1. Introduction

KMini is a DVI/VGA/USB KVM extender over IP providing remote access to a single computer or server over the LAN or over the Internet. Its small size and limited price make it perfect to control farm of computers in server rooms, branch offices, development and test labs, and many other applications. KMini is not bandwidth hungry and can leverage the existing network infrastructure. A set of KMinis, used in combination with the free KCenter management tool makes a non-blocking matrix KVM-switch more reliable and flexible than traditional multiport IP KVM-switches.

1.1. Features

- Wi-Fi & Ethernet 10/100 Connections
- Java, Windows and Android Viewers
- Digital & Analog video inputs
- Virtual media over IP feature
- KCenter free management
- High video resolution support up to 2048 x 1152 in DVI
- Brick of decentralized non-blocking IP KVM switches

1.2. Package Contents

KMini unit; CD with user's manual and KCenter software; DVI/VGA adapter; USB cable, Power adapter.

2. Product Overview

2.1. Front and Back Panels

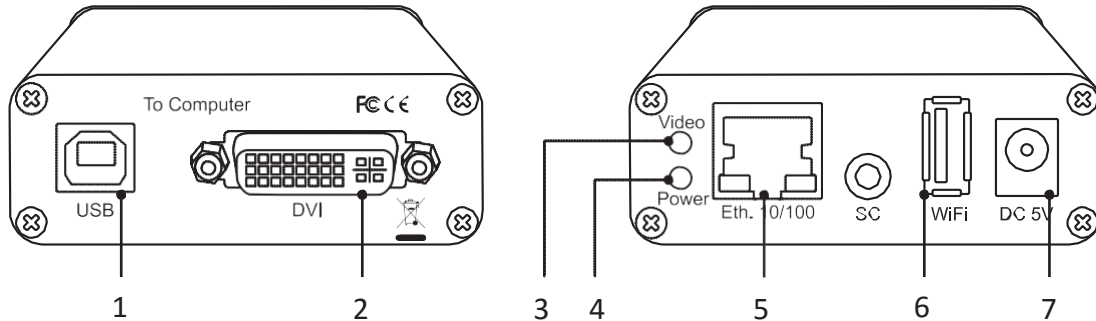


Figure 1: Front and Back Panels

No.	Item	Description
1	USB Type B port	Connect to the Server/PC
2	DVI-I port	Connect to the DVI or VGA port of the Server/PC. The VGA connection needs a VGA to DVI-I cable or adaptor.
3	Video indicator	Blinks when the video capture is working. The blinking rate indicates the video capture rate. When there is no connected remote user, the video capture is automatically stopped to save energy.
4	Power Good indicator	Lights on when all internal voltages have correct values.
5	Ethernet port	Connect to an Ethernet network using Cat5/6 cable.
6	WiFi port	To get WiFi access, plug an EDIMAX Wireless nano USB adapter, model EW-7811, to this USB extension port.
7	Power jack	Connect to the 5V power adapter if the computer USB port is not able to provide 500mA. When the power adapter is plugged, the USB power source is automatically disabled.

2.2. Hardware Specifications

Model	KMini
Connectors	DVI-I Female x 1 3.5mm Earphone Jack (RS232) x 1 RJ45 x 1 USB Type A (Extension) x 1 USB Type B (Computer) x 1
LED Indicators	Red x 1 Green x 1
Wi-Fi	Available by connecting a wireless 802.11 USB Adapter to the USB extension port
Video Resolution	Up to 1600x1200 in VGA or 2048x1152 in DVI
Operation Temperature	0° ~40° C
Storage Temperature	-20° ~60° C
Humidity	0 ~90% RH, Non-condensing
Weight	150g
Housing	Aluminum, Black
Dimensions	100 x 72 x 26 mm
Power Adapter	DC 5V 2A
Consumption	No IP access: 0.65A (3.2W) During IP access: 0.8A (4W)
Certifications	CE,FCC

3. Quick Start

3.1. Typical Connection Diagram

This diagram is an example. The actual application may vary. All illustrated accessories are not necessarily included in the package. Most of time the power adapter is useless because KMini is powered by the computer through the USB.

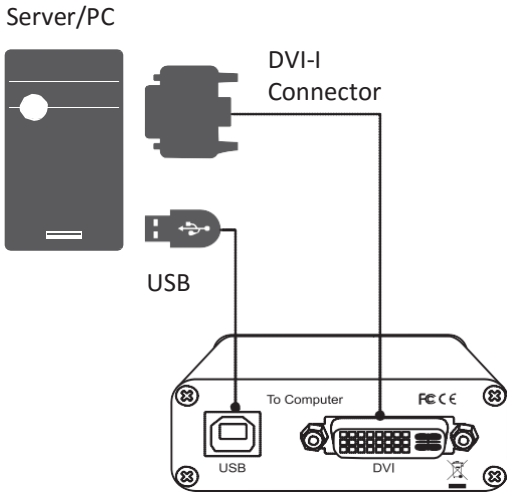


Figure 2: Typical Computer Connection

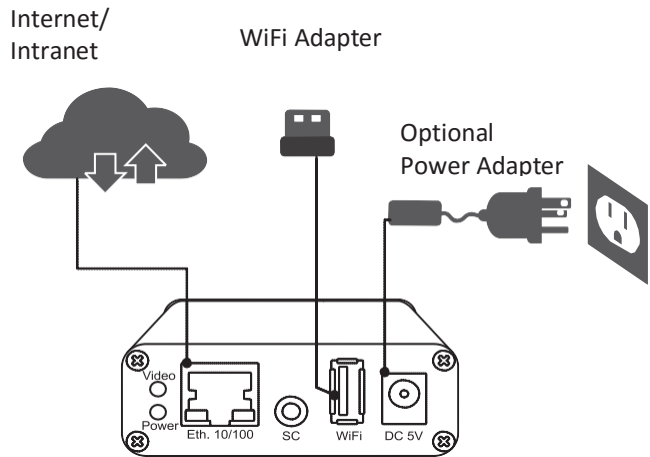


Figure 3: Typical Networking Connection

The keyboard and mouse will be detected after turning on the computer.

* Some older computers with USB interface might need to manually enable the USB option in the BIOS settings before you can use any USB devices. If your USB interface does not work, please check the USB option in the BIOS.

