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About this Guide

The content in this document is for information purpose and is subject to change without prior notice. We made every effort to ensure that this User's Manual is accurate and complete. However, no liability is assumed for any errors and omissions that may have occurred.

The manufacturer reserves the right to change the technical specifications without prior notice.

FCC Statement

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.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

WEEE Notice

Disposal of Waste Electrical and Electronic Equipment and/or Battery by users in private households in the European Union



This symbol on the product or on the packaging indicates that this can not be disposed of as a household waste. You must dispose of your waste equipment and/or battery by handling it over to the applicable take-back scheme for the recycling of electrical and electronic equipment and/or battery. For more information about recycling of this equipment and/or battery, please contact your city office, the shop where you purchased the equipment or your household waste disposal service. The recycling of materials will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and environment.

CE Regulatory Notice

This equipment complies with the requirements set out in the Council Directives on the Approximation of the Laws of the Member States relating Electromagnetic Compatibility (2004/108/EC); the Low Voltage Directive (2006/95/EC); the Restriction of The Use of Certain Hazardous Substances in Electrical And Electronic Equipment Directive (2002/95/EC), Turkish EEE Directive; the Commission Regulation (EC) No 1275/2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment, and the Directive 2009/125/EC of the European parliament and of the council establishing a framework for the setting of eco-design requirements for energy-related products.

Safety Instructions

- ❖ Do not expose the device to rain or use it in areas near water.
- ❖ Do not wrap the device or store it in a hot environment.
- ❖ Do not place the device on unstable surfaces or near any heat sources such as stoves, heaters, or etc.
- ❖ Clean only with dry cloth.
- ❖ Do not subject the LCD display to impact.
- ❖ Keep the battery out of reach of children.
- ❖ When inserting battery, pay careful attention to the polarity of the terminals.
- ❖ Do not fire the flash close to anyone's eyes.
- ❖ Do not use the device while you are driving or riding a bike/motorcycle.
- ❖ If the device has fallen or its case has been damaged, turn off the power and remove the battery. Consult authorized dealers or repair service center.
- ❖ Only use the supplied accessories.

Li-ion Battery Pack

MODEL: CA NP40

3.7V 1200mAh 4.44Wh

Be sure to use only the supplied battery and charger. The use of any other type of battery or charger may damage the device and void your warranty.

Caution

- ❖ Use the authorized charger only.
- ❖ Never disassemble by yourself.
- ❖ Never short-circuit the battery.
- ❖ Dispose of the battery properly.
- ❖ Exposing the battery to open flames can cause explosion.

1 Introduction

Thank you for purchasing this advanced Digital Video Camera. This user guide will get you started and ready to make the most of your digital video camera.

1.1 System requirements

For PC connection, be sure your PC meets the following specifications:

For Windows:

- Windows XP SP2 / Vista / Win 7
- Processor with at least Pentium IV 3.2GHz / AMD Athlon FX 2.6GHz or higher
- 2GB RAM at least
- nVIDIA Geforce 7600GT / Ati X1600 series or later
- USB port
- 16-bit color display compatible monitor (1280x1024, 32-bit color display recommended)
- 250 MB of available hard disk space
- CD-ROM drive

For Macintosh:

- Mac OS 10.4 or higher
- Power Mac G3 or higher
- Minimum 256MB RAM
- 110MB of available hard disk space
- USB port
- CD-ROM drive

1.2 Features

- Full HD camera (1920x1080 @ 30fps)
- 3.0" Touch screen
- Time lapse recording
- Motion detection recording
- Dual memory card slot

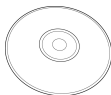
1.3 Package contents

The package contains the following items. In case there is any missing or damaged item, contact your dealer immediately.

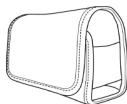
Digital video camera



CD-ROM



Pouch



Quick guide



HDMI cable



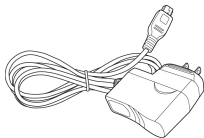
Video cable



USB cable



AC adapter

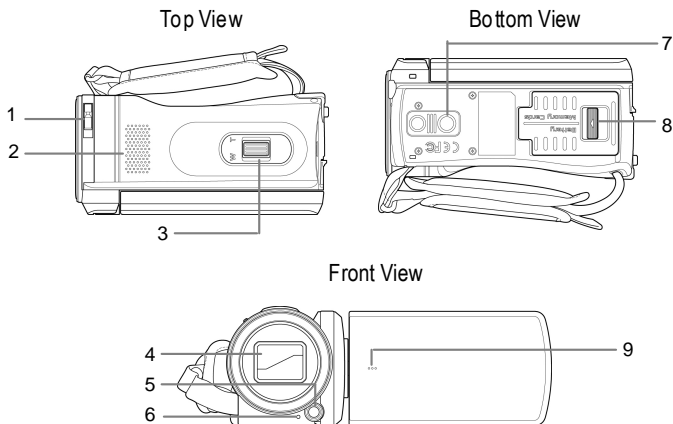


Lithium battery



1.4 External view

Top, Bottom, and Front views

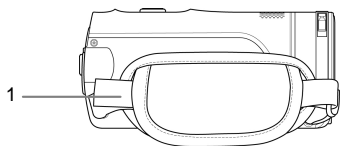


No.	Item
1	Lens Cover Latch
2	Speaker
3	Zoom Lever
4	Lens Cover
5	LED Light

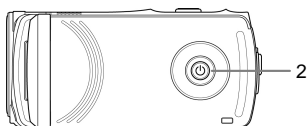
No.	Item
6	Self Timer Indicator
7	Tripod Socket
8	Battery/Memory Card Cover
9	Microphone

Left, Right, and Rear views

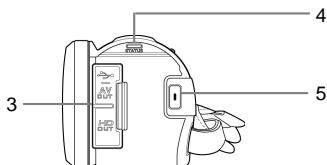
Left View



Right View



Rear View



No.	Item
1	Hand Strap
2	Power Button
3	USB/HDMI Connector Cover

No.	Item
4	LED Indicator
5	Record Button

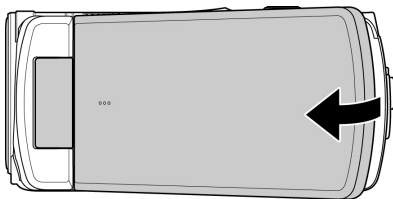
1.5 Buttons operation

See the table below for a description of each button's function.

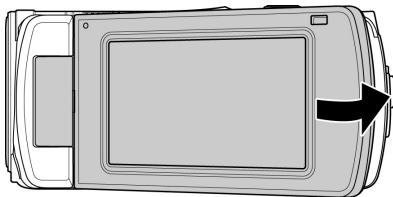
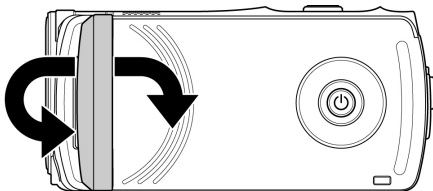
Item	Function
Power Button	Press to turn the digital video camera on or off.
Record Button	<ul style="list-style-type: none">• In Video mode, press to start recording a video. Press it again to stop recording.• In Camera mode, press to capture a photo.
Zoom Lever	<ul style="list-style-type: none">• In Video and Camera modes, slide to the right/left to zoom in/out when recording videos or shooting photos.• In Video Playback mode, slide to the right/left to adjust the volume. The volume can also be adjusted during the playback.• In Camera Playback mode, slide to the right/left to zoom in/out your photo.

