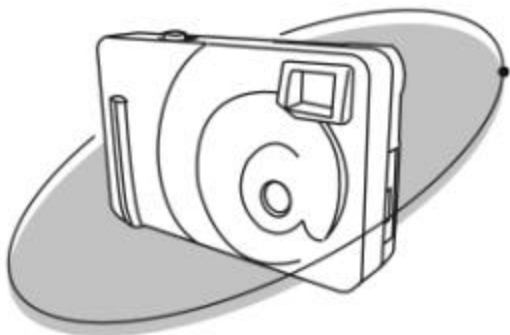


3-in-1 Digital Camera

User's Manual









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1.Camera Precautions



Notice the following guidelines when you use the camera:

-  To avoid a fire or electric shock, do not put this camera in damp or dusty location.
-  Do not leave the camera in places subject to extremely high temperatures, such as in direct sunlight. This may affect the camera's case and its internal components.
-  After the camera is activated, avoid bumping it against hard surface. This may cause malfunction.
-  Choose a flat surface free from vibration when the camera stands on it.
-  If the lens or the viewfinder is dirty, clean them with a lens brush or a piece of soft cloth.
-  Under the following situations, let the camera repaired by qualified personnel:
 - a) Its cable or plug is damaged or worn.
 - b) It has been dropped and/or the casing has been damaged.
 - c) Liquid has entered the camera.

2. Technical Specifications

DE	Sensor Resolution:	CMOS, 1280 x 1024 pixels
DE	Built-in Memory:	8 MB Flash Memory
DE	Image Storage:	1280 x 1024 – 30 images (with compression); 640 x 480 – 120 images (with compression);
DE	Status LCD:	2-digit B/W on back for functions
DE	White Balance:	Auto
DE	Exposure:	Auto
DE	Viewfinder:	Optical, Reverse Galilean type with field ratio of 80~85% and magnification of 0.49.
DE	Lens:	4 elements in 4 groups, fully coated glass lens
DE	Focusing:	Fixed range from 60 cm to the infinity
DE	Focal Length:	9.85 mm
DE	Aperture:	F=4.0
DE	Self Timer:	10 seconds
DE	File Format:	Still images--- JPEG Movie images--- AVI
DE	Interface:	USB
DE	Delete Image:	All or the last one
DE	Movie clip:	Supported
DE	Video Teleconference:	PC camera, NetMeeting 20 fps-QVGA resolution
DE	Auto Power Off:	30 seconds
DE	Battery:	3 x AAA alkaline battery
DE	Dimensions:	85.6 x 54 x 23 mm
DE	Weight:	50 grams (without battery)
DE	Operating System:	WIN 98/98SE/2000/XP

3.Computer System Requirement

-  Personal computer designed for Win98, 98SE, 2000, ME or XP
-  Minimum 200 MHz CPU
-  At least a 8x CD-ROM drive to install software
-  Available USB ports
-  Color monitor with a minimum resolution of 640 x 480 24-bit true color (1024 x 768 is recommended)
-  Minimum 48 MB RAM for WIN98; 64 MB for WIN 2000 and WIN XP
-  At least 120 MB of available hard disk space
-  Graphic Card: 2 MB memory or above

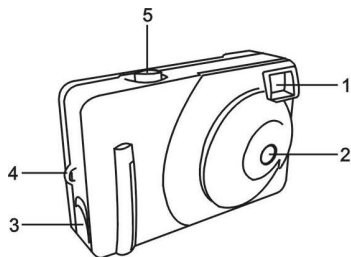


Fig. (1)

4.Camera Description

Front Side---Fig. (1)

1. Viewfinder
2. Lens
3. Battery Compartment Door
4. Hand Strap Lug
5. Shutter Release Button

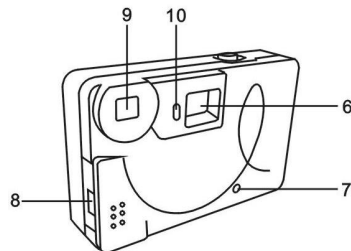


Fig. (2)

Back Side---Fig. (2)

6. Status LCD
7. Power On Button
8. USB Port and Its Rubber Cover
9. Viewfinder
10. Mode Button
11. Tripod Connection Socket



