

USB Laptop Console User's Manual

Control any computer with USB ports and a VGA/DVI analog video output via your laptop.

A window on your laptop acts as the console.

Works even if the server is in the BIOS or is damaged.



Customer Support Information

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500)
FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746
Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018
Web site: www.blackbox.com • E-mail: info@blackbox.com

Trademarks Used in this Manual

Black Box and the Double Diamond logo are registered trademarks of BB Technologies, Inc.

Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

We're here to help! If you have any questions about your application or our products, contact Black Box Tech Support at **724-746-5500** or go to **blackbox.com** and click on "Talk to Black Box." You'll be live with one of our technical experts in less than 20 seconds.

Federal Communications Commission and Industry Canada Radio Frequency Interference Statements

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

Instrucciones de Seguridad (Normas Oficiales Mexicanas Electrical Safety Statement)

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

Table of Contents

- 1. Specifications 6
- 2. Overview 7
 - 2.1 Introduction 7
 - 2.2 Features 7
 - 2.3 What's Included 7
 - 2.4 Hardware Description 7
- 3. Installing the Hardware 9
 - 3.1 Connections 9
 - 3.2 LED Indicators 9
- 4. Installing the Software 10
 - 4.1 Mac OS X 10
 - 4.2 Windows 10
 - 4.2.1 Main Software 10
 - 4.2.2 Device Driver Files 10
- 5. Using the Software 11
 - 5.1 Basics 11
 - 5.1.1 Zooming 12
 - 5.1.2 More Tips 12
 - 5.1.3 Toolbar 12
 - 5.2 Video Menu 13
 - 5.2.1 Auto fine-tune picture 13
 - 5.2.2 Video Related Settings 13
 - 5.2.3 Save PNG Snapshot 14
 - 5.3 Keyboard Menu 15
 - 5.3.1 Special Keys 15
 - 5.3.2 Simulate Hotplug (Reset) 15
 - 5.4 Mouse Menu 16
 - 5.4.1 Mac OS X Scaling 16
 - 5.4.2 Disable Mouse 16
 - 5.5 Toolbar Menu 16
- Appendix A. Menu Reference 17
- Appendix B. Warnings 18
- Appendix C. Troubleshooting 19

USB Laptop Console

1. Specifications

Approval: FCC Class A, CE, VCCI and C-Tick, RoHS

Laptop Requirements: Windows 2000, XP, Windows 7, or Vista; Mac OS X 10.5 (leopard) or higher (Intel only);
(1) available high-speed USB port on laptop (100 mA current); 20 Megabytes available disk space for install,
24-bit color display

Resize Video: Entire video picture is always visible—no scroll bars

Server Requirements: (1) USB port (full speed) for keyboard and mouse, 500 mA current; Analog VGA graphics output, DVI can be used with adapter; operating system that supports absolute USB mouse, Windows 2000 and up, Mac OS, Linux, etc.

Screen Snapshot: PNG or JPEG file

Software: Package includes copy of the latest version at the time of manufacture, and the latest version is available on the Internet (<ftp.blackbox.com/connectivity/ServSwitch/>)

Special Keys: Easily send Alt + F4, Ctrl-Alt-Del, and other key sequences that would otherwise affect the laptop instead of the server

Toolbar Functions: Horizontal or vertical, detachable and removable

Video Adjustments: Fine position control (image centering), sample phase (sharpness), video noise filtering controls

Video Resolution (Maximum): 1920 x 1200 @ 60 Hz or 1600 x 1200 @ 75 Hz

Video Scaling Modes: Any scale from 6% to 100% (in 6.25% steps), full screen mode (uses all pixels of your laptop), maximized mode (laptop task bar is still accessible)

Connectors: Inputs: (1) HD15 VGA analog video, (1) USB Type A (keyboard and mouse);
Outputs: (1) USB Type Mini-B F (high-speed, 480-Mbps)

Indicators: (3) LEDs: (1) USB link activity, (1) Video, (1) USB keyboard/mouse activity

Temperature Tolerance: Operating: 32 to 104° F (0 to 40° C);
Storage: -40 to +158° F (-40 to +70° C)

Relative Humidity: Up to 80%, noncondensing

Power: Maximum 500 mA at 5 VDC

Size: 0.06"H x 2.9"W x 4.5"D (0.15 x 7.4 x 11.5 cm)

Weight: 0.4 lb. (0.17 kg)

Chapter 2: Overview

2.1 Introduction

The USB Laptop Console enables you to control any computer with USB ports and a VGA/DVI-Analog video output using just your laptop.

