

# USBDEX

KVM OVER USB 3.0 WITH INTEGRATED FLASH STORAGE



## USER MANUAL



Designed and Manufactured in the USA

**Smart-AVI**

1-800-284-2131  
[www.smartavi.com](http://www.smartavi.com)

# CONTENTS

TECHNICAL SPECIFICATIONS	3
WHAT'S IN THE BOX?	3
FRONT AND BACK	3
INSTALLATION	4
USBDESK SOFTWARE	4
TROUBLESHOOTING	6
TECHNICAL SUPPORT	6
LIMITED WARRANTY STATEMENT	7

# TECHNICAL SPECIFICATIONS

VIDEO	
Format	HDMI 2.0
Bandwidth	594MHz (18Gbps)
Interface	(1) HDMI 19-pin (female)
Resolution	3840 x 2160 @ 60 Hz
Color Mode	24-bit
DDC	5 volts p-p (TTL)
Input Equalization	Automatic
Cable Length	Up to 20 ft
Data Rate	1.65 Gbps per color
USB	
Signal Type	USB 3.0, 2.0, 1.1, and 1.0 w/ internal hub
Interface	(1) USB 2.0 Type B (female) Server Side (1) USB 3.0 Type B (female) Host Side
OTHER	
Power Adapter	12VDC
Dimensions	5" W x 3.8" H x 7.5" D
Weight	.8 lb
Approvals	UL, CE, ROHS Compliant
Operating Temperature	+32 to +104°F (0 to +40°C)
Storage Temperature	-4 to 140°F (-20 to +60°C)
Humidity	10 to 70% (No Condensation)
Emulation	Keyboard and Mouse

## WHAT'S IN THE BOX?

PART NO.	Q-TY	DESCRIPTION
USBDK-100	1	KVM over USB 3.0 with Integrated Flash Storage
	1	12VDC power adapter
	1	USBDesk Software (installed on host laptop)
	1	User Manual

## FRONT AND BACK



USBDex Front Panel



USBDex Back Panel

# INSTALLATION

## 1. Connect the USB Dex to the target server

Run an HDMI cable from the server's video output into the HDMI port on the USB Dex. Connect a USB cable from the server's USB port into the USB (Server) port on the USB Dex.

## 2. Connect power and plug into your laptop

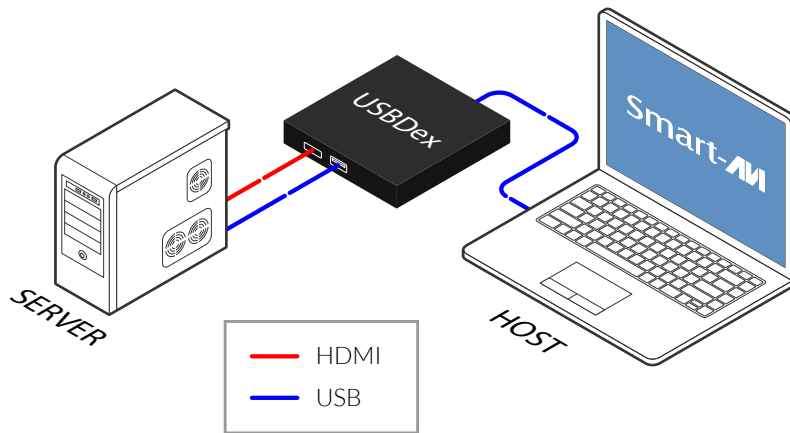
Attach the 12VDC power adapter. Then run a USB 3.0 cable from the USB HOST port into an available USB 3.0 port on the host laptop. Avoid USB hubs – a direct port connection is required.

## 3. Install USBDesk Software

Run the USBDesk Software installer on the host laptop. No installation is needed on the target server – the USB Dex is plug-and-play on the server side.

## 4. Launch and click Run

Open USBDesk Software. Confirm USB3.0 HD VIDEO is selected as the video device and the correct COM port is selected, then click Run to start the session.



**Note:** BIOS-level access is available immediately – the target server does not need to be booted into an OS. Simply power on the server after the USB Dex is connected.

# USBDESK SOFTWARE

## MAIN WINDOW

When you open USBDesk Software, the main window appears. This is where you select your video device and COM port and verify your connection settings before starting a session.

## Fields & Controls

NAME	DESCRIPTION
Set Video Device	Select the USB capture device. Should display USB3.0 HD VIDEO when the USB Dex is connected and powered.
Set Port	Select the COM port assigned to the USB Dex (e.g. COM14). Open Device Manager on the host if you need to identify the correct port.
Transmission Type	Displays the active color format (YUY2). This is set automatically – no user action required.
FPS	Shows the current frames per second of the captured video (e.g. 60).
Resolution	Shows the active capture resolution (e.g. 1280x720). Change this in the Settings dialog.
Run	Starts the live session and opens the stream view.
Setting	Opens the Settings dialog to configure resolution, frame rate, and display mode.

# USBDESK SOFTWARE (CONTINUED)

## SETTINGS DIALOG

Click the Setting button on the main window to open the Settings dialog before starting a session.