Fig. (3)

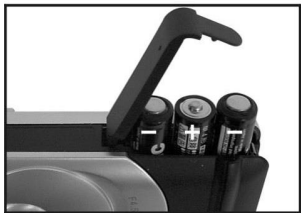


Fig. (4)

5.Quick Start

Battery Installation

1. Open the Battery Compartment Door (3). Refer to Fig. (3).
2. Insert three AAA alkaline batteries into the battery compartment, with the polarity in the direction shown by. Fig. (4)

Important: When the batteries are low, you will see the battery symbol on the Status LCD (6) blinking continuously. Always download photos to the PC prior to the replacement of batteries to avoid memory loss.

Note:

- a) Do not mix old and new batteries .
Replace all of the batteries at once.
- b) Remove the batteries if the camera will not be used for some time. This will save the battery life.
- c) The camera has a 3-minute data loss protection to allow you replacement of batteries if you can't download the photos in advance while the batteries are drained.

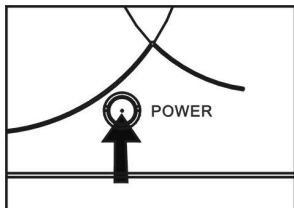


Fig. (5)

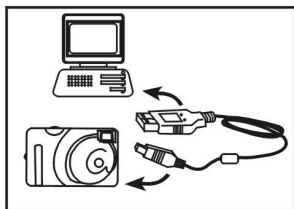


Fig. (6)

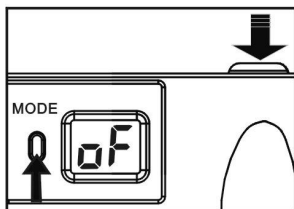


Fig. (7)

Power On/Off

Power On

Method 1

Press the Power On Button (7) until the Status LCD (6) lights up. See Fig. (5).

Method 2

Plug in the USB cable and connect the camera to your PC, and press the Power On/Off Button (7). The camera will be powered by the USB power source. See Fig. (6).

Power Off

Method 1

After the camera is turned on, it will be turned off automatically 30 seconds after non-operation.

Method 2

Press the Mode Button (10) until the Status LCD (6) shows as Fig. (7), then press the Shutter Release Button (5) to turn off the camera.

Note: If the camera is connected with the PC, you have to unplug the USB cable in order to turn it off.

Taking Photos

After the camera is turned on, you will see the Status LCD (6) show s “HI” and the frame number of “0”. Refer to Fig. (8). If images have been saved in the camera, the frame counter will show the picture number which are taken.

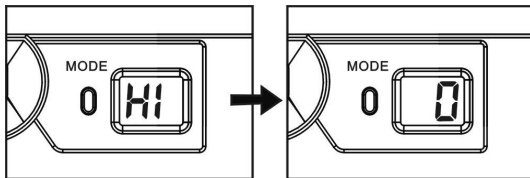


Fig.(8)

1. Look through the Viewfinder (1) to aim the subject which you want to take.
2. Press the Shutter Release Button (5) to take photos.
3. The frame number shown on the Status LCD (6) indicates how many shots are still available before the memory is full. The frame counter will count up automatically after each shot.
4. When a photo is taken, a single short beep will be heard. After the beep, the camera is ready to take another photo.

Important: If the environment is too dark for this camera to get acceptable image, the camera's self detection device will prevent you from taking photos.

Note: Whenever you hear two beeps, it means the memory is full, or the light is not bright enough. No photo can be taken under this situation.

Mode Selection

By pressing the Mode Button (10) sequentially, you can cycle through different modes as displayed on the Status LCD (6). After the selected mode is displayed, you can press the Shutter Release Button (5) to take photos. The different icons in the Status LCD (6) are shown in Fig. (9).