* If you see Windows 95/98/SE or Mac OS and has not yet installed a USB mouse on your computer, there might be an error message telling you that mouse is not detected and prompting you to decide whether to ignore the same message in the future, and yet you will find there is no mouse movement to disable this message. So it is suggested that you should install your USB mouse on your computer first before connecting to this KVM switch.

3.2. Configuring the Attached Computer/Server for Better Performance

There are several aspects that have to be taken into consideration when configuring your computer/server for the best performance:

Refrain from selecting too peculiar video resolution modes. Choose a resolution that is within KMini standard support.

Turn off special transition effects on your operating system such as fade.

Adjust the server desktop background with preferably plain solid colors with simple designs.

Concerning digital DVI video, KMini is able to capture any resolution up to 2048x1152@60Hz. The video resolution is discovered automatically.

Concerning analog VGA video, not all resolutions are possible. The video resolution discovery is made by comparison with an internal table of VESA standards. Please refer to the table of supported VGA video resolutions.

Please note that RB means reduced blanking. Resolutions with RB are not intended for older CRT monitors. They are newer VESA standards for digital devices, which precisely KMini is. However, not all computers can generate reduced blanking VGA video.

In a general way, you will get much better results by using digital video: better video quality, better video speed, higher compression, faster mouse, etc. Use HDMI or DVI each time possible.

Resolution	Refresh rate (Hz)	Resolution	Refresh rate (Hz)
640x480	60	1280x768	60
720x400	70	1024x768	60
720x400	72	1024x768	70
720x400	75	1024x768	75
720x400	85	1024x768	85
640x480	60	1152x864	60
640x480	72	1152x864	75
640x480	75	1440x900	60
640x480	85	1280x1024	60
800x600	60	1280x1024	75
800x600	72	1680x1050	60
800x600	75	1400x1050	75
800x600	85	1920x1080RB	60
1280x720	60	2048x1152RB	60
1360x768	60	1920x1200RB	60

Table 1: Supported VGA resolutions

3.3. Default Settings

The factory default network settings are as follows:

IPv4 Address: 192.168.1.200

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.254

DNS Servers: 192.168.1.254

Default access to KMini Web Browser Management Interface: **https://192.168.1.200:5908**

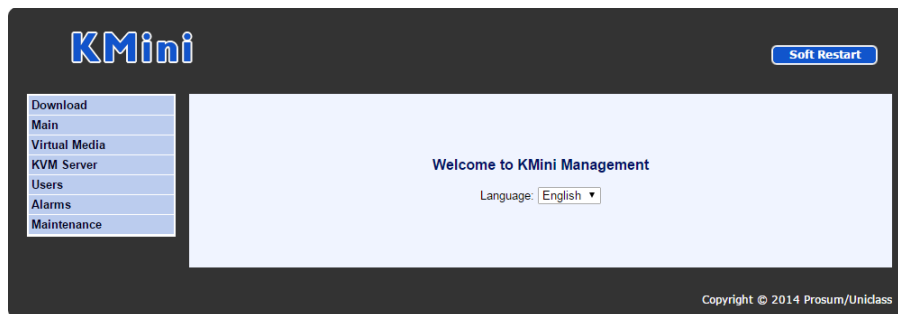


Figure 4: Welcome to KMini Management

Default administrator account name and password:

User name: superuser

Password: superu

3.4. First Access to Web Management

The first access to the HTTP server can be a little bit tricky if the default settings, i.e., HTTPS://192.168.1.200:5908 are not compatible with your LAN, or if another machine already occupies this address. In this case preferably use KCenter or getipdev (<http://www.prosum.net/download/GETIPDEVInstall.exe>) to set up a temporary IP address. Then open the KMini web management to confirm this IP address or to change the IP settings.

- * You could also create an isolated network, not connected to the local or company network, between KMini and a computer with a simple cross connect cable. Then set up the IP address of the computer to something like 192.168.1.xxx, and then with a browser, open KMini management at default address HTTPS://192.168.1.200:5908
- * When accessing to the Web Management, your browser may provide a security warning. Please choose "**Continue to this website**" since there is no risk of pirate website here. These warnings are not relevant for HTTPS servers of hardware devices such as KMini. You can also install the Root certificate of KMini in the list of trusted CA if you want to remove this warning. You will also have to authorize the usage of certificates that do not contain the name of the HTTPS server.

3.5. Setting Up the Network Interfaces

Using a browser, login to the KMini Web Management. Expand **Main** on the left menu and click **Networks**.

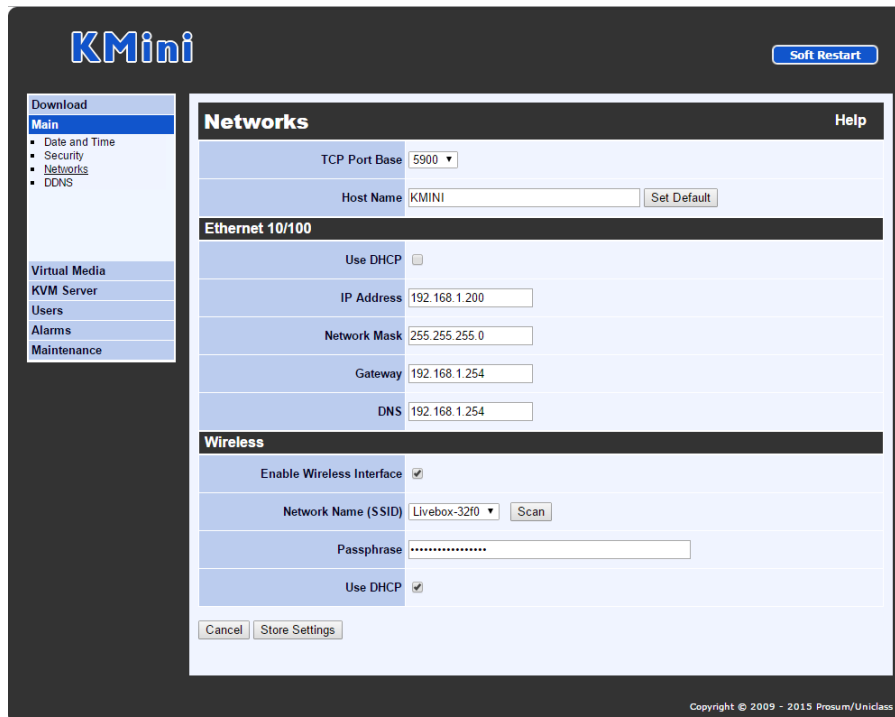


Figure 5: Network Settings

Specify the port base for viewer connections in **TCP Port Base**. You can choose any available port base, starting from 5900 with an increment of 10 right up to 6400. TCP port base + 8 is the port number you will use for https web management.

