

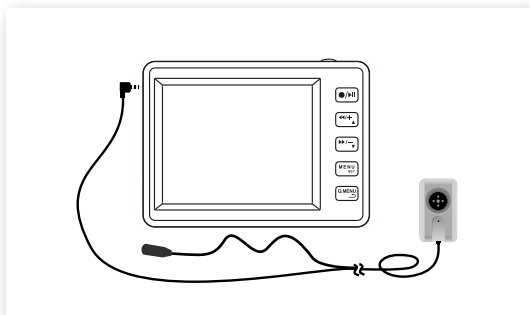
KL-600

OPERATION MANUAL

KL-600 Mini Digital Video Recorder and
JS-418C Mini Button CCD Camera

Operating Instructions

Before operating the unit, please read this manual thoroughly, and retain it for future reference.



RoHS FC CE

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Attention

The electromagnetic fields at the specific frequencies may influence the picture of the recorder.

Be sure to read the following before using the recorder and the mini Camera.

Trial recording

Before you record one-time events, you may want to make a trial recording to make sure that the recorder and the camera are working correctly.

Notes on image data compatibility

Playback of moving images recorded with your recorder on other equipment

and playback of moving images recorded or edited with other equipment on your recorder are not guaranteed.

Do not shake or strike the recorder

In addition to malfunctions and inability to record moving images, this may render the SD card unusable or image data breakdown, damage or loss may occur.

LCD screen and mini camera

Be careful when placing the camera near a window or outdoors. Exposing the LCD screen or the lens of camera to direct sunlight for long period may cause malfunctions.

Back up recommendation

To avoid the potential risk of data loss always copy data to a disk.



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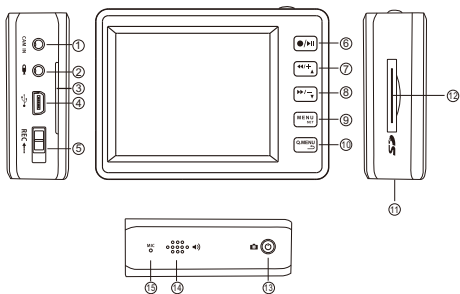
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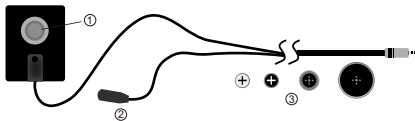
Getting Started

Identifying the parts of the mini DVR



- | | |
|----------------------------------|-----------------------|
| ① Camera/AV in | ⑧ [FWD] FWD / Vol - |
| ② Microphone in | ⑨ [MENU] Menu key |
| ③ LED indicator | ⑩ [RETURN] Return key |
| ④ AV OUT/USB/DC-in/Wired control | ⑪ Tripod thread |
| ⑤ REC/OFF switch button | ⑫ SD card slot |
| ⑥ [PLAY] Play / OK | ⑬ Power/photo |
| ⑦ [REV+] REV / Vol + | ⑭ Speaker |
| | ⑮ Built-in microphone |

Identifying the parts of the mini camera

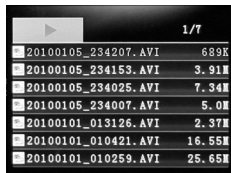


- ① Lens
- ② Microphone
- ③ Interchangeable buttons and screws

Getting Started

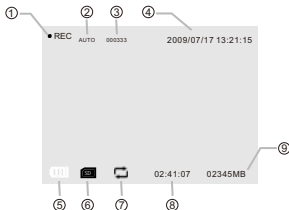
LCD screen indicators

Playback Mode

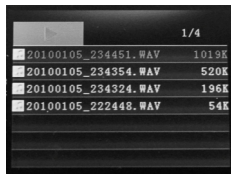


⑩

Recording Mode

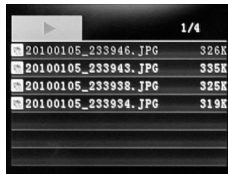


Playback Mode



⑪

Playback Mode



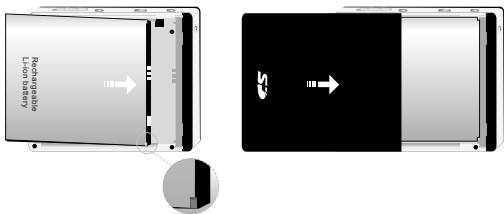
⑫

- ① Recording symbol
- ② Motion Activated symbol
- ③ No. of Frames indicator
- ④ Date/Time indicator
- ⑤ Battery indicator
- ⑥ SD card symbol
- ⑦ Cyclic Recording symbol

