

Hamilton Electronics
CAMERA-DC2
User's Manual

1. PARTS OF THE DIGITAL CAMERA.....	5
2. PREPARING FOR USING.....	6
INSTALLING THE BATTERY	6
CHARGE THE BATTERY	7
INSERTING THE MEMORY CARD.....	9
FORMAT THE MEMORY CARD.....	11
SETTING THE LANGUAGE	11
SETTING THE DATE AND TIME	12
MONITOR SCREEN DISPLAY	13
3. USING THIS DIGITAL CAMERA	16
TURNING THE DIGITAL CAMERA ON AND OFF	16
CHANGE THE RECORD MODE	17
TAKING STILL IMAGES.....	18
USING THE SELF-TIMER	19
USING THE FLASH	20
RECORDING A VIDEO CLIP.....	21
4.USING THE MENU IN RECORD MODE	22

MENU IN CAPTURE MODE	22
MENU IN VIDEO MODE	24
SETUP MENU	25
5. PLAYBACK	28
PLAYBACK STILL IMAGE	28
PLAYING BACK MOVIE CLIPS	29
OTHER FUNCTION IN PLAYBACK MODE	29
6. MAKING CONNECTIONS.....	31
CONNECTING THE DIGITAL CAMERA TO A PC	31
7. SOFTWARE INSTALLATION	34
INSTALLING THE SOFTWARE	34
8. TROUBLESHOOTING	38
9. TECHNICAL SPECIFICATIONS	40

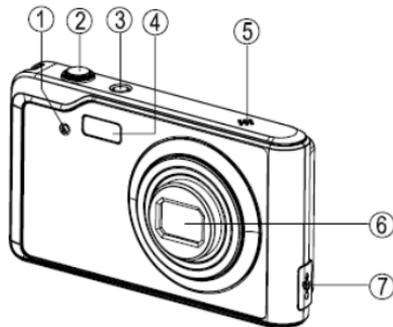
Thank you for purchasing this product. Please read these operating instructions carefully in order to use the digital video camera correctly. Keep the instructions in a safe place after reading so that you can refer to them later.

Precautions

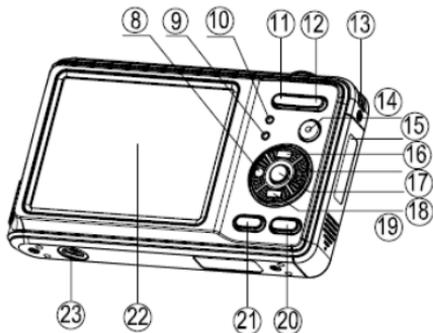
Before using the digital camera, please ensure that you read and understand the safety precautions described below.

- Do not try to open the case of the digital camera or attempt to modify this digital camera in any way. Maintenance and repairs should be carried out only by authorized service providers.
- Keep the digital camera away from water and other liquids. Do not use the digital camera with wet hands. Never use the digital camera in the rain or snow. Moisture creates the danger of electric shock.
- Use only the recommended power accessories. Use of power sources not expressly recommended for this equipment may lead to overheating, distortion of the equipment, fire, electrical shock or other hazards.

1. Parts of the digital camera



- 1: Self-timer LED
- 2: Shutter button
- 3: Power button
- 4: Flash strobe
- 5: Microphone
- 6: Lens
- 7: USB jack
- 8: Left/self-timer button



- 13: Hand strap
- 14: Playback button
- 15: Battery /SD card cover
- 16: Up/Display button
- 17: Right / Flash button
- 18: Ok button
- 19: Down/Mode button
- 20: Delete Button