With real-time video compression technology, the console streams the video screen over high-speed USB to a special application on your laptop. At the same time, USB keyboard and mouse are emulated. The end result is a window on your laptop that acts as the console and gives you easy and complete control over your server. It works even if the server is in the BIOS or is otherwise damaged. No software is ever installed on the server and the USB Laptop Console can be hot-plugged into a working system at any time.

2.2 Features

- View the video produced by a server on your laptop screen, without rebooting the server or changing it in any way.
- USB keyboard and mouse are emulated so that you can interact with the server as a window on your laptop.
- Real-time video scaling allows you to always see the entire screen, even on small laptop displays.
- Software provided for Windows and Mac OS X.
- Supports video up to 1920 x 1200 and all standard VESA video modes.

2.3 What's Included

Your package should include the following items. If anything is missing or damaged, contact Black Box at 724-746-5500.

- USB Laptop Console
- (1) 6 ft. (1.8-m) high-speed USB cable
- (1) PS/2 to USB adapter
- (1) Flash drive containing this user's manual in PDF format and viewer software
- (1) printed Quick Start Guide

2.4 Hardware Description

Figure 2-1 shows the USB Laptop Console's side panels. Table 2-1 describes the components.

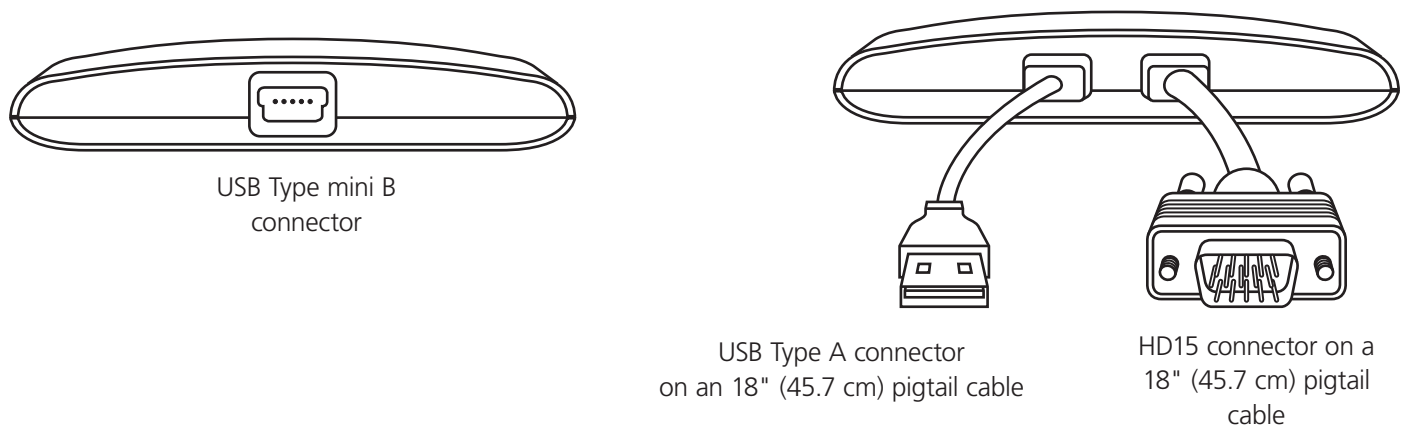


Figure 2-1. USB Laptop Console's side panels.

USB Laptop Console

Table 2-1. Side panel components.

Side 1 (Input)		Side 2 (Output)	
Component	Description	Component	Description
USB Type mini B connector	Links to high-speed (480-Mbps) USB device.	*USB Type A connector	Connects to keyboard and mouse
		**HD15 connector	Links to VGA analog video

*The USB Type A connector is hard-wired to the console and has an 18" (45.7 cm) pigtail.

**The HD15 connector is hard-wired to the console and has a 18" (45.7 cm) pigtail.

3. Installing the Hardware

3.1 Connections

The USB Laptop Console has captive (non-removable) cables for video input and USB keyboard and mouse. Connect both to the server or PC that you want to control. For DVI video cards, use a DVI-A to VGA (HD15) adapter (not included).

