1.2 Features

USB 2.0 port

You can use this feature to transfer files with a USB 2.0 device. A USB 3.1 port may enable you to transfer files in and from your host PC, but transfer speeds may be much faster with a USB 3.1 port.

1.1 System Requirements

This chapter also covers system requirements to operate the Camcorder.

The Camcorder requires a PC with the following specifications:

- Intel Core i3 or higher (recommended)
- 4GB RAM or higher (16 GB recommended)
- Windows Vista / XP / 7 / 8.1 / 10 (32-bit or 64-bit supported)
- 1GB free hard disk space
- Adobe Flash Player installed
- internet connection

The Camcorder supports a variety of features and functions, including:

- Digital camcorder (with Zoom function)
- HD Digital Camcorder
- Additional albums (for easy editing)
- Voice recorder
- More...
I.3 Unpacking the Camcorder

I.4 About the Camcorder

Front View

- Microphone
- Zoom/Volume button
- Battery cover latch
- Shutter button
- Flash module
- Self-timer LED
- LED flash light
- Lens

Top View

- Memory card slot
- Battery door
- AV cable
- Power cord
- USB cable
- AV cable
- User manual
- CD-ROM
- Lithium battery
- Charger
- Power charger
- AC adapter
- Camera
- Camcorder

Appendix A: Contact your dealer immediately if any item is missing or damaged. See the following illustrations to familiarize yourself with the buttons and features of this camcorder.
2. Inserting an SD Card

1. Open the LCD screen cover and move the SD card cover latch in the direction of the arrow to open the SD card compartment cover.

2. Insert the SD card into the SD card slot as shown in the diagram.
2.2. Inserting the batteries

The camcorder is designed to use rechargeable Li-ion battery. Only use the batteries supplied or similar batteries recommended by the manufacturer.

- Note: Install the battery exactly as described here. Installing the battery incorrectly could cause damage to the camcorder and possibly start a fire.

1. Slide the battery cover latch as shown and then the battery cover opens automatically.

2. Insert the battery as shown.
2.3 Charging the battery

1. Insert the Li-ion battery into the charging unit. Connect the power supply to the charging unit and plug in the power cord as shown.

2.4 Turning on/off the camcorder

2.5 Changing modes

Press and hold the power button to turn the camcorder on/off. The camcorder can operate in three modes: Camcorder, Camera, and SRT. Move the mode dial to toggle different modes.
### Setting the date and time

1. Move the joystick up and down to highlight the Date/Time. Press the center joystick button to enter.

2. Move the joystick up and down to highlight each field and press the center joystick button to select a field.

3. After each value by moving the joystick up and down. Press the center joystick button to save your changes.

4. Press the joystick down to highlight 1 to leave the Date/Time menu.

### Setting the language

2. Move the joystick left and right to select the following languages: English, Traditional Chinese, Simplified Chinese, German, Italian, Spanish, French, Turkish, Portuguese, Dutch, Japanese, Russian, Korean, and Arabic. After the language is selected, press the center joystick button to confirm.

3. Press the center joystick button to select the Format.
27.2 Shoot/Playback video

27.3 Setting the beep
3. The LCD preview and the ratio of the still-image capture can vary depending on the different video resolution settings. See the following table.

<table>
<thead>
<tr>
<th>Video resolution</th>
<th>Capture ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD (1280 x 720)</td>
<td>4:3 ratio</td>
</tr>
<tr>
<td>16:9 ratio</td>
<td></td>
</tr>
</tbody>
</table>

4. Before deleting a video clip, you can still take a photo in Camcorder mode.

5. With the video clip, select a desired video clip and adjust the volume.

6. Press the center joystick button to stop playing.

7. Press the Playback button again to return to Camcorder mode.

8. Press the REC/STOP button to resume the video playback.
28.2 Viewing Images

1. Turn on the camera and move the mode dial to Camera mode.

2. Press the Shutter button to capture the image.

3. Use the LCD screen to frame the picture.

4. Press the zoom button right to zoom in the picture. There are four switch between the zooming directions (up/down/left/right).

5. Press the center zoom button to view the image in full screen mode.

6. Press the center zoom button again to return to Camera mode.

Images and thumbnails are displayed on the LCD screen. The most recent image displays on the LCD screen. To access the picture and press the center zoom button to switch between the zooming directions (up/down/left/right).

Move the zoom button up and down to scroll through the images.
2.10 Connecting to a standard TV

Connect the camcorder to a standard TV as shown with the AV cable provided.

2.11 Connecting to a HDTV

Connect the camcorder to a HDTV as shown with the component video cable and AV cable provided.

