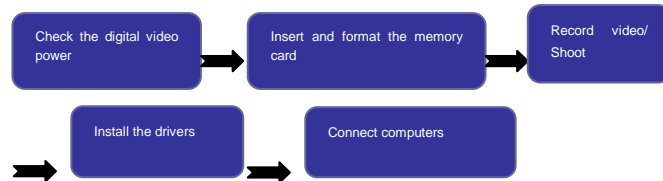## Foreword

Thank you for choosing our digital video. Please read this manual carefully before using, and keep it in a safe place for future reference.

The content involved in this manual is the latest information during compilation. The screen display and figures adopted by this manual are used to introduce the operation of the digital video in a more detailed and intuitive way, which may vary from the one in actual use due to the difference of technical development and production batches.

Introduction

Please use the digital video pursuant to the following sequence:

Check the digital video power	→	Insert and format the memory card	→	Record video/ Shoot

→	Install the drivers	→	Connect computers

⚠ Note: Any new memory card or the one used in other digital videos/cameras before should be formatted by the digital video if such card will be used in the digital video. Please backup the important data on other media, such as soft disks, hard disks or optical disks, etc.

There is write-protection switch on SD card. It can prevent deleting or formatting saved data.

Metal Pin of Storage Card ⟶

Write-Protect Switch ⟶
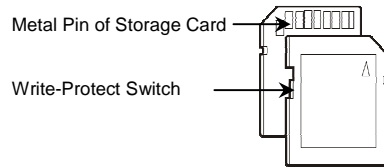
Push write-protection switch to the bottom. Saved data in SD card will be protected. Push the switch to the top, the data will be unprotected.

Operations on Storage Card

● If use any new memory card, or the one with data unable to be recognized by the digital video or photos shot by other digital videos, please format the memory card before using.

● Turn off the digital video power before inserting or removing the memory card.

● Using the memory card for many times may reduce its performance. If so, please replace it with new ones.

● The memory card is a precise electronic device.

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Please do not bend the card, and prevent it from falling down or being pressed heavily.

- Please do not expose the memory card in strong electronic/ magnetic fields, such as speakers or near TV receivers.
- Please don't use or keep the memory card in extra hot/cold circumstances.
- Please keep the memory card clean and avoid touching it with any liquid. If so, dry it with soft cloth.
- Keep the memory card in the card holder when not using.
- Please note that it is normal for the memory card to become warm after using for a long time.
- Do not use any memory card that used in other digital videos/cameras before. Please format any memory card to be used in the digital video.
- Do not use any memory card formatted by other digital video or memory card reader.
- Under any of the following conditions, data stored on the memory card may be damaged:
  - Use of the memory card inappropriately.

- Turn the power off or remove the memory card while recording, deleting (formatting) or reading.
- Recommend to backup important data in other media, such as soft disks, hard disks and optical disks.

Maintenance for Digital Video
Keep the digital video at dry place and remove its battery when not using.
- Wear the wrist strap to avoid sliding it off while using.
- Use proper protective film to avoid scratching the lens or display screen.
- To clean the lens, firstly, move dust on it, and then use proper cloth or tissue fit for cleaning optical devices to wipe the lens softly. If necessary, use lens detergents. Do not use organic solvent to clean the digital video.
- Do not touch the surface of lens by fingers.

System Requirements

When operating the digital video, please refer to the computer system with minimum requirements. We strongly recommend you to use better computer system for best performance of the digital video. The minimum system requirements are as follows:

System Requirements	
Operating	Microsoft Windows 7 2000,XP,VISTA
Operating system	Above Intel PIII667 or other CPU with equivalent performance
RAM	Above 128 MB
Audio card	Support DirectX8 or higher versions
Video card	
CD-ROM	Above 4 times speed
Hard disk	More than 1 GB free space
Others	One standard USB 1.1 or USB 2.0 port