1.6 Adjusting the LCD display

Flip the LCD display outwards 90° to fully open.



Flip and twist the LCD screen at the appropriate angle to suit your viewing preference.

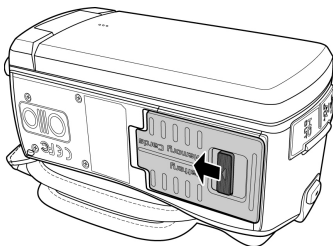


2 Getting Started

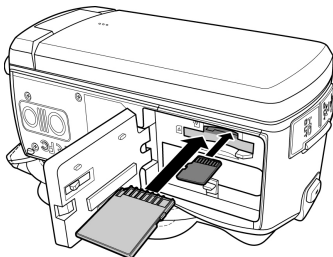
2.1 Inserting the memory card(s)

This device supports dual memory card slot that allows you to insert two memory cards at the same time. You can insert one SD card and one micro SD card into the digital video camera.

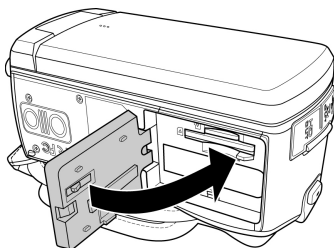
1. Push the battery/memory card cover latch to open the battery/memory card cover as shown in the illustration.



2. Insert the memory card(s).



3. Close the battery/memory card cover.

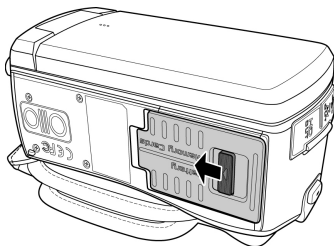


Note: Do not remove or insert the memory card when the digital video camera is turned on. This may damage the memory card.

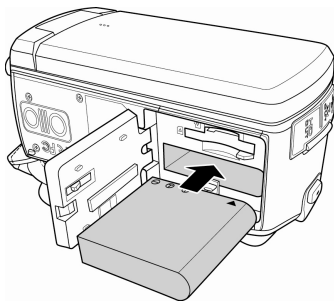
2.2 Inserting the battery

Only use the specified rechargeable battery for the digital video camera.

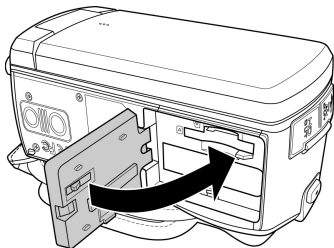
1. Push the battery/memory card cover latch to open the battery/memory card cover as shown in the illustration.



2. Fully insert the battery with the correct orientation until it clicks into place.



3. Close the battery/memory card cover.



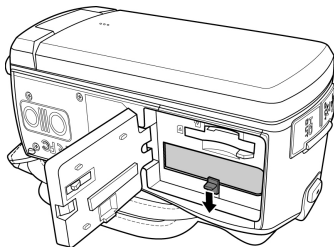
Note:

Turn off the digital video camera before removing the battery.

The battery may be warm after being used. This is normal and not a malfunction.

To remove the battery:

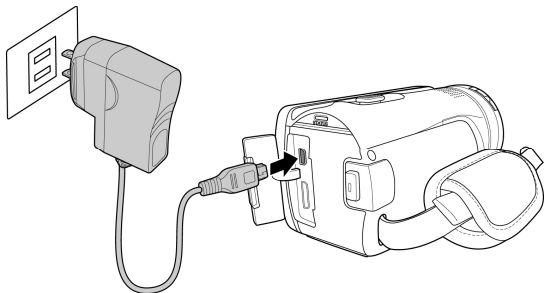
1. Push the battery/memory card cover latch to open the battery/memory card cover.
2. Press and hold the latch as shown in the illustration and remove the battery from the battery compartment.



2.3 Charging the battery

Use the supplied power adapter to charge the battery.

1. Open the USB/HDMI connector cover.
2. Connect one end of the power adapter to the USB connector of the digital video camera.



3. Plug the other end of the power adapter to the wall outlet.

Note:

The red LED lights up while the battery is charging.

The charging time depends on the current battery capacity and charging conditions.

Please take note if the environment temperature reaches 45°C or above, the adapter can still supply power to the digital video camera, but it will not charge the Lithium-ion battery. This is the characteristic of Lithium-ion and is not a malfunction.

2.4 Turning on/off the digital video camera



There are two ways to turn on/off the power:

- Open/close the LCD panel.
- Press the **Power** button.



Note: Before using this digital video camera, be sure to slide the lens cover latch to the right to open the lens.

2.5 Changing modes

The digital video camera has two recording modes:

-  **Video** mode: Record videos.
-  **Camera** mode: Shoot photos.

By default, the digital video camera is set to **Video** mode.

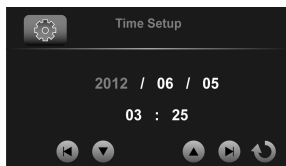
- In **Video** mode, touch the upper left corner icon () to switch to **Camera** mode.
- In **Camera** mode, touch the upper left corner icon () to switch to **Video** mode.

2.6 Initial Settings

Before using the digital video camera, you may want to set up the date and time and screen language settings.

2.6.1 Setting the date and time

1. To adjust the field item, touch the respective field to select the field and touch ▲/▼ to adjust the value.
2. Repeat step 1 to adjust other fields.
3. Touch ↻ to save your changes.



Note: Touch ▲/▼ to adjust the value. Touch ◀/▶ to go to the previous/next field.

2.6.2 Setting the language


1. Touch **Language** to enter the menu.
2. Touch the language option to select the desired language.



Note: Touch ◀/▶ to scroll through the available menu options. Touch ◀/▶ to go to the previous/next page.

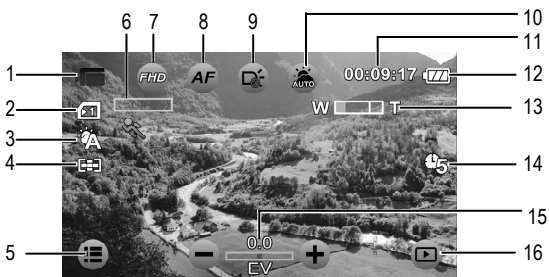
3 Using the Digital Video Camera


3.1 Recording videos











1. Turn on the digital video camera. By default, the device is set to **Video** mode. In **Camera** mode, touch  to switch to **Video** mode.
2. Press the **Record** button to start recording the video. Press it again to stop recording.








While recording, you can also use the **Zoom** lever to zoom/in on the subject.

3.1.1 The recording screen






No.	Icon	Item	Description
1		Video mode	Indicates the digital video camera is currently in Video mode. Touch to switch to Camera mode.



