HD MiniDV Manual

b. Open the "time" text document, input the time settings string, the string is composed of "year. month.Day hours.minutes.seconds show/hide flag" ,set-up times are as follows:

With time shows: 2009.01.01 12.01.01 Y

Do not show time: 2009.01.01 12.01.01 N

The above time string are the time you want to set, attention to the space between that Month day and Hours minutes seconds, the "Y" and "N" is a flag of time display, "Y" means show the time string on the right corner of the video;"N "mean hide the time string.

c. The file of set-up time has been copied to the root directory, uninstall hardware, boot, complete set-up time.

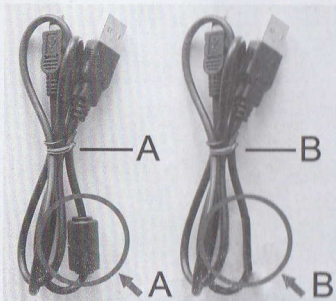d. The time set up will be saved to the camera inside.

k. Troubleshooting:

When the storage space is insufficient, the red light and blue light flashes alternately about 5 seconds, then automatically save the current files and shut down. If you want to continue to use this video recorder, copy the necessary files to computer and delete the old documents in storage in order to free up enough storage space;

When the battery is insufficient, the red and blue light flash alternately about 5 seconds, then automatically save the current files and shut down. If you want to continue to use the recorder, please charge the battery.

If the video recorder stops responding due to improper operation or other unexpected reason, please use the suitable non-metallic tool to push the reset button.

l. Optional accessories:

A, Power line   **B,** Data wire
Wire A: This is a optional accessories can only be used in our products.

Sometimes, you want get a longer work time of your product, You should connect this wire to your device. It can supplies continuous power to compensate for the capacity of the battery. It is only allowed to connect to the USB interface of computer and standard chargers has output voltage DC 5V and current greater than 250mA.

Note: In order to protect the machine from damage when you connect the wire to the device or remove the wire, please make sure your device's power have been turned off. This wire can also be used to charge, but the device's indicator light will not work.

Wire B : This wire is generic usb cable, primarily used for data transmission and charging. The specific data transfer and charging status indicator please refer to Chapter 3.i describes.

4. Parameters

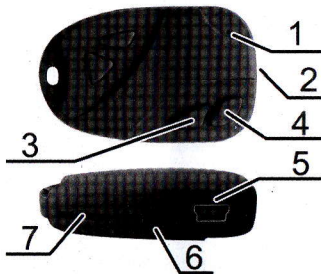| Item	Parameters
Video format	AVI
Video encoding	M-JPEG
Video resolution	1280*960
Media playing software	Attached software of the operating system or Mainstream audio and video media playing software, recommend Kmplayer
Picture format	JPG
The ratio of image	4:3
Supporting system	Windows me/2000/xp/2003/vista, Mac OS10.4 (uncertainty, depends on the computer model)
charge pressure	DC-5V
Interface type	Mini 4 Pin USB
Storage support	MicroSD(TF) or Nand flash
Battery type	high-capacity lithium polymer

5. Warning:

● **Application:** Please strictly abide relevant regulations and laws. This product should not be used for any illegal purposes. The user is fully responsible for its using purpose.

● **Battery:** If do not use this recording function after long time, please charged it fully before using.

● **File security:** This product is not a professional storage device. It does not guarantee the integrity and security of saved files. Please back up your important documents on the computer or other storage device timely.

● **Video quality:** This product is not a professional video recording device. It Does not guarantee the effect of the video file to have the professional quality

● **Operating temperature:** 0—40°C. For the extension of life, it is best used at room temperature.

● **Operating humidity:** 20% -80%. This product does not have the waterproof function. So it can not work under the humid environment.。

● **Shooting brightness:** Do not expose the camera directly to strong light, such as the sun light, to avoid damage to optical devices.

● **Cleaning:** Do not use it under the environment with high dust density to avoid the contamination of camera lens or other components!

Remark: This picture only for reference

1. Overview

Remark: This picture only for reference

1: Status Indicator   2: Camera&Mic   3: Operation button   4: Mode button

5: Mini USB   6: Reset   7: MicroSD(Built-in Memory Version have no this socket)

2. Introduction

This is the first HD Mini DV, you can shoot high-definition video, taking high-quality photos, recording high-quality audio, With simple operation, elegant design, small size, it is easy to carry. It is an essential utility in business, education, security, media, justice, tourism, health care, living and other field.