- ⑧ Remaining Time of Memory
- ⑨ Remaining Memory
- ⑩ Recorded Files(video)
- ⑪ Recorded Files(audio)
- ⑫ Recorded Files(photo)


Preparing the power supply

Your DVR can operate with mobile phone battery pack (KB-02 series)



Installing the battery pack

Open the cover by slightly pushing and pull it back.

Insert the battery pack with the corner of "  " facing toward the battery compartment as illustrated.

Close the battery cover.

Charging the battery

Connect the AC power adapter with the USB port on your DVR. The charge lamp lights up when charging begins. When the charge lamp goes off normal charge is completed.

Charging time

Battery pack capacity	Fully charging time(Approx.)
1400 mAh	240 mins

Getting Started

Battery life

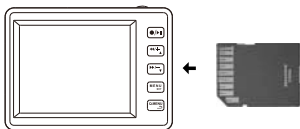
Movie mode recording

Battery pack capacity	Continuous recording time(Approx.)
1400 mAh	180mins. (fully charged battery)

Movie mode playback

Battery pack capacity	Continuous recording time(Approx.)
1400 mAh	180mins. (fully charged battery)

Inserting the SD card



Insert SD card with the " " mark facing toward the SD slot as illustrated.

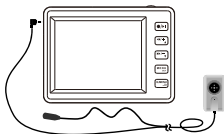
Recording time of memory capacity

SD card capacity	720 X 480	640 X 480	320 X 240
2GB	Approx. 55 mins	Approx. 65 mins	Approx. 130 mins
4GB	Approx. 110 mins	Approx. 130 mins	Approx. 260 mins
8GB	Approx. 220 mins	Approx. 260 mins	Approx. 520 mins
16GB	Approx. 440 mins	Approx. 520 mins	Approx. 1040 mins
32GB	Approx. 880 mins	Approx. 1040 mins	Approx. 2080 mins


Basic Operations

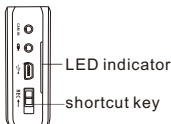
One Touch Record

Moving image is recorded in AVI(MPEG-4) format.




One Touch Record (Video & audio)

a. When the main unit power off, connect the mini camera and slide the shortcut key [](upward),the LED indicator is red-flashing during recording, this moment it is a video & audio recording.(Red LED light)as illustrated.



b. Slide the shortcut key[](downward), to save the video & audio recording.

One Touch Record (Audio)

a. When the main unit power off, do not connect the mini camera and slide the shortcut key[],the LED indicator is blue-flashing during recording, this moment it is a audio recording. (Blue LED light)as illustrated.

b. Slide the shortcut key[] (downward),to save the audio recording.

LED Indicator

Recording video: Red-flashing

Recording audio: Blue-flashing


Charging: Red



Stand by: Green

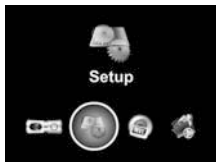
Basic Operations

Motion Detection recording

Moving image is recorded in AVI(MPEG-4) format.


a. When the main unit power off, connect the mini camera, press and hold the power button [] for 2 seconds into a state of preview.

b. Press the menu button [], select " Setup " , press [] into the Setup menu.




c. Press [] or [], and select "MOTION DETECTION"





d. Select "YES" and press [] to start the Motion Detection function. as illustrated



After setting, return to the state of preview, "press[] into the detection mode" shows on the bottom-left of the screen at the same time.

Basic Operations

Cycle video (Storage full over write automatically)

- When the main unit power off, connect the mini camera, press and hold the power button [] for 2 seconds into the state of preview.
- Press the menu button [MENU], select " set up ", press [] into the set up menu.




- Press [] or [], and select "CYCLE VIDEO"



- Select "Open" and press [] to start the Cycle video function.



After setting, return to the state of preview, "[]" shows on the bottom-left of the screen at the same time.