No.	Icon	Item	Description
2		Card type	Indicates the memory card type in use.
3		White balance	Indicates the current white balance mode.
4		Metering mode	Indicates the current AE metering mode.
5		Menu	Touch to enter the Video menu.
6		Motion detection	Indicates Motion detection recording mode is activated.
7		Video resolution	Touch to select the desired video resolution. Available options: FHD / HD (60) / HD (30)
8		AF setting	Touch to select the desired AF setting. Available options: Auto Focus (AF) / AF Lock.
9		LED icon	Touch to select the suitable lighting mode. Available options: Off / On
10		Scene mode	Touch to select the desired scene mode: Available options: Auto / Night / Sports / Landscape / Portrait / Sunset / Sand/Snow / Flower / Firework / Backlight / Beauty
11		Time duration	Indicates the recording time.

No.	Icon	Item	Description
12		Battery status	Indicates the remaining battery power.
13		Zoom indicator	Indicates the zoom status.
14		Time lapse	Indicates the Time lapse recording is set to 5 minutes.
15		EV compensation	Indicates the current EV compensation. Touch  /  to adjust the EV value.
16		Playback	Touch to enter Playback mode.

3.2 Video menu


The Video menu is used to adjust settings in **Video** mode.

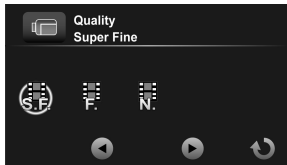
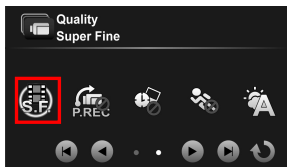
1. Turn on the digital video camera. By default, the device is set to **Video** mode. In **Camera** mode, touch  to switch to **Video** mode.
2. Touch  to enter the **Video** menu.
3. Touch the desired menu option to enter the menu.
4. Touch an option to select the desired setting.
5. Touch  to exit the menu.

Note: Touch  to scroll through the available menu options. Touch  to go to the previous/next page.

3.2.1 Quality


Set the video quality.

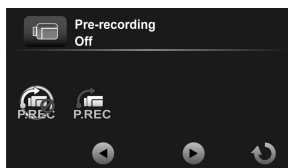
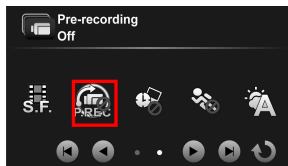
1. In **Video** mode, touch  to enter the **Video** menu.
2. Touch **Quality** to enter the menu.
3. Touch an option to select the desired setting (Super Fine, Fine, or Normal).



3.2.2 Pre-recording

Pre-recording function records images even before you press the **Record** button.

1. In **Video** mode, touch  to enter the **Video** menu.
2. Touch **Pre-recording** to enter the menu.
3. Touch the option to select **On** or **Off**.




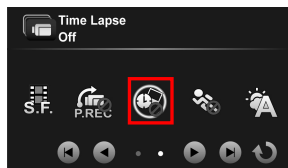
Note: If **Pre-recording** is enabled, **Time Lapse** and **Motion Detection** will be disabled.

3.2.3 Time Lapse

With the Time Lapse feature, the frames are recorded slower than the normal recording speed but the recorded videos will be played back in fast motion than normal playback speed.

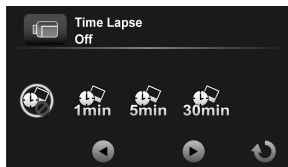
You can use this feature to record videos such as evolution of a construction project, weather changes, tree growth, or flower blossom.

1. In **Video** mode, touch  to enter the **Video** menu.
2. Touch **Time Lapse** to enter the menu.



3. Touch an option to select the desired setting.


- **Off**: Disable this feature.
- **1 min**: 1-minute time lapse recording.
- **5 min**: 5-minute time lapse recording.
- **30 min**: 30-minute time lapse recording.

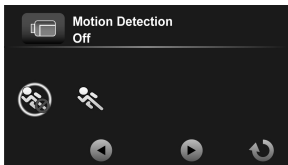


Note: If **Time Lapse** is enabled, **Pre-recording** and **Motion Detection** will be disabled.

3.2.4 Motion Detection

With Motion Detection feature, the video recording automatically starts if the digital video camera detects any movement.

1. In **Video** mode, touch  to enter the **Video** menu.
2. Touch **Motion Detection** to enter the menu.
3. Touch the option to select **On** or **Off**.



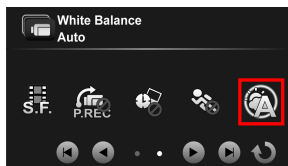
Note: If **Motion Detection** is enabled, **Time Lapse** and **Pre-recording** will be disabled.

3.2.5 White Balance

Set the white balance when recording videos under specific lighting conditions.

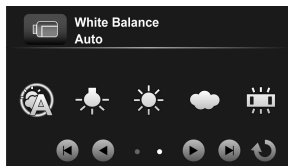
1. In **Video** mode, touch  to enter the **Video** menu.

2. Touch **White Balance** to enter the menu.




3. Touch an option to select the desired setting.

- **Auto**: Set the white balance automatically.
- **Incandescent**: Indoor under tungsten lighting condition.
- **Sunny**: Bright daylight shooting.
- **Cloudy**: Cloudy day or shady condition.
- **Fluorescent**: Indoor under fluorescent lighting.
- **Preset**: Manually adjust the white balance.

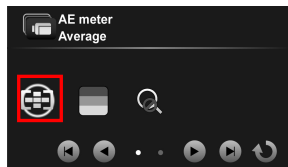


3.2.6 AE Meter

Select the metering method for calculating the exposure.

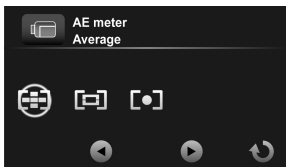
1. In **Video** mode, touch  to enter the **Video** menu.

2. Touch **AE meter** to enter the menu.




3. Touch an option to select the desired setting.

- **Average:** Calculate exposure based on the entire image area.
- **Center:** Calculate exposure based on the entire image area, but provides greater exposure to the center of a subject.
- **Spot:** Calculate exposure based on the small portion of the screen center.

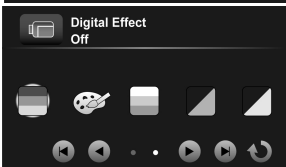
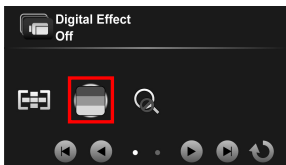


3.2.7 Digital Effect

Set the color filter effect to be applied on the video you want to record.

1. In **Video** mode, touch  to enter the **Video** menu.
2. Touch **Digital Effect** to enter the menu.
3. Touch an option to select the desired setting.


- **Off:** No digital effect is used.
- **Art:** Add an oil painting color effect.
- **Sepia:** Add brown color effect.
- **Negative:** Add a negative color effect.
- **Black/White:** Add a monochrome color effect.

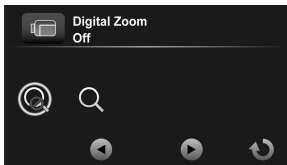
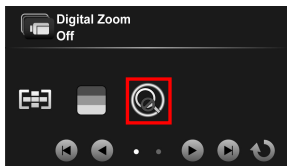


- **Vivid:** Add a bright color tone effect.



3.2.8 Digital Zoom

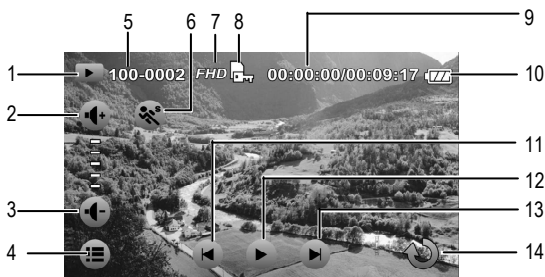
Set whether or not to use digital zoom when recording videos.