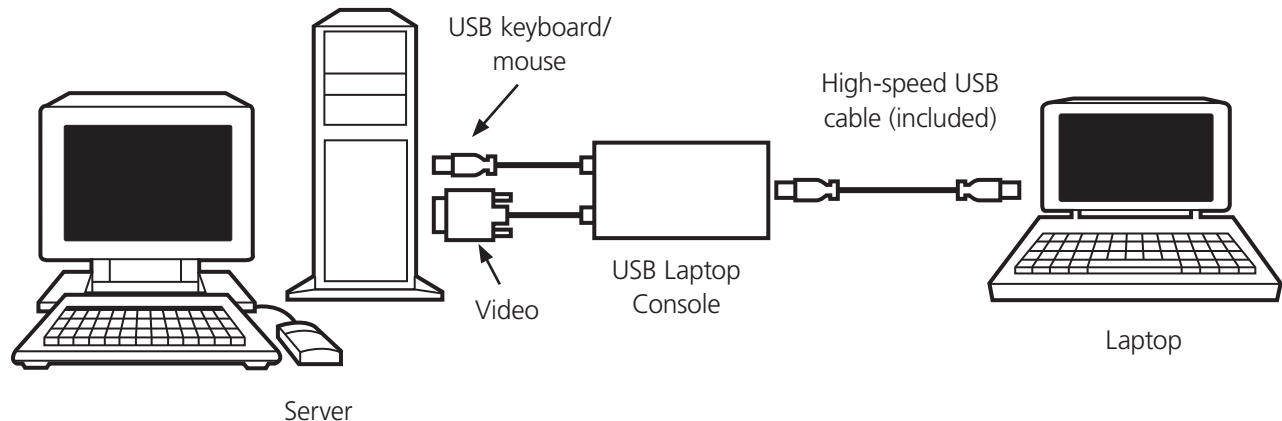


Figure 3-1. Connection diagram.

The console has a connector for a detachable standard mini-B to A USB cable that connects to your laptop. Use the provided cable or a high-quality USB 2.0 certified cable.

For older systems that are not USB capable, we provide a passive PS/2 to USB adapter. You can use this in place of USB and connect it to the PS/2 keyboard connection on the server. The USB Laptop Console will auto-detect the PS/2 and switch once connected. This console does not support a PS/2 mouse because it is not hot-pluggable (in general) and the emulated USB mouse provides better mouse synchronization.

3.2 LED Indicators

The USB Laptop Console has three indicators on the top of the unit.

- **Keyboard/Mouse LED:** This lights when the emulated USB keyboard/mouse is working. It blinks briefly whenever the emulated mouse moves, or an emulated key is pressed. The LED flashes slow down when there is a problem with the USB connection to the host. This can happen if disconnected, or if the host's operating system is not enumerating the USB device.
- **Video Good LED:** This indicates that a valid VGA video signal is being received. It will be off if nothing is connected (and in some power savings modes) and may flash if unsupported video mode or other trouble is detected with the video signal. This light will not light, regardless of the video input status, until the the adapter is connected to the application software at least once.
- **High Speed USB LED:** This lights when a good connection to the laptop is established. If it is slowly flashing, the USB to the laptop is not connected or is ignored. Blinks briefly when video data is send to the laptop.

If all the LED indicators are off, then the USB Laptop Console has no power from either USB port. In normal operation, either USB port can provide enough power to operate. The USB keyboard/mouse emulation is always active, even if the laptop USB is disconnected.

When used in PS/2 mode, the topmost light indicates correct PS/2 keyboard operation, and power is received from the PS/2 as it would be from USB.

4. Installing the Software

The Laptop Console requires custom application software running under Windows and custom device drivers on the laptop side. You must install the provided software to use the USB Laptop Console.

4.1 Mac OS X

You should have received application software for the USB Laptop Console on either CD-ROM or USB flash drive. If you received a CD-ROM, insert the disk. If you received a flash drive, connect it to a USB port. Double-click on the MacOSX-install.dmg file that you find on the media. (It is a compressed disk image.)

After a short delay to verify that disk image, a finder window will open showing the application and a link to /Applications. Drag the main application onto the Applications link. Click on the eject icon beside the disk image, and then on the USB drive or CD-ROM to eject them both.