9: Busy LED

10: Charging LED

11: Zoom out button

12: Zoom in button

21: Menu button

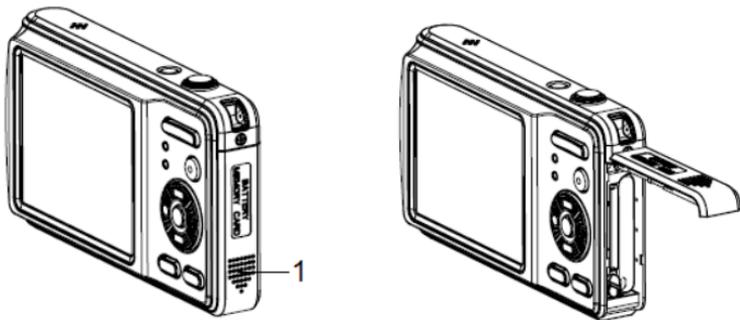
22: TFT monitor screen

23: Tripod sock

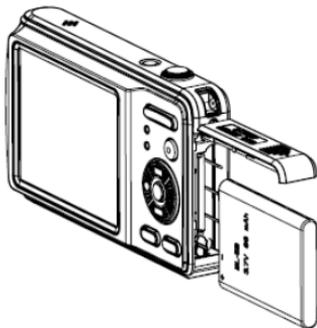
2. Preparing for using

Installing the Battery

1: Push the lock button (1) down to open the battery cover.



2: Insert the battery with the positive (+) and negative (-) poles matching the directions indicated inside the battery compartment.



3: After the battery is properly installed, replace the battery cover until a clearly click is heard.

Charge the battery

Please charge the battery when the indicator shows the  icon.

1: Power OFF; connect the camera to the computer's USB-port with supplied USB cable.

2: Charging starts when charge indicator LED turns RED. The charge

indicator light turns OFF when charging is completed.

3: Disconnect the camera.

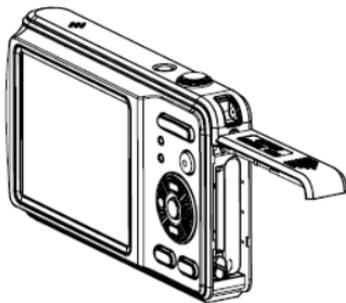
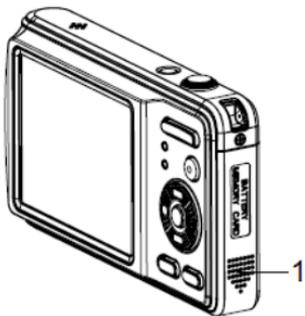
Note:

1. DO NOT power on the camera when the battery is charging. The camera will not work normally if you power on it.
2. When the battery is charging by the USB-cable, long press the **shutter** button to get the camera into PC camera mode. Or, get it into mass storage mode. The charge will be stop.
 - When charging is completed be sure to disconnect the power supply device from the electrical outlet.
 - Camera becomes warm during charging – that is normal.
 - Battery is exhausted after being charged when left for a long time.
 - Battery can be re-charged even when it has some power left, but it is not recommended; better is to re-charge it when it is empty.
 - Battery has characteristics that will reduce its operating duration and cause the battery to swell up.
 - When the operating time of the camera becomes extremely short even after proper battery-charging, the life of the battery may be expired. Buy a new battery.

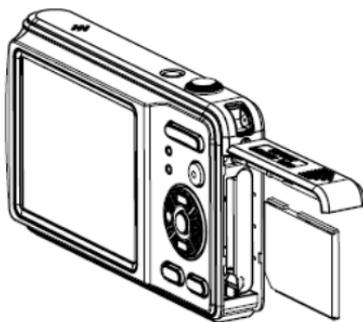
- DO NOT leave any metal items (such as clips) near the contact areas of the power plug. Otherwise a fire and/or electric shocks may be caused by short-circuiting or the resulting heat generated.

Inserting the Memory Card

1. Turn off the digital camera.
2. Push the lock button (1) down to open the battery cover. And then you will see the SD card slot.



3. Insert the memory card to the card slot with the label against the LCD screen. Check the right direction before insert the memory card.



- **To release the memory card open the battery cover firstly and then press the edge of the card gently.**

Format the memory card

It is important to format the memory card when it is the first time you use this digital camera. All data will be deleted including protected files. Be sure to download important files to your computer before formatting.

- 1: Turn the power on, and set the digital camera to the Setup Menu.(See the details on page 28)
- 2: Press the **Up/Display** or **Down/Mode** button to select [**Format**] then press the **OK** button to launch the submenu.
- 3: Press the **Up/Display** or **Down/Mode** button to select the item [**OK**] and then press the **OK** button to erase all data.

Setting the Language

When using the digital camera for the first time after purchasing it, be sure to choose a language and set the date & time before using the digital camera.

- 1: Turn the power on, and set the digital camera to the Setup Menu.(See the details on page 28)
- 2: Press the **Up/Display** or **Down/Mode** button to select [**Language**] then

press the **OK** button to launch the submenu.