1. In **Video** mode, touch  to enter the **Video** menu.
2. Touch **Digital Zoom** to enter the menu.
3. Touch the option to select **On** or **Off**.













3.3 Playback videos

1. In **Video** mode, touch  to enter **Video Playback** mode.
2. Touch the video to view it in full screen.
3. Touch  to play the video.
4. Touch the corresponding icons to adjust the volume and playback speed.




No.	Icon	Item	Description
1		Playback mode	Indicates the digital video camera is in Video Playback mode.
2		Volume up	Touch to increase playback volume.
3		Volume down	Touch to decrease playback volume.
4		Menu	Touch to enter the Video Playback menu.






No.	Icon	Item	Description
5		File number	Indicates the file number.
6		Slow motion	Touch to enable or disable slow motion playback.
7		Video resolution	Indicates the file resolution.
8		Protect	Indicates the file is protected.
9		Time duration	Indicates the played duration / total video duration.
10		Battery status	Indicates the remaining battery power.
11		Previous	Touch to view the previous video.
12		Play	Touch to play the video.
13		Next	Touch to view the next video.
14		Return	Touch to return to the previous screen.


3.3.1 Slow motion playback

To start playback in slow motion:

1. In **Video** mode, touch  to enter **Video Playback** mode.
2. Touch the video to view it in full screen.




3. Touch  to enable slow motion feature. The icon turns orange.
4. Touch  to play the video.
5. During playback, do the following:
 - Touch  to adjust the fast-forward speed 1/2X ~ 1/64X.
 - Touch  to adjust the rewind speed 1/2X ~ 1/64X.
6. Touch the orange  to disable slow motion.

Note: If video playback is already in progress, touch  to enable slow motion.

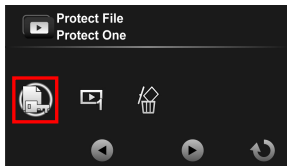
3.4 Video playback settings

3.4.1 Protect File

1. In **Video** mode, touch  to enter **Video Playback** mode.
2. Select the desired video file that you want to protect.

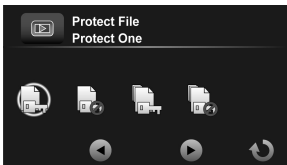
3. Touch  to enter the **Video Playback** () menu.

4. Touch **Protect File** to enter the menu.






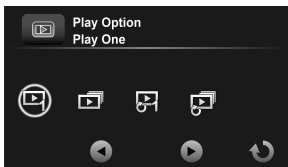
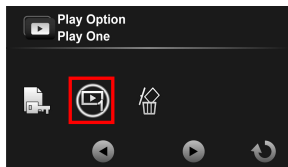
5. Touch an option to select the desired setting.

- **Protect One:** Protect the current file.
- **Unprotect One:** Unprotect the current file.
- **Protect All:** Protect all files.
- **Unprotect All:** Unprotect all files.






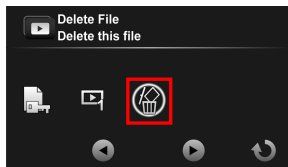
3.4.2 Play Option

1. In **Video** mode, touch  to enter **Video Playback** mode.
2. Touch the selected video file to view it in full screen.
3. Touch  to enter the **Video Playback** () menu.
4. Touch **Play Option** to enter the menu.
5. Touch an option to select the desired setting.
 - **Play One**: Playback on the current video.
 - **Play All**: Playback all videos.
 - **Repeat One**: Replay the current video.
 - **Repeat All**: Replay all videos.



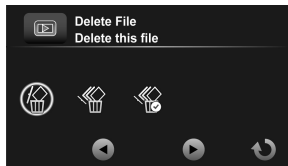
3.4.3 Delete File


1. In **Video** mode, touch  to enter **Video Playback** mode.
2. Select the desired video file that you want to delete.
3. Touch  to enter **Video Playback** () menu.
4. Touch **Delete File** to enter the menu.



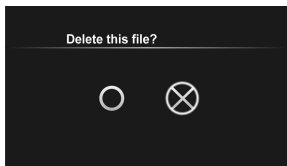
5. Touch an option to select the desired setting.

- **Delete this file:** Delete the current file.
- **Delete all files:** Delete all files.
- **Delete Selection:** Delete the selected files.




Touch the desired files to mark them. When the file selection is complete, touch .

6. Touch  to confirm delete.

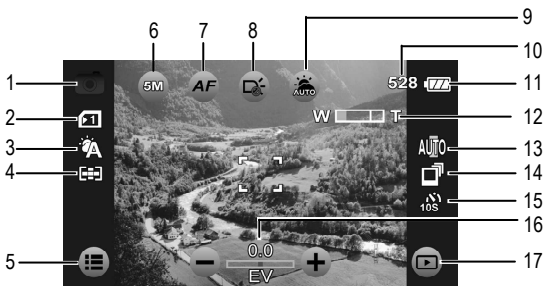





Note: Deleted files cannot be recovered. Ensure the files have backup before deletion. Protected files cannot be deleted, unlock the file first.

3.5 Shooting photos








1. Turn on the digital video camera. By default, the device is set to **Video** mode.
2. Touch  to switch to **Camera** mode.
3. Press the **Record** button to capture a photo.

3.5.1 The shooting screen






No.	Icon	Item	Description
1		Camera mode	Indicates the digital video camera is currently in Camera mode. Touch to switch to Video mode.
2		Card type	Indicates the memory card type in use.
3		White balance	Indicates the current white balance mode.





No.	Icon	Item	Description
4		Metering mode	Indicates the current AE metering mode.
5		Menu	Touch to enter the Camera menu.
6		Photo size	Touch to select the desired photo size. Available options: 16M / 12M / 8M / 5M / 3M.
7		AF setting	Touch to select the desired AF setting. Available options: Normal / Macro / AF Lock.
8		LED icon	Touch to select the suitable lighting mode. Available options: Off / On
9		Scene mode	Touch to select the desired scene mode. Available options: Auto / Night / Sports / Landscape / Portrait / Sunset / Sand/Snow / Flower / Firework / Backlight / Beauty
10		Available shot	Indicates the number of available shots.
11		Battery status	Indicates the remaining battery power.
12		Zoom indicator	Indicates the zoom status.

No.	Icon	Item	Description
13		ISO	Indicates the current AE ISO mode.
14		Capture mode	Indicates the Capture Mode is set to Continue Shot.
15		Self-timer	Indicates the Self Timer mode is set to 10 seconds.
16		EV compensation	Indicates the current EV compensation. Touch  /  to adjust the EV value.
17		Playback	Touch to enter Playback mode.

3.6 Camera menu


The Camera menu is used to adjust the capture settings in **Camera** mode.

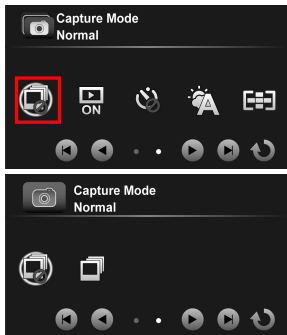
1. Turn on the digital video camera. By default, the device is set to **Video** mode.
2. Touch  to switch to **Camera** mode.
3. Touch  to enter the **Camera** menu.
4. Touch the desired menu option to enter the menu.
5. Touch an option to select the desired setting.
6. Touch  to exit the menu.

