DAKOTA MICRO

User Manual
AgCam®/EnduraCam®/RazerCam™ Camera mates to USB-A Port

DM Part Number(s)	Description(s)
DMAC-2USB	The adapter cable allows for the input of up to two (2) AgCam®/EnduraCam®/RazerCam™ cameras into one (1) standard USB-A port.

Always read the manual prior to operating this equipment. Also, please follow all safety signs and precautions.

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Included Components

Description	Picture
AgCam®/EnduraCam®/RazerCam™ USB Adapter	
Dakota Micro® 2.1 Barrel Male to Electrical Outlet Power **PN: DM-PA3**	

Before you Install

Before you install your software there are a few things you should do to prepare. Doing so will help to avoid any trouble you could encounter due to out-of-date drivers or security updates. Please take a few moments to perform the following:
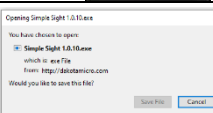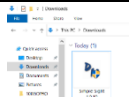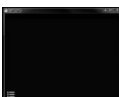
1. Note: Simple Sight software only works with CVBS (analog) cameras.
2. Make sure you have at least the minimum hardware requirements.
   - Desktop or Laptop with available USB 2.0 port or greater.
   - Windows OS, XP, Vista, Windows 7, 8 or 10.
   - 1GB RAM installed.
   - HDD space of at least 10MB.
   - CPU 2 GHz or better may work on slower computer but you may need to select a lower resolution camera image for best results.
   - Internet Connection for installation
3. Run Windows update or Microsoft update (depending on your version of Windows) and allow the computer to update all updates available.
4. If you are running any Anti-Virus software, you may want to temporarily suspend the software during installation.

Network Requirements

1. Always use with a high-speed internet connection.
2. Wired connection (preferred; wireless will work) to host computer.
3. Static IP address (preferred if viewing outside your local network; dynamic will work but will change periodically. Note: in some instances, you may need to contact your ISP to allow viewing outside of your local network.
4. Configurable router (settings are the customers responsibility; Dakota Micro technical support is not able to assist with router configuration).

Software Installation Instructions

Important: Leave the Simple Sight hardware UNPLUGGED from the USB during installation. ONLY plug the hardware into your computer AFTER the Simple Sight software has run for the first time. After this initial installation you may plug and unplug at will with no issues.

Visit http://dakotamicro.com/software/Simple%20Sight/ and click on "Simple Sight 1.0.10.exe."	
If prompted with a security warning, click "Run" to continue with installation. This program is safe, but there is no Microsoft certificate. **Continue to leave USB Device unplugged!**	
Click "Save File" when asked if you would like to save this file.	
Find saved files in your Downloads folder. Double click to open Simple Sight 1.0.10.	
Setup Wizard will begin. Click "Next" to get started.	
Select the destination folder to store this program. Then click "Install."	
When it is done installing, click "Finish."	
Once the software is successfully installed a Simple Sight software icon will appear on the desktop. Double click this icon and run the program for the first time. Wait for about 10 seconds and let the program check for updates. If there are updates available, the program will prompt you to install them; let the program update to the latest version. During the update procedure the program will close and, upon completion, will prompt you to re-open the program.	
When the software first opens, you will see a screen similar to the image to the right that should include the statement "Device Unavailable". NOW you get to plug in your Simple Sight! When the device is plugged in for the first time, Windows will identify the device and assign the driver to it; please be patient as this will take a moment.	
As soon as the device driver is installed and ready, the next screen will appear. This screen means you are set up and ready to run. Now it is time to get your hardware all hooked up. Cameras or wireless receivers will get their power through the SS hardware using the included AC adapter. Simply plug in the cameras, receivers, or extension cables to the DM camera ports and you should automatically, and almost immediately, see a picture.	
Hover the mouse over the Menu icon in the lower left side of the screen and you will see the word "Menu" pop up on the top of it; click the Menu screen to display the options.	