Specify the host name, i.e., the name that KMini will assume on your Local Area Network. Click **Set Default** to load the default unique host name composed of the product name and the hardware MAC address of the Ethernet port.

Ethernet IP Settings

The Ethernet 10/100 is the default network interface. It is faster than the Wireless Interface. Fill in the form. Please refer to the help page if you need more information.

Wireless Interface IP Settings

This subsection is hidden if you do not have a compatible wireless 802.11 USB adapter plugged in the USB extension port of your KMini. The supported USB adapter is the EW-7811 from Edimax.



Figure 6: Wireless nano 802.11 USB Adapter

Preferably use a WPA/WPA2 wireless connection. Older protocols such as WEP are unsecure.

Check **Enable Wireless Interface** to put the wireless interface in service. Wait until the service is started and the wireless part of this form is displayed.

In **Network Name (SSID)**, select the name of the wireless network (SSID) you want to connect to. If you do not know, please get this information from your network administrator. If the wanted SSID does not appear in the list, try to click on **Scan**. Eventually, if you cannot get the desired SSID, this is likely because the access point is out of reach.

Please refer to the help page to fill in the wireless interface parameters. We recommend you leave the wireless router or access point configure the KMini by checking **Use DHCP**

Store Settings

Click the **Store Settings** button to save the new network setting. Then press the **Soft Restart** to put them in service. Once it restarted, all accesses to KMini will need to use the new network information. The new Web Management address will be:

`https://<IP_address>:<TCP Port Base + 8>`

For example let's suppose that the new IP Address is 192.168.1.192 and that the TCP Port Base is set to 5920, then the Web Management new URL is: `https://192.168.1.192:5928`

Important Note

The Ethernet port and the Wireless port can work simultaneously at the condition they belong to different IP networks. In the case that both ports are set to conflicting IP addresses, the Ethernet port will work, and the wireless port will not work whether or not the Ethernet cable is connected.

So, if you plan you use the wireless alone, i.e., without Ethernet cable, please give to the Ethernet port a fake IP address in a different network. For example, if the IP address of the wireless port belongs to 192.168.1.xxx, you could set the Ethernet Port to 192.168.2.xxx (netmask = 255.255.255.0).

* Make sure you pass all information about KMini to your Network Administrator so that he can make the needed adjustments to the firewalls, network configuration, and DMZ of routers for the KMini to function properly and to allow it to be accessed from remote locations across the Internet.

3.6. Downloading the Viewers

There are three different programs called viewers allowing to access the KMini KVM server. The KVM server captures and sends the video of the attached computer. In the other direction it receives the events of your keyboard and mouse and transmits them to the attached computer by simulating a USB keyboard and mouse.

Two viewers can be downloaded from the Web Management: **Download** --> **Viewers**. You have the choice between the viewer for Windows® and the OS-independent viewer for Java™. Note that the viewer for Java runs on Windows as well.

The third viewer for Android™ must be bought on the Google Play Store: [PrimaView](#).




Figure 7 : Downloading the viewers

Download and install the preferred viewer on your computer.

* To run the Java viewer your computer must have a recent Java installed ≥ 7 .

3.7. Accessing the KMini KVM Server

Viewer for Windows

Under Windows, click the viewer link icon  to launch the Windows viewer. If insufficient rights are granted to the viewer, the User Access Control will pop up for authorization.

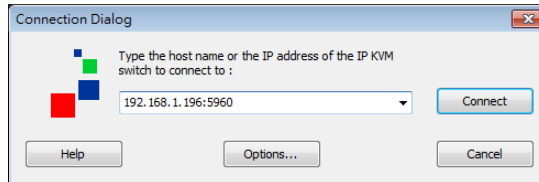


Figure 8: Windows Viewer Connection Dialog

In the **Connection Dialog**, key-in the network information to access KMini, then press **Connect**. If the KMini is found, the viewer will come back and ask for User Authentication. Key-in the User ID and Password for access.

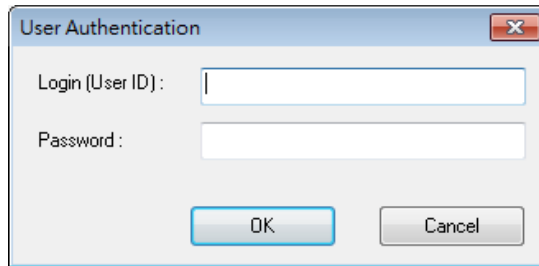


Figure 9: Viewer User Authentication Dialog

Viewer for Java

This viewer can be used on any system that supports a recent version of Java, including Windows. Run or double click the jar file and it will pop up the **Connection Dialog** similar to the Windows viewer.

If the system is not intelligent enough to associate the Java virtual machine to the .jar file, open a text console and type "java -jar mkview-dist.jar"

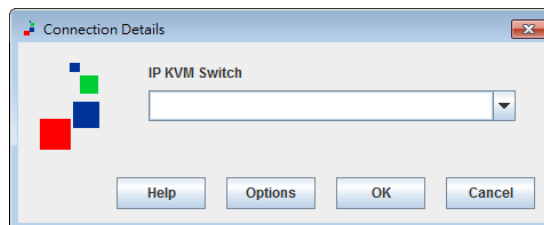


Figure 10: Jave Viewer, Connection Dialog

Viewer Title Bar

The viewer title bar provides some basic information about the connection. These data are important for the technician when requested. Changing the viewer basic settings will be introduced later on in this manual. The format is like this:

Server Name - Computer Name - Capture Time - Transmission Time - User Session Mode - Encryption

Server Name - The name given to the current video server

Computer Name - The name given to the connected computer

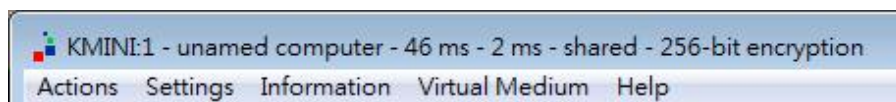
Capture Time - The time in ms it takes to capture a screen image

Transmission Time - The time needed to transmit the video screen image

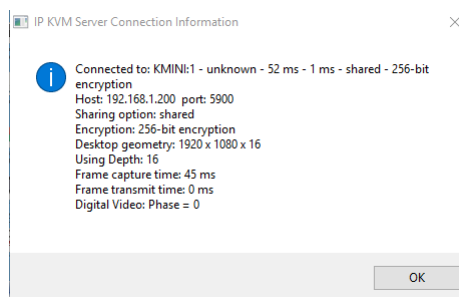
User Session Mode - Current user session mode, shared, private, see only.

