D-Link

DSB-C100 USB Digital Video Camera

User's Manual

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Introduction

Thank you for purchasing the D-Link DSB-C100 USB Digital Video Camera. Using state of the art technology, it can be used with any Windows 98 or above PC for video-conferencing, to create multimedia presentations, or video emails.

This guide will walk you through the steps necessary to install your DSB-C100.



Hardware Installation

Installation of a D-Link DSB-C100 requires installation of the camera hardware itself, and then installation of the software drivers.

Installing the Camera

Please verify that you have Windows 98 or Windows 2000 running and working before attempting to install your DSB-C100.

Install the camera by plugging its USB type 'A' connector into an available USB port on your PC or on any USB hub attached to your PC.

No power adapter is required, the DSB-C100 is powered directly by the USB Bus.

Once the camera has been plugged in the Add New Hardware Wizard will start automatically.



This concludes the hardware installation section of the manual.

Driver Installation

Installing the Camera Drivers

Note: Please have your original Windows CD available, it may be required to complete the installation.

Once the DSB-C100 has been installed the New Hardware Wizard will launch:



Once again press "Next>" so that your computer will search for the best driver:



Make sure that the driver diskette that came with your camera is in your floppy drive and that you have checked "Floppy disk drives" and then press "Next>":

Add New Hardware Wizard	
	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search. Floppy disk drives CD-ROM drive Microsoft Windows Update Specify a location: A\ Browsen.
	< <u>B</u> ack Next > Cancel

Once the driver has been installed click "Finish":



Quality & Format Adjustment

Display Utility

Once the driver is installed successfully, it allows three options of "PC Camera VFW Capture", "PC Camera WDM Capture", and "Uninstall D-Link USB Digital Video Camera+".These programs are automatically installed to \Program \ Files directory. The display utility allows you to view video images from your D-Link USB Digital Video Camera, and adjust the parameters for best color quality.

To adjust for the best image quality, you need to run the "PC Camera WDM Capture" display utility, click on windows **Start Menu/Programs/D-Link USB Digital Video Camera+/Camera/PC Camera WDM Capture**. Select **Options** in the menu bar and in the selection item choose **Preview** and this will activate the D-Link USB Digital Video Camera to start capture images.



However, before you begin utilizing the D-Link USB Digital Video Camera make sure there is enough lighting in the scene and adjust the focus on the Digital Video Camera to gain optimal image quality.

Color Adjustment

Once the D-Link USB Digital Video Camera is capturing images you can start adjusting the colors by selecting the **Options** in the menu bar and in the selection item choose **Video Capture Filter**. A prompt screen will be displayed like the one below:

Properties		×
Camera Controls		
	Manual	Auto
<u>B</u> rightness		36 🔽
<u>C</u> ontrast		7
<u>H</u> ue		7
<u>S</u> aturation		208
Shar <u>p</u> ness		3
Backlight	J	
<u>E</u> xposure	i	154 🔽
ColorE <u>n</u> able	Cancel Flicker	<u>D</u> efault
[OK Cancel	Apply

Under the **Camera Controls** tab, make the appropriate adjustments from the menu list to fine tune the image related parameters such as Brightness, Contrast, Saturation, Sharpness, Hue, Backlight, and Exposure or set to Default.

Brightness tells how much white or black that exists in the image. It is the amount of light reflected in proportion to the amount absorbed by the material in the image. Therefore, reflective objects are bright, and vise versa.

Contrast is the degree of difference in tone between the light and dark parts of an image. The higher the contrast the brighter the image and the lower the contrast the darker it will become.

Saturation is an expression for the relative bandwidth of the visible output from a light source. As saturation increases, colors appear more pure and as it decreases, colors appear more washed out.

Sharpness determines how crisp the image quality looks. For example, when sharpness is high, the picture will look crisp and edges will be well-defined. **Hue** in short means color, it is the wavelength of light that gives a color its distinguished characteristics.

Backlight is the source light coming from the background, it affects the picture quality in areas of brightness from the background.