3. Operating

a. Parts Description:

a.1 Indicator: Part(1) is status indicator. Red light is video model indicator. Blue light is a photo mode indicator. Blue light and Red light are audio model indicator.

a.2 Keys Description: Part (3) is operation button, Press the button to turn on, turn off, start, stop, video recording, photo, sound recording. Part(4) is mode button, Press the button to change mode between Video recording, Photo, and Audio recording.

a.3 Socket: USB socket (5) is used to connect computer or charger. It is the interface for data transfer and charging. Parts（7）is MicroSD(TF) socket. If your device is Built-in Memory Version, Will not have this jack.

a.4 Microphone and camera: Microphone (2) is used to get the sound signal ;Camera(2) is used to get the image signal.

b. ON/OFF: Press the button(3) to turn on the device. Then the blue light is on, The device begin initializing, After initialzation complete, the blue light is off, the red light is on. The device enters into the video recording mode, Press the button for 2 seconds, all lights will be turned off. The device will automatically save the current file and shutdown.
Note: Don't press any button when the device is initializing, The device will no response it.

c. Mode change: You can change the mode between Video recording , Photograph, Audio recording by press the mode button.
Note: Don't change the mode of device when it is recording.

d. Record video: In the video mode, the device enters into the standby status.Now the red light is on. Press the button (3) to start the video recording. The red light flashes slowly. In order to save system power, after the beginning of the video taking for 5 seconds, the indicator light will automatically be off while the device is still in the recording mode. If need confirm the device status or have a new operation, please press the any button once to see the status indicator. When the red indicator light flashes, Pressing the button again to stop recording and save the file. Afterward the red light returns to ON mode; In order to ensure the safety and the size of the file, the system will automatically save file every 50 minutes once, and continue the video recording.
Note: Make sure there is adequate light in the surrounding and the camera is not blocked by other items. Keep the camera upright and stable. And the object should be more than 50cm from the camera. In order to ensure good sound effect of recording, do not block the microphone hole.

e. Take photo: In the photo mode, the device enters into the standby status for photo-taking. Now the blue light is on. Press the button(3). The blue light flashes one time to complete the photo taking and image saving. Then it returns to the standby status. This function is 3 piece continuous shooting.
Note: Make sure there is adequate light in the surrounding and the camera is not blocked by other items. Keep the camera upright and stable. And the object should be more than 50cm from the camera.

f. Record sound: In the audio mode, the device enters into the standby status.Now the red and the blue light are on at the same time, Press the button(3) to start the sound recording, The blue light flashes slowly. In order to save system power, after the beginning of the sound recording for 5 seconds, the indicator light will automatically be off while the device is still in the recording mode. If need confirm the device status or have a new operation, please press the any button once to see the status indicator. When the red indicator is on and the blue light flashes. Pressing the button(4) again to stop recording and save the file. Afterward the blue light returns to ON mode.
Note: In order to ensure good sound effect of recording, do not block the microphone hole.

g. PC camera: When the power is on, you can connect the device with computer USB interface, you can enter the PC Camera (webcam) mode. In this mode, your camera can be used as a PC camera, with your friends online video chat, take photos, and so on.
Note: According to the computer system configuration or difference, the computer may not detect a camera function by once, if the computer can not enter the camera function, but into a Udisk. Please remove the camera and connect the camera to the computer again; If you are the first time to use the PC camera function on your computer, please install the drivers on the CD or dealers provided. Please connect the data cable to the device at first, then connect the other side to the Computer.

h. Removable Disk: In the shutdown mode, connect a computer USB interface, enter into the Udisk function, at this time, the computer will pop up movable disk logo, the media file directory as follows: * : \ _REC \ 100MEDIA ; During the camera and computer transfer data,the blue light flashes rapidly; Need to uninstall the device, please click on the task bar on the bottom right corner of the icon to the management of removable devices, uninstall the inside removable storage devices, when the system recognizes the hardware can be safely pulled out, and then disconnect the camera and computer connections.
Note: According to a computer or system configuration differences, the time to identify removable disk will be slightly different, please be patient, this period is best not to carry out the operation of the camera, so as to avoid the impact of the computer hardware identification.if did not identify to a removable disk for a long time, try to re-insert, if still unable to identify the hardware, make sure that your operating system, driver, usb interface cable are all normal; please uninstall the hardware with the normal process, so as to avoid to damage the computer or device. Please connect the data cable to the device at first, then connect the other side to the Computer.