256-bit encryption - Currently used encryption mode

The below information is a capture example: "KMini" server, with "unnamed" computer, 46 ms to capture video screens, 2 ms to send the screens, user shared mode, with 256-bit encryption.



Similar information can be found in the viewer menu: **Information--> Connection Information**



Viewer Performance

The video can be slow when connecting across the Internet. The image quality is depending on the global bandwidth of the network. If the bandwidth is too small, choose the appropriate compression mode in the viewer connection options (Slow Internet,) and if not enough, use 7-bit video depth. With the maximum compression and 7-bit video quality, it is possible to work with bandwidths as low as 100 Kbps.

4. Web Management

The Web Management is the main administrative user interface of KMini. This chapter provides a short description of the form pages of the Web Management in same order as the left side menu. More detailed information is available by clicking the **Help icon in the title bar of each page**.

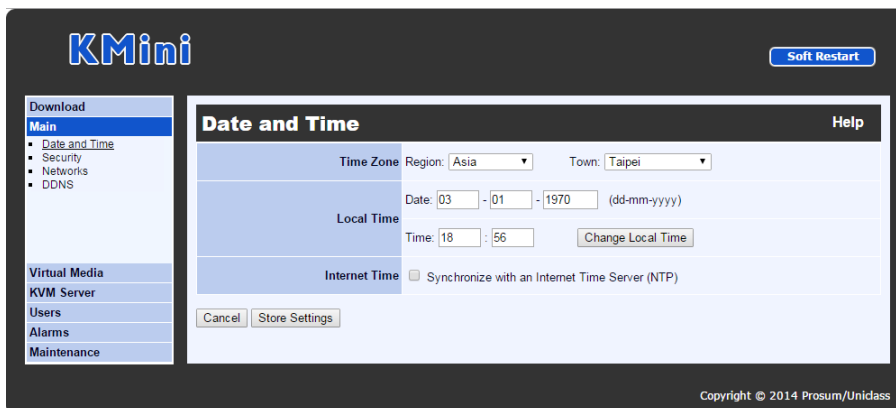
4.1. Download

Get the Viewers. Refer to section 3.6.

4.2. Main

Date and Time

Specify the locale and time settings. It is recommended that KMini gets its time from an NTP server.



The screenshot displays the KMini web management interface. The top left corner features the 'KMini' logo. A 'Soft Restart' button is located in the top right corner. On the left side, there is a navigation menu with the following items: Download, Main (selected), Date and Time, Security, Networks, DDNS, Virtual Media, KVM Server, Users, Alarms, and Maintenance. The main content area is titled 'Date and Time' and includes a 'Help' icon in the top right. The configuration fields are as follows: 'Time Zone' with 'Region' set to 'Asia' and 'Town' set to 'Taipei'; 'Local Time' with 'Date' set to '03 - 01 - 1970' (format dd-mm-yyyy) and 'Time' set to '18 : 56', accompanied by a 'Change Local Time' button; and 'Internet Time' with a checkbox for 'Synchronize with an Internet Time Server (NTP)' which is currently unchecked. At the bottom of the form are 'Cancel' and 'Store Settings' buttons. A copyright notice 'Copyright © 2014 Prosum/Uniclass' is visible in the bottom right corner of the interface.

Figure 11: Date and Time

Security

In this page you will specify the encryption level of connections, the certificates, and the password policy: No Password, Global Password, or User Password.

Networks

Set up all Ethernet and Wireless networking settings. See section 3.5.

DDNS

In this page you can enable and configure a Dynamic DNS client allowing to access KMini with a fixed alias name when the public Internet IP address provided by the ISP is not fixed.

4.3. Virtual Media

Remote Virtual Media

When running a viewer, you can share a DVD/CDROM, USB key, or ISO file with the computer attached to KMini. For example, a CDROM in the drive of the computer running the viewer can appear like a removable mass storage to the KMini-attached computer. Thus, from your remote location, you can transfer files, install new programs or even install a complete OS into the attached computer. Note that the transfer speed is limited by the network bandwidth, so it cannot be as fast as a direct attachment.

If you share one of your hard drives, the attached computer can also write to your disk, provided you did not check the option **Disable Writes**.

This page shows the current status of the connected Virtual Media and allows to forcefully disconnect it. Specify whether the attached computer can or cannot write to the Virtual Media.

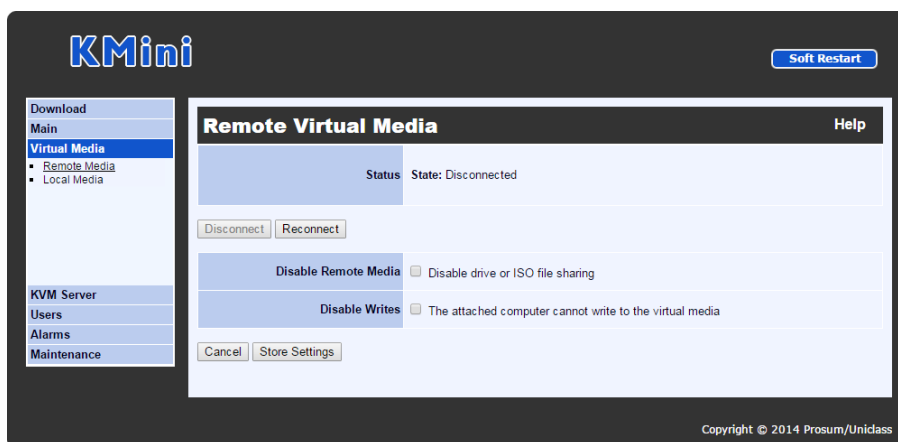


Figure 12: Remote Virtual Media

Local Virtual Media

KMini can get local access over the LAN to an ISO file shared by a Windows computer, or by another machine emulating a Windows share (For example Linux with Samba server). Similarly to the Remote Virtual Media feature, KMini will emulate for the attached computer a removable mass storage reflecting the ISO file. By nature this is a read-only storage. With this feature you can install programs or boot the attached computer on the Virtual Media, provided the ISO file is the image of a bootable disk.

