Foreword

Thank you for purchasing this digital camera. Please carefully read through this product manual before using, and keep this manual properly for future reference.

Contents of the product manual are based on the updated information when compiled. The screen display and figures used in the manual are for detailed and visual operation of the camera. Due to technical development and different production lots, they may differ from the digital camera you actually use.

Operation Notice

This camera uses the TF card (Multimedia memory card)

Instructions for using the memory card

For the first time of using a new memory card, or when there is unrecognized data for the camera or images shot with other cameras in the memory card, please make sure to firstly format the memory card;
Please power the camera off before plugging in or taking out the memory card;
After using for many times, performance of the memory card will get lower. In

case of lower performance of the memory card, please buy a new one; The memory card is a precision electronic device. Please do not bend the card and prevent from falling down or heavy load on it;

Keep the memory card away from the environment with strong electromagnetic field or magnetic field like places close to speaker or TV receiver:

Keep the memory card away from the environment with over high or low temperature;

Keep the memory card clean and prevent it from contacting liquid. In case of liquid contacted, clean and dry it with a piece of soft cloth;

In case of idle use, please keep the memory card in a guard staple;

- Please note that the memory card will get hot after long-term use, and this is normal;
- Do use the memory card having been used on other digital video recorder or digital cameras. In case of using the memory card, please firstly format it;

Using the memory card formatted with other digital video recorders or digital cameras are prohibited;

In case of one of the followings for the memory card, the recoded data may be damaged:

Improper use of the memory card;

- Power-off of taking out the memory card during recording, deleting (formatting) or reading;
 It is recommended to make backup for the important data on other media like
- soft disk, harddisk or CD;
- To ensure image quality, minimum class 4 high-speed card is needed for TF card.

Camera maintenance

Use proper protective cover to avoid lens and display scratched;

- It is to blow off dust and sand on surface of the lens before cleaning, and then gently clean the lens with cloth or paper suitable for cleaning optical devices. If needed, please use lens cleanser. It is strictly prohibited to clean the camera with organic solution;
- It is strictly prohibited to touch surface of the lens with finger.

System Requirements

When operating and using this digital camera, please pay attention to minimum system requirements from the camera. You are strongly recommended to use better computer to control the camera for better effect. The requirements for minimum system are as below:

System Requirements		
Operating system	Microsoft Windows 7, 2000, XP, VISTA	
CPU	Intel PIII667above or CPU with equivalent performance	
International memory	512 MB or above	
Sound card, graphics	Sound card and graphics card support DirectX8 or above	
card		
CD-ROM	4X speed or above	
Harddisk	Minimum 1 GB free space	
Others	One standard USB 1.1 or USB 2.0 interface(s)	

Function Characteristics

This camera is equipped with various characteristics and functions:

- Digital video recorder;
- Digital camera (1.3 Mega pixel);
- Black and white digital display;
- Mass Storage (portable disc)

Appearance





(1) Black and white digital screen(2)MODE key(3)Shutter (4)Power(5)
Microphone(6)Lens(7)Reset(8)USB port(9)TV port(10)TF card slot

Key Functions and Indictors

Key/Indicator	Function
Power	Power On/Off
	Video recording mode, Recording/Stop
	Capture mode, taking pictures
Shutter	Replay mode; after connecting to TV, short press to play
	the recorded video; long press to enter shortcut for
	deletion; short press to confirm file deletion.
	Switchover of video recording and capture mode in circle
	and change image size;
MODE key	In capture mode, long press MODE key to format FT card;
	Replay mode: after connecting to TV, it is used for next or
	previous photo, or exit from deletion mode.

Start Operation

Battery

This camera uses the original packaged built-in rechargeable 3.7V lithium battery. Battery disassembly is prohibited.

Memory card installation

Following instructions by the card slot, it is plug the FT memory card into the card slot with metal pins inwards.

To take the memory card out, please press the FT card downward and take it out.

Attention: •Please disconnect power supply of the camera before replacing the memory card;



- •Keep a correct direction to plug the card in. Gently plug the card to void card or camera parts damaged. In case of fail to plug in, check it is in a correct direction to plug in;
- Please format the memory card before the first time of use, using a card having been used on other cameras.

Power-on

Press and hold power key for 2 seconds and release it for power-on of the camera.

Mode switchover

After power-on, the camera enters the default mode of video recording at a default size of Lo. In video recording mode at Lo size, click MODE key to switch the size to HI; in video recording mode at HI size, click MODE key to enter capture mode at Lo size, and in capture mode at Lo size, click MODE key to return to video recording mode at Lo size.

Attention: ●Video recording mode: Lo indicates VGA (640x480) 60 frames, Hi

indicates HD (1280x720) 30 frames

●Capture mode: Lo indicates 1.3M (1280x960), Hi indicates 3.1M (2048x1536)

Video recording

In video recording mode, click Shutter key to start video recording and click it again to stop recording.

Capture

In capture mode, press Shutter key to take pictures.

TV output

When output of image and audio from the camera to TV is needed, please plug common end of TV cable into TV port of the camera. The yellow port is for video input, and the red/white port is for audio.

Replay

After connecting to TV, the camera enters the replay mode. In replay mode, press MODE key to select photo or recorded video.

After selecting recorded video file, press Shutter key to play the file. During playing the recorded video, press Shutter key to stop playing.

In replay mode, long press Shutter key to enter shortcut deletion prompt, press Shutter key to confirm deletion, and press MODE key to exit from deletion.