- oF** Power off
- St:** Self timer in 10 seconds
- d8:** Capture pictures in video mode
- CA:** Delete all photos in the memory
- CL** Delete the last picture
- HI** High resolution (1280 X 1024 pixels)
- Lo:** Low resolution (640 X 480 pixels)
- 50** Lighting AC power frequency 50MHz
- 60** Lighting AC power frequency 60MHz
- P#** Capacity mode

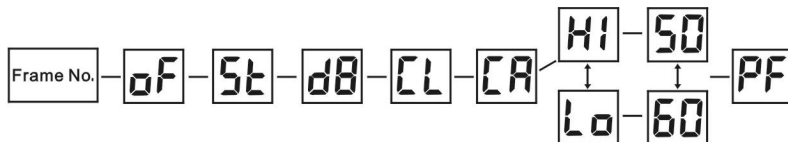


Fig.(9)

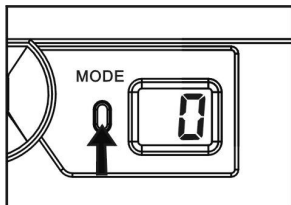


Fig.(10)

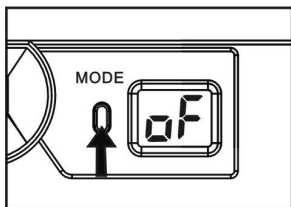


Fig.(11)

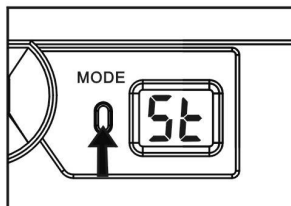


Fig.(12)

Different Modes

1) Default (Hi)1280x1024 Resolution

The camera can take 120 photos in “Lo” format (with compression). If it is in “HI” format (with compression), it can take 30 shots. See Fig. (10)

2) Power Off

In this mode, you can press the Shutter Release Button (5) to turn off the camera. See Fig. (11).

3) Self Timer

After you enter this mode, press the Shutter Release Button (5) to perform the self-time feature. See Fig. (12). There is a 10-second shooting delay. During this interval, you can hear beep at every second.

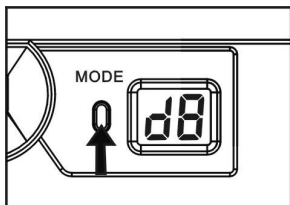


Fig.(13)

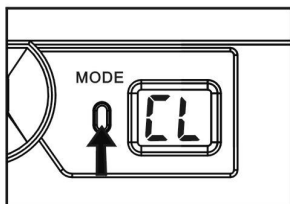


Fig.(14)

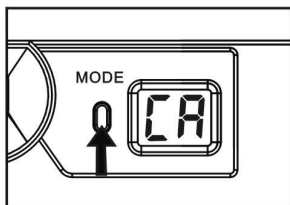



Fig.(15)

4) Movie Clip

Press the Mode Button (10) to access this mode. Refer to Fig. (13). After that, press and HOLD the Shutter Release Button (5). In the beginning of the movie, the camera will sound a “beep”. During the movie taking, the status LCD will be shown “”. To stop the movie clip, just release the Shutter Release Button (5), the camera will sound a double “beep”. A minimum of 60 seconds movie can be taken at 320x240 resolution.

5) Delete Last Photo

When you enter this mode, the camera will delete the last photo you shot. Refer to Fig. (14).

6) Delete All Photos

Press the Mode Button (10) to enter this mode. Refer to Fig. (15). You can delete all images stored in camera by pressing the Shutter Release Button (5). The command will be cancelled and the camera will return to the default mode.

Important: Before you activate this mode, make sure that all desirable photos have been downloaded to the PC.

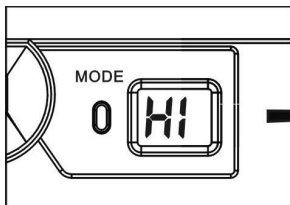


Fig. (16)

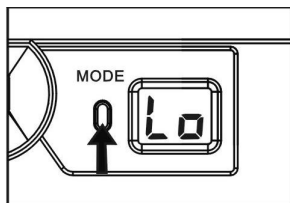


Fig. (17)

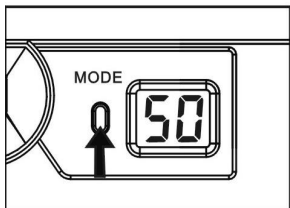


Fig. (18)

7) High Resolution

In this mode, the camera can take 30 images in "HI" format with compression. See Fig. (16).