Compared to the Remote Virtual Media, the Local Virtual Media is faster but limited to ISO files on machines connected to the same LAN as KMini. The connection to the share does not involve the viewer.

This page shows the current status of the connected ISO shared file. It allows you to set up the access to the ISO file and to forcefully disconnect it.

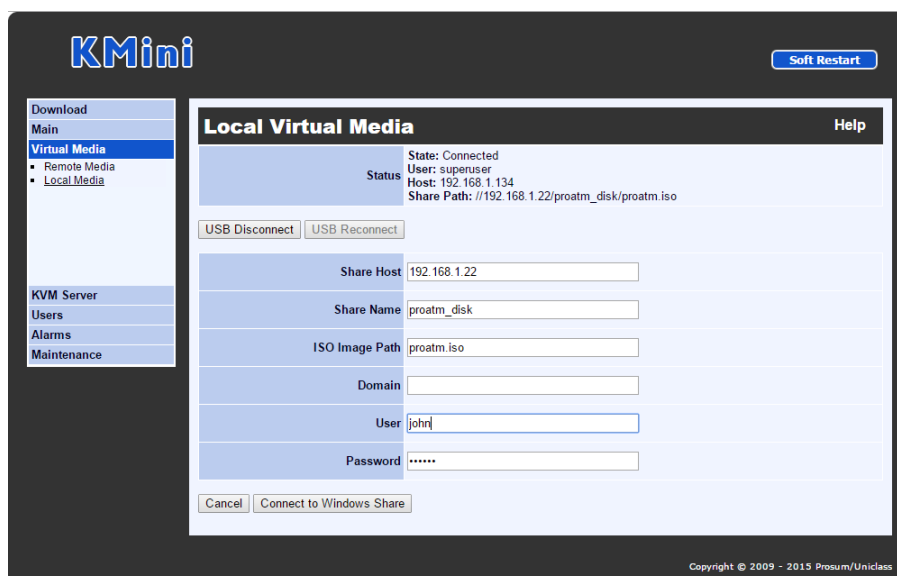


Figure 13: Local Virtual Media

4.4. KVM Server

Server Log

The Server Log keeps detailed record of events, errors, user logins and logouts, video modes, etc. It also records each login attempt, even when the attempt is not successful. It provides certain technical details such as compression ratio, encoding scheme, and bytes transmitted in each viewer session. This is the place where you should go first to know the usage and state of your KMini.

This page is the place where you can see the log content, clear the log content, refresh the display of the log, enable/disable the recording of statistical information about user connections.

Once the log file reaches its maximum size, oldest data is erase to give room to new data. Each log entry is composed of the date plus time stamp, and the description of the event. The first letter "K", "H" or "U" indicates whether the message is coming from the KVM server, the HTTP server, or the USB server.

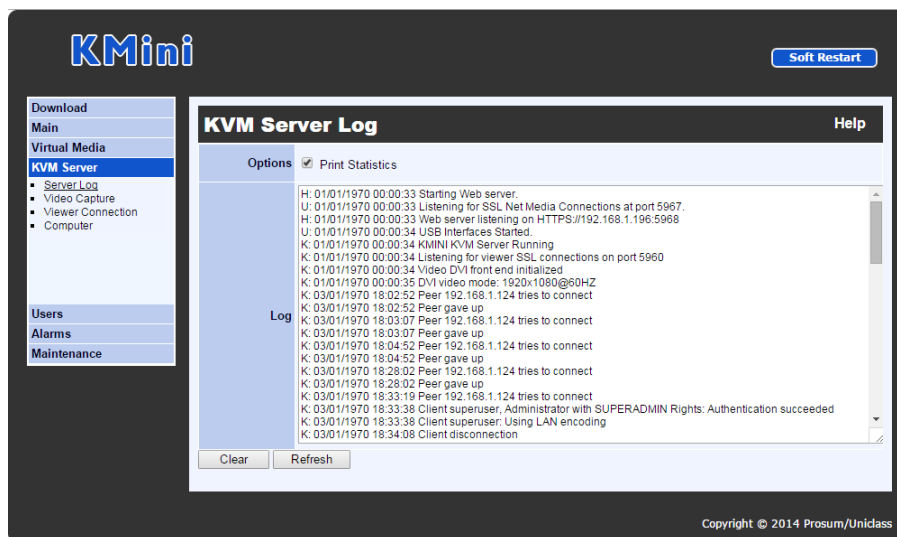


Figure 14: Server Log

Video Capture

Please note that the digital video capture is always set to optimal quality and speed. **This page is not relevant for digital video.**

If the video is **VGA**, this page is the place where you can set up the level of quality and speed of the video capture.

The setting here is use to balance the Video Quality against the Data Volume. Higher video quality will generate larger data volume which will slow down the video transmission, especially across slow Internet connections. Try to find a tradeoff between quality and speed.

Viewer Connection

This page allows adjustment of settings related to the viewer usage:

- KMini name as it is displayed on the title bar of the viewer window
- keyboard layout that should be consistent with the keyboard you use on your computer and that is setup in the attached computer
- mouse re-synchronization hot keys,
- mouse shortcuts
- special feature for anyone who uses a double-byte language such as Chinese, Japanese or Korean (the CJK languages) and some other languages

If KMini is connected to a KVM, you can also setup the KVM hot keys that will allow selecting the active port in a mouse click.