- 3: Press the **Up/Display** or **Down/Mode** button to select the desired language and then press the **OK** button to confirm the setting.
- 4: Press the **MENU** button to close the menu.

Setting the date and time

- 1: Turn the power on, and set the digital camera to the Setup Menu. (See the details on page 27)
 - 2: Press the **Up/Display** or **Down/Mode** button to select [**Date/Time**] then press the **OK button** to launch the dialog box.
 - 3: Press the **Up/Display** or **Down/Mode** button to change the highlighted value. Press the **LEFT/SELF-TIMER** button or **RIGHT/FLASH** button to move the cursor between settings.
 - 5: Press the **OK** button to confirm the settings.
- **The date and time can be only added to still images by setting the function [Date Stamp] in capture menu.**



Monitor screen display

1. Camera Mode

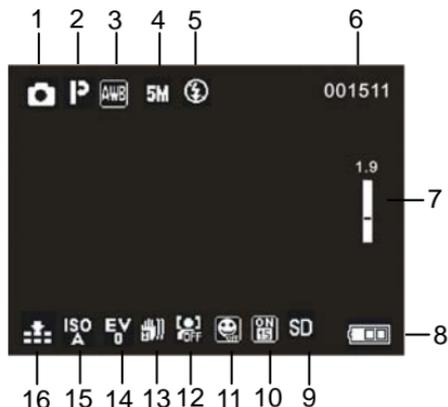
-  Still Image Capture
-  Video recording
-  Playback

2. Scene Mode

-  Auto
-  Night Portrait
-  Night Scenery
-  Portrait
-  Scenery
-  Sport
-  Party
-  Beach
-  High Sensitivity

3. White Balance

-  Auto
-  Daylight
-  Cloudy
-  Incandescent
-  Fluorescent



4. Image Size

	4000x3000
	3264x2448
	2592x1944
	2048x1536
	1600x1200
	640x480

8. Battery Power Level

	Full
	Medium
	Low
	None

12. Face Detect

	On
	Off

5. Flash Mode

	Always On
	Auto
	Off

10. Date Stamp

	On
	Off

13. Anti-Shake

	On
	Off

6. Number of pictures Remaining on SD Card

7. Zoom Value Level

9. SD Card inserted

	No protect status
	Protect status

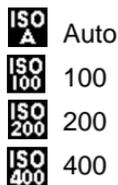
11. Smile Capture

	On
	Off

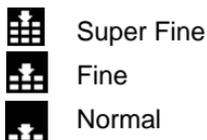
14. Exposure

	+3
	+2
	+1
	0
	-1
	-2
	-3

15. ISO

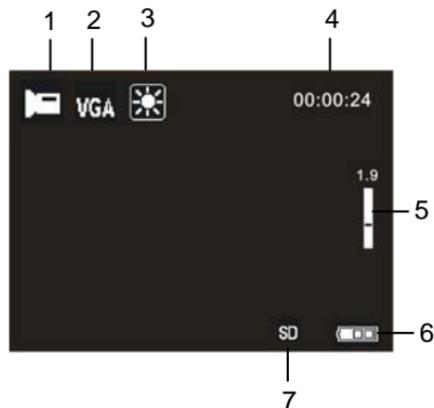


16. Image Quality



Video record mode []

1. Video record icon
2. Video size
3. White Balance
4. Recording time available
5. Zoom value level
6. Battery level
7. SD Card inserted



Playback mode []

1.  Playback still image icon
 Playback movie clips icon
2. Image# /Total Images on SD card
Video# /Total Videos on SD Card
3. Video recording time
4. Date stamp (Only still Image mode)
5. Press the shutter button to playback video file



3. Using this digital camera

Turning the Digital camera On and Off

1. Press the **POWER** button to turn on the camera and press it again to turn the digital camera off.

You can change the power-off time by setting the function [Auto Power Off] in the Setup menu.

Change the record mode

There are three modes in this digital camera.

- 1: Press the **POWER** button to turn on the digital camera.
- 2: Press the **Down/Mode** button to change the mode. Each time the **Down/Mode** button is pressed the mode icon is changed.

Display	Title	Description
	Capture mode	For taking still photos.
	Video mode	For recording movie clips.
	Playback mode	For previewing record files.