Basic Operations

Playback

a. In the state of preview, press [MENU], select " Video ".



b. Select " Record " or " Photo " or " Audio " , and press [PLAY].



c. Enter " Record ", select the desired video file with [←/→] or [↑/↓] key.
d. Press [PLAY] key to play back the selected video file.

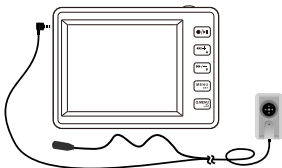
	1/7
20100105_234207.AVI	689K
20100105_234153.AVI	3.91M
20100105_234025.AVI	7.34M
20100105_234007.AVI	5.0M
20100101_013126.AVI	2.37M
20100101_010421.AVI	16.55M
20100101_010259.AVI	25.65M


e. Press [PLAY] key to stop playing.
f. Press [MENU] key to return the recorded file list.
Enter "Photo", and "Audio" mode, the same operation as the above.

Basic Operations

Recording moving images from mini camera

- a. Press and hold the power button [] for 2 seconds into the state of preview.



- b. Press [] to start recording ,the LED indicator is flashing during recording, "Rec" shows on the left-up corner of the screen at the same time.



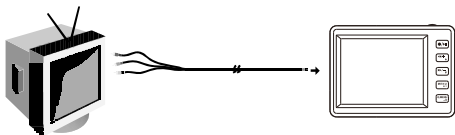
- c. Press [] to stop and save recording, the red LED lamp is off.




Basic Operations

Recording moving images from TV set and other video sources

a. When the main unit power off, connect the DVR with TV or other video sources via AV input cable.

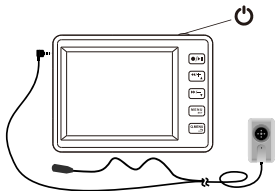


b. Press [] and hold for 2 seconds into the state of preview

c. Press [] to start recording, the LED lamp is red-flashing during recording, "Rec" shows on the left-up corner of the screen at the same time, as illustrated

Taking photos from mini camera

a. In the state of preview, Shortly press [] as illustrated.



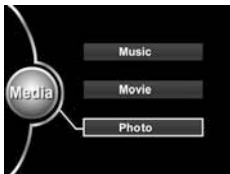
Basic Operations

Playing back media files on mini DVR (music, movie, photo)

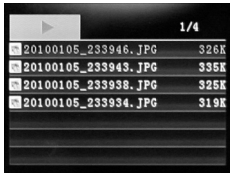
- a. In the state of preview, press [**MENU**] to enter the Media mode.



- b. Enter "Photo", select the desired Photo files with [**←/→**] or [**↑/↓**] key.



- c. Press [**▶/⏪**] key to play back the selected photo file.
d. Press [**●/⏸**] key to stop playing.

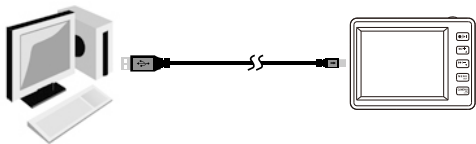


- e. Press [**MENU**] key to return the recorded file list.
Enter "Music", and "Movie" mode, the same operation as the above.

Basic Operations

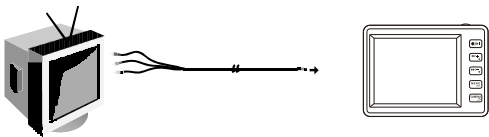
Playing back moving images on PC (records,photo,audio)

- Take out the SD card,connect it with the computer via the card reader.
- Connect the DVR with the computer via the USB cable,"PC Connection" shows on the screen as illustrated.



Playing back moving images on TV screen (records,photo,audio)

- IN the state of preview,connect the DVR with TV/monitor via AV output cable.



- Press the [MENU] button,select "Setup"

c. Press [⏪] or [⏩], and [⏹] into the "TV-OUT SET" select "PAL" or "NTSC", the image is transmitted from DVR to TV . as illustrated.

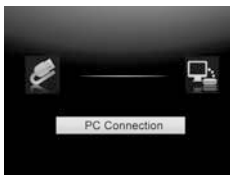


d. The next operations are the same as the DVR's (Playing back moving images on mini DVR).