Functions & Features
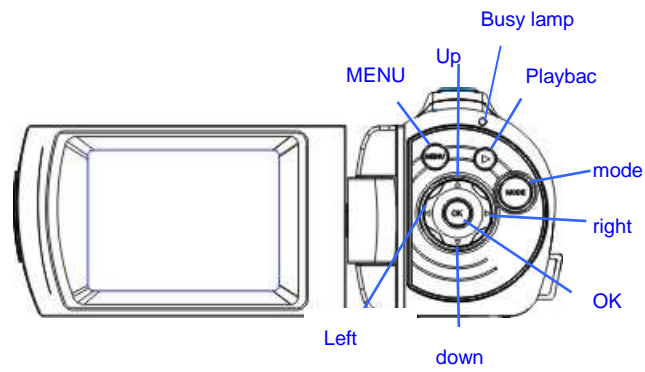
The digital video has various features and functions:
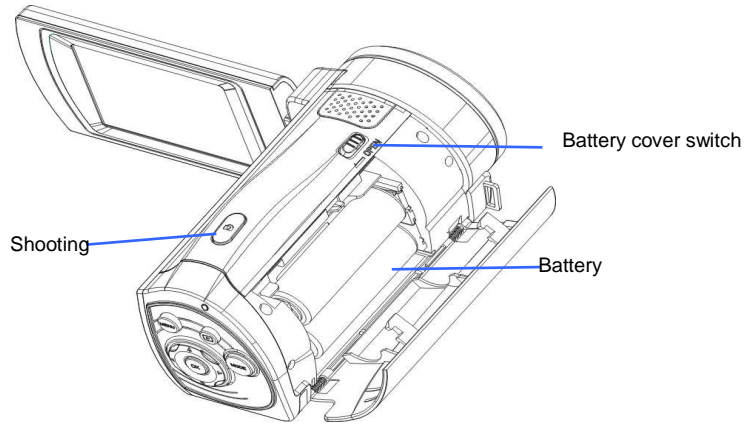Digital Video
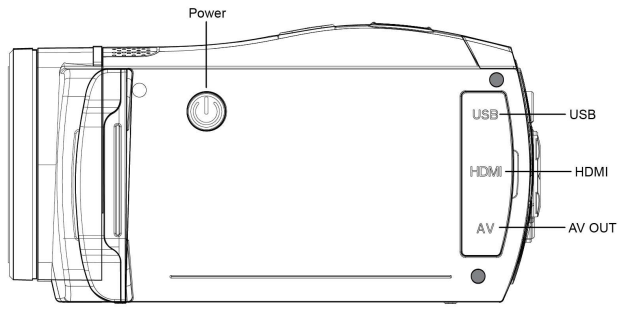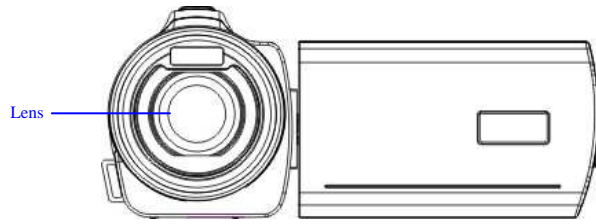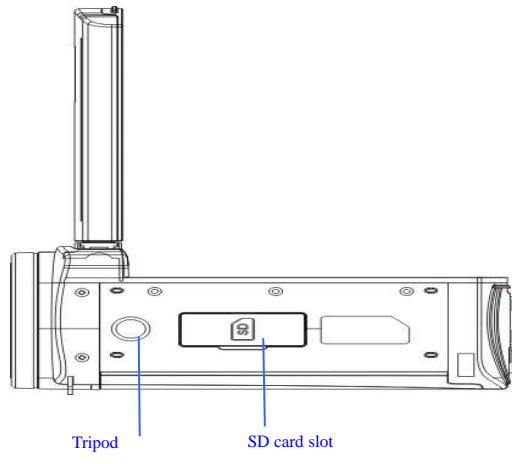Digital camera (5 million pixels)

Mass Storage (Removable disk)

PC Digital video   (Camera)