Note: Touch /  to scroll through the available menu options. Touch /  to go to the previous/next page.

3.6.1 Capture Mode

Set the recording method to use when shooting photos.

1. In **Camera** mode, touch  to enter the **Camera** menu.
2. Touch **Capture Mode** to enter the menu.
3. Touch an option to select the desired setting.
 - **Normal:** Shoot one photo at a time.




- **Continue Shot:** Continuously shoot photos as long as you keep pressing the **Record** button.

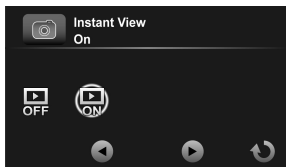
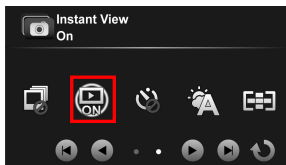
Note:

If **Capture Mode** is set to **Continue Shot**, **Instant View** and **Self Timer** will be disabled. The **Continue Shot** function will be disabled if the **Photo size** is set to 16M / 12M / 8M.

3.6.2 Instant View


Display a preview of the recorded photo right after the shot is taken.

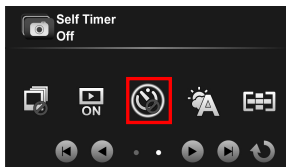
1. In **Camera** mode, touch  to enter the **Camera** menu.
2. Touch **Instant View** to enter the menu.
3. Touch the option to select **On** or **Off**.



3.6.3 Self Timer

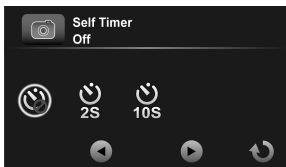
Set pre-defined time delay for self timer photography.

1. In **Camera** mode, touch  to enter the **Camera** menu.
2. Touch **Self Timer** to enter the menu.




3. Touch an option to select the desired setting.

- **Off:** Disable this feature.
- **2 sec:** 2-second delay self timer.
- **10 sec:** 10-second delay self timer.

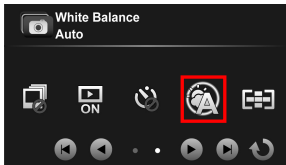


3.6.4 White Balance

Set the white balance when shooting photos under specific lighting conditions.

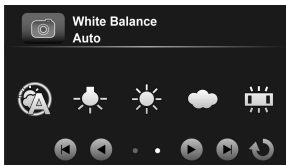
1. In **Camera** mode, touch  to enter the **Camera** menu.

2. Touch **White Balance** to enter the menu.




3. Touch an option to select the desired setting.

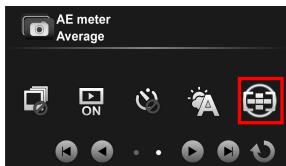
- **Auto:** Set the white balance automatically.
- **Incandescent:** Indoor under tungsten lighting condition.
- **Sunny:** Bright daylight shooting.
- **Cloudy:** Cloudy day or shady condition.
- **Fluorescent:** Indoor under fluorescent lighting.
- **Preset:** Manually adjust the white balance.



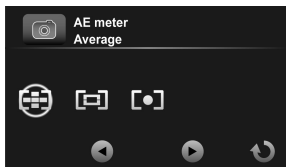
3.6.5 AE Meter

Select the metering method for calculating the exposure.

1. In **Camera** mode, touch  to enter the **Camera** menu.
2. Touch **AE meter** to enter the menu.
3. Touch an option to select the desired setting.




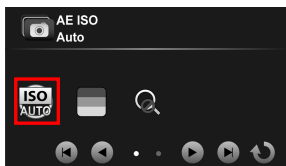
- **Average:** Calculate exposure based on the entire image area.
- **Center:** Calculate exposure based on the entire image area, but provides greater exposure to the center of a subject.
- **Spot:** Calculate exposure based on the small portion of the screen center.



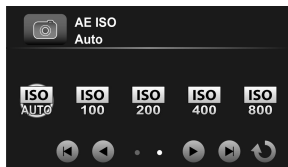
3.6.6 AE ISO

Set the sensitivity for shooting photos.

1. In **Camera** mode, touch  to enter the **Camera** menu.
2. Touch **AE ISO** to enter the menu.




3. Touch an option to select the desired setting:
Auto (100-400), Auto800 (100-800), Auto1600 (100-1600), 100, 200, 400, 800, 1600.

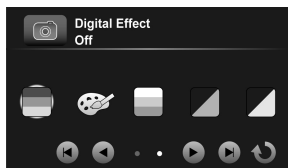
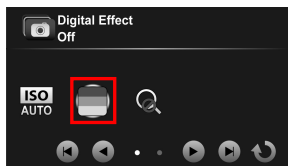


Note: Use a higher ISO setting in dim conditions and a lower ISO setting in brighter conditions.

3.6.7 Digital Effect

Set the color filter effect to be applied on the photo you want to capture.


1. In **Camera** mode, touch  to enter the **Camera** menu.
2. Touch **Digital Effect** to enter the menu.
3. Touch an option to select the desired setting.
 - **Off:** No digital effect is used.
 - **Art:** Add an oil painting color effect.
 - **Sepia:** Add brown color effect.
 - **Negative:** Add a negative color effect.
 - **Black/White:** Add a monochrome color effect.

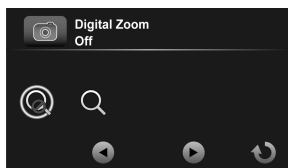
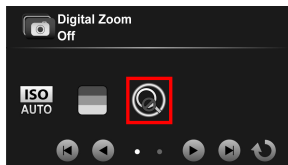


- **Vivid:** Add a bright color tone effect.



3.6.8 Digital Zoom

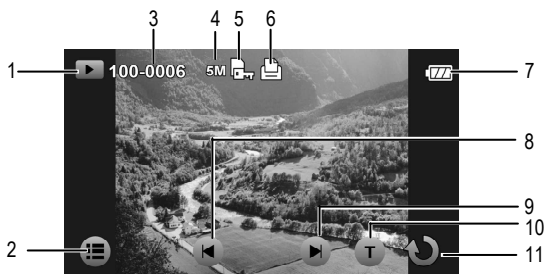
Set whether or not to use digital zoom when capturing photos.



1. In **Camera** mode, touch  to enter the **Camera** menu.
2. Touch **Digital Zoom** to enter the menu.
3. Touch the option to select **On** or **Off**.











3.7 Viewing photos

1. Turn on the digital video camera. By default, the digital video camera is set to **Video** mode.
2. Touch  to switch to **Camera** mode.
3. Touch  to enter **Photo Playback** mode.
4. Touch the photo to view it in full screen.




No.	Icon	Item	Description
1		Playback mode	Indicates the digital video camera is in Photo Playback mode.
2		Menu	Touch to enter the Photo Playback menu.
3	100-0006	File number	Indicates the file number.