8) Low Resolution

In this mode, the camera can take 120 photos in "Lo" format with compression. See Fig. (17). As there are only two digits display on the Status LCD (6), unless the available frames are lower than 99, the frame number will not count down. It will keep showing "99" even though pictures have been taken and stored in camera.

9) 50: Lighting AC Power Frequency

If the AC power is in frequency of 50 MHz, press the Mode Button and the Shutter Release Button to enter this mode. It can eliminate the potential image noise caused by external lighting source. See Fig. (18).

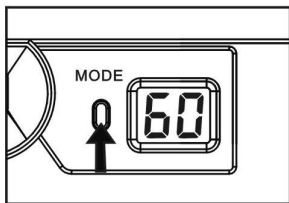


Fig. (19)

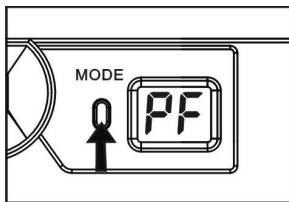


Fig. (20)

- 10) 60: Lighting AC Power Frequency
 If the lighting AC power is in 50 MHz, press the Mode Button (10) and the Shutter Release Button (5) to enter this mode. It can eliminate the potential image noise caused by external lighting source. See Fig. (19).

Note: Please refer to the “Worldwide AC Electrical Power Frequency” Table to choose the correct frequency.

- 11) Capacity Mode
 The symbol displayed on the Status LCD (6) may vary from 0 to 9 or F, depending on the remaining memory space in the Flash Memory. When the free memory space is over 3 MB, the Status LCD (6) will show “PF”. Fig (20).
 The approximate free memory space left is # x 300 KB.

6. World AC Electrical Power Frequency Reference Table

Country	Frequency (Hz)	Country	Frequency (Hz)	Country	Frequency (Hz)
Argentina	50	Germany	50	Netherlands	50
Australia	50	Greece	50	New Zealand	50
Austria	50	Hong Kong	50	Pakistan	60
Belgium	50	Hungary	40, 50	Panama	60
Brazil	60	India	50	Philippines	60
Bulgaria	50	Indonesia	50	Poland	50
Canada	60	Iran	50	Portugal	50
China	50	Israel	50	Romania	50
Colombia	60	Italy	50	Saudi Arabia	50, 60
Czech	50	Japan	50, 60	Spain	50
Demark	50	Morocco	50	Sweden	50
Dominica	60	Korea	60	Switzerland	50
Dubai	50	Kuwait	50	Thailand	50
England	50	Luxemburg	50	Taiwan	60
Finland	50	Malaya	50	U. S. A.	60
France	50	Mexico	50, 60	U. S. S. R.	50

Note : It is suggested to choose the correct frequency in your territory when you take photos **indoors**, for the indoor lighting frequency may cause image noise.

7.Installing the Software

Precaution!!!

If your computer is Windows XP system, please note the following notices.

This camera is compatible with Microsoft XP operation. Before installing the Twain Driver, the computer may have warning message said that the software has not passed Windows Logo test. At this moment, you have to set up Microsoft Windows Hardware Compatible manually in advance. (Refer the Figure below.) Or you may just ignore the warning message and keep going on installing the software.



Please follow the instructions step by step

1. Right-click “ My computer” icon and click “Property.”
2. Check “ Hardware” tab and click “ Driver Signing” button.
3. a) Click the default setting “Warn-Prompt me each time to choose an action” if you want the computer display the warning message whenever you install new software.
b) Click “ Ignore-Install the software anyway and don’t ask for my approval” if you don’t need the reminded warning message whenever you install new software.
4. Click “OK” for Microsoft XP hardware compatible setup.

8.Install the Twain Driver

1. Turn on your computer.
2. Place the software CD to your computer's CD-ROM drive.
3. You MUST check and install the twain driver first, Fig (21).
Click the “Install Digital Camera Driver”, and the installation will begin. Follow the instruction of the InstallShield Wizard step by step to complete the installation.
4. Restart your PC after the installation is completed.
5. After your PC is rebooted, use USB cable to connect the camera with the PC.
Your computer will display “Find new hardware” after a few seconds. You will be prompted to insert your Windows 98, Windows 98SE, Windows 2000 or XP CD to update the system.