Software Menu Options

1. **Toggle Camera**

   - Clicking this icon will switch between the camera displayed and the one that is not. The camera name will briefly appear at the top of the screen to identify it. Location of the camera name can be changed in your settings.

2. **Take Snapshot**

   - Clicking on this icon will instantly take a photograph of the image on the screen and store it on your computer with the default location being the "My Pictures>Simple Sight" folder.
   - Each image within the dated folder will be named according to the time of day the snapshot was taken; for example, if the snapshot was taken on July the 4th, 2022 at 2:23PM, the folder name will be 2022-07-04, and within that folder will be an image with the title (military time)14-23-10 (the 10 is the seconds, HH-MM-SS)
   - Once you press the "Take Snapshot" button there will be a confirmation on the top of the screen stating "Snapshot Saved" with a small arrow next to it. This will stay for a few seconds, so if you would like to open the folder where the image was saved, you can click anywhere in the bar where the statement appears to open the folder. The default image save folder can be changed in the Settings menu, under Image Settings.

3. **Image Settings**

   - Clicking on the "Image Settings" icon you will be given slide bars that will allow you to adjust the hue, saturation, brightness, contrast, and XX of your displayed camera images. These settings are individual for each camera, and the settings for each view are changed only for the camera that is being viewed. All individual settings will be saved when the program is closed.
   - Click on the "X" on the right-hand side is to exit the Image Settings mode
   - Click on the curled arrow to return all settings to default.

4. **Full Screen Mode**

   - Clicking this icon, the image will fill the entire screen with your current camera image
   - If you click the icon again (the arrows will be grouped and pointing towards each other), the screen size will return to a windowed state.
   - Upon 'exit', the program will return to a windowed state.

5. **Settings**

   - Clicking this icon will bring you to your "Settings Menu". This menu will be discussed in section V.

6. **About/Info**

   - Click this icon and you will get a pop-up telling you the version number you are using.

7. **Quit/Close**

   - Clicking this icon will quit/close the software.
   - You have the option of "quitting" the program or simply closing it while leaving it to run in the background.

Settings

Interface Tab

- <u>Show systems tray icon</u>- This will show/hide the system tray icon when the software is running. This is useful for those that want to minimize the program but to let the program continue to stream (explained later).
- <u>Start in full screen mode</u>- This will start the program in full screen mode when you first start the program. You can exit the full screen mode at any time by right clicking on the video image screen and select "Windowed Mode" or alternately when the screen is windowed you can select "Full screen mode"
- <u>Aways Show camera name</u>- This will keep the camera name on the top of the screen in the standard view screen. The name of the camera will not be captured with the snapshot utility as the label is above the image area.
- <u>Download updates automatically</u>- Keep this feature checked if you want to receive updates when available. Uncheck only if you do NOT want the updates, and if the program is perfect for your needs.

- <u>On-Screen Menu</u>- This section box has 2 options, "Show Menu Button" and "Show Expanded Menu". When the selection "Show Menu Button" is selected the program will open with a menu Icon in the lower left side of the screen. When the selection "Show Expanded menu" is selected the screen will always show the menu icons. If you would like to customize your menu items that are displayed, you can click on the "Customize" button. A new window will appear that will give you the ability to decide which icons are available to the user interface.
  a. To add or remove menu items, simply highlight the unwanted item from the box of available icons in the top box and click on the Minus (-) button, the icon will be removed from the top box.
  b. If you would like to add an additional icon select it from the drop-down list on the left and click on the Plus (+) button and it will appear in the top box.
  c. To rearrange the icons in the top box you simply highlight the icon you want to move up or down and cluck on the UP or DOWN arrows to move it one space.
  d. More than one of the "Separator" items can be added to the list as shown in the image to arrange the buttons with more space between them or to force them left or right.
  e. <u>Hide menu automatically</u>-This will make the lower menu disappear after approximately 5 seconds of no use. **Note: Hide Menu automatically is not recommended for touch screen display.**
- Snapshots Directory- This is where you can choose an alternate location for your snapshots; for example, if you want them to be stored on a server you may choose a network location or on a removable drive.
- Reset Defaults- This is a way to return to the install defaults and start over.