Basic Operations

Update media files (Music, Movie, Photo)

- Take out the SD card, connect it with the computer via the card reader.
- Connect the DVR with the computer via the USB cable, " PC Connection " shows on the screen to update the media files as illustrated.



c. Format Instruction

Music	MP3/MP2.5
Movie	MPEG-1/MPEG-4/AVI/ASF/ADPCM
Photo	JPG/JPEG

Copy recorded files

- In the playback mode, press [●/▶] into record submenu.
- Select the desired file, press [MENU].as illustrated.



- Select "Copy to", Press "Nand flash" or "SD" as illustrated.



Delete recorded files

- In the playback mode , press [**•/▶**] into record submenu.
- Select the desired file , press [**MENU**] .as illustrated.



Delete **Copy to**

- Select "Delete", press "All" or "Current" or "Cancel" as illustrated.



DELETE

YES

NO



Delete

All

Current

Cancel

Setting Operations

Setting the record

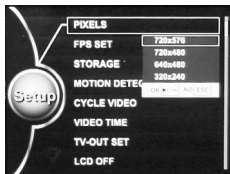
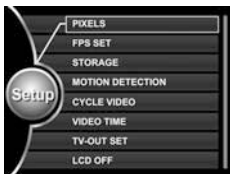
- In the state of preview, press [**MENU**] into record Setup
- Select "Pixels" and "Microphone" submenu, press [**ENTER**] as illustrated.



- Press [**MENU**] to back to the state of preview

Setting the pixels

- In the state of preview, press the [**MENU**] button, select "Setup".
- Press [**←**] or [**→**], select the "Pixels"
- Select "720x576" or "720x480" or "640x480" or "320x240" and press [**ENTER**]. as illustrated.



- Press [**MENU**] to back to setup menu.

Setting Operations

Setting the frames

- In the state of preview, press the [MENU] button, select "Setup".
- Press [←/→] or [↑/↓], select the "FPS SET" as illustrated.



- Select "15Fps" or "25Fps" or "30Fps" and press [OK].
- Press [MENU] to back to setup menu.

Setting the storage

- In the state of preview, press the [MENU] button, select "Setup".
- Press [←/→] or [↑/↓], select the "STORAGE".



- Select "FLASH" or "SD Card" and press [OK].
- Press [MENU] to back to setup menu.

Setting Operations

Setting the motion detection

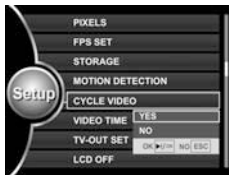
- In the state of preview, press the [MENU] button, select " Setup ".
- Press [←+] or [→-],select the "MOTION DETECTION".as illustrated.



- Select "YES" or "NO" and press [●/▶].
- Press [MENU] to back to setup menu.

Setting the cycle video

- In the state of preview, press the [MENU] button, select " Setup ".
- Press [←+] or [→-],select the "CYCLE VIDEO".as illustrated.



- Select "YES" or "NO" and press [●/▶].
- Press [MENU] to back to setup menu.

Setting Operations

Setting the video time

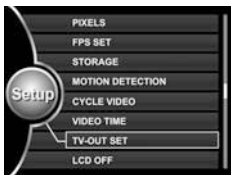
- In the state of preview, press the [MENU] button, select " Setup ".
- Press [←/→] or [↑/↓], select the "VIDEO TIME" . as illustrated.



- Select "10 Minutes" or "20 Minutes" or "30 Minutes" and press [●/▶].
- Press [MENU] to back to setup menu

Setting the TV output

- In the state of preview, press the [MENU] button, select " Setup ".
- Press [←/→] or [↑/↓], select the "TV-OUT SET". as illustrated.



- Select "LCD" or "PAL" or "NTSC" and press [●/▶].
- Press [MENU] to back to setup menu.

Setting Operations

Setting the LCD off time

- In the state of preview, press the [MENU] button, select " Setup ".
- Press [←+] or [→-],select the "LCD OFF" .as illustrated.



- Select "1 Minute" or "5 Minutes" or "NEVER"and press [●▶].
- Press [αMENU] to back to setup menu.

Setting the Power off time

- In the state of preview, press the [MENU] button, select " Setup ".
- Press [←+] or [→-],select the "AUTO OFF" .as illustrated.