4 times digital zoom

Appearance Introduction

Power

USB — USB

HDMI — HDMI

AV — AV OUT

Battery cover switch

Shooting

Battery

7

Tripod   SD card slot

Lens

8

Digital Video's Key Functions and Indicators

Press/ Indicator	Functions
Power key	Turn the digital video on/off
Shooting key	**1.Shooting** **2.Recording/Stop**
MENU key	Open/exit the menu. Stop playing (while playing video)
MODE key	Switch among picture, video and preview mode (press this key to switch to PCCAM after connecting to PC)
Playback key	Enter/exit playing mode.
Up key	Select menu. Zoom in and move the picture (when the picture is zoomed in)
Down key	Select menu. Zoom out and move the picture (when the picture is zoomed in). In preview mode, press this key to enter grid screen.
Left key	Move the picture (when the picture is zoomed in). Turn on/off flash. While

	playing video, press and hold to reverse fast.
Right key	In picture mode, adjust the shooting mode (self portrait \2S \10S \continuous). Move the picture (when the picture is zoomed in). While playing video, press and hold to forward fast.
OK key	**Press this button to enter menu and start setting. Confirm and return to upper menu. Pause/play video.**
Busy lamp	The indicator is constantly lit when the camera is turned on.

Start Using

Insert Battery

This digital video uses 2 AA batteries. Before replacing batteries, please turn it off.

Open the battery cover, and then insert batteries according to the prompt of the positive/negative poles in the battery compartment. Replace the battery cover.

Insert SD/MMC Memory Card

Insert a SD/MMC memory card in the memory card slot with the metal pins towards inside in light of the prompts next to the card slot.

To remove the memory card, press the SD/MMC memory card downwards, and then remove it.

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⚠ Note: ●Turn the power off before replacing the memory card.

●Insert cards in correct direction. Do not insert cards with large force to avoid damaging cards or any part of the digital video. If failed, check whether the direction is correct.

● Format any new memory card or the one used in other digital videos before using it in your digital video

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Open Screen

Open the LCD to let it face towards yourself.

Turn Digital Video on

Press Power key to turn the digital video on.

Switch mode

In picture/video mode, press the Play key to switch to playback mode; in playback mode, press the Play key to exit.

Video recording

In video recording mode, press the shutter key to start video recording, and press the shutter key again to stop recording.

Taking picture

In picture mode, press the shutter key to take a picture.

Playback

Press the Play key to enter the playback mode, browse the pictures and play the recorded video.

Browse picture: press the LEFT/RIGHT key to select a picture and press the Zoom key to zoom in the picture. When the picture is amplified, press the UP/DOWN/LEFT/RIGHT key to move the picture.

Play video: press the LEFT/RIGHT key to select a video, press and hold the LEFT/RIGHT key to forward/reverse fast, and release the key to play normally. Press OK to start playing, and press MENU to stop playing; while

playing, press OK to pause, and press it again to resume playing.

HDMI output

To output video and sound from the video recorder to HDTV, insert the common terminal of the HDMI cable to the HDMI interface of the video recorder, and insert the input port of the HDMI cable into the HD input interface of the HDTV. Before inserting/pulling out the HDMI cable, stop the video recording/playing first.

TV Out

To output video and sound of digital video to TV, please insert common terminal of TV cord into the TV port of the digital video. Yellow terminal should be connected to input port of video equipment. Red/White port should be connected with sound input port of the video equipment.

Note: Before inserting/pulling out the TV cable, stop the video recording/playing first.

Power-off

When digital video is on, press Power button once to turn it off.

If digital video is idle, and the idle time without operation is beyond automatic power-off time (1 minute/ 3
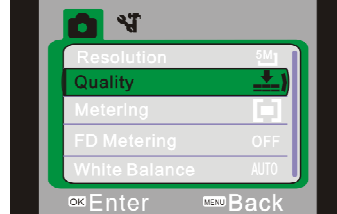
minutes/5 minutes), it will turn off automatically for power saving.

Menu settings

In picture/video or playback mode, press the MENU key to open the menu, and then press the UP/DOWN key to select a menu, and press OK to enter the submenu. When selecting menu, the selected menu will be highlighted.
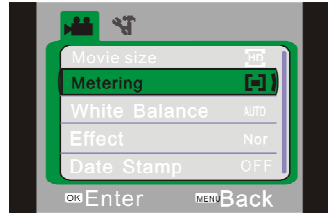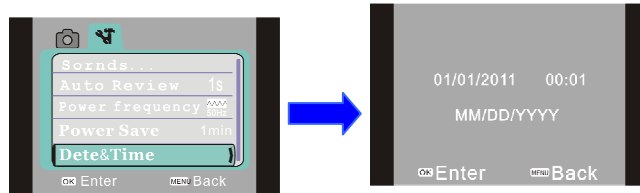

▲Video recording Menu   ▲Shooting menu

Date & Time Setting

Press the MENU key to open the menu, and then press the LEFT/RIGHT key to enter the setting. Press the DOWN key to select "Date & Time" option and press OK to enter the setting window.