No.	Icon	Item	Description
4		Photo size	Indicates the file resolution.
5		Protect	Indicates the file is protected.
6		DPOF tag	Indicated the file is marked for printing.
7		Battery status	Indicates the remaining battery power.
8		Previous	Touch to view the previous photo.
9		Next	Touch to view the next photo.
10		T (zoom in)	Touch to zoom in the photo up to 10X.
11		Return	Touch to return to the previous screen.

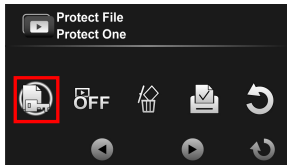
3.8 Photo playback settings

3.8.1 Protect File

1. In **Camera** mode, touch  to enter **Photo Playback** mode.
2. Select the desired photo file that you want to protect.

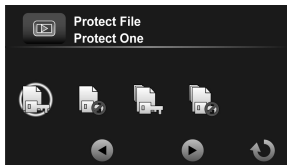
3. Touch  to enter the **Photo Playback** () menu.

4. Touch **Protect File** to enter the menu.







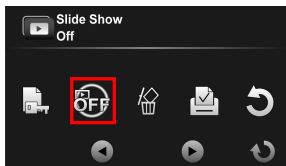
5. Touch an option to select the desired setting.

- **Protect One:** Protect the current file.
- **Unprotect One:** Unprotect the current file.
- **Protect All:** Protect all files.
- **Unprotect All:** Unprotect all files.



3.8.2 Slide Show

1. In **Camera** mode, touch  to enter **Playback** mode.
2. Select the desired photo file that you want to start the slide show first.
3. Touch  to enter the **Playback** () menu.
4. Touch **Slide Show** to enter the menu.
5. Touch the option to select **On** to enable the slide show. The slide show starts right away.
6. Touch  to stop.



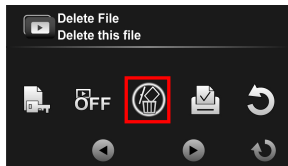
3.8.3 Delete File

1. In **Camera** mode, touch  to enter **Photo Playback** mode.

2. Select the desired photo file that you want to delete.

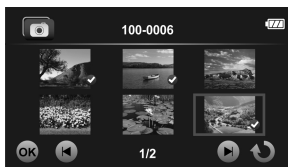
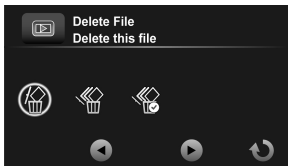
3. Touch  to enter **Photo Playback** () menu.


4. Touch **Delete File** to enter the menu.



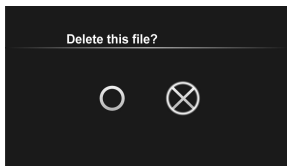
5. Touch an option to select the desired setting.

- **Delete this file:** Delete the current file.
- **Delete all files:** Delete all files.
- **Delete Selection:** Delete the selected files.



Touch the desired files to mark them. When the file selection is complete, touch .




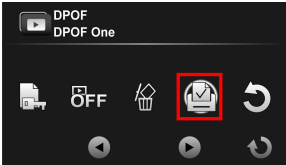
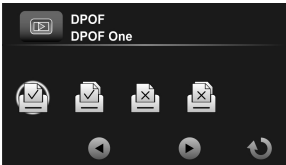






6. Touch  to confirm delete.






Note: Deleted files cannot be recovered. Ensure the files have backup before deletion. Protected files cannot be deleted, unlock the file first.

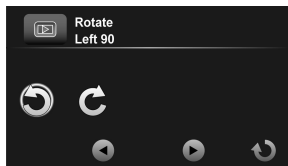
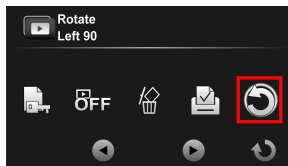
3.8.4 DPOF

Note: A memory card is required for DPOF function.

1. In **Camera** mode, touch  to enter **Photo Playback** mode.
2. Select the desired photo file that you want to set the DPOF tag.
3. Touch  to enter the **Photo Playback** () menu.
4. Touch **DPOF** to enter the menu.
5. Touch an option to select the desired setting.
 - **DPOF One:** Set the number of print on the current file.
 - **DPOF All:** Set the number of print on all files.
 - **Reset One:** Remove the DPOF tag on the current file.
 - **Reset All:** Remove the DPOF tag on all files.
6. Touch / to select the desired file.
7. Touch / to set the number of print.
8. Repeat step 6~7 to tag other file.
9. Touch  to confirm the DPOF setting.

3.8.5 Rotate









1. In **Camera** mode, touch  to enter **Photo Playback** mode.
2. Select the desired photo file that you want to rotate.
3. Touch  to enter the **Photo Playback** () menu.
4. Touch **Rotate** to enter the menu.
5. Touch an option to select the desired setting.
 - **Left 90**: Rotate the image 90° counter-clockwise.
 - **Right 90**: Rotate the image 90° clockwise.







4 Using Setup menu

4.1 Setup menu

Configure the digital video camera general settings.

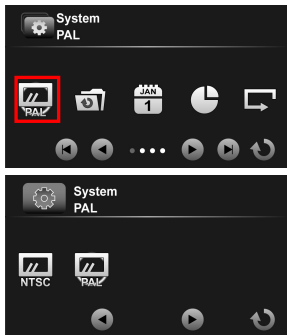
1. Turn on the digital video camera. By default, the device is set to **Video** mode. In **Camera** mode, touch  to switch to **Video** mode.
2. Touch  to enter the OSD menu and switch to **Setup** () menu.
 - In **Video** mode, touch  twice to switch to **Setup** () menu.
 - In **Camera** mode, touch  to switch to **Setup** () menu.
3. Touch the desired menu option to enter the menu.
4. Touch an option to select the desired setting.
5. Touch  to exit the menu.

Note: Touch / to scroll through the available menu options. Touch / to go to the previous/next page.

4.1.1 System

Set the TV type based on your local region.

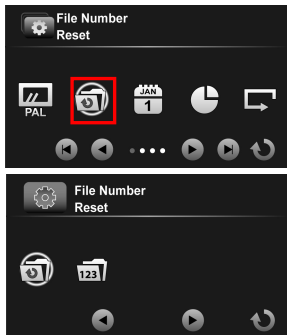
1. Switch to **Setup** (⚙️) menu.
2. Touch **System** to enter the menu.
3. Touch the option to select **NTSC** or **PAL**.



4.1.2 File Number

Set the file numbering type for recorded files.

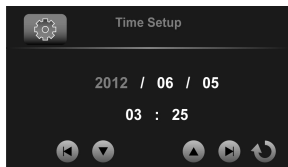
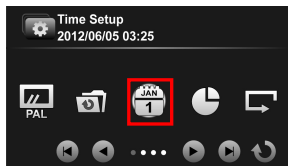
1. Switch to **Setup** (⚙️) menu.
2. Touch **File Number** to enter the menu.
3. Touch an option to select the desired setting.
 - **Reset**: Reset the file number to 0001.
 - **Serial**: Continue the file numbering from the last recorded file.



4.1.3 Time Setup

Set the date and time settings.

1. Switch to **Setup** (⚙️) menu.
2. Touch **Time Setup** to enter the menu.
3. To adjust the field item, touch the respective field to select the field.
4. Touch ▲/▼ to adjust the value.
5. Repeat step 3-4 to adjust other fields.
6. Touch ↻ to save your changes.