Note:

You can only switch the digital camera to playback mode by using the **PLAYBACK** button. Press the **PLAYBACK** button to set the camera to playback mode  and press it again to set it record mode.

Taking still images

1. Turn on the digital camera and set the digital camera to default capture mode, the icon  appears on the LCD screen.
2. Zooming:
Press the **ZOOM IN** or **ZOOM OUT** button to zoom in or zoom out the screen. the value of magnification level appears on the LCD monitor.
3. Hold the digital camera steady and then press the **SHUTTER** button completely down to take a picture.
 - **Automatically the number displayed on the screen is increased by one. For example, if the screen displays 3/20 when the camera is powered on, after one photo has been captured, 4/19 will appear. If the memory is full, “Memory Full “ will appear on screen.**
 - **In some environment, it’s normal to the number of the actual photos taken is not same as the number of taking photos.**
 - **Make sure that your fingers do not cover the lens.**
 - **No card inserted, you can take a photo, it will be not saved it after powering off.**
 - **No card inserted, you can take a photo, when the card inserted, the message appears “Copy to card”, [yes]: the image will be copied to the card; [no]: the image will be deleted.**

Using the Self-timer

Use the self-timer to set a delay from the time the shutter button is pressed to the time the image is shot.

- 1: Turn the power on, and set the digital camera to the Capture mode.
- 2: Press the **LEFT/SELF-TIMER** button to change the self-timer mode.

Each time the **LEFT/SELF-TIMER** button is pressed the self-timer icon changes.

Off: Don't use self-timer.



2 Seconds: The shutter release will delay for 2 seconds.



5 Seconds: The shutter release will delay for 5 seconds.



10 Seconds: The shutter release will delay for 10 seconds.

- 3: Press the SHUTTER button to take picture.
- 4: After Self-timer begins, the self-timer LED will flash. one second for a flash, till count down is over.

Using the Flash

The flash is not only for taking pictures when there is insufficient light, but also for when the subject is in shade or with backlight conditions. Pressing the **RIGHT/FLASH** button cycles your camera through the various flash modes. The flash will not activate during continuous shooting or movie recording.

1: Set the digital camera to the Capture mode.

2: Press the **RIGHT/FLASH** button to change the flash mode.

Each time the flash button is pressed, the flash icon changes.

	Auto: Automatically turn on/of
	Flash on: Force on the flash
	Flash off: Force off the flash

3: Press the **SHUTTER** button to take a picture.

Note:

When the battery level is low, the flash strobe will not work. Meanwhile press the **RIGHT/FLASH** button, the message shows “Low battery” on the LCD monitor.

Recording a video clip

1: Turn on the digital camera, press the **DOWN/MODE** button to set the digital camera to video record  mode.

2: Zooming:

Press the **ZOOM IN** or **ZOOM OUT** button to zoom in or zoom out the screen. The value of magnification level appears on the LCD monitor.

3: Press the **SHUTTER** button to start recording.

4: Press the **SHUTTER** again to end the recording. If the memory is full the video camera will stop recording automatically.

- On the upper of the LCD monitor displays the recorded time.
- In some environment, it's normal to the number of the actual photos taken is not same as the number of taking photos.
- Don't remove the card when video recording, Or, it may cause the digital camera can not work normally.

4. Using the menu in record mode

When a menu is displayed, the **Up/Display**, **Down/Mode**, **OK** button are used to make the desired setting.

Menu in capture mode

- 1: Turn on the digital camera and set it to capture mode.
- 2: Press the **MENU** button to display the menu.
- 3: Press the **Up/Display** or **Down/Mode** button to select an item.
- 4: Press the **OK** button to enter the submenu.
- 5: Use the **Up/Display** or **Down/Mode** button to select the desired item.
- 6: Press the **OK** button to confirm the setting.
- 7: Press the **MENU** button to close the menu.

Capture menu list

Menu item	Function
Scene 	There are nine options for choice: [Auto]/[Night Portrait]/[Night Scenery]/[Portrait]/[Scenery] [Sport]/[Party]/[Beach]/[High Sensitivity].