The software is now installed and ready to run. Find it in /Applications and double click. If you want to add this application to the Dock, drag and drop it from /Applications onto the Dock.

4.2 Windows

Before installing the software on Windows, disconnect the USB Laptop Console hardware and cancel any dialogs you see that refer to "Add new hardware wizard." These dialogs can interfere with the installation process.

4.2.1 Main Software

A setup.exe program is on the CD or flash drive you received. To run this program, double-click on it.

- The setup program will be extracted. Wait for this to complete.
- A welcome screen is shown for the setup program. Click Next.
- The license agreement is shown. Click the "YES—I accept" check-box and then click "Next."
- Choose a location where you want to install the software. Click "Next."
- Choose a different shortcut to add to the start menu, or disable it if desired. Click Next.
- Confirm all the choices you've made and click "Next."
- The files are copied into place. Click "Finish."
- An information dialog box is shown to remind you to unplug/reconnect the adapter if it was already connected.
- Click Okay.

At this point, the application software is installed. A copy of the device driver has been installed into the operating system. However, if the USB Laptop Console was already connected before the setup program was started, Windows will not notice the device. Therefore, if the USB Laptop Console is connected, contrary to our instructions above, disconnect and reconnect it now.

You can now use the Laptop Console, and launch the main application. Normally, you don't need to reboot, but because of specific situations and Windows' limitations, you might be directed by the setup software to do so.

The USB Laptop Console itself can be connected or disconnected at any time you want. You don't need to start the software first, and you don't need to shut it down before unplugging the USB Laptop Console.

4.2.2 Device Driver Files

Once the software is installed, it will find the correct USB device driver automatically. If Windows asks for a device driver, go to the Drivers subdirectory under C:\Program Files\KVT100A (assuming the default install location). You may also be able to select the CD-ROM provided because it contains a copy of the device drivers.

Chapter 5. Using the Software

This chapter introduces the application software. These screen captures are from the Mac OS X version of the software, so they may differ slightly from your screen.

5.1 Basics

Figure 5-1 shows the main window when the adapter is not connected to anything. A large picture appears, showing that the user needs to connect the USB port from the USB Laptop Console into the laptop.



Figure 5-1. The main window when no adapter is connected.

Once connected, the real-time video from the attached host computer appears centered in the main window (see Figure 5-2).

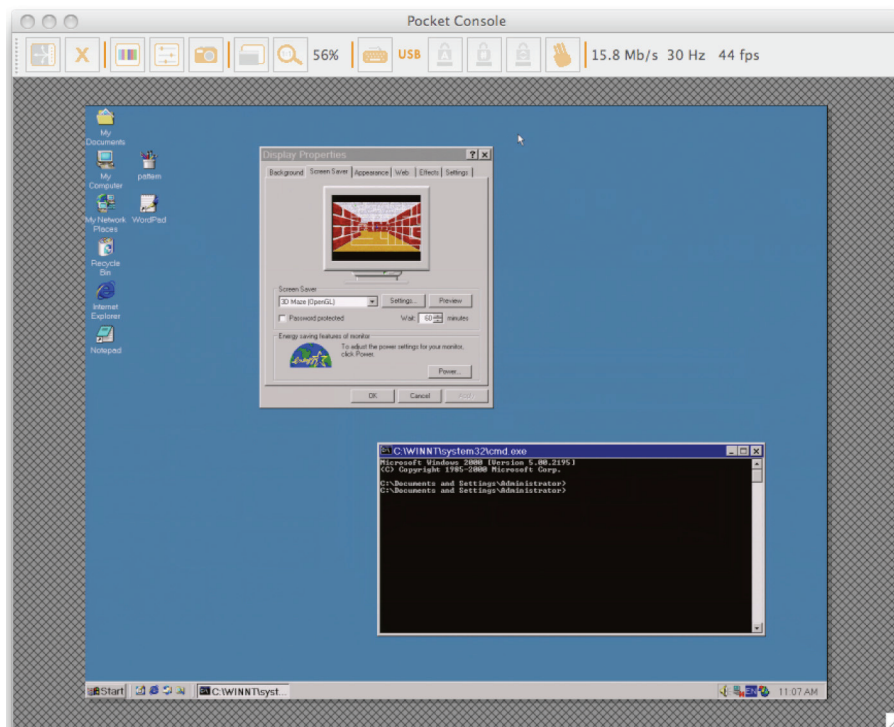


Figure 5-2. The desktop of a Windows machine is shown in real-time.