Device Tab

- 1st (and 2nd) Camera Name- This allows you to enter the name you want to have display on the top of the screen. The camera name will not be stored on the image snapshots.
- Video Mode- There are several options. These options are intended to allow you to choose the proper resolution and orientation of your cameras. Select lower resolutions if you want faster refresh, especially when streaming the video as it will be significantly faster and you will receive more images per second; or use higher modes if you aren't concerned with a delay or fluid motion but want clear images for snapshot use. For live viewing on the PC where the USB device is plugged, there is only personal preference; however, you will want to choose 29fps modes for NTSC cameras and 25fps for PAL modes. The lowest Frame rate of 14fps is primarily for use in slow internet connections intended to stream the video.
- View Mode- 2 Options
  a. Fit in view- This option will keep the screen size of the viewing area in the same aspect ratio of the camera image to maintain the entire image on screen at all times.
  b. Scale and crop- This will allow the image to fill the screen top to bottom at all times and crop the sides off if necessary; it will not cut the top and bottom of the camera image off, only the sides.
- Reset Defaults- This is a way to return to the install defaults and start over.

Web Access Tab

- Enable Web Access- this turns on the Web Access Server, allowing for internet or intranet streaming on other computers, or even off-site via the internet.
  a. The default port for this devise is 8080, which should be perfect for most internal network viewing.
  b. To test if your network can allow outside access to this video device, click on "Enable Web Access" and then click the "Test" button. At this point you may need to allow access through your firewall which (unless you are super secure) you will only need to tell your computer to "Allow" it. After a few seconds you will either be transferred to a web page displaying your camera or you will see an error. In either case, you can likely view the cameras on any other computer within your home network.

**NOTE: This section is not for the novice user; if you don't understand this section you may want to seek the assistance of someone who is familiar with your 'router', port forwarding, IP addresses etc. Dakota Micro Technical Support cannot help you with any settings on your router, or any other IP settings of your computer or any other computer on your network.

Tips

Most home networks will not be restricted for this activity and if you have sufficient network resources, you should have no problems. Before we get into the details of how this is accomplished, let us first discuss some of the terminology of a home network, and how it all relates to the streaming of your video.

In the chart below you will see a very common network with a brief explanation of how each device interacts with the next and previous. Dakota Micro can assist with the video streaming hardware to get an image on your computer screen when it's plugged in, and possibly on another computer within your network, but to get your video stream out of your network **Dakota Micro will not be able to help you,** as there are devices that may control that ability beyond our capability of assisting you.

**Please be aware that Dakota Micro technicians are not able to help with router settings, computer antivirus settings, firewall settings or any other network issue that may affect your ability to stream video to other computers on or outside of your own home network. However, having said that, most people find that there are no issues, and the below instructions should help to better understand your network, and the internet.

Home Network and Internet Relationship to Video Feed

- AgCam®/EnduraCam®/RazerCam™ Camera
  a. Produces the image and is sent along the cables to the Simple Sight Hardware.
- Simple Sight Hardware:
  a. Accepts the composite signal from the Dakota Micro Cameras where it's converted into a digital signal that can be understood by your computers USB port.
- Home PC:
  a. This accepts the signal from the USB device the image from the camera onto the screen, also this image can be forwarded onto the home network via "Ethernet" cable to your router. The computer will need the Simple Sight software installed and configured to stream the video onto the network vie a port number. All computers on a network have an "IP address" such as 192.168.0.2. In the simple sight software, you will have to specify a port to send the video onto your router in your network.
  b. In addition, an IP address assigned to your computer there is one assigned to your internet service as it's seen from the internet side, to find this out simply visit the site http://whatismyip.com and your internet address will show.
- Home Router: (this is the point where DM Technical Support cannot provide assistance any longer, please contact your ISP or networking specialist)
  a. This is the part of your network that will route information from your PC to other PCs on your network or to the Internet via your ISP and whatever equipment they provide if any to communicate such as a Modem. This router must be configured to allow the port mentioned above to forward the information from that port onto the internet, this is done by a method called "Port Forwarding". You may need to consult your Internet service provider or the router manufacturer to help with this if you aren't familiar with router configuration. Most home devices such as this are quite user friendly however Dakota Micro CANNOT assist you with this configuration.
- ISP or Internet Service Provider
  a. The ISP is a service company that sells access to a network of computers called the Internet. This company is a very large version of what the home router is and can block or allow access in a similar way. Some ISPs have been known to block certain ports or even throttle bandwidth to certain customers. You should check with your ISP to make sure they allow for your service to act as a "Server" for video feed and inquire if any port numbers are blocked. Without the ISP cooperation there is no way to ever configure you Simple Sight for offline viewing.
- Internet:
  a. The internet is a massive network of computers including ISP's, server locations, companies, homes, and any other computer which can host information of any kind onto this network. Along the way your information (video stream) may pass through dozens or hundreds of other computers or ISPs to get to the computer you want to access it from. This is simply how it works and while it almost always works without flaw it can at times be an issue in both speed and overall accessibility.