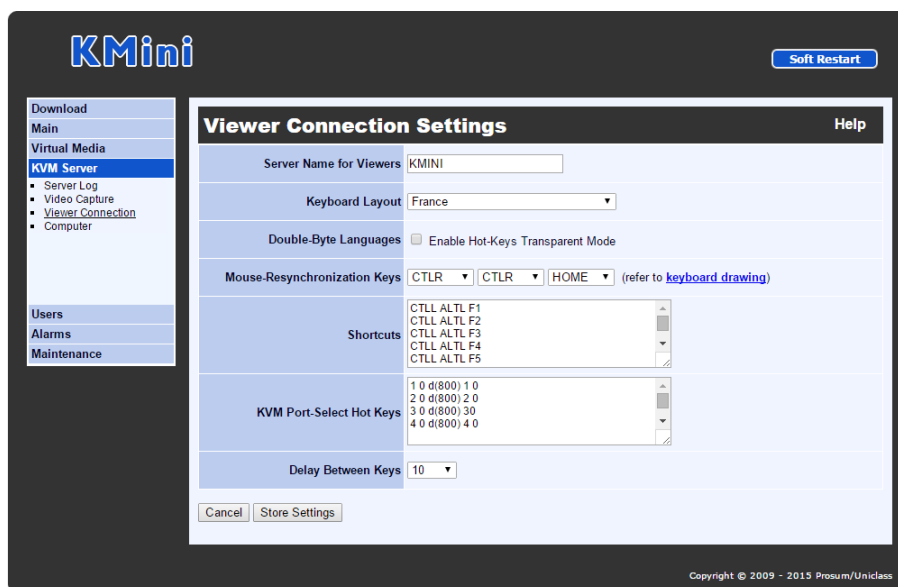


Figure 15: Viewer Connection Settings

Computer

In this page you must provide some information concerning the attached computer:

- Computer Name to be used
- Type of Operating System
- Digital or Analog Video Type
- USB Mouse Relative of Absolute.

4.5. Users

Local Database

In this page you can list, edit, add, or remove user accounts that can access the product. These users are stored in the local database of the KMini. They need no external access to an authentication server. In case of conflict, the information in the local database has higher priority than the information provided by the possible authentication server.

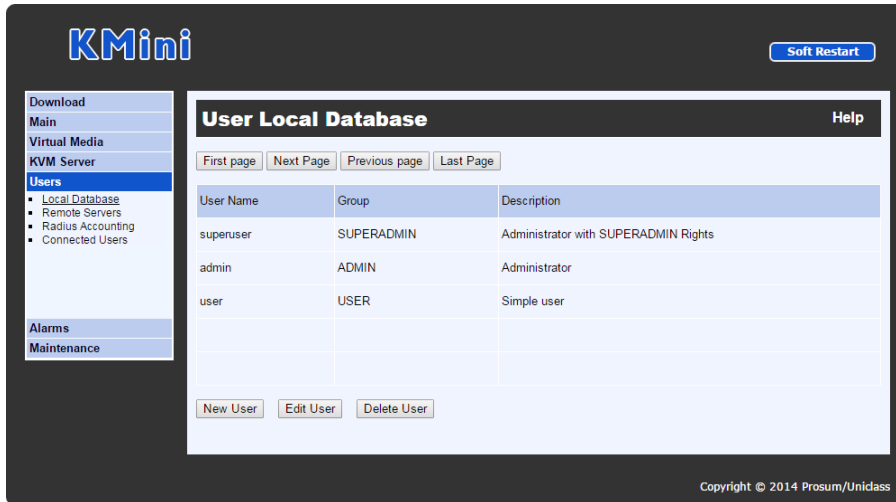


Figure 16: User Local Database

Remote Server

In this page you will enable or disable the usage of a centralized server running a Radius service or hosting a directory that can be accessed through the LDAP protocol (Active Directory for example). This server can be interrogated each time a user tries to connect to the KMini. Its responses grant or reject the connection attempts. This feature allows integrating KMini into a more global enterprise management of users.

By default, the Remote Authentication is configured as None, i.e., all remote authentications are disabled. In this case, the authentication is all done locally by using the User database on KMini.

Radius Accounting

The Radius Accounting allows KMini to record all user connection and disconnection events on a remote Radius Accounting server. The Radius Accounting is not related to the RADIUS or LDAP server features that can be used to authenticate users.

The RADIUS Accounting is disabled by default.

Connected Users

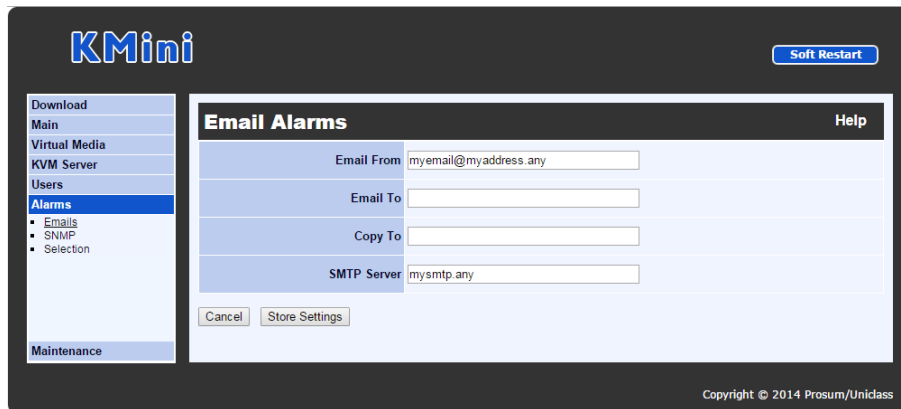
This page shows a list of all users that are connected with a viewer to the computer via KMini.

Note: This list of connected users is not generated when the password policy is **No Password** or **Global Password** since by adopting these policies you imply that the distinction of user identities is not necessary. Please refer to the **Security** page for more information about password policies.

4.6. Alarms

Emails

Settings to send out Email alarm notifications.



The screenshot shows the KMini web interface. On the left is a navigation menu with items: Download, Main, Virtual Media, KVM Server, Users, Alarms (highlighted), Emails, SNMP, Selection, and Maintenance. The main content area is titled "Email Alarms" and includes a "Help" link. It contains four input fields: "Email From" (pre-filled with "myemail@myaddress.any"), "Email To", "Copy To", and "SMTP Server" (pre-filled with "mysmtp.any"). Below the fields are "Cancel" and "Store Settings" buttons. A "Soft Restart" button is visible in the top right corner of the interface. The footer of the interface reads "Copyright © 2014 Prosum/Uniclass".

Figure 17: Email Alarms

SNMP

Settings concerning the SNMP manager that will get the SNMP traps sent by KMini.

Selection

In this page select which events will generate an alarm and the type of alarm that must be sent.

4.7. Maintenance

Software Version

Basic information on the software.