5.1.1 Zooming

By design, this program will never show scroll bars. The entire video picture is always completely visible. You can scale it down to fit into the available space inside the window. You can make it larger by resizing the main window. Similarly, if you maximize the main window, the size of the video image will be maximized.

In the Zoom menu, a number of buttons set the zoom factor and resize your window to achieve that zooming factor. For example, if the attached computer is running at XGA resolution (1024 x 768), and you select 50% zoom, the main window will be set to a size of approximately 512 x 384. Keep in mind that not all zoom factors will be possible; your laptop's screen may be too small for the larger percentages. If so, the software will make it as big as it can.

Since many laptops have smaller screens, you may want to run this program maximized. That leaves other software on your laptop easily accessible. We also support full-screen mode, where the window decorations are removed and other applications are hidden. Click on the full-screen/window icon on the toolbar or select it from the Zoom menu.

To get out of full screen mode, click the icon again. If the toolbar is disabled when you enter full-screen mode, a smaller toolbar is provided with only the Fullscreen and Quit options. This toolbar floats and may be moved out of your way, but cannot be removed.

Also in the Zoom menu is an option to center the window on the screen. This can be handy when it is off the edge of the screen for some reason. There is also a shortcut for maximize (toggle). This does the same thing as clicking the maximize button in the title bar of the main window.

5.1.2 More Tips

- If your laptop is wide-screen (16:10 aspect, or 1280 x 800, etc.), it may be helpful to locate the toolbar along the left or right vertical edge. This gives more usable screen height, and if the server's screen is square (4:3 aspect) the space used by the vertical toolbar would have been wasted anyway.
- This program does not enlarge video, only shrinks it. Therefore, text mode (720 x 480 or similar) will not be enlarged to fill your screen.
- The toolbar is automatically disabled when you select a Zoom factor below 50%. You need to enable it manually when you return to a larger size.
- Unusable parts of the window are shown in grey. This happens because the video is scaled by an integer factor of 1/16 and because of other rounding issues.

5.1.3 Toolbar

There is an optional toolbar along the top edge of the window. This toolbar may be hidden, detached or dragged onto the other three edges of the window. It provides a number of shortcuts and some status information. All functions are duplicated in the pull down menu system, so it is entirely optional.

Refer to Figure 5-3 to learn the meanings of each tool icon and status area.

You can move and/or detach the toolbar by dragging the handle (column of dots) at left/top edge. Once detached, there is a red circle that you can use to close it. When dragging or moving the toolbar, you can stick it (dock) to the top/bottom edge, if in horizontal mode, or left/right edges if vertical. Some of these features are available in the Toolbar menu as well.

The rightmost status area of the toolbar reports some statistics while the system is running. The first number is the USB bandwidth, in bits per second. This can range from zero to 200 Mbp/s depending on your laptop and the video picture being observed. When no motion is detected by the hardware video compression, no bits are sent. Noisy video cards and ongoing video animations will cause a constant stream of USB traffic.

The next two numbers, 30 Hz and 44 fps in this example, report the achieved frame rates for the hardware and software components respectively. The hardware number (Hz) will range from 1 to 85 Hz, but is typically 30 Hz or 60 Hz. The software number is limited to 60 fps (frames per second) maximum and varies depending what other software on your laptop is doing.

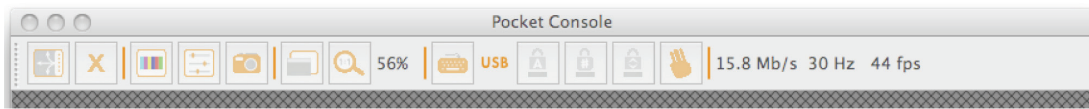


Figure 5-3. Toolbar.

From left to right:

1. (arrows) Change orientation of tool bar between horizontal (shown) and vertical.
2. (X) Quit the USB Laptop Console application immediately.
3. (color bars) Fine-tune video picture.
4. (sliders) Open video-related settings window.
5. (camera) Take a snapshot of screen, save as PNG file.
6. (windows/screen) Toggle full-screen vs. windowed mode.
7. (magnifying glass) Go to 100% zoom, or largest possible.
8. (56%) Shows current zoom factor as a percentage.
9. (keyboard) Keyboard status (red X shown if trouble). Click to open special keys window.
10. USB or PS/2 mode for keyboard (USB shown).
11. (A padlock) Caps lock indicator (green if active, shown inactive). Click to simulate pressing caps lock.
12. (# padlock) Num lock indicator/button.
13. (padlock) Scroll lock indicator/button.
14. (salute) Send three-finger salute (Ctrl-Alt-Del).
15. (15.8 Mb/s...) Status area. Shows USB bandwidth, hardware and software frame rates.