Read this section to learn how to transfer files to your TV and watch your video clips or photos. Connecting to a HDTV offers the high resolution for displaying the video clips and HD photos.
### Using the Camcorder

#### 3. Camcorder and Voice Recorder Mode

3.1 Camcorder and voice recorder mode

Use this mode to capture video clips or record voice and store them in an internal memory or on an SD card.

<table>
<thead>
<tr>
<th>Camcorder mode</th>
<th>Voice recorder mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remaining recording time indicator</td>
<td>Remaining recording time indicator</td>
</tr>
<tr>
<td>LED flash light indicator</td>
<td>Histogram indicator</td>
</tr>
<tr>
<td>Force and auto flash indicator</td>
<td>Battery indicator</td>
</tr>
<tr>
<td>Resolution indicator</td>
<td>Memory status indicator</td>
</tr>
<tr>
<td>Battery indicator</td>
<td>SD card indicator</td>
</tr>
<tr>
<td>Histogram indicator</td>
<td>Internal memory indicator</td>
</tr>
<tr>
<td>Micro indicator</td>
<td>Zoom indicator</td>
</tr>
<tr>
<td>Camcorder mode indicator</td>
<td>Voice recorder mode indicator</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Camcorder mode</th>
<th>Camera mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory status indicator</td>
<td>EY compensation indicator</td>
</tr>
<tr>
<td>SD card indicator</td>
<td>Effects indicator</td>
</tr>
<tr>
<td>White balance indicator</td>
<td>Night mode indicator</td>
</tr>
<tr>
<td>Internal memory indicator</td>
<td>Memory status indicator</td>
</tr>
</tbody>
</table>

---

Use the following picture to familiarize yourself with the Camcorder and voice recorder mode icons and symbols.
3.1 Using the LED Flash Light

To use the LED flash light to illuminate subjects in dark environments, press the LED flash light button.

3.1.1 Using the Zoom Function

To zoom in or out using the zoom function, press the zoom button on the LCD screen or rotate the zoom control.

3.1.2 Using the Macro Function

This function can capture subjects close to the lens. In macro mode, subjects can be as close as 5 cm.
3.31 Camera mode icons

- LED flash light indicator
- Internal memory indicator
- Mbrarx memory indicator
- Write balanced indicator
- Night mode indicator
- Effect indicator

Remaining number of photos

0003

See the table below for a description of each icon and symbol.

3.2 Camera mode icons

- Memory on internal card
- Memory off internal card
- Memory on SD card
- Memory off SD card
- SD card indicator
- Micro SD card indicator
- Battery indicator
- Photo indicator
- Flash icon
- Face and hair flash indicator
### Camera Recorder Playback Mode

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Level</td>
<td>Displays the number of recorded audio clips</td>
<td>Displays the number of current audio clip</td>
</tr>
<tr>
<td>Memory status indicator</td>
<td>SD card indicator</td>
<td>Internal memory indicator</td>
</tr>
<tr>
<td>Battery status indicator</td>
<td>Play/Pause indicator</td>
<td>The length of every audio clip</td>
</tr>
<tr>
<td>File protect indicator</td>
<td>The length of every video clip</td>
<td>Displays the number of current camera / total</td>
</tr>
</tbody>
</table>

See the table below for a description of each icon and symbol.

### Camera Recorder Playback Mode

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Level</td>
<td>Displays the number of recorded audio clips</td>
<td>Displays the number of current audio clip</td>
</tr>
<tr>
<td>Memory status indicator</td>
<td>SD card indicator</td>
<td>Internal memory indicator</td>
</tr>
<tr>
<td>Battery status indicator</td>
<td>Play/Pause indicator</td>
<td>The length of every audio clip</td>
</tr>
<tr>
<td>File protect indicator</td>
<td>The length of every video clip</td>
<td>Displays the number of current camera / total</td>
</tr>
</tbody>
</table>

See the table below for a description of each icon and symbol.
3.3. Thumbnail mode

When in Camera Playback or Camera Playback mode, press the ZOOM button to show thumbnails.

1. Turn on the camera and make sure it is in Playback mode.

2. The most current image/video clip displays on the screen. Press the ZOOM button to show six simultaneous images/video clips on the LCD screen.

3. Use the up and down arrows to select an image/video clip. Press the ZOOM button to return to thumbnail view.

1. Press the ZOOM button to return to thumbnail view.

2. The most current image/video clip displays on the screen. Select an image/video clip using the up and down arrows. Press the ZOOM button to return to thumbnail view.

3. Display the number of frames/images.

3.4. Camera Playback mode icons

See the table below for a description of each icon and symbol.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPF (Digital Picture Format) indicator</td>
<td>Displays the number of photos</td>
</tr>
<tr>
<td>Printed mode icon</td>
<td>Displays the number of images on the memory card</td>
</tr>
<tr>
<td>Battery status indicator</td>
<td>Displays the number of saved images</td>
</tr>
<tr>
<td>Memory status indicator</td>
<td>Displays the number of current images/file</td>
</tr>
</tbody>
</table>
4.1 Using the menus

4.1.1 Camera menu

Select the menu to learn how to configure the camera settings and use the camera.