i. Charge: Connect to computer USB interface or charger. During the charging, the red light flashes slowly. When the battery is fully recharged, the red light stops flashing.
Note: The recorder is with built-in high-capacity lithium polymer battery. The battery is with no memory effect. It can be used and charged at anytime. But for the initial five times of charging, please charge battery to saturation after the battery runs out. It is to activate the battery maximum capacity and maintain the standard working time. In order to maximize the capacity of storage battery, please continue to charge for 30 minutes to 1 hour after the indicator light long bright. Please connect the data cable to the device at first, then connect the other side to the Charger.

j. Set time: the video recorder provides the function to display the video record time in video file, you can set the time and the time display or not according to actual needs; the time display format: "year. month. Day Hours: minutes: seconds" , setup times are as follows:
a. Turn off the camera —> to connect the computer—> open the removable disk—> click the right mouse button on blank space of the root directory of the device —>move the cursor on "New" option of the pop-up menu —> select "Text Document"—> named "time" to the text document, need to pay attention to its extension name is ". txt" —> completion of setting up time file; you can set up in accordance with the above steps on your desktop, other disk partition, under the other folder and then copy to a removable disk root directory.

"Y"表示"Yes"；"—"表示"No"。

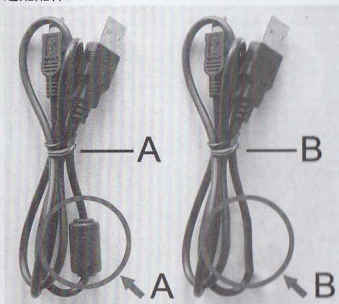c. 确认时间设置文件已经拷贝到根目录之后，卸载硬件，开机，时间设置完成。

d. 设置好的时间可保存到摄像机里面。

11. 异常处理：

摄像机存储空间不足时，将在蓝灯和红灯同时闪烁约5秒后，自动保存当前影像文件并关机。如果你要继续使用摄像机，请在电脑上备份所需影像文件，并删除存储器内的旧文件，以腾出足够存储空间；

摄像机电池余量不足时，将在蓝灯和红灯交替闪烁约5秒后，自动保存当前影像文件并关机。如果你要继续使用摄像机，请先充电；

摄像机因偶然的不当操作或其他特殊原因停止响应时，可以用牙签等非金属细棍伸入复位孔进行复位。

12. 选配配件：

A、外部电源供电线　　B、数据传输线

上图为选配配件，其中线A为持续电源供电线；线B为标准的数据传输、充电线。从外形上区分，外部电源供电线，在靠近Mini 5 Pin的端口，有一个黑色鼓起的消358，而普通数据传输线则不具备，请勿混淆。由于，二者具有不同功能，具体区别如下：

线A：是本公司产品专用配件，主要用于为摄像机提供持续的外部供电，以防止内置的锂电池电力不足时，使用时间达不到测试要求。该线可以连接到输出电压为标准DC—5V、输出电流大于250mA的通用USB充电器上，也可以连接到电脑USB上。

注意：为了保护机器免受因插头插拔瞬间的电流冲击而损坏，并保护正在录制的文件不会丢失，在关机前连接充电器，并在文件已经完成保存动作，关机后移除供电线；在插头连接的同时也可对电池充电，不过摄像机不会有状态指示。

线B：是通用的数码产品连接线，主要用于数据传输，同时也用于充电。具体的数据传输以及充电的状态指示请参照第8点，第9点描述。

四、　相关参数

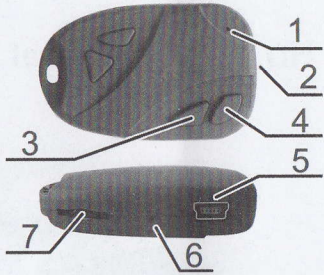| 项　　目	相关参数
视频格式	AVI
视频编码	M-JPEG
视频分辨率	1280*960
播放软件	操作系统自带或主流影音播放软件
图片格式	JPG
影像比例	4:3
支持系统	Windows me/2000/xp/2003/vista; Mac os 10.4; Linux;
充电电压	DC-5V
接口类型	Mini 4 Pin USB
存储支持	MicroSD(TF) or Nand flash
电池类型	高容量聚合物锂电