- Select "1 Minute" or "5 Minutes" or "NEVER"and press [●▶].
- Press [αMENU] to back to setup menu.

Setting Operations

Setting the vibrato

- In the state of preview, press the [MENU] button, select "Setup".
- Press [←+] or [→-], select the "VIBRATE OFF". as illustrated.



- Select "YES" or "NO" and press [OK].
- Press [MENU] to back to setup menu.

Setting the language

- In the state of preview, press the [MENU] button, select "Setup".
- Press [←+] or [→-], select the "LANGUAGE". as illustrated.



- Select "English" or "Russian" or "Chinese" and press [OK].
- Press [MENU] to back to setup menu.

Setting Operations

Setting the date time

- In the state of preview, press the [MENU] button, select "Setup".
- Press [←+] or [→-], select the "DATE TIME". as illustrated.



- Select "Time stamp", Select "YES" or "NO", and press [●/▶]. as illustrated.



- Select "Time set" to set up the date. as illustrated.



- Press [αMENU] to back to setup menu.

Setting Operations

Setting the format

- In the state of preview, press the [MENU] button, select " Setup ".
- Press [←+1] or [→-], select the "FORMAT" .as illustrated.



- Select "Flash" or "SD Card", and press [OK/ENTER]. as illustrated.



- Press [MENU] to back to setup menu. as illustrated.



WARNING! FORMATING WILL DELITE ALL DATA.

Specifications

KL-600DVR

Digital Screen	2.5 TFT LCD	
Color System	PAL/NTSC (Auto)	
Resolution	960 X 240	
Recording Format	AVI	
Recording Resolution	720 X 576	
	720 X 480	
	640 X 480	
	320 X 240	
Motion Activated	Yes	
Cycle Recording	Yes	
Real-time Stamp	Yes	
Video Time	10/20/30Mins	
LCD Off	1/3/5Mins/Never	
Auto Power Off	5/10Mins/Never	
Vibration Function	ON/OFF	
TV-OUT	NTSC/PAL	
AV-IN	NTSC/PAL	
Storage	FLASH	
	SD CARD	
Playback	Video	Yes
	Voice	Yes
Media	Yes/Music/Movie/Photo	
Frame Rate	30fps/25fps/15fps	
Built-in Flash Memory	256MB	
USB jack	High-speed USB2.0	
DC Input	DC 5V 1A	
Battery pack capacity	3.7V 1400mAh	
SD card	SD 1GB~32GB	
Power output of Camera	DC 5V 200mAh	
AV Input jack	3 rings with 2.5	
AV Output jack	3 rings with 2.5	
Language	English/Chinese/Russian	

Specifications

JS-418C mini button CCD camera(Optional)

Imaging Sensor	1/3 color SONY CCD
Horizontal definition	480 TV Lines
Total number of pixels	NTSC:537 (H) 505 (V) approx.
	PAL:537 (H) 597 (V) approx.
Minimum illumination	0.5 LUX
Dimensions	34x22x10mm
Power supply	DC 5V 150mAh

JS-618C mini button CMOS camera(Optional)

Imaging Sensor	1/3 color CMOS
Horizontal definition	420 TV Lines
Minimum illumination	3 LUX
Dimensions	34x22x10mm
Power supply	DC 5V 150mAh

Specifications

GL-403C mini bullet CCD camera (Option)







Imaging Sensor	1/3 color SONY CCD
Horizontal definition	480 TV Lines
Total number of pixels	NTSC:537 (H) 505 (V) approx.
	PAL:537 (H) 597 (V) approx.
Minimum illumination	0.5 LUX
Dimensions	∅18x75mm
Power supply	DC 5V 150mAh

GL-405C mini bullet digital camera (Option)

Imaging Sensor	1/3 color CMOS
Horizontal definition	420 TV Lines
Minimum illumination	3 LUX
Dimensions	∅15x61mm
Power supply	DC 5V 150mAh

Accessories

Accessories

AV In cable AV Out cable	 x 1
Camera Covers	 x 1
USB cable	 x 1
Rechargeable Li-ion Battery 1400mAh	 x 1
AC charger	 x 1
Manual	 x 1

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