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In setting window, press the LEFT/RIGHT key to select an item (date, time), and the selected item will be highlighted in Blue. Then, press the UP/DOWN key to adjust, then press OK to confirm, or press the MENU key to cancel and return. Finally, press the MENU key to exit the setting mode.

Computer-connecting

Before connecting to computer, please install driver for digital video with installation disk. First turn digital video on, and connect digital video to available USB port of computer with accessory USB cord. In USB mode, it can be used as removable disk, or camera. Digital video automatically enter into removable disk mode, and press MODE button to enter camera mode.

Advanced Operations

Picture/video mode

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After turned on, the device enters picture/video mode automatically.

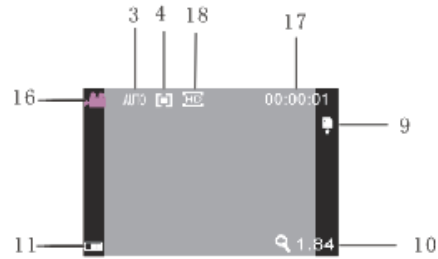Press the shutter key to take a picture directly.

Press the shutter key to start video recording, and press it again to stop recording.
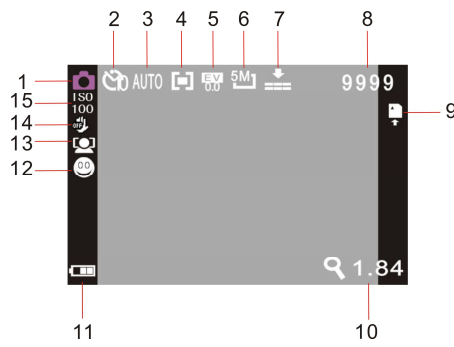
Press the UP/DOWN key to zoom.

Press the LEFT key to turn on/off the LED flash (flash isn't used in playback mode).

Press the RIGHT key to select self portrait 2S/10S or continuous mode.

◆ Display of Picture/Video Mode on Screen

▲Screen display message in shooting mode

▲Screen display message in video recording mode

NO.	Icon Name	Description
1	**Shooting mode**	It indicates that it is able to take photos by pressing Shutter key in the shooting mode.
2	**Self-shooting count down**	It instructs the countdown for self-timer.
3	**White balance**	It indicates the current settings for white balance.
4	**Metering mode**	It indicates current metering mode.

5	**Exposure**	It indicates current exposure value.
6	**Image size**	It indicates current resolution of photos
7	**Image quality**	It indicates current selected picture quality.
8	**Residual photos**	It indicates the remaining numbers of photos available to be taken.
9	**SD Card**	The 🗋 icon indicates to insert the memory card, 🔒indicates that inserted SD is locked for write-protection.
10	**Zoom indication**	It indicates the current times for digital zoom.
11	**Battery level**	It indicates current power status. In red color, it means the power is depleted, and the digital video will turn off automatically.
12	**Smile Capture**	Activate smile detection.
13	**Face detect**	Activate face detection.
14	**Anti-shake**	Activate anti-shake.

15	ISO 100	Indicate that the value of ISO is 100.
16	Video recording mode	It indicates the digital video is in the video recording mode, in which press Video Recording key to record.
17	REC time	The free time indicates the remaining available recording time; the recording time indicates the recorded time.
18	Video format	It indicates current video resolution.

◆ Menu setting

Press the MENU to open the video/picture menu, press the UP/DOWN key to select a menu, and then press OK to enter the submenu. In the submenu, press MENU or OK to return to the main menu, press the UP/DOWN key to select and press OK to confirm. In the main menu, press the MENU key to exit.

When select menu, the selected menu will be highlighted in green.