<p>Image Size</p> 	<p>There are five options for choice: 12M: 4000x3000; 8M: 3264x2448; 5M: 2592x1944; 3M: 2048x1536; 2M: 1600x1200; VGA: 640x480</p>
<p>Anti-Shake</p> 	<p>Use the function to avoid our hands shaking when taking pictures. There are two options for choice. [On] / [Off]</p>
<p>Face Detect</p> 	<p>Use this function to detect our faces when taking pictures. There are two options for choice. [On] / [Off]</p>
<p>Smile Capture</p> 	<p>Sets smile capture is on, Face Detect will be automatically opened. Once it detects smile, the digital camera will auto take pictures. [On] / [Off]</p>
<p>Continue Shot</p> 	<p>Use this function to take 6 pictures continuously. And image resolution will automatically adjust to 640X480, Only image resolution is 640x480 to use this function. Continue shot mode can not flash.</p> <p>[Off]: Press the shutter button once to take one picture. [On]: Press the shutter button once to take six pictures continuously.</p>

<p>Capture Mode</p> 	<p>Use the self-timer to set a delay from the time the shutter button is pressed to the time the image is shot.</p> <p>[Off] / [2 Seconds] / [5 Seconds] / [10 Seconds]</p>
<p>White Balance</p> 	<p>Adjust the white balance to suit different light sources. There five items for option:</p> <p>[Auto]/[Daylight]/[Cloudy]/[Incandescent]/[Fluorescent].</p>

Menu in video mode

- 1: In video record mode press the **MENU** button to display the menu.
- 2: Press the **Up/Display** or **Down/Mode** button to select an item.
- 3: Press the **OK** button to enter the submenu.
- 4: Press the **Up/Display** or **Down/Mode** button to select the desired item.
- 5: Press the **OK** button to confirm the setting.
- 6: Press the **MENU** button to close the menu.

Menu item	Function
<p>White Balance</p> 	<p>Adjust the white balance to suit different light sources. There five items for option:</p> <p>[Auto]/[Daylight]/[Cloudy]/[Incandescent]/[Fluorescent].</p>

Size



Select small movie size to record longer time. There are two items for option:VGA [640x480]; QVGA [320x240].

Setup menu

You can set the system items in setup menu.

- 1: Turn the power on and press the **MENU** button to display the menu.
- 2: Push the **RIGHT/FLASH** button to select  [Setup].
- 3: Press the **Up/Display** or **Down/Mode** button to select an item.
- 4: Press the **OK** button to enter the submenu.
- 5: Push the **Up/Display** or **Down/Mode** button to select the desired item.
- 6: Press the **OK** button to confirm the setting.
- 7: Press the **MENU** button to close the menu.

Menu item	Function
Exposure 	Set the exposure value manually to compensate for unusual lighting conditions such as indirect indoor lighting, dark backgrounds, and strong backlighting. The exposure value range is -3 to +3.
ISO	The ISO menu allows you to set the level of sensitivity

	<p>that your camera has to light in the surrounding environment. [Auto] / [100] / [200] / [400].</p>
<p>Sharpness</p> 	<p>You can set the level of sharpness in the images taken with your camera. The sharpness level dictates if the edges of objects in the image are more or less distinct. [Normal] / [Sharp] / [Soft].</p>
<p>Quality</p> 	<p>Select a lower image quality to decrease the image size in order to capture more images. There are three options for choice: [Super Fine] / [Fine] / [Normal].</p>
<p>Date Stamp</p> 	<p>This function can be used to add a date to your pictures as you take them. There are two items for option: [Date]: Add the recording date & time to printed images. [Off]: Do not add the recording date & time to printed images.</p>
<p>Date/Time</p> 	<p>Refer to page 13.</p>
<p>Auto Power Off</p>	<p>To save power, the digital camera is turned off automatically after a period of time. There are four</p>

	<p>options: [60 Seconds] / [120 Seconds] / [180 Seconds] / [None].</p>
<p>Language</p> 	<p>Select a language for the Display menu and other information from the following languages: [English]: English, [Français]: French, [Español]:Spanish, [Português]: Portuguese, [Deutsch]:German, [Nederlands]: Nederland, [Italiano]: Italian,[Pyccknn]:Russian;</p>
<p>Frequency</p> 	<p>Light Frequency should be set to either 60Hz or 50Hz depending on your region. [50HZ] / [60HZ].</p>
<p>Format</p> 	<p>Refer to page 12.</p>
<p>Default Setting</p> 	<p>To reset the entire menu and button operation settings to initial default. [OK] / [Cancel].</p>

5. Playback

Playback still image

1: Press the playback button to playback mode.