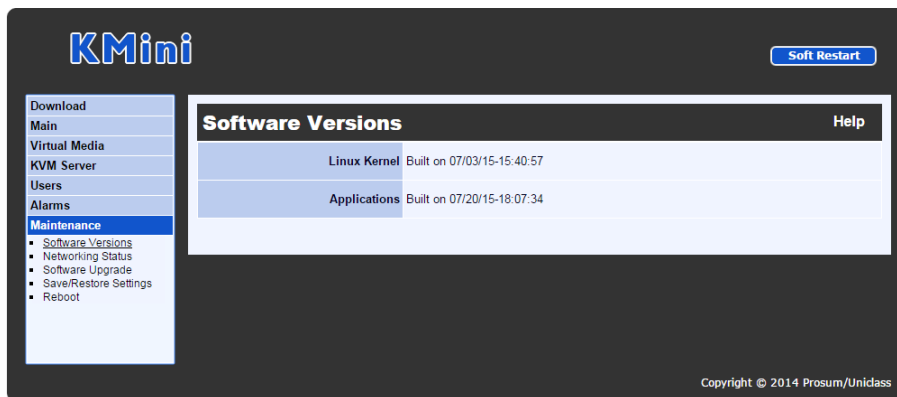


Figure 18: Software Versions

Networking Status

View current Ethernet and Wireless networking information.

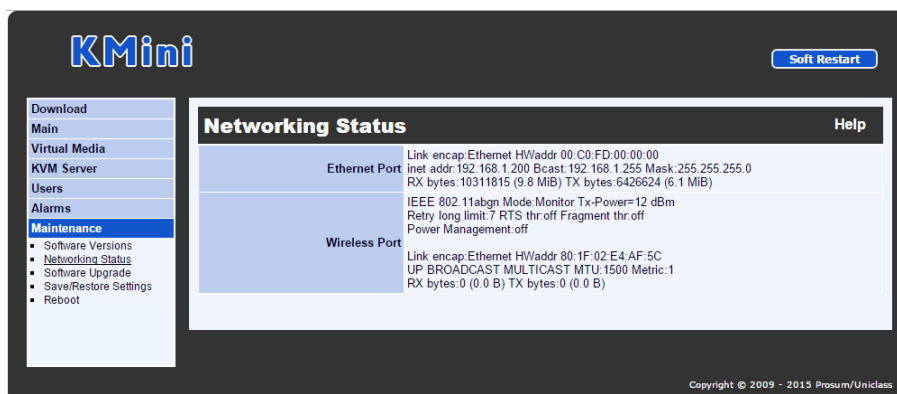


Figure 19: Networking Status

Software Upgrade

You can upgrade the software of the KMini from this page across the LAN or the Internet.

Save/Restore Settings

Save the current configuration for future usage or upload a previously saved configuration file.

Reboot

This page allows restarting KMini from the boot loader. Note that this is generally useless. Most of times a Soft Restart is enough.

5. Viewers

This chapter provides some information, tricks and tips about the Windows and Java viewers. The Android viewer is not described here but its features are very similar and it provides a detailed help. The three viewers provide similar performances.

Refer to section 3.7 to log in to the Windows or Java Viewer.

5.1. Menu Bar



The menu bar can be hidden in Windows viewer.

Actions

- **Select Computer:** Relevant when KMini is driving a KVM and the KVM command have been set up in the Web Management (Refer to Viewer Connection in section 4.4).
- **Send Shortcut:** This menu item provides the list of mouse shortcuts previously defined in the Web Management (Refer to Viewer Connection in section 4.4). Click on one of the shortcuts and it will be sent to the attached computer.
- **Refresh Screen:** Forces total update of the viewer screen.
- **Send Cntl-Alt-Del:** Fixed shortcut to make KMini send Control-Alt-Delete to the attached computer. This sequence cannot be sent by normal strikes on the keyboard because it is captured by the Windows operating system.
- **Power off Current Computer:** No effect with KMini.
- **Power on Current Computer:** No effect with KMini.
- **New Connection (Windows viewer only):** Open another Connection Dialog to login to other remote server.
- **Disconnect:** Release access to the remote system. It will automatically close the viewer application.

Settings

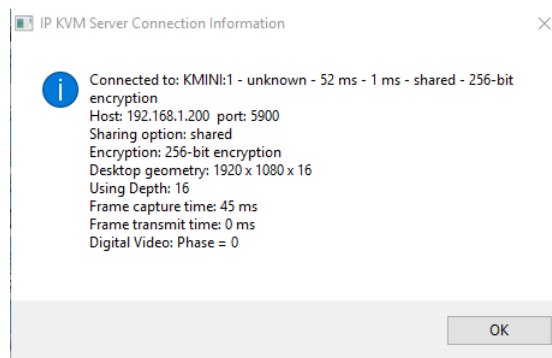
- **Connection Options:** This menu item opens the Connection Options dialog box allowing to change some options such as Scaling Factor, etc. Not all options can be changed on the fly. Some options can only be set up at connection time.
- **Adjust Screen:** Change the window centering (VGA only) and adjust the brightness and contrast. Note that with digital video the screen is always perfectly centered.
- **Full Display (Windows viewer only):** Hides all menu bars of the viewer to give the maximum space to the display of the remote screen. It opens a small floating box with a single button "Quit Full Screen". Click this button to come back to normal display.
- **Show Menu Bar (Windows viewer only):** Enable or disable the menu bar. To get the menu bar back, right click on the viewer top title bar and select **Show Menu Bar** in the menu.
- **Save Settings/ Store Connection Options:** Store User ID/Password and connection options.
- **Device Management (Windows viewer only):** Link to the KMini Web Management.

Virtual Medium

- **Manage Virtual Medium/ Drive Redirection:** Opens the Virtual Medium dialog box. Select the Hard Disk, DVD/CDROM drive or ISO file and click **Connect**. See details below.
 - **Status:** Show current Virtual Media connection status
 - **Hard Disk or CD ROM Drive** (Windows viewer only): Redirect and map a local drive onto the attached computer. Check **Enable Write Accesses** if you want to allow the computer to write on the Virtual Media.
 - **ISO Image File:** File in ISO format that can be mapped onto the attached computer. This file will appear as a removable mass storage device.
 - **Disconnect Button:** Release the Virtual Media connection and mapping.
 - **Connect:** Click to establish the Virtual Media connection and mapping. We recommend mapping small file or drive because the time to link the file depends on its size.
 - **Close:** Close the dialog box. Note: Closing the dialog box does not release the mapping of the Virtual Medium

Information

- **Connection information:** Displays information concerning the KMini, the video type, the capturing and transmitting times, and the connection options.