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Video menu option:

Main Menu	Sub Menu	Description
Move size	1920x1080	Full HD
	1280x720	High resolution scheme
	640x480	Medium resolution scheme
Metering	Center	It subjects to the central area when metering.
	Multi	It subjects to multi spots when metering
	Spot	It subjects to one spot when metering
White balance	Auto	It is fit for many conditions.
	Day light	It is fit for day light circumstance.
	Cloudy	It is fit for cloudy

		circumstance.
	Fluorescent	It is fit for fluorescent lamp circumstance.
	Tungsten	It is fit for tungsten lamp circumstance.
Effect	Normal	Normal effect
	B&W	Black & White effect
	Sepia	Return to the ancients effect
	Negative	Negative film effect
	Red	Partial red effect
	Green	Partial green effect
	Blue	Partial blue effect
Date stamp	Off	Disable the function of printing date/time on files.
	Date	When shooting/video recording, the date will be print on the

		lower right corner of files.
	Date & Time	When shooting/video recording, the date and time will be print on the lower right corner of files

Picture menu option:

Main Menu	Sub Menu	Description
Resolution	2592 x 1944	5 million pixels resolution
	2048 x 1536	3 million pixels resolution
	1280 x 1024	1.30 million pixels resolution
Quality	Super Fine	Excellent picture quality
	Fine	Good picture quality
	Normal	Normal picture

|		quality
Metering	Center	It subjects to the central area when metering
	Multi	It subjects to multi spots when metering
	Spot	It subjects to one spot when metering
FD metering	On	Enable the auto face metering, which optimizes faces automatically.
	Off	Disable the auto face metering.
White balance	Auto	It is fit for many conditions.
	Daylight	It is fit for day light circumstance.
	Cloudy	It is fit for cloudy circumstance
	Fluorescent	It is fit for

		fluorescent lamp circumstance
Exposure	Tungsten	It is fit for tungsten lamp circumstance.
	/	Use Left/Right key to adjust the compensation for exposure.
Driver mode	Off	Use the normal single photo shooting mode
	Self-timer 2s	Use the 2s delayed self-timer mode.
	Self-timer 10s	Use the 10s delayed self-timer mode.
	Burst	Continuous shooting
Effect	Normal	Normal effect
	B& W	Black & White effect
	Sepia	Return to the

		ancients effect
	Negative	Negative film effect
	Red	Partial red effect
	Green	Partial green effect
	Blue	Partial blue effect
Date stamp	Off	Disable the function of printing date/time on files
	Date	When shooting/video recording, the date will be print on the lower right corner of files.
	Date & Time	When shooting/video recording, the date and time will be print on the lower right corner of files.
Face detect	On	It will be shown on the screen.

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	Off	Disable the function of face detection
Smile capture	On	The digital video will shoot automatically if detecting smile of humans.
	Off	Disable the function of smile capture.
Anti-shake	On	Activate anti-shake during picture-shooting.
	Off	Disable the function of anti hand shake.
ISO	ISO100	Set ISO value as 100
	ISO200	Set ISO value as 200
	ISO400	Set ISO value as 400

Setting menu

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In video, picture or playback mode, you can press the MENU key to open the menu, and press the LEFT/RIGHT key to enter the setting menu. Then, press the UP/DOWN key to select a menu, and press OK to enter the submenu. In the submenu, press MENU or OK to return to the main menu, press the UP/DOWN key to select and press OK to confirm. In the main menu, press the MENU key to exit.
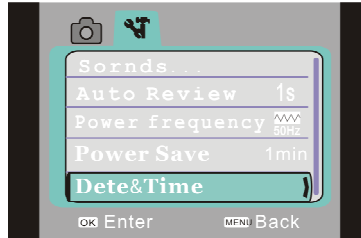
▲ Setting menu

When selecting menu, selected menu will be displayed in highlight.