五、　注意事项

● 使用场合：请严格遵守国家相关法令，不得将此产品用于任何非法用途，否则后果自负。

● 关于电池：随着使用时间增长，电池工作时间会有所缩短。长久未使用时，请在使用前先充满电。

● 文件安全：本产品非专业存储设备，不保证内部存储文件的完整性和安全性，请即时在电脑或者其他存储设备上备份您的重要文件。

● 摄录品质：本产品非专业摄录设备，不保证所摄录文件的效果能达到您的期望。

● 工作温度：0—40°C。

● 工作湿度：20%—80%，请勿将产品置于潮湿的工作环境，产品不具备防水功能。

● 拍摄照度：请在光线充足的环境下用，请勿将摄像头直接对着太阳等高光源，以免光学器件受到损坏。

● 保洁要求：请勿在粉尘密度过大的环境下使用，以免镜头受到其他部件沾染灰尘；影响摄像效果。镜头可以用擦镜纸或眼镜布轻轻擦试，保持洁净。

● 其他事项：该产品属于精密电子产品，请勿使其受到强烈冲击、震动；请勿在强磁场、强电场下使用。

● 补充说明：其他未明事宣请与当地经销商联系。

高清多功能摄像机说明书

图片仅供参考，请以实物为准

一、 总览

图片仅供参考，请以实物为准

1、指示灯　　2、摄像头及麦克风　　3、开关/操作键　　4、模式按键

5、Mini USB　　6、复位孔　　7、MicroSD（闪存版本机型无此插口）

二、 产品简介

本产品是首款具有高清数码摄像、拍照、录音功能的钥匙扣型摄像机，有操作简便、小巧精致、美观实用的特点，是商务、教育、安防、媒体、司法、旅游、医疗、生活等领域的实用工具，深受广大用户青睐。

三、 操作说明

1. 各部件说明：

1.1 指示灯说明： 图示 1 是状态指示灯，其中红灯为录像模式的状态指示灯；蓝灯是拍照模式的状态指示灯；红灯和蓝灯同时点亮是录音模式指示灯。

1.2 按钮说明： 操作键（图示 3）用于开机、关机、拍照和停止摄像以及录音；模式键（图示 4）用于录像模式、拍照模式、录音模式这三者间循环切换，图 6 是复位按钮孔。

1.3 插座说明： USB 插座（图示 5），用于数据传输、充电和外接电源供电的接口；图示 7 是 Micro SD（TF）卡插口，用于插入存储卡，如果是内置闪存芯片的机型，

则无此插口。

1.4 麦克风和摄像头： 麦克风（图示 2），用来拾取声音信号；摄像头（图示 2），用于拾取影像信号。

2. 开关灯：

长按操作键开机，指示灯将进入系统初始化过程，初始化完成后，蓝灯灭，红灯灯灯亮，进入默认的录像模式；长按操作键 2 秒，红蓝两灯同时熄灭，摄像机将自动保存当前摄录文件并关机。

注意：在初始化的过程中，摄像机正在为进入正常工作状态做准备，将不响应初始化期间进行的任何操作。

3. 切换模式：

摄像机在键完成模式切换时，摄像机将自动保存当前摄录文件并切换到下一种模式，每按一次模式键切换一种工作模式，模式切换时按以摄像—>拍照—>录音—>摄像—>拍照……的方式循环。

注意：不在摄像机工作的时候切换模式，只能在每种模式的待机状态下切换模式。

4. 录制视频：

当摄像机处于摄像模式的待机状态，红灯长亮，短按操作键一次，开始录像，此时红灯慢速闪烁；为了节省系统电力，开始录像后约 5S 钟，状态指示灯将自动熄灭，此时摄像机仍处于摄像状态中，如需确认摄像机状态或者进行新的操作，按任意按钮一次，打开状态指示；在红色指示灯闪亮的情况下，再次短按操作键一次，停止录像，保存文件；为了保证拍摄文件的大小和安全，系统将每隔 50 分钟自动保存一次文件，然后继续录像。

注意：请在有充足照明的环境下，确保摄像头没有被遮挡，保持摄像机的身的竖直与稳定，并与被摄景物保持在 50cm 以上的距离，以得到方向正确、色彩自然、图像清晰、画面稳定的影像。为了得到最佳录音效果，请勿遮挡住麦克风拾音孔。

5. 拍摄照片：

当摄像机处于拍照模式的待机状态，蓝灯长亮，每短按一次操作键，蓝灯闪烁一次，连拍三张照片后，蓝灯长亮，回到待机状态。

注意：请在有充足照明的环境下，确保摄像头没有被遮挡，保持摄像机的身的竖直与稳定，并与被摄景物保持在 50cm 以上的距离，以得到方向正确、色彩自然、图像清晰、画面稳定的照片。