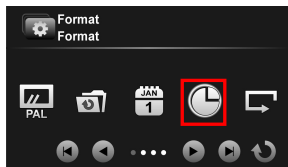


Note: Touch ▲/▼ to adjust the value. Touch ◀️/▶️ to go to the previous/next field.

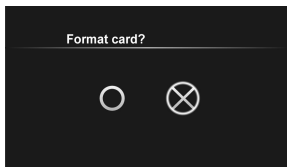
4.1.4 Format


Format the memory card.

1. Switch to **Setup** (⚙️) menu.
2. Touch **Format** to enter the menu.




3. Touch  to format the card.

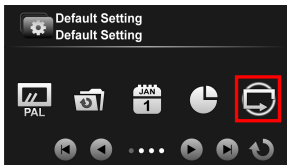


4. When the "Format successful!" message appears, touch  to exit the menu.

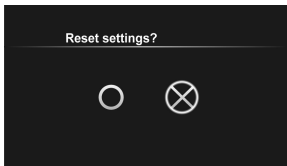
4.1.5 Default Setting


Reset the digital video camera settings to its factory defaults.

1. Switch to **Setup** () menu.
2. Touch **Default Setting** to enter the menu.




3. Touch  to reset.

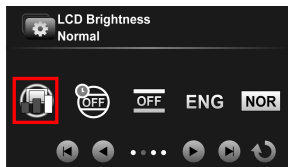


4. When the "Operation done!" message appears, touch  to exit the menu.

4.1.6 LCD Brightness

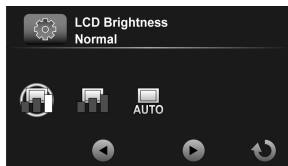
Set the LCD display brightness.

1. Switch to **Setup** () menu.
2. Touch **LCD Brightness** to enter the menu.




3. Touch an option to select the desired setting.

- **Normal:** Maintain the brightness level as the default setting.
- **High:** Increase the brightness level.
- **Auto:** Automatically adjust the brightness level based on the surrounding environment.



4.1.7 Date/Time Stamp

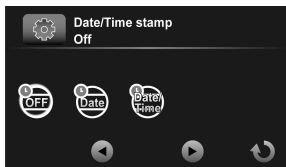
Disable the date/time stamp or select the date/time stamp type when shooting a photo.

1. Switch to **Setup** () menu.
2. Touch **Date/Time stamp** to enter the menu.



3. Touch an option to select the desired setting.

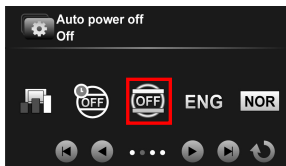
- **Off:** Disable the date/time stamp.
- **Date:** Enable the date stamp only.
- **Date/Time:** Enable date and time stamp.



4.1.8 Auto Power Off

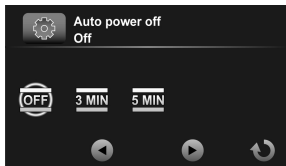
Set the digital video camera to automatically turn off if it is left idle for a preset time.

1. Switch to **Setup** (⚙️) menu.
2. Touch **Auto power off** to enter the menu.



3. Touch an option to select the desired setting.

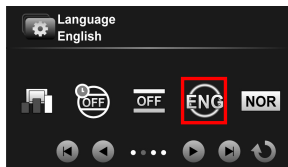
- **Off:** Disable the Auto Power Off function.
- **3 min:** Automatically turn off the power if the digital video camera is left idle for 3 minutes.
- **5 min:** Automatically turn off the power if the digital video camera is left idle for 5 minutes.



4.1.9 Language

Set the on-screen display language.

1. Switch to **Setup** (🔧) menu.
2. Touch **Language** to enter the menu.
3. Touch the language option to select the desired language.

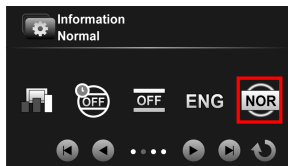


Note: Touch ◀/▶ to scroll through the available menu options. Touch ▶/▶ to go to the previous/next page.

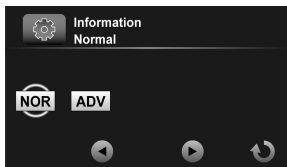
4.1.10 Information

Select the information type to be displayed on the preview screen.

1. Switch to **Setup** (🔧) menu.
2. Touch **Information** to enter the menu.



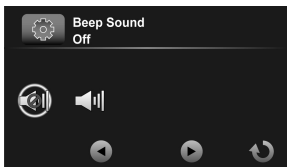
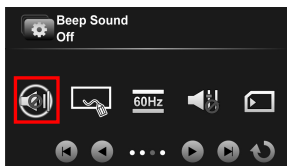
3. Touch an option to select the desired setting.
 - **Normal:** Display basic information on the preview screen.
 - **Advance:** Display detail information on the preview screen.



4.1.11 Beep Sound

Enable/Disable the beep sound.

1. Switch to **Setup** (⚙️) menu.
2. Touch **Beep Sound** to enter the menu.
3. Touch the option to select **On** or **Off**.

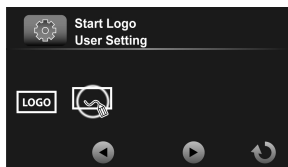
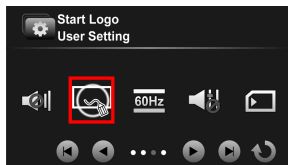


4.1.12 Start Logo

Set the start up image to be displayed on the screen when the digital video camera is turned on.

1. Switch to **Setup** (⚙️) menu.
2. Touch **Start Logo** to enter the menu.
3. Touch an option to select the desired setting.

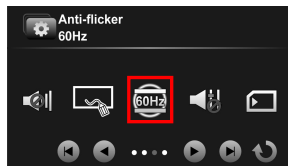
- **Default:** Use the default start-up logo.
- **User Setting:** Use one of the captured photos as the start-up logo.



4.1.13 Anti-flicker

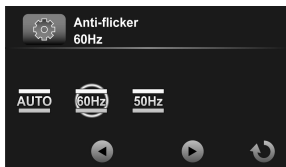
Set the refresh rate of the digital video camera.

1. Switch to **Setup** (⚙️) menu.
2. Touch **Anti-flicker** to enter the menu.



3. Touch an option to select the desired setting.

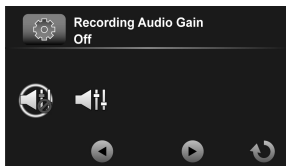
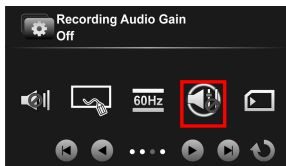
- **Auto:** Automatically adjust the frequency system based on the **System** setting.
- **60Hz:** Set the frequency system to 60Hz.
- **50Hz:** Set the frequency system to 50Hz.



4.1.14 Recording Audio Gain

If the automatic volume gain function is enabled and the recording volume is increased, subtle sounds and dialogue are recorded as clearly as possible. However, when recording with the automatic volume gain function, a larger surrounding sound will be added to the recording; this is a normal situation and is not of poor quality. At normal environment, it will automatically disable the automatic volume gain function.