- Remote Location:
    a. Wherever you need to see your cameras from is possible through a standard web browser, you will be able to switch the cameras and view them from this remote location. We recommend that you use Firefox Browser for the most convenience, but you can also use Internet Explorer/Edge if you install the Google Chrome Frame plug-in, your browser
    b. In order to access the video feed from your offsite location you will need to use your internet address as described above plus the port number as shown in this example. http://99.99.99.99:8088, the 99.99…. part represents your internet address and the :8088 represents the port number as configured on your simple sight software configuration.

Example Setup

In this example we're going to assume a few things: if you got a router from a retail store and didn't establish a different IP address, your default IP address for the router will be something like 192.168.0.1, and each computer on your home network will be using a similar number with the last number in the sequence being a different number, such as 192.168.0.123.

Giving this example let us assume:

- Router address is 192.168.0.1
- PC where SS is plugged in is 192.168.0.123
- Port number typed in SS program (settings, web access tab, port number) is 8088
- On the web access tab of the SS program, you have the "Enable Web Access" checked
- You have not selected to "Require Authorization" (if you only use this within your own network it is not necessary to require authorization; however, if you pipe this outside your network, this should be enabled and enter a username and secure password.)

Using this example setup: if you were to go to another computer on your network, you would open an internet browser and in the address bar (not the search bar), which is toward the top of the page and will have something like http://google.com in it. Type the following numeric code into the address bar:

192.168.0.123:8088

The first part is the address of the computer with the SS software and the 8088 is the port number, the ":" (colon) separated the two numbers and must be typed in properly as shown.

This address is unique to each computer just like your house has a unique address.

Once you hit "Enter" or "Go", you should connect to the computer using the SS hardware and be directed to the port serving the video feed, a similar looking window will pop up to interface with the SS. Different browsers will require different methods of viewing the camera feed:

Internet Explorer/Edge: The least friendly of the browsers will prompt you to install the "Google Chrome Frame", which is very small and loads very fast. This will only be required the first time you access the cameras if it is not already installed.

Firefox: Very friendly and will instantly display your video

Google Chrome: Very friendly and will instantly display your video.

There are many other browsers that may or may not work, but the video feed has been tested on these because they are the most used. The recommended method for best results is to download the Firefox browser.

Using the tool:

Within the SS program there is a tool to help you access your video feed; if you have not set up your router to allow access to the SS video feed from an "offsite location", you will get a warning message. This warning indicates that the program cannot access the external address for your video stream; this is normal and will not work until you set your router to "Forward", which will forward the video feed outside of your network. However, if you click OK on this warning box it will almost immediately open your default browser, which will likely show your video feed. More importantly, in the address bar you will have the exact address which you will use to access the video feed from other computers. If you don't get the video feed, it is likely that your computer does not have "File Sharing" enabled. For your specific operating system you may want to do an internet search for "Enable file and print sharing"; this will provide some very comprehensive instructions. Here are some basic instructions which will be helpful to most running Windows 7 or Vista.