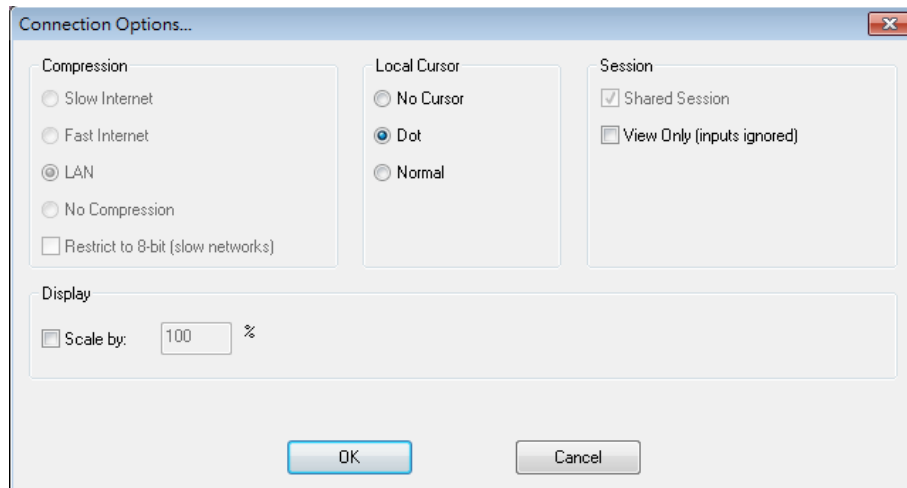


- **About (Java):** Viewer copyright and version information.

5.2. Connection Dialog

Compression

Specify the compression type that will be used to transmit the video from KMini to viewer. The compressions are listed from the lowest to the highest data volume. Note that high compressions need more work and thus longer KMini and viewer processing times. High compressions are efficient when the network bandwidth is low. Note that all compressions are with NO loss. The volume of data depends on the video type. It is lower with digital than with analog video. With analog video, it depends on the video quality setting (refer to Video Capture in section 4.4)



- **Slow Internet:** Video compression optimized for Internet bandwidth lower than 2Mbps.
- **Fast Internet:** Video compression optimized for High Speed Internet.
- **LAN:** Video compression optimized for 100BaseT. Note that KMini rarely use more than 10Mbps.
- **No Compression:** However this option is only useful for testing purposes. It does not provide better performance than the **LAN** option. Note that "No Compression" is a misnaming because there is still a video compression that can be high. Just a second level of data compression is not applied.
- **Restrict to 8-bit:** In worst cases, when the available bandwidth is below 1Mbps or even 500 Kbps, do not hesitate to check this box to limit the color depth of the video to 8 bits. Most often you can still work with an 8-bit color video, provided you don't look at HD movie or try to do artistic painting!

5.3. Local Cursor

You see two cursors when accessing a remote system with a viewer, the local cursor and the remote cursor. Normally, except during movements, the two cursors should be superimposed. If this is not the case, please refer to section 5.3.

- **No Cursor:** Due to personal preference, some may find confusing having two mouse cursors.
- **Dot:** Having a dot as local cursor can help identifying which cursor is local and which one is remote.
- **Normal:** Having a big local cursor accelerates the mouse utilization. The reason is that you can click on an element in the screen without worrying whether the remote cursor has already reached this element or not. Only the local cursor is relevant. We recommend this option.

Session

A user session can be shared or private. If your connection is **Shared**, other users can connect simultaneously. They will see the same video as you and compete for mouse and keyboard access. If your connection is **not shared** (private), other users cannot get access to the computer as long as you don't close your session. Note that by clicking on **Software Restart** in the Web Management, a user with "superuser" privileges can kick off any user that does not want, or that forgot to close his session. All viewer connections are immediately closed.

Concerning the keyboard and mouse, the behavior will depend on the **View Only** option. When this box is checked, you can only see the computer video. Your keyboard and mouse have no action.

- **Shared Session:** Authorize other users to simultaneously connect. This is the recommended mode. If you forget closing your session, other users will not be penalized. Don't rely too much on the pseudo security provided by private sessions. Anybody close to the computer can see what you do with a local monitor and you will have no knowledge of this.
- **View Only:** Use this option to survey without interfering.

Display

Scale by: Shrink or magnify the video display. to the non-full screen local display window.

5.4. Mouse Troubleshooting.

If the remote and the local cursors are out of synchronization, and if the Ctrl-Ctrl-Home action cannot get them resynchronized, please check the VGA and mouse settings.

If the computer is sending VGA video

Make sure the video sent by the computer corresponds to one of the resolutions supported by KMini (Refer to Table 1). Check the video resolution detected by KMini in the KVM Server Log (Section 4.4).

Check whether the remote screen is well centered in the viewer window, without black borders. If not, use the viewer screen adjustment to remove the black borders. Note that the Centering can be Automatic.

If the mouse is set to relative in computer settings (Refer to Computer in section 4.4)

Make sure to turn off the mouse acceleration on the attached computer. If the acceleration is not removed, the remote and local cursor cannot be synchronized. This is the most frequent cause of desynchronization.

Unfortunately, some operating systems do not allow removing the mouse acceleration (Mac OS X). On Linux you can quickly check this point by typing "xset m 1 1" in a console. This should turn off the mouse acceleration temporarily. For permanent settings, use the configuration tools of your distribution.

There is no mouse loss of synchronization possible when using digital video and when the KMini mouse is set to Absolute, whatever the operating system of the computer.

6. KCenter

KMini is a distributed IP KVM. By using one KMini for each PC or server and managing them with the KCenter application, you can build efficient non-blocking matrix IP KVMs with no limit concerning the number of simultaneous users.

KCenter is a free application designed for centralized management of sets of KMinis and/or KLEv2s. With KCenter, IT administrators can easily manage all distributed IP KVMs connected to the LAN or across the Internet. They can detect all devices on the LAN, upgrade them in a single operation, duplicate settings, centralize and save all messages, execute group actions, change IP settings even if several devices have same IP address, etc.

In KCenter just click on a computer name to open the viewer on it, or click on a device to open the Web Management of the device in the same way you would do with a multiport IP KVM.

KCenter is a Java application that runs on all platforms able to run a Java virtual machine, Windows, Linux, Mac OS X, etc.

7. Trademarks, FCC, CE Statements

All trademarks in this manual are the properties of their respective trademark owners.

FCC Statement: This equipment has been tested and found to comply with the regulations 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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this User Guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case, the user will be required to correct the interference at his/her own expense.

CE Statement: This is a Class B product in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