Fig.(21)

Install Digital Camera Driver

8.Install the Twain Driver

6. If the driver of the digital camera is successful installed, you will find “**CA504A**” appears in the Program Files, Fig (22), or in the Device Manager of System, Fig (23).

Note1: For PC operating with Windows 98 or Windows 98SE, you may be prompted with unknown device three times and asked to insert the respective CD to update your computer system.

Note2: If the InstallShield Wizard does not display automatically, open the folder on the CD-ROM and double-click the “Setup.exe” file.

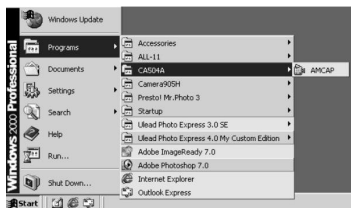


Fig.(22)

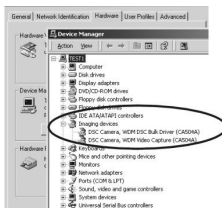


Fig.(23)

Imaging devices

DSC Camera ,WDM DSC Bulk Driver(CA504A)
DSC Camera ,WDM VIDEO Capture(CA504A)

9.Install Application Software

Included in the software CD are Ulead Photo Express 4.0, Ulead Photo Explorer 7.0 and Ulead COOL 360. Ulead Photo Express 4.0 is a program used to download images from the digital cameras. It also allows the functions of snap, save, delete last picture, delete all pictures and video mode. Ulead Photo Explorer 7.0 allows editing of photos, and Ulead COOL 360 offers the editing of special effects from the downloaded pictures.

The user should at least install the Photo Express 4.0 to allow the capture of still images and video images taken by the digital camera. This software also allows the deletion of the last images or all of the images. The other softwares are optional. When you install the application software, please follow the instruction of the InstallShield Wizard on the screen carefully.

Click Install Ulead Photo Express 4.0 to begin the installation, and follow the instruction of the InstallShield Wizard step by step to complete the installation.



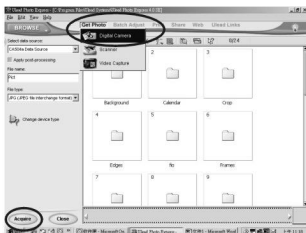


Fig.(24)



Fig.(25)

10.Download Images

1. Plug the USB cable to the camera and the computer properly.
2. Execute Photo Express by clicking its icon from the desktop.
3. After the download and editing wizard appears on the screen, click **"Get Photos"** and select **"Digital Camera"**, as shown by Fig. 24.
4. Click **"Acquire"** at the bottom left of the screen to download images from the camera. Fig.24
5. Select the desirable still and movie images and click **"Save"**. To save the images to you designated folder. Fig 25.

Note1: The still images will be saved in JPG format directly.

Note2: The movie images will be saved in AVI format directly.



Fig.(26)



Fig.(27)

11.Open Images

1. Open Photo Express and select “**Browse**” on the top left of the screen.
2. Click your designated folder and then the images of which you saved will be shown on. Fig 26.
3. For Movie images, double click the image and can be played by Media Player directly. Fig 27.

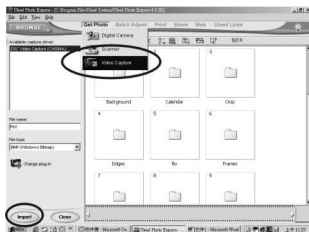


Fig.(28)

12.PC Camera

1. Plug the USB cable to the camera and the computer properly.
2. Open Photo Express, click "**Get Photo**" and select "**Video Capture**", as shown by Fig. 28.
3. Click "**Import**". Fig. 28.
4. Click "**Captured**" as shown by Fig. 29, and then the digital camera will capture images.

Note: This camera is functioned to be a Web-Cam (PC camera) and is able to connect can also support Microsoft NetMeeting software.

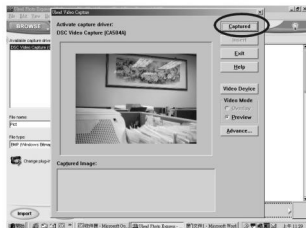


Fig.(29)