Getting outside your home network:

This section will very briefly discuss what you will need to do to access your cameras from outside of the home network. To clarity, as per the networking char displayed earlier in this document, we're talking about accessing the device located "inside" of your home network, and we will be accessing this device from somewhere "outside" of your network, for instance a neighbor's house, lake house, or hotel.

Using the "Tool" mentioned in the previous section, you will almost certainly know when you are able to access the cameras from "outside" of the network. If the tool gives you the error message, "unable to determine external network address," something is not set up correctly withing your router, or it is possible that your ISP may have blocked the Port you entered for Streaming.

If you still require assistance at this point, we must encourage you to contact someone who is familiar with your router and help to configure it. Dakota Micro cannot assist you with this setting. There are literally thousands of possible hardware options, and we can't be familiar with them all, but most importantly the router or firewall is your protection from hackers and viruses from the outside world and our technical support staff is forbidden to make any changes to your firewall or any other device which may affect any protection you may or may not have. Thank you for your understanding.

Warnings

1. When selecting a camera system from Dakota Micro, Inc., be sure to utilize the appropriate system for your use. AgCam®, EnduraCam® and InnoPro® cameras are designed for high impact, moisture, vibration, and a variety of other rough conditions. OverView® and RazerCam™ cameras and kit components are designed for light use, low vibration, and low moisture. OverView® and RazerCam™ equipment is not warranted when used in situations outside of the above-mentioned parameters. We always request that customers keep in mind that our less expensive OverView® and RazerCam™ product line is cheaper because it does not feature the reliability and durability of our AgCam® and EnduraCam® lines. The warranty available on these products reflects that durability.
2. To avoid electrical shock and maintain optimal functionality, do not open the enclosures. High voltage may be present and there are no user serviceable parts inside. All warranties will be void should any enclosures be tampered with in any way.
3. Do not use any harsh chemical solvents, cleaning agents or corrosive detergent to clean away dirt on the surface of the screen or lens.
4. On AgCam® and EnduraCam® products, the photo-chromic camera lenses have been made impact-resistant and have been drop-ball tested according to Sec. 3.84,21 CRF BUT ARE NOT UNBREAKABLE. Because they have been hardened chemically, they show no stress pattern. Inspect your lenses frequently. Chipped or scratched surfaces will reduce protection. Such lenses should be replaced only by the manufacturer.
5. Power to cameras is not interrupted by turning off monitor; 12v power source must be terminated when not in use to avoid battery drain. To avoid this problem be sure when hard wiring a unit, use a fused circuit.
6. Do not use your Dakota Micro, Inc. camera system for anything other than legal surveillance and observation uses. Dakota Micro, Inc. is not liable for any illegal or nefarious usage.

Product Warranty/Repair Process

1. For Technical Support call 1 701-538-4403 OR email techsupport@dakotamicro.com
2. Technician will assist in troubleshooting product malfunction.
3. If product malfunction cannot be remedied and a repair is deemed necessary, Technician will issue a case number.

   IMPORTANT NOTE: The Technician will note if the repair APPEARS to be a warranty or non-warranty issue based on customer description of the issues at hand. No final determination can be made until inspection and testing of the equipment is completed at the factory.