Exposure is recommended to be set at Auto or you can have the option to adjust to your required capture image. Since most cameras determine the exposure by averaging all the light that enters the lens.

When the **ColorEnable** is activated it allows the user for color display and if deactivated black and white images will appear from the AMCAP screen.

Keep in mind when changes are made, click the **Apply** button to refresh all the new details you have set and click **OK** to return to the AMCAP Capture Screen.

Format Adjustment

You can also format the image captured by selecting the **Options** in the menu bar and in the selection item choose **Video Capture Pin**. A prompt screen will be displayed like the one below:

Properties	×
Stream Format	
Video Format	Compression
Video Standard: None	
Frame <u>R</u> ate: 15.000	I Frame Interval:
Elip Horizontal:	P Frame Interval:
Color Space / Compression:	
RGB 24 💌	
Output <u>S</u> ize:	Quality:
320 x 240 💌	J
OK	Cancel <u>A</u> pply

In the **Frame Rate** display you have the options from 7.5 frames per second (fps) up to 30 fps.

You can format the setting allowing incoming color depth as 24-bit RGB with the other choices of RGB 555 (16 bit) and I420 in the **Color Space/Compression**.

Output Size to set the video display size. There are various formats available such as 176X144 (QCIF) and 352X288 (CIF).

However, keep in mind the higher the Frame Rate, Color Space/Compression, and Output Size the larger the video file size will be. Therefore, the lower resolution is recommended for video-conferencing or video recording.

Once again when changes are made, click the **Apply** button to refresh all the new details you have set and click **OK** to return to the AMCAP Capture Screen.

Now you are ready to have fun with the new D-Link USB Digital Video Camera and with the bundled software you will be able to use the various video editing applications permitting you image manipulation, editing, photo album, video mail and video conferencing capabilities.



Uninstalling the D-Link USB Digital Video Camera

To uninstall your D-Link USB Digital Video Camera click on windows **Start Menu/Programs/D-Link USB Digital Video Camera/Camera/Uninstall D-Link USB Digital Video Camera+**. A prompt screen will be displayed like the one below:

Uninstall	Device				\times
?	You Really Want to Remo	ve D-Link U	ISB Digita	al Video C	amera
	Yes	<u>N</u> o			

Click **Yes** if you want to remove the program from your system. A new prompt will be displayed acknowledging the D-Link USB Digital Video Camera has been successfully removed.



Click **OK** to finish the uninstall process.



Macintosh OS 8.6 or Above Installation

- 1. Do not plug the USB Digital Video Camera to the USB port before setup is completed and instructed to do so.
- 2. Insert the MAC Driver CD-ROM that came with the USB Digital Video Camera into the appropriate drive.
- 3. Once initiated double click on the "USB Camera installer" icon to start the installation of the driver.
- 4. A prompt will appear featuring the creator of the installer by Aladdin System. Click on the Continue icon to proceed further.
- 5. After installation, a prompt will appear with the following message: "Installation was successful. Choose Quit if you are finished or Continue to perform further installations". Click on the Quit icon and you are finished installing the USB Digital Video Camera.
- 6. When the driver installation is completed you can plug in the USB Digital Video Camera into the USB port on your PC.
- 7. Once the driver installation is completed and the USB Digital Video Camera is plugged into the USB port you can initiate the Digital Video Camera to start capture images through the video application programs.

Specifications

Sensor	352 x 288 Color CMOS sensor
Minimum Illumination	8 lux
System Interface	USB port
Video Compression	Proprietary video compression
Snap-shot Button	Yes
Color Adjustment	Brightness, Hue, Saturation
White Balance	Automatic
Driver	Windows 98/Me, Windows 2000 Mac OS 8.6 or above
Lens	F=6.0mm / f=1.8
Aspect Ratio	4:3
Power Consumption	5V, 200mA max.
Operating Temperature	10 °C ~ 50 °C
Storage Temperature	0 °C~ 65 °C
Humidity	10% ~ 90% non-condensing