The latest recorded file appears on the LCD screen. If there are no images stored, a message [No File Exist] appears.

2: Press the **LEFT/SELF-TIMER** or **RIGHT/FLASH** button to preview the previous or next image.

3: Zooming:

Press the **ZOOM IN** or **ZOOM OUT** button to zoom in or zoom out the image. When the picture is enlarged press the **UP/DISPLAY**, **DOWN/MODE**, **LEFT/SELF-TIMER**, **RIGHT/FLASH** button to browse the details of the image.

Playing back movie clips

- 1: Set the digital camera to playback mode.
- 2: Press the **RIGHT/FLASH** or **LEFT/SELF-TIMER** button to select the movie clips you want to playback.
- 3: Press the **SHUTTER** button to start playing and press it again to pause, press **UP/DISPLAY** button to end the playing.

Other function in playback mode

Viewing Thumbnails

Press the **ZOOM OUT** button to view the files in thumbnails mode. Press the **UP/DISPLAY, DOWN/MODE, LEFT/Self-timer, RIGHT/FLASH** button to select a file. Press the **OK** button to view the file in full screen.

Delete files in playback mode

- 1: Press the **DELETE** button in playback mode to display the dialog box.
- 2: Press the **RIGHT/FLASH or LEFT/SELF-TIMER** button to select "Yes" and then press the **OK** button to delete the file.

Menu in playback mode

- 1: In playback mode press the **MENU** button to display the menu when file in full screen mode.
- 2: Press the **Up/Display** or **Down/Mode** button to select an item.
- 3: Push the **OK** button to enter the submenu.
- 4: Press the **Up/Display** or **Down/Mode** button to select the desired item.
- 5: Press the **OK** button to confirm the setting.
- 6: Press the **MENU** button to close the menu.

Menu item	Function
Rotate 	Use this function to rotate the images. [90]: Rotate the image 90 degrees in clockwise. [180]: Rotate the image 180 degrees in clockwise. [270]: Rotate the image 270 degrees in clockwise. [Cancel]: No rotate the image.
Protect 	Use this function to protect the files from being deleted by accident. [Lock Current]: Lock the current file. [Unlock Current]: Unlock the current file. [Lock all]: Lock all files.

	[Unlock All]: Unlock all files.
Delete 	Use this function to delete a single or all files. [This Image]: Delete a single file. [Cancel]/[OK]. [All]: Delete all files. [Cancel]/[OK]. [Cancel]: Cancel this operation.

6. Making connections

Connecting the Digital camera to a PC

There are two ways to download files from the digital camera's internal memory or memory card to a computer:

- By inserting the memory card into a card reader
- By connecting the camera to a computer using the supplied USB cable.

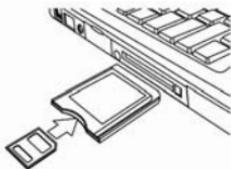
Using a Card Reader

1: Eject the memory card from the digital camera and insert it into a card reader that is connected to a computer.

2: Open [My Computer] or [Windows Explorer] and

double-click the removable disk icon that represents the memory card.

3: Copy images from the card into a directory of your choice on the computer's hard disk.



Connecting the Digital camera to a PC with the USB Cable

1: Connect the supplied USB cable to the computer's USB port and turn on the digital camera. A message "MSDC" appears on the screen when connection to the computer has been successfully completed.

Notes:

1. Turn the digital camera on, it needs immediately long press the shutter button to set the digital camera to "PC Camera" mode. Or, the digital camera to "MSDC" mode.

2. After connecting to the PC, press the Power button to not power off, and remove the USB cable to turn the digital camera off.

2: Open [My Computer] or [Windows Explorer]. A "Removable Disk" appears in the drive list. Double-click the "Removable Disk" icon to view its contents. Files stored on the camera are located in the folder named "DCIM".

3: Copy the photos or files to your computer.

7. Software Installation

Installing the Software

The bundled software CD has the drivers and software that come with video camera.

Insert the CD into your CD-ROM drive. The autorun menu appears:



The following software is listed:

- Install Driver: Installs software for PC camera.
- Arcsoft MediaImpression: Installs software for editing movie clips and

photos.