### Options

NAME	DESCRIPTION
Resolution	Set the capture resolution. Default: 1280x720. Higher resolutions require more USB bandwidth.
FPS	Set the target frame rate. Default: 60 fps. Reduce if the stream is unstable or choppy.
Window	The stream opens in a resizable window on the host desktop.
Fullscreen Window	The stream fills the entire host display.
Save	Applies the selected settings. Takes effect on the next session.
Cancel	Closes the dialog without saving changes.

## STREAM VIEW & TOOLBAR

Once you click Run, the stream view opens and displays the target server's screen in real time. Your mouse and keyboard are captured by the session automatically. To release the cursor back to the host at any time, press Left Ctrl three times in quick succession.

### Toolbar Controls

The toolbar runs across the top of the stream window and provides the following controls:

NAME	DESCRIPTION
Shift	Toggles a modifier state for keyboard shortcuts that may conflict with the host operating system.
Record	Starts and stops screen recording of the target's display. The save path is shown in the toolbar (e.g. <code>C:\Users\...\Documents\usbdesktop</code> ). Click once to start, click again to stop and save.
Ctrl+Alt+Del	Sends the Ctrl+Alt+Del command directly to the target machine. Useful for Windows login screens and Task Manager.
File Transfer	Opens the file transfer interface. Move files between the host laptop and the target server via the USB Dex's built-in flash storage – no network required.
Resolution / FPS	Displays the current resolution and frame rate of the active session (e.g. 1920x1017 · 29 fps) in real time.

**Tip:** If the frame rate drops noticeably during a session, click Setting from the main window before the next session and lower the resolution or FPS.

**Note:** Recording files are saved to the folder shown at the top of the stream window. Make sure the host has sufficient disk space before starting a long recording session.

# TROUBLESHOOTING

## No Power

- Make sure that the power adapter is securely connected to the power connector of the unit.
- Check the output voltage of the power supply and make sure that the voltage value is around 12VDC.
- Replace the power supply.

## No Video

- Check if all the video cables are connected properly.
- Connect the computer directly to the monitor to verify that your monitor and computer are functioning properly.
- Restart the computers.

## Keyboard is not working

- Check if the keyboard is properly connected to the unit.
- Check if the USB cables connecting the unit and the computers are properly connected.
- Try connecting the USB on the computer to a different port.
- Make sure that the keyboard works when directly connected to the computer.
- Replace the keyboard.

## Mouse is not working

- Check if the mouse is properly connected to the unit.
- Try connecting the USB on the computer to a different port.
- Make sure that the mouse works when directly connected to the computer.
- Replace the mouse.

## No Audio

- Check if all the audio cables are connected properly.
- Connect the speakers directly to the computer to verify that the speakers and the computer audio are functioning properly.
- Check the audio settings of the computer and verify that the audio output is through the speakers.

# TECHNICAL SUPPORT

For product inquiries, warranty questions, or technical questions, please contact [info@smartavi.com](mailto:info@smartavi.com).

# LIMITED WARRANTY STATEMENT

## A. Extent of limited warranty

SmartAVI, Inc. warrants to the end-user customers that the SmartAVI product specified above will be free from defects in materials and workmanship for the duration of 1 year, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

SmartAVI limited warranty covers only those defects which arise as a result of normal use of the product, and do not apply to any:

- a. Improper or inadequate maintenance or modifications
- b. Operations outside product specifications
- c. Mechanical abuse and exposure to severe conditions

If SmartAVI receives, during applicable warranty period, a notice of defect, SmartAVI will at its discretion replace or repair defective product. If SmartAVI is unable to replace or repair defective product covered by the SmartAVI warranty within reasonable period of time, SmartAVI shall refund the cost of the product.

SmartAVI shall have no obligation to repair, replace or refund unit until customer returns defective product to SmartAVI.

Any replacement product could be new or like new, provided that it has functionality at least equal to that of the product being replaced.

SmartAVI limited warranty is valid in any country where the covered product is distributed by SmartAVI.

## B. Limitations of warranty

To the extent allowed by local law, neither SmartAVI nor its third party suppliers make any other warranty or condition of any kind whether expressed or implied with respect to the SmartAVI product, and specifically disclaim implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

## C. Limitations of liability

To the extent allowed by local law the remedies provided in this warranty statement are the customers sole and exclusive remedies.

To the extent allowed by local law, except for the obligations specifically set forth in this warranty statement, in no event will SmartAVI or its third party suppliers be liable for direct, indirect, special, incidental, or consequential damages whether based on contract, tort or any other legal theory and whether advised of the possibility of such damages.

## D. Local law

To the extent that this warranty statement is inconsistent with local law, this warranty statement shall be considered modified to be consistent with such law.

# Smart-**AVI**

SMART AUDIO VIDEO INNOVATION

## NOTICE

The information contained in this document is subject to change without notice. SmartAVI makes no warranty of any kind with regard to this material, including but not limited to, implied warranties of merchantability and fitness for particular purpose. SmartAVI will not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material. No part of this document may be photocopied, reproduced, or translated into another language without prior written consent from SmartAVI, Inc.

20240506



**Designed and Manufactured in the USA**

Tel: (888) 994-7427 • (702) 800-0005  
2917 E Alexander Rd.  
North Las Vegas, NV 89032

**[www.smartavi.com](http://www.smartavi.com)**