Power-off

In power-on mode, long press Power key to power the camera off.

Connection to computer

Firstly power the camera on, and then connect the camera with attached USB cable to USB port of the computer. After connecting to the computer, the camera automatically enters portable disc mode.

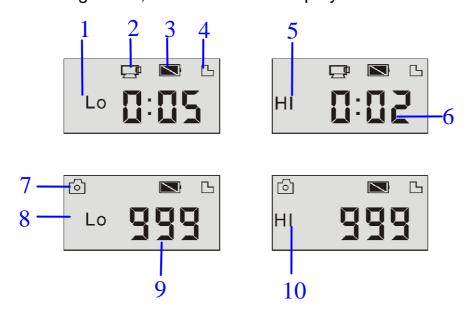
Advanced Operation

Video recording, capture mode

After power-on, the camera automatically enters video recording mode. In video recording mode at Lo size, click MODE key to switch the size to HI; in video recording mode at HI size, click MODE key to enter capture mode at Lo size, and in capture mode at Lo size, click MODE key to return to video recording mode at Lo size.

In video recording mode, press Shutter key to start recording and press it again to stop recording, press MODE key to switch to Lo size. In capture mode, press Shutter key to start shooting, and press MODE key to switch to Lo size.

◆ In video recording mode, information are displayed on the screen as below:



No.	Icon	Description
1	Video recording HI	Indicates high resolution in current video recording mode
2	Video recording icon	Indicates currently in video recording mode (Flashing icon means in the process of video recording)
3	Battery level	Indicates level of battery
4	TF card	Indicates a memory card available
5	Recording Lo	Indicates low resolution in current video recording mode
6	Time left for recording	Indicates time left in FT card for video recording
7	Capture mode	Indicates currently in capture mode
8	Capture HI	Indicates high resolution in current capture mode

9	Photo to be captured	Indicates quantity of photos to be captured in current internal memory
10	Capture Lo	Indicates low resolution in current capture mode

Attention: •Due to limited characters displayed on the screen, video recording time can be displayed in minimum unit minute;

E.g. 0: 02 indicates 2 minutes. During recording, 0: 01 indicates video recorded for 1 minute.

Replay Mode

After power-on and connecting to TV, the camera enters the replay mode. In replay mode, press MODE key to select photo and recorded video. After selecting video file, press Shutter key to play it. During playing, press Shutter key to Stop playing.

In replay mode, long press Shutter key to enter file deletion mode. In file deletion mode, press Shutter key to confirm deletion, and press MODE key to exit from deletion.

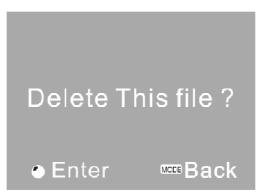
◆ In replay mode, information are displayed on the screen as below:



No.	Icon	Description
1	Replay mode	Indicates reply mode
2	File quantity	Indicates there are total 31 files, and the 19 th file is being browsed currently.
3	TF card	Indicates a memory card available
4	Icon for video recording	Indicates the current file is a video recording file.

File Deletion

After connecting to TV, the camera enters the replay mode. In replay mode, long press Shutter key to enter file deletion mode, press Shutter key to confirm deletion, and press MODE key to exit from deletion.



Connect to computer to download photo/video

After connecting to computer, the camera enters portable disc mode. In window of "My computer", there will be a portable disc added. The photos or video is stored under catalogue of "DCIM\100MEDIA" in the portable disc. You may enter this catalogue to copy files onto harddisk of your computer.



Attention: During file downloading, do not disconnect USB. Plug-in or plug-out of USB connection is prohibited to avoid loss of data.

Specification

Image sensor	1.30Mega pixel CMOS image sensor
Image resolution	Lo 1M(1280x1024), HI 3M(2048 x 1536)
Memory	External TF card (4GB to 32GB class 4or above)
File format	JPEG, AVI
Video resolution	Hi HD 1280X720, Lo VGA 640×480
White balance	Automatic
Exposure compensation control	Automatic
USB port	USB2.0

TV Output	NTSC
Display	Black and white digital screen
Power supply	Built-in 3.7V rechargeable lithium battery
Menu language	English
Focal length	f=5.8mm
Iris aperture	F2.8
Automatic power-off	3 minutes
Requirements for operating system	Microsoft Windows 7, 2000,XP,VISTA
Dimensions	58.3 mm ×32.51 mm × 23.84 mm

Attention: Design specification of the product is based on updated information when the product manual is compiled. Specification is subject to change without further notice.

FAQ

Failure of camera startup after placing battery in	Battery low. Recharging battery is required.
Fail to take picture or record video by pressing Shutter key	Full memory. Please store filed achieved on other memories.
Blur photo	Trembling hand when taking the photo. Hold the camera stead with two hands, or fix the camera stable with assistance of tripod to keep the camera from of moving during taking photo.
Dull photo or video	Insufficient light. Please take photo with sufficient light or use lamp to increase brightness.
Automatic power-off of the camera	Battery low. Recharge the battery. To save power, the camera will automatically power off if no any operation performed for over 3 minutes.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the

interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is

connected.

Consult the dealer or an experienced radio/TV technician for help.

Shielded cables with Core must be used with this unit to ensure compliance with the Class B FCC

limits.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two

conditions: (1) this device may not cause harmful interference, and (2) this device must accept

any interference received including interference that may cause undesired operation.