4. To ensure fast and effective repairs, customer is required to send:
   - Dakota Micro, Inc. product that technician has requested/deemed necessary in the proper diagnosis and repair of malfunction. This may include some or all components of the kit.
   - Original/Copy of purchase receipt.
   - For serialized items ONLY, if a copy of the original purchase receipt cannot be provided, then Dakota Micro, Inc. will use the product manufacture date.
   - Customer information, including return address, phone number & email address.
   - Case Number provided by Dakota Micro, Inc. technical support
   - Shipping and associated costs to ship product to Dakota Micro, Inc. factory to be borne by the customer unless otherwise specified.
5. Customer should mail product to:
   Dakota Micro, Inc.
   Case # XXXX
   8659 148 ½ Ave. SE
   Cayuga, ND 58013
6. Upon receipt and evaluation of product at Dakota Micro, Inc. factory, it will be established if the repair is warranty or non-warranty. Customer will be notified of any applicable charges.
7. If the repairs are deemed non-warranty and require a service/repair fee of any kind, a credit card number will be required.
8. If customer is unable to be contacted over the course of 3 weeks regarding required non-warranty repairs, product will be held for 30 days and, if no response from customer, product will be discarded.
9. Any product returned without proper documentation may be returned at customer's expense.
10. Product returned with unconfirmed problems may be assessed an evaluation fee of up to $60 per unit.
11. Return shipping costs will be borne by the party at fault; in other words, if Dakota Micro, Inc. determines that the defective product was covered under warranty, Dakota Micro, Inc. pays the shipping charges. If Dakota Micro, Inc. determines that it was the customers fault, the customer will pay shipping charges. If a particular circumstance cannot be determined than the cost of shipping charges will be decided on a discretionary basis depending on the situation at hand.

Consumer Limited Warranty

Subject to the disclaimer, limitations and other directions stated hereafter, Dakota Micro, Inc. warrants that the Product will be free from defects in material and workmanship for periods as stated hereafter from the date of original purchase. **THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS. THE EXCLUSIVE REMEDY OF THE BUYER IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT. EXCEPT AS STATED IN THIS WARRANTY, DAKOTA MICRO, INC. SHALL NOT BE LIABLE FOR ANY LOSS, INCONVENIENCE, OR DAMAGE, INCLUDING DIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER RESULTING FROM BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY OF ANY OTHER LEGAL THEORY**. Any oral statements or representations made by anyone which are contrary to or at variance with the terms stated in this **LIMITED WARRANTY** are void.

Dakota Micro, Inc. will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period of five (5) years for AgCam® /EnduraCam® cameras; three (3) years for InnoPro® cameras; two (2) years for AgCam®/ EnduraCam® monitors, and Wireless components; Twelve (12) Months for all Overview® and RazerCam™ Cameras & Monitors, cables and all other accessories.

In addition to the five (5) years for AgCam® /EnduraCam® cameras Dakota Micro will warranty for the life of the camera against any variety of ingress within the camera housing. This includes moisture and dust particles that are found inside the camera resulting from a manufacturing defect and does not include ingress because of damage caused by no fault of Dakota Micro, Inc.

The Dakota Micro, Inc. limited warranty periods outlined above apply throughout the United States and Canada only. A one (1) year maximum limited warranty for all Products applies to all other geographic locations unless otherwise stated in writing by Dakota Micro, Inc.

This limited warranty does not apply to any issues connected with appearance that have no relation to the performance of the Product nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the process set forth in the Product Warranty/Repair Process, and provide proof of purchase to Dakota Micro, Inc.

Neither the sales personnel of Dakota Micro, Inc. nor any dealer or any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time periods described herein.

The warranties described herein shall be the sole and exclusive warranties and remedies provided by Dakota Micro, Inc. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Dakota Micro, Inc. to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims. In no event shall Dakota Micro, Inc. be liable or in any way responsible for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than Dakota Micro, Inc.

Some states do not allow the limitation or exclusion of incidental or consequential damages, so said limitation may not apply to you.

Any action at law, suit in equity, or other judicial proceeding for the enforcement of any right provided for herein or otherwise, or with respect to any claim that a purchaser may have against Dakota Micro, Inc. shall be instituted only in the Courts of the State of North Dakota, either in the state district court located in Wahpeton, North Dakota or in Federal District Court located in Fargo, North Dakota. Without regard to conflicts of law principles, the laws of the state of North Dakota shall govern the interpretation and enforcement of the terms of this Limited Warranty and all aspects of the relationship between Dakota Micro, Inc., and the purchaser.

This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state.

Disclaimer

Dakota Micro Inc. products, specifications, pricing, and programs are subject to change without prior notice. Dakota Micro Inc. reserves the right to make design changes at any time without obligation to retroactively install them on previously sold units.

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