1. Switch to **Setup** (⚙️) menu.
2. Touch **Recording Audio Gain** to enter the menu.
3. Touch the option to select **On** or **Off**.



4.1.15 SD

Select the memory card type to be used as the default storage.

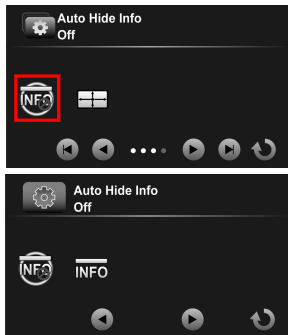
1. Switch to **Setup** (⚙️) menu.
2. Touch **SD** to enter the menu.
3. Touch the option to select **micro SD** or **SD**.



4.1.16 Auto Hide Info

Select whether or not to automatically hide the information icons shown on the screen.

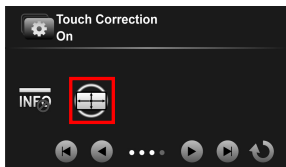
1. Switch to **Setup** (⚙️) menu.
2. Touch **Auto Hide Info** to enter the menu.
3. Touch the option to select **On** or **Off**.



4.1.17 Touch Correction

Calibrate the touch panel screen to ensure accuracy.

1. Switch to **Setup** (⚙️) menu.
2. Touch **Touch Correction** to enter the menu.



3. Follow the on-screen instruction by tapping ✕ icon at the corner of the screen successively to complete the screen calibration.

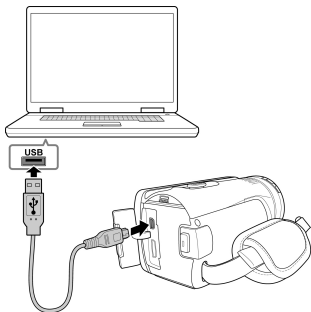


5 Connecting to other devices

5.1 Connecting to the computer

You can connect the device to a PC or notebook to transfer or view files as well as charge the device.

1. Turn on the digital video camera.
2. Open the USB/HDMI connector cover.
3. Connect one end of the USB cable to the device.
4. Connect the other end of the USB cable to an available USB port on your computer.

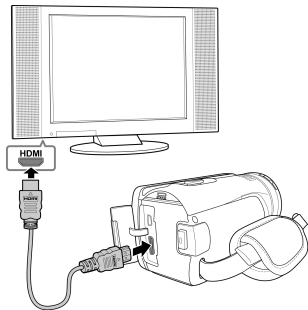


5. After the connection is established, a "Removable Disk" icon appears in "My Computer". Click this icon to access the files in your device.
6. Copy the desired files to a folder on your computer.

5.2 Connecting to TV

You can play files in your digital video camera on a TV using an HDMI cable.

1. Turn on the digital video camera.
2. Open the USB/HDMI connector cover.
3. Connect one end of the HDMI cable to the digital video camera.
4. Connect the other end of the HDMI cable to an HDMI TV.



5. Turn on the TV, and then switch the input source of the TV to "HDMI".
6. Follow the on-screen instructions to operate the device via the TV.

Note:

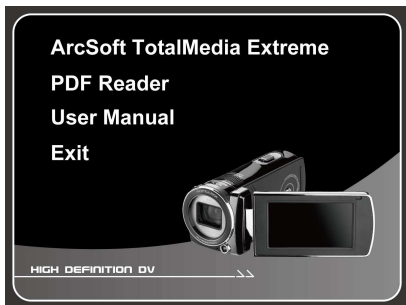
The synchronized output depends on the current digital video camera mode (Video or Camera). These two modes cannot be switched.

In HDMI mode, you cannot use the digital video camera to record videos, capture photos, utilize the digital zoom function, or playback videos in slow motion.

Be sure to turn the digital video camera on before connecting to a TV using an HDMI cable.

6 Installing the Software

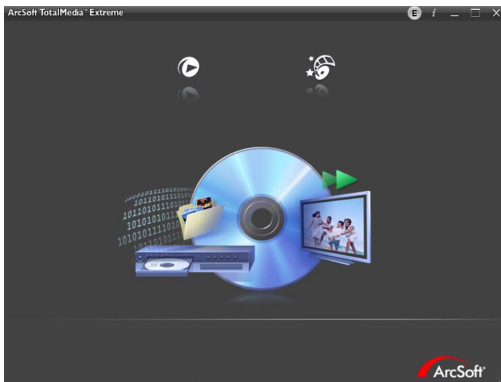
1. Insert the supplied CD-ROM in a CD-ROM drive.
2. An **Autorun** screen will be displayed.



If the **Autorun** screen is not displayed, go to *My Computer* > *CD-ROM* and double-click **Install_CD.exe**.

3. Click the respective software name. Follow the on-screen instructions to complete the software installation.

7 Editing software



ArcSoft Total Media Extreme (TME)™ manages your media for you, and gives you tons of fun and exciting ways to create and share projects featuring your photo, video, and music files. Edit, enhance and add creative effects to your photos. You can

- Create your own movies or photo slide shows complete with soundtrack.
- Upload your files easily to YouTube™!
- Or share them through simple email attachments or popular photo printing.
- You can go to <http://www.arcsoft.com/> for more information.

8 Specifications

Specifications		
Image sensor	1/3.2" CMOS sensor	
Effective pixels	5.0 Megapixels (2592 x 1944)	
Storage media	Supports SDHC, up to 32GB class 4 or above	
Memory	1Gbits NAND Flash	
Lens	10X Optical zoom lens F2.8-F3.5, f=4.6mm-46mm (35-350mm, 35mm equivalent)	
Focus range	Movie	Wide: 10cm~Infinity Tele: 90cm~Infinity
	Still image	<i>Normal</i> Wide: 70cm~Infinity Tele: 200cm~Infinity <i>Macro</i> Wide: 10cm~70cm Tele: 90cm~200cm
Movie Clip	Resolution: Full HD (1920 x 1080), 30fps HD (1280 x 720), 30fps and 60fps	
	Playback Function: Play/Pause, Forward, Rewind; Slow Motion On: 1/2X ~ 1/64X Slow Motion Off: 2X ~ 64X	

Specifications		
Still image	Resolution: 16M (4608x3456, by interpolation), 12M (4000x3000, by interpolation), 8M (3200x2400, by interpolation), 5M (2592x1944), 3M (2048x1536)	
	Format: DCF 1.1 (JPEG, Exif2.2)	
	Playback:10x digital zoom	
TFT screen	3.0" Touch Panel screen (16:9)	
Assist Lamp	White LED: 1m effective distance	
Shutter	Electronic shutter Auto:1/2 ~1/2000 sec, Night: 2~1/2000 sec.	
Exposure	Average, Center, Spot	
ISO	Movie	Auto
	Still image	Auto (100-400), Auto800 (100-800), Auto1600 (100-1600), 100, 200, 400, 800, 1600
Interface	Mini B Type USB 2.0 (high-speed), Mini C Type HDMI	
Microphone	Yes	
Speaker	Yes	
Battery	1200mAH CA NP-40 Lithium-ion rechargeable battery	
Operating Temperature	0° ~ 40°C	

Specifications	
Operating Humidity	20 ~ 70% RH
Dimensions	120 x 57.5 x 57.5 mm
Weight	Approx. 268 g (without battery/memory card)

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