4.1.2 Video resolution

Follow these steps to change the video resolution:

1. Press the menu button and select "Video resolution".
2. Select the desired resolution from the options provided.
3. Confirm the selection by pressing the menu button again.
4.1.4 Night mode

Press the Menu button again to exit the menu.

1. Turn the camcorder on and ensure it is in Camcorder mode.
2. Press the Menu button and move the Joystick up and down to highlight the Effect option. Press the center Joystick button to display the Effects menu.
3. Press the center Joystick button again to select Night mode. Press the center Joystick button again to select Effect.
4. Press the center Joystick button to exit the menu.

Use this function to shoot a better video quality in dark environments.

The camcorder can capture standard color images, black and white images, or images with a red filter.
1. Press the Menu button again to exit the menu.

2. Move the joystick up and down to select Delete One or Delete All options.

3. Press the Joystick button to display the Playback menu.

4. Turn the Camcorder on and ensure it is in Camcorder mode. Press the Capture button to continue.

In Camcorder mode, press the center Joystick button to display the capture menu. Use the Play/Stop button to start recording. The SD card menu allows you to manage the files stored in the internal memory or on the SD card.
4.3.3 Color effect

The camcorder can capture standard color images, black and white images or sepia tone to give an old-fashioned look.

1. Turn the camcorder on and ensure it is in Camera mode.
2. Press the Menu button and move the joystick up and down to highlight the Effect option. Press the center joystick button to display the available options.
3. Move the joystick left and right to select Color, B & W or Sepia.

4.3.4 Nightmode

Use this function to shoot a better video clip quality in dark environments.

1. Press the Menu button and move the joystick up and down to display the available options.
2. Press the center joystick button to confirm. Move the joystick left and right to select Off or Night mode option.
3. Press the center joystick button again to exit the menu.
4.5 System menu

1. A memory card is required for Drop function.

2. If DPOF is set, all photos are printed in order.

Notes:

4. Press the Playback button again to exit the image.

Drop function is displayed to show that the file is set to print.

1. Change the Playback mode and enter the Playback function.

2. Move the Thumbnail display and press the Menu button to display the

3. Change the Playback menu. The images are displayed and

4. The DPOF (Digital Print Order Function) function in Playback mode in the

4.3 Slide show

1. Turn the camera on and ensure it is in Playback mode. Press the

2. Turn the navigation dial to select the image. Press the

3. Automatically press the center of the navigation dial to select the image and

4.4 DPOF

1. Turn the navigation dial to select the DPOF menu. Use the

2. Enter the Playback mode and then press the Menu button to display the

3. Change the playback mode and select the image. Press the

4. Turn the navigation dial to select the image and

5. Press the center of the navigation dial to set or cancel the DPOF function.
5.2 Preset Mr. Photo

The following screen is displayed:

To install Video Works an additional software application for editing video.

5.1 Preset Video Works

Read this section to learn how to install the software for the camera.

Installing the software and drivers

3. Click the Install button to begin the installation process and follow the instructions on-screen.

More information about Preset Video Works can be found in the help file when the application is started.

The instructions on-screen explain how to proceed. The following steps are displayed:

1. Insert the supplied CD into the CD-ROM drive.

2. If the CD-ROM drive does not automatically open, use Windows Explorer to open the CD-ROM drive.

3. Click the Install button to open the installation process and follow the instructions on-screen.

The following screen is displayed:

To install the application, follow these steps:

1. Insert the supplied CD into the CD-ROM drive.

2. The installation process begins. Follow the instructions on-screen to complete the installation.

3. After installation, launch the application to use the features provided.

5.2 Preset Mr. Photo

The following screen is displayed:

To install the software application for editing video:

1. Insert the supplied CD into the CD-ROM drive.

2. The installation process begins. Follow the instructions on-screen to complete the installation.

3. After installation, launch the application to use the features provided.
Appendix

General Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video clips</td>
<td>- Resolution: CIF, D1, HD (1280 x 720, 30 fps)</td>
</tr>
<tr>
<td></td>
<td>- Frame Rate: Max. 30 fps</td>
</tr>
<tr>
<td>Focus range</td>
<td>- Normal: 55 cm - inf.</td>
</tr>
<tr>
<td></td>
<td>- 5X Optical zoom lens</td>
</tr>
<tr>
<td></td>
<td>- 5X Optical zoom lens</td>
</tr>
<tr>
<td>Lens</td>
<td>- Wide: F/3.2, 24mm</td>
</tr>
<tr>
<td></td>
<td>- Tele: F/3.2, 24mm</td>
</tr>
<tr>
<td>Color effects</td>
<td>- B/W, Sepia</td>
</tr>
<tr>
<td></td>
<td>- Auto</td>
</tr>
<tr>
<td>Sensor</td>
<td>- 5.1 Megapixel sensor</td>
</tr>
<tr>
<td>Storage media</td>
<td>- Built-in 32 MB flash memory (available memory for up to 9 MB)</td>
</tr>
<tr>
<td></td>
<td>- SD card (support SDHC Class 6)</td>
</tr>
<tr>
<td>Active pixels</td>
<td>- 1/2.7&quot; CMOS 5.1 Megapixel sensor</td>
</tr>
</tbody>
</table>

To install the Quick Time software application, follow these steps:

1. Insert the supplied CD into the CD-ROM drive. The installation screen is displayed.
2. Ensure the software is automatically booting up. Navigate to the installation files in the root directory.
3. Click the install button to begin the installation process and follow the instructions on-screen.

More information about Quick Time can be found in the help files when the application is started.
<table>
<thead>
<tr>
<th>Weight</th>
<th>1.7 / 800g sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV out format</td>
<td>NTSC/PAL/Component output</td>
</tr>
<tr>
<td>Memory card</td>
<td>SD/MMC (high speed)</td>
</tr>
<tr>
<td>Camera interface</td>
<td>USB 2.0 (high speed)</td>
</tr>
<tr>
<td>Self-timer</td>
<td>10 seconds</td>
</tr>
<tr>
<td>Compression</td>
<td>2:1, 2:0, EV</td>
</tr>
<tr>
<td>White balance</td>
<td>Auto, Sunny, Cloudy, Tungsten</td>
</tr>
<tr>
<td>Effective range</td>
<td>1.5 1m</td>
</tr>
<tr>
<td>Video</td>
<td>LCD monitor</td>
</tr>
<tr>
<td>Audio video</td>
<td>Yes</td>
</tr>
<tr>
<td>Still image display</td>
<td>Digital zoom Max 8X</td>
</tr>
<tr>
<td>Camera x Optical zoom</td>
<td></td>
</tr>
<tr>
<td>Still image</td>
<td>Formats JPEG (DPOE EXIF)</td>
</tr>
<tr>
<td>Color temperature</td>
<td>5500K</td>
</tr>
<tr>
<td>Info display</td>
<td>Information</td>
</tr>
</tbody>
</table>

**General**

<p>| Approx. dimensions | 292 x 70 (H) x 129 (D) mm |
| Power supply | 1 coin battery NP-120 battery |
| Air power | 0.5 mWh, 3 min options |
| Weight | 270g (without batteries) |</p>
<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The camera is off.</td>
<td>The camera is turned off.</td>
<td>Turn the camera on again.</td>
</tr>
<tr>
<td>The camera is in standby mode.</td>
<td>The camera is in standby mode.</td>
<td>Charge the battery (3-2 hours) or use the camera's power button to turn it on.</td>
</tr>
<tr>
<td>The camera is not connected to a computer.</td>
<td>The camera is not connected to a computer.</td>
<td>Connect the camera to a computer and follow the instructions to turn it on.</td>
</tr>
<tr>
<td>The camera is not charging.</td>
<td>The camera is not charging.</td>
<td>Check the power source and ensure the camera is properly connected.</td>
</tr>
<tr>
<td>The camera is not recording.</td>
<td>The camera is not recording.</td>
<td>Check the memory card and ensure there is sufficient space.</td>
</tr>
<tr>
<td>The camera is not displaying images.</td>
<td>The camera is not displaying images.</td>
<td>Check the memory card and ensure there are no errors or corrupted files.</td>
</tr>
<tr>
<td>The camera is not taking pictures.</td>
<td>The camera is not taking pictures.</td>
<td>Check the memory card and ensure there is sufficient space.</td>
</tr>
<tr>
<td>The camera is not focusing.</td>
<td>The camera is not focusing.</td>
<td>Check the memory card and ensure there are no errors or corrupted files.</td>
</tr>
<tr>
<td>The camera is not recording audio.</td>
<td>The camera is not recording audio.</td>
<td>Check the microphone and ensure it is properly connected and functioning.</td>
</tr>
<tr>
<td>The camera is not playing back images.</td>
<td>The camera is not playing back images.</td>
<td>Check the memory card and ensure there are no errors or corrupted files.</td>
</tr>
<tr>
<td>The camera is not connecting to a computer.</td>
<td>The camera is not connecting to a computer.</td>
<td>Check the driver installation and ensure it is up to date.</td>
</tr>
</tbody>
</table>