5.2 Video Menu

Three functions are available under the Video menu: Auto fine-tune picture, Video related settings, and Save PNG snapshot.

5.2.1 Auto Fine-Tune Picture

Use this function to automatically adjust the sampling phase of the video. This makes the picture sharper and reduces USB traffic. This is generally not required since the console performs this operation automatically whenever video is applied.

The picture will freeze for about one second while the calibration is performed.

5.2.2 Video Related Settings

For more in-depth video adjustments, the dialog shown in Figure 5-4 is used.

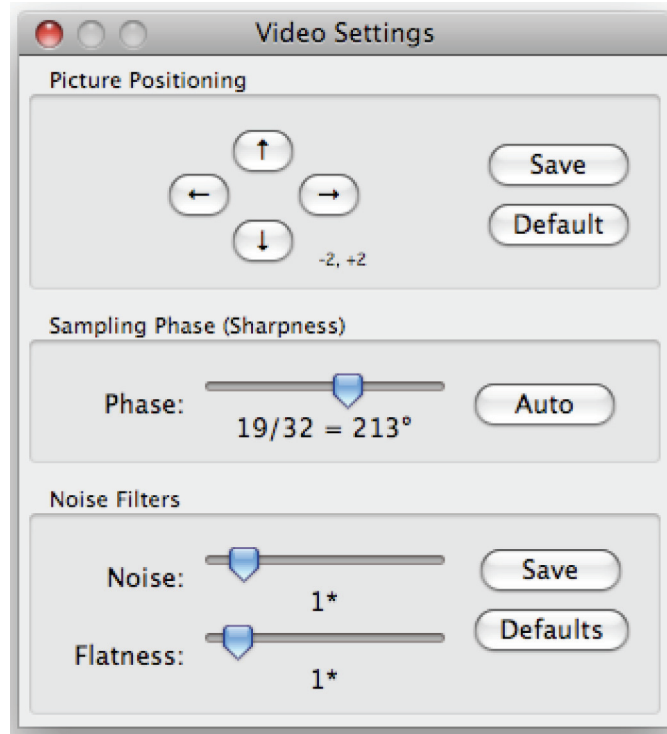


Figure 5-4. This window controls a number of related video fine-tuning settings.

Picture Positioning

These four arrows may be used to fine-tune the position of the video image. These are the same as the centering controls found on video monitors. Save your changes with the Save button. The adjusted values will be used automatically whenever this same video mode is seen again.

Sampling Phase (Sharpness)

This slider allows you to override the automatic phase adjustment. Press Auto to perform auto phase again. The numbers shown under the slider are the phase (angle) of the control.

Noise Filters

The hardware implements two filters to reduce USB traffic and improve picture quality. By default they are both enabled and set to one. You may override that here and save your setting (which will apply to all video modes).

The first "Noise" filter helps to remove speckle noise. There is usually no visual effect to this filter, except that at high values, moving the mouse may leave some pixels behind (mouse droppings).

The second "Flatness" filter converts regions that are nearly all the same color into exactly the same color to aid compression. The picture will become chunky or blocky at high values.

You probably won't need to change these sliders from the default values.

5.2.3 Save PNG Snapshot

Use this function to record a copy of the window contents and save it into a PNG or BMP file. The snapshot happens as soon as the menu item (or toolbar camera) is clicked. You are then given a chance to choose where the image file should be stored. A default filename is provided based on the current time.

Snapshots are always stored at full resolution and contain the whole screen.

5.3 Keyboard Menu

This menu deals with the emulated keyboard.

5.3.1 Special Keys

Most keystrokes are forwarded directly to the host under control. However, some special key combinations, such as Ctrl-Alt-Del, are blocked by the laptop's operating system. The dialog has lots of buttons that you can use to send these sequences manually.

Click on the keyboard icon of the toolbar, or use the menu item More special keys.