Main Menu	Sub Menu	Description
Sound	Shutter	On/off
	Start-up	No/1/2/3

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	Beep	On/off
	Volume	0/1/2/3
Auto review	Off	No playback after shooting
	1sec.	Playback 1s after shooting
	3sec.	Playback 3s after shooting
Power frequency	50Hz	Set light source frequency as 50HZ
	60Hz	Set light source frequency as 60HZ
Power save	1 min.	Auto power off after being in idle status for 1 min.
	3 min.	Auto power off after being in idle status for 3 min.
	5 min.	Auto power off after being in idle status for 5 min.
	OFF	Disable the function of

		auto power off.
Date & Time	/	Set date & time, together with the date format
Language	English	Set the menu language as English
	French	Set the menu language as French
	Spanish	Set menu language as Spanish.
TV out	NTSC	Set television system as NTSC
	PAL	Set television system as PAL
Format	Yes/No	Format the memory card.
Reset	Yes/No	Restore the factory settings

To set time and date, use Left button to switch item to be adjusted and press Up/Down button to change value. Press OK button for confirmation and press MODE

button to cancel setting or return to main menu.

Picture/Video Mode

After power-on, digital video automatically enter video mode.

Press shutter to start picture-shooting, video-recording, or stop video-recording.

Press the UP/DOWN key to zoom.

To delay self portrait, press the RIGHT key to switch to 2s/10s self portrait.

Self portrait mode: press the shutter key to start counting down, and take a picture after 2sec or 10sec delay.

Continuous Shooting Mode: Select continuous shooting mode. By pressing shutter once, three continuous pictures will be captured.

Use LED Flashlight: Press Right button to open or shut flashlight. (In replay mode, flashlight is not available.)

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⚠ Note: ●Stabilize digital video while shooting. Better use tripod or supporters to acquire clear pictures.

● When recording video of high resolution and full HD, it is necessary to use Class 4 4GB storage card.

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◆ Menu setting

Press the MENU key to open the picture/video menu, press the UP/DOWN key to select a menu, and press OK to enter the submenu. In the submenu, press OK to confirm and return to the main menu, press the UP/DOWN key to select and press OK to confirm. In the main menu, press the MENU key to exit.

The selected menu will be highlighted in green.

Shooting menu option:

Note: When adjusting exposure compensation in exposure submenu, press the LEFT/RIGHT key to adjust the exposure, the screen brightness changes accordingly. After setting, press OK to confirm and return to the main menu, or press the MENU key to cancel setting.

Setting menu

The menu operation is same as picture/video mode.

Playback mode

Press the Play key to enter the playback mode.

If a video is selected, press OK to start playing, and the upper right of the screen shows the playing timer (the lower left of the video file has a video icon, which distinguishes from the picture). While playing, press OK

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to pause, press it again to resume playing, press and hold the LEFT/RIGHT key to reverse/forward fast, and release the key to play normally. Press the MENU key to stop playing.

If a picture is selected, press the UP key to zoom in the picture, press the LEFT/RIGHT key to confirm and then press the direction keys to move the picture.

◆ Playback menu setting

Press the MENU key to open the playback menu, press the UP/DOWN key to select a menu, and press OK to enter the submenu. In the submenu, press OK to confirm and return to the main menu, press the UP/DOWN key to select and press OK to confirm. In the main menu, press the MENU key to exit.

The selected menu will be highlighted.
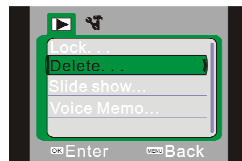
▲ Playback menu

Options of Picture Menu:

Main Menu	Sub-menu	Instructions
Lock	Lock/unlock one	Lock/unlock the present file
	Lock all	Lock all files
	Unlock all	Unlock all files
Delete	One	Delete the present file
	All	Delete all files
Slide show	Start	Start playing slide
	Interval	1 second-10 seconds
	Repeat	Yes/No
Voice memo	Add	Add sound label to picture
	Delete	Delete sound label added to picture

Note: 1. The lantern slide playing and sound memo are only valid for pictures.

2. Each picture can be attached with 30 seconds sound memo. In playback mode, the picture attached with sound menu has an 🎤 icon. Press OK to start playing the sound memo, press the UP key to pause or press the MENU key to stop. Press and hold the LEFT/RIGHT key to reverse/forward fast, and release the

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key to play normally.

Downloading Picture/Video via Connecting to Computer

When digital video is connected to computer and enter removable disk mode, a new removable disk will be added to the window of "My Computer". Recorded picture or video is stored in" DCIM\100MEDIA" of the removable disk. You can copy files in this path to your hard drive.

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⚠ Note: 1. In the course of download, do not disconnect USB cord. When USB connection is applied, do not insert or plug off storage card to avoid data loss.