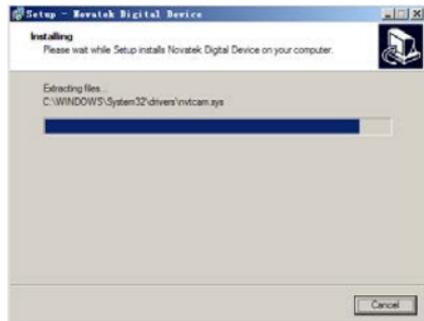
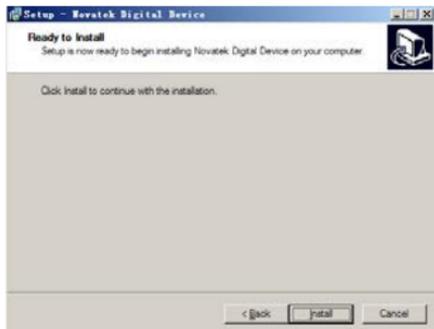
If the autorun menu does not appear automatically, open the CD-ROM in [My Computer] or [Windows Explorer] and double-click the file named [autorun.exe] to start the program. You can also click [Run] in the Windows Startup menu, enter "D:\autorun.exe" (where D is your CD-ROM drive letter) in the text box, and click [OK].

1. Install Driver

- (1) Insert the CD to your PC CD-ROM;
- (2) Click "Install Driver" to install the driver, and then choose the language;



(3) Click “Next” and then click “Install” to install the driver;



(4) Click “Finish” to complete the installation.



- (5) Connect the camcorder to PC by the USB-cable;
- (6) Long press the **shutter** button and power on to set the digital camera to [PC Camera] mode.

2. How to use PC-CAM function

- a) Connect the camera to PC with the attached USB cable. Long press the “Shutter” button and power on the camera to enter “PC camera” mode.
- b) Double click the icon “my computer” on the desktop of PC.
- c) Double click the icon “”, then you can start to use the PC Camera function.

3. How to download the photos

Set the USB mode to “MSDC”, and then the camera becomes a removable storage device:

- a): Connect the PC and camera with the USB cable;

b): Double click the icon “my computer” on the desktop of PC;

c): Double click “  ” icon;

d): Double click “DCIM” file folder;

e): Copy all the files to your PC.

Attention:

1. do not take out the SD card or the batteries when you copy the files to PC, otherwise the files might be destroyed or lost.
2. When you download the photos, please always connect the USB cable to PC first, then to the camera; if you connect the USB cable to camera first, the screen will go blank, and if in this case, you can restart the camera.

8. Troubleshooting

Power does not turn on.	
1. Battery is insufficient to power on.	★Recharge the battery.

The digital camera does not take pictures.	
1.Memory is full.	★Insert a new memory card.
2.Memory card is not formatted correctly.	★Format the memory card again or use a new card.
Image is blurry or out of focus.	
1.The digital camera was moving when the image was captured.	★Hold the digital camera steady when shooting picture.
Image is not displayed on the LCD monitor.	
1.A memory card with non-PICT images (recorded with other camera) is loaded.	★ This digital camera cannot display non-PICT images.
Recorded files are not saved in memory.	
1.The digital camera was turned off before the files are saved in memory.	★ If the battery low indicator appears on the LCD monitor, recharge the battery immediately.

9. Technical Specifications

Sensor	5 Mega Pixels CMOS,
Display	2.7" TFT Color LCD
Aperture	F=2.8, f=5.3mm
Shutter	Electronic Shutter: 1/2~1/2000 sec.
Resolution	Still Image:12M; 8M; 5M; 3M; 2M; VGA Video:VGA 640x480; QVGA 320x240.
Sensitivity	ISO Auto/100/200/400
White balance	Auto/Daylight/Cloudy/Incandescent/Fluoresce
Exposure control	-3EV to +3EV in 1step
Continue shot	YES
Self-timer	2 /5 /10 sec.
Storage	External memory: SD / MMC
Power Supply	3.7V Li-thium battery
Ambient temperature	Operating: 0° C to 40° C Storage: -20 to 60° C
Dimension	100 X 58.5 X 19.2(mm)
Weight	Camera Body w/o battery: Approx. 90g