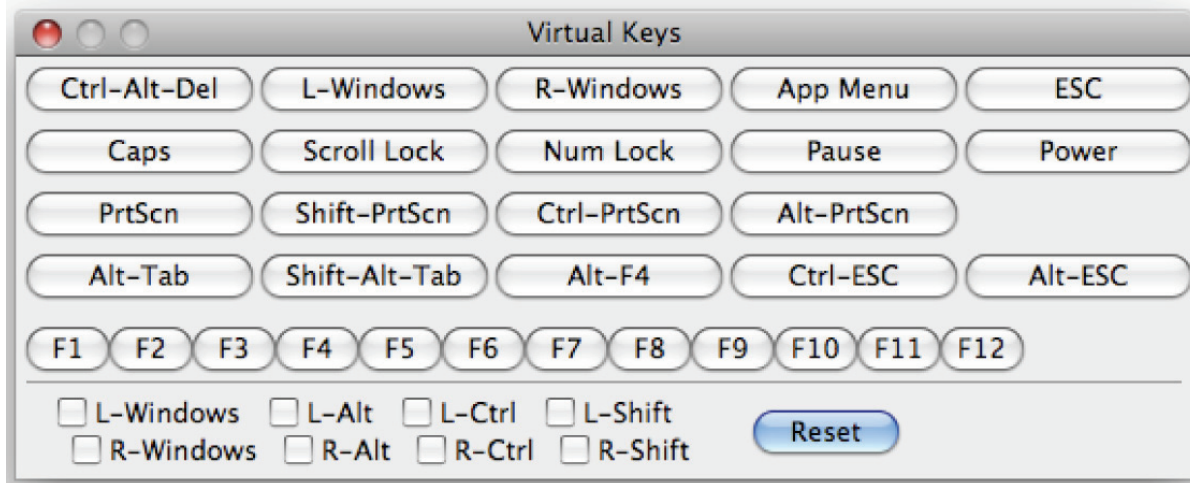


Figure 5-5. This window allows you to send special key sequences to the attached host, without actually typing them.

In Figure 5-5, all of the buttons in the top part of this window simply send the keystroke listed. Many of them are useful combinations, such as Alt-F4, which closes the current window under Windows.

At the bottom of the screen, there are checkboxes (toggle buttons) for each of the meta keys (both left and right). When you check these boxes, the key-down event is sent. When the check-box is unclicked, the key-up event is sent. This means you can use them to compose complex sequences not shown on this screen. Use the Reset button to un-check all boxes. Clicking any of the keys above the line also resets the check-boxes.

To send Left and Right Windows F8, for example, check L-Windows then R-Windows and then click on the F8 button. Similarly, you can press L-Windows and then use your keyboard to press E to send Windows+E (which might start Windows Explorer in some versions of Windows) and then click Reset.

NOTE: The L-Windows button at the top will send both a down and up, whereas the checkbox labeled L-Windows, will send a down when checked, and then an up only when cleared.

5.3.2 Simulate Hotplug (Reset)

Clicking on this menu item will “hotplug” the USB going to the host keyboard and mouse. Hotplugging simulates unplugging the USB cable and immediately reconnecting it. It will reset the USB keyboard and mouse emulation completely. Use this if the host operating system is confused.

In PS/2 mode, this also simulates a hotplug event with similar effects. Most modern operating systems can handle a PS/2 hotplug event, although this interface was never designed for hotplug.

When hotplugging, the keyboard and mouse are not available until the host O/S device driver reinitializes the emulated keyboard and mouse. During this period, a red X is shown over the keyboard icon on the toolbar.

5.4 Mouse Menu

Mouse related toggles are present on the Mouse menu. They affect the emulated USB mouse in USB mode.

5.4.1 Mac OS X Scaling

If you are controlling a Mac OS X computer with the USB Laptop Console, select this special mode. Without it, you will observe the two mouse pointers are aligned correctly in the center of the screen, but drift apart as you move to any edge of the screen.

By enabling this mode, a special adaptive scaling factor is applied to reverse this effect and return the mouse pointers to perfect alignment.

The USB Laptop Console remembers this setting, so it will be in effect regardless of which laptop is used.

5.4.2 Disable Mouse Entirely

Although we expect most customers to use the laptop's pointing device (touch pad), if you have a standard USB mouse with you, you might want connect it directly into the server instead to the laptop. The laptop's screen and keyboard are still used in this configuration, but the mouse emulation is not needed.