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Application of Camera

When digital camera is connected to computer, press MODE button to enter camera mode. Before using camera, make sure the driver of camera is installed on computer. When driver is installed, "SPCA1628 PC Driver" item will be added to "Start-All Programs". There is a shortcut icon Amcap in it. After digital camera is

connected with computer and enters into camera mode, press the shortcut icon ▣ Amcap to open AMCAP window. In AMCAP window, captured image via camera will be displayed. If AMCAP is not run, the camera can transmit image through network.

Install driver and software

The provided CD contains video recorder driver and the software **MAGIX Video easy SE / MAGIX Photo Manager 10** (used for picture and video processing).

Installation interface

Insert the provided CD into the CD-ROM, the installer will be run automatically, and the installation wizard as below will appear.

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(Depending on the PC configuration, it takes several seconds to run the installer automatically. If the installer window doesn't appear, please open the "Windows Explorer", and run the "SoftwareInstaller.exe".)

Install driver

In the installation wizard window, click the "Install Driver" button, and follow the prompt to finish the installation step by step.
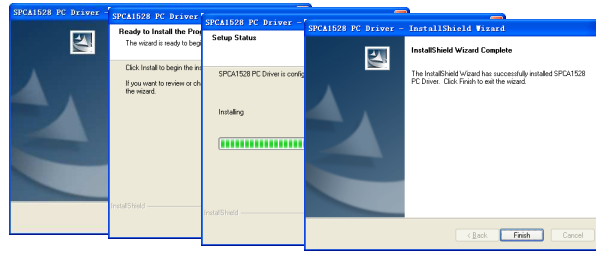
Please restart the PC after installing the driver.

Select MAGIX Video easy SE / MAGIX Photo Manager 10, click the button on the wizard window and follow the prompt to install step by step.

For usage, please click the "Software operation explanation" button on

the installation wizard window.

Specifications

Image Sensor	Image Sensor130 Megapixel CMOS

Resolution of Picture	5M (2592 x 1944), 3M (2048 x 1536), 1.3M (1280 x 1024)
Storage	External SD Card (128M to 32GB)
File Format	JPEG, AVI, WAV
Video	FHD 1920x1080, HD 1280X720，VGA 640×480
Self-shooting Delay	2 seconds / 10 seconds
Digital Zoom	4 times
White Balance	Auto/Daylight/Cloudy/Fluorescent /Tungsten
Exposure Compensation	-2.0 ~ +2.0
USB Port	USB2.0
TV Output	NTSC / PAL
Screen	2.4" TFT LCD
Power	2 *AA alkaline batteries
Language of Menu	English/French/Spanish
Focal Length	f=7.5mm
Aperture	F3.0
Auto	1minute / 3minutes/5minutes
Requirement	Windows7/ 2000 / XP / Vista

Size	114 mm × 52 mm ×60 mm

Note: Specifications of product design are subject to the latest information written in this instruction manual. Any change of the product will not be noticed further. It is subject to real product.

Common Problem-Shooting

Failure in power-on after installing battery	1. Battery is low, please replace with new batteries.
	2. Battery package is not removed.
	3. Wrong installation, please make sure that battery installation is correct.
Can't take picture or record video by pressing the shutter key	1. The memory is full; please move the files to another memory device.
	2. The write protection of SD card in the video recorder is enabled. Please take out the SD card and toggle the write-protection switch to release the protection.

The picture is blurry	1. Hand shakes when taking picture. Please hold the video recorder with both hands, or use a tripod to stabilize the device; do not make the device shake when taking picture.
The picture or video is dark	1. The environment lighting is insufficient. Please take picture or record video at a place with sufficient lighting, or use flash light to increase the brightness.
The video recorder turns off automatically	1. The battery voltage is too low; please replace the battery. 2. To save energy, the video recorder will turn off automatically if there is no operation in one minute (3min or 5min, depending on the setting).
Can't delete files in the video recorder	1. The write-protection of SD card in the video recorder is enabled. Please take out the SD card and toggle the write-protection switch to release the protection. The file protection function is enabled in the camera menu.

Please turn off this function in the menu.

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Only the USB cable supplied (with molded ferrite core) must be used with this product