6. 录制声音：

当摄像机处于录音模式，红蓝双灯同时长亮，短按操作键一次，开始录音，红灯双灯仍同时长亮；为了节省系统电力，开始录音后的 5S 钟，状态指示灯将自动熄灭，此时摄像机仍处于录音状态中，如需确认摄像机状态或者进行新的操作，请短按任意按键一次，打开状态指示；在红色指示灯亮，蓝色指示灯长亮的情况下，再次短按操作键，停止录音，保存文件，此时红蓝双灯恢复同时长亮。

7. PC 摄像头：

在任意模式的开机状态下，连接电脑 USB 接口，即可进入 PC Camera（网络摄像头）状态，在这模式下，可以把摄像机作为电脑摄像头使用，与好友网上视频聊天，拍摄大头贴，等等。

注意：根据电脑配置或者系统差异，电脑不一定一次就能检测到

摄像头功能，如果偶然出现电脑无法进入摄像头功能而进入了可移动磁盘，请删除摄像机，并在摄像机与电脑后重新连接电脑；如果你是第一次在你电脑上使用摄像机的电脑摄像头功能，建议安装随机光盘里面或者经销商提供的摄像头驱动程序；为了避免设备受到损坏，当你准备连接设备到电脑上时，请先接随机附带的数据线连接到摄像机，再将数据线另外一端连接到电脑上。

8. 移动磁盘：

在关机状态或者待机状态下，即可连接电脑，此时，电脑将会弹出可移动磁盘盘符，影像文件保存目录为：*盘\-REC\100MEDIA；当摄像机与电脑交换数据时，蓝灯会快速闪烁；需要卸载摄像机时，请点击任务栏右下角的可移动设备管理图标，在里面卸载该可移动存储设备，待系统确认可以安全拔出硬件后，再断开摄像机与电脑的连接。

注意：根据电脑配置或者系统差异，识别可移动磁盘的时间会稍有不同，请耐心等待，此期间当不使用摄像机的时候，请勿对电脑识别硬件造成影响。如果长时间未识别到可移动磁盘，请尝试重新插入，从是否识别该硬件，请确认该系统的操作系统、主板驱动程序、usb 接口、连接线是否都正常；请按照规范的流程卸载硬件，以免对电脑或者硬件造成损害。为了避免设备受到损坏，当你准备连接设备到电脑上时，请先接随机附带的数据线连接到摄像机，再将数据线另外一端连接到电脑上。

9. 充电：

连接电脑 USB 接口或充电器，即可对摄像机进行充电，当电池处于充电状态时，红灯将慢速闪烁，当电池充满电后，红灯变为长亮。

注意：摄像机内置高容量聚合物锂电池，无记忆效应，可随时随意充电；新启用时的前五次，请将电池用完后充电至饱和，以激活电池最大容量，获取标准工作时间；为了让电池性能力最大化，每次充电时，请注意指示灯指示充满电后继续保持充电 30 分钟至 1 个小时，为了避免设备受到损坏，当你准备连接设备到充电器上时，请先接随机附带的数据线连接到摄像机，再将数据线另外一端连接到充电器上。

10. 设置时间：

摄像机提供了在视频文件中显示录像时间的功能，你可以根据实际需要设置时间的值和时间显示与否；时间显示格式为："年.月.日 时:分:秒"，设置时可分两步：

a. 关闭摄像机——》连接电脑——》打开摄像机可移动磁盘——》在摄像机目录下面空白处单击鼠标右键——》把鼠标移至弹出菜单中的"新建"选项上方——》选择"文本文档"——》给该文件取名为"time"，需要注意它的扩展名为".txt"——》时间设置保存成功了；你也可以按照上述步骤在电脑盘面、其他磁盘分区、其他 U 盘中先拷贝好此时间设置文件，再将此设置文件拷贝摄像机可移动磁盘后拷贝到根目录。

b. 打开"time"文本文档，在里面输入时间设置字符串，字符串由"年月日 时分秒 显示/隐藏开关"几个部分组成，要设置时间，请按以下格式设置：

带时间显示：2009.01.01 12.01.01 Y
不显示时间：2009.01.01 12.01.01 N

上述格式中的时间字符串部分为您想设置的时间值，注意年月日与时分秒中空格，末位的"Y"和"N"是时间显示的标志字符，