We also recommend this configuration when using the USB Laptop Console with USB KVM switches. These USB KVM products generally cannot understand the USB mouse device because of its advanced use of the HID standard (Human Interface Device).

You can turn on this toggle to disable the mouse emulation completely. This is helpful because touches to the laptop's mouse pad will not interfere with your full-sized USB mouse. The emulation is completely removed, down to the USB descriptor level, so any possible confusion is removed and it appears to be an utterly standard USB keyboard.

In this mode, the mouse cursor is shown as a circle with a line. This is to remind you that clicks won't be effective in that window.

Changes to this setting will cause a USB hotplug event, and this setting is remembered in the USB Laptop Console itself.

5.5 Toolbar Menu

This menu provides a more direct way to control the toolbar. You can easily "dock" or "float" the toolbar, as well as hide or show it. The current status of the toolbar is shown as check marks beside these choices.

The detailed state of the toolbar (floating, docked, vertical, horizontal position if floating and so on) is preserved when this program is closed and reopened. However, if you want to return to the default layout, use the Restore default window layout.

Appendix A. Menu Reference

Here is the complete menu structure for your reference. There may be minor variations based on your platform.

File

- Quit

Zoom

- Fullscreen mode
- Maximize window
- Center on screen

- 100%
- 87%
- 75%
- 50%
- 25%
- 12%

- Current zoom: 100%

Video

- Auto fine-tune picture
- Video related settings...
- Save PNG snapshot...

Keyboard

- Send: Ctrl-Alt-Del
- More special keys...
- Simulate Hotplug (reset)

- Active emulation type
 - USB
 - PS/2

Emulated keyboard lights

- Caps Lock
- Num Lock
- Scroll Lock

Mouse

- Mac OS X scaling
- Disable mouse entirely

Toolbar

- Show toolbar
- Horizontal toolbar (else vertical)
- Dock the toolbar (else float it)

- Restore default window layout

Help

- Online manual
- Get latest version...
- License
- About...

Appendix B. Warnings

- If you lose control of the mouse because of an ESD event, use the Simulate Hotplug (reset) found on the Keyboard menu. This will cause the host O/S to reprobe the USB keyboard and mouse.
- Recommended maximum cable length for USB (A to mini B) cable is 9 feet (3 meters).
- Although this product can function over a full-speed (12 Mbps) USB connection, a warning is shown when it is too slow to be useful. Please use only a high-speed (480 Mbps) USB port.

Appendix C. Troubleshooting

Symptoms	Problem or suggested course of action
No lights	Adapter has no power from either USB connection. Try other USB ports.
Black bar on left/top of image	Use the Picture Positioning arrows on the Video Settings dialog to shift the image leftwards/upwards until no black can be seen. Be sure to save your change.
USB Out flashing, says not connected	Verify the device drivers are correctly installed (Windows only): Unplug the adapter. Reboot. Plug in the adapter. No dialog from Windows about 'found new hardware' should be seen.
Red X over keyboard in toolbar	The emulated USB keyboard and/mouse is not being handled by the attached computer. It might be disconnected, powered down, or the O/S may be halted. When in this state, the keyboard and mouse will not do anything. Try using the (Simulate Hotplug (reset) command in the Keyboard menu, Section 5.3.2).
KVM switch doesn't work	When using a USB KVM switch, rather than a direct connection to a server, we recommend disabling the USB mouse emulation (see the Mouse menu in Section 5.4). This simplifies the USB profile we present to the KVM switch, and even the most basic USB implementation should be able to understand and support our keyboard. You will need a real USB mouse to directly connect to the KVM switch.
Toolbar is gone/Always fullscreen/ Window stuck too big or small	Use the menu item: Toolbar > Restore default window layout to restore window positions and toolbar state.

Black Box Tech Support: FREE! Live. 24/7.

Tech support the
way it should be.



Great tech support is just 20 seconds away at 724-746-5500 or blackbox.com.



About Black Box

Black Box Network Services is your source for more than 118,000 networking and infrastructure products. You'll find everything from cabinets and racks and power and surge protection products to media converters and Ethernet switches all supported by free, live 24/7 Tech support available in 20 seconds or less.

© Copyright